



# LITERACY IN BULGARIA

COUNTRY REPORT  
SHORT VERSION

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**Main authors (in alphabetical order):**

Lydia Dachkova, Natalia Georgieva, Marieta Tzvetkova

**Contributing authors (in alphabetical order):**

Christine Garbe, Dominique Lafontaine, David Mallows, Gerry Shiel, Renate Valtin

**Coordinator of the ELINET-Project:**

University of Cologne

Prof. Dr. Christine Garbe

Institut für Deutsche Sprache und Literatur

Richard-Strauss-Str. 2

50931 Köln – Cologne

Germany

christine.garbe@uni-koeln.de

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# 1 Introduction

This report on the state of literacy in 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 countries<sup>1</sup>. ELINET aims to improve literacy policies in its member countries in order to reduce the number of children, young people and adults with low literacy skills. One major tool to achieve this aim is to produce a set of reliable, up-to-date and comprehensive reports on the state of literacy in each country where ELINET has one or more partners, and to provide guidance towards improving literacy policies in those countries. The reports are based (wherever possible) on available, internationally comparable performance data, as well as reliable national data provided (and translated) by our partners.

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

The Country Reports are organised around the three recommendations of the HLG's literacy report:

- Creating a literate environment
- Improving the quality of teaching
- Increasing participation, inclusion (and equity<sup>4</sup>).

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"<sup>5</sup>.

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<sup>1</sup> For more information about the network and its activities see: [www.eli-net.eu](http://www.eli-net.eu).

<sup>2</sup> 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](http://ec.europa.eu/education/policy/school/doc/literacy-report_en.pdf).

<sup>3</sup> See: <http://www.eli-net.eu/research/country-reports/>.

<sup>4</sup> "Equity" was added by ELINET.

<sup>5</sup> See: <http://www.eli-net.eu/good-practice/>.

## 2 General Information on the Bulgarian Education System<sup>6</sup>

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.

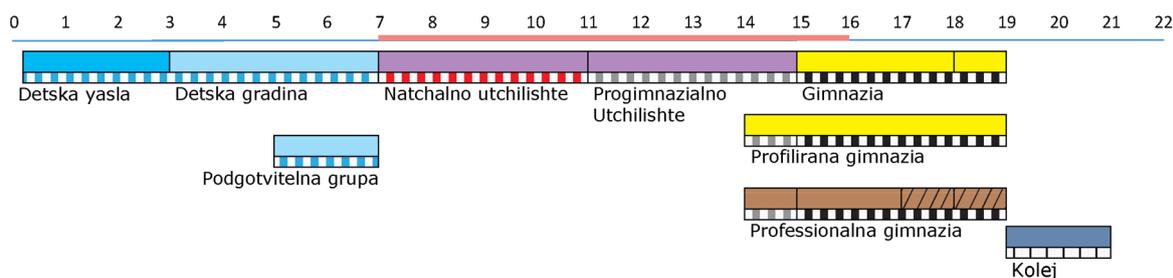
According to the current Public Education Act (1991)<sup>7</sup>, full-time education is mandatory for all children at the age between 7 and 16, and the public education system includes kindergartens, schools and servicing units (Art.2 of the same Act).

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<sup>6</sup> 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).

<sup>7</sup> 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 1: Structure of the Bulgarian School System



Source: [http://eacea.ec.europa.eu/education/eurydice/documents/facts\\_and\\_figures/education\\_structures\\_EN.pdf](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 1<sup>st</sup> 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 15<sup>th</sup> of September and continues till 15<sup>th</sup> or 30<sup>th</sup> 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.

### 3 Literacy Performance Data

Bulgaria participated in IEA's PIRLS (4<sup>th</sup> 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 4<sup>th</sup> 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.

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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.

## 4 Key Literacy Policy Areas for Development (age-specific and across age-groups)

### 4.1 Creating a Literate Environment

#### 4.1.1 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.

#### 4.1.2 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 network<sup>8</sup>.

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.

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<sup>8</sup> See: [www.glbulgaria.bg](http://www.glbulgaria.bg).

### 4.1.3 Adults

**Fostering literacy provision for adults:** The Ministry of Education and Science acts as a National Coordinator for Adult Learning in Bulgaria. There is a strong focus in national policy on vocational education and training, on providing access to work-related training for unemployed people, and on expanding access to vocational education for all citizens. Adult learning and adult literacy are important components of the Bulgarian National Strategy for Lifelong Learning (2014-2020), which includes formal, non-formal, and informal learning for improving basics skills, obtaining new qualifications, up-skilling or re-skilling for employment of adults. A National Strategy for the encouragement and increase of literacy was also adopted in 2014.

There have been a number of educational initiatives in recent years designed to improve the literacy skills of adults needing to re-enter or improve their position in the labour market, or for adults who did not complete compulsory education. For example, the "New Chance for Success" programme developed an overall model for adult literacy education including training methodology (training schemes, curricula, learning packages), training process, tests and certification. Training was conducted in courses for literacy provision and in master courses envisaged for pre-secondary level grades of basic education. By September 2014 over 16, 000 people had participated in training for completion of primary level and grades from the secondary level. Financing for such initiatives comes from a variety of sources including public funding, EU structural funds, employers and fees from course participants. The high cost of courses to participants is regarded as the main barrier to participation in lifelong learning in Bulgaria. In general, adult rates of participation in formal and informal learning are very low (2% in 2014 according to Eurostat's Labour Force Survey).

Lately – in the last two years a project was initiated on national level to foster literacy provision for adults. It is still in its initial stage – starting with specific preparatory work – elaborating teaching packs and providing specialized courses for potential teachers.

## 4.2 Improving the Quality of Teaching

### 4.2.1 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 GDP<sup>9</sup>

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).

### 4.2.2 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.

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<sup>9</sup> Source: Convergence Programme (2013-2016); [http://ec.europa.eu/europe2020/pdf/nd/cp2013\\_bulgaria\\_en.pdf](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 Bulgaria<sup>10</sup>.

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.

#### 4.2.3 Adults

**Monitoring the quality of adult literacy providers:** There is no comprehensive system for the quality assurance of adult learning in Bulgaria. There have, however, been a number of important achievements which signal the development of a more organised and accountable system:

- A national qualification framework has been developed and adopted;
- State educational standards for the acquisition of vocational qualifications by professions have been developed and endorsed;
- Measures for upgrading the qualifications of teachers in the school education system, lecturers in the higher schools and directors of training institutions have been taken;
- An information system for assessment of the competences of the workforce is under development;
- A functioning system for accreditation, licensing and control over the providers of vocational education and training is in place;
- The range of potential learners in the different geographic areas has been expanded; the centres for vocational education offer training courses for adults in a wide range of professions, programmes and schemes for motivational training, literacy courses, professional guidance, training in key competences;
- There is a national network of information desks for provision of information and consultations to employers and employees. Electronic platforms for adult learning have been constructed.

**Developing curricula for adult literacy:** There is currently no national curricula for adult literacy in Bulgaria.

**Improving the qualification and status of teachers of adult literacy:** Adult education as a professional field is underdeveloped in Bulgaria. There are, of course, national regulations regarding qualifications for those working as teachers in compulsory education and vocational schools, but no information could be found on specific qualifications and specialised training routes for those working in the field of adult literacy.

Likewise, little information was available on the status of these professionals. It should be noted that salaries for teachers in Bulgaria are low in comparison to other countries, although employers can and do offer additional results-based payments on top of basic rates.

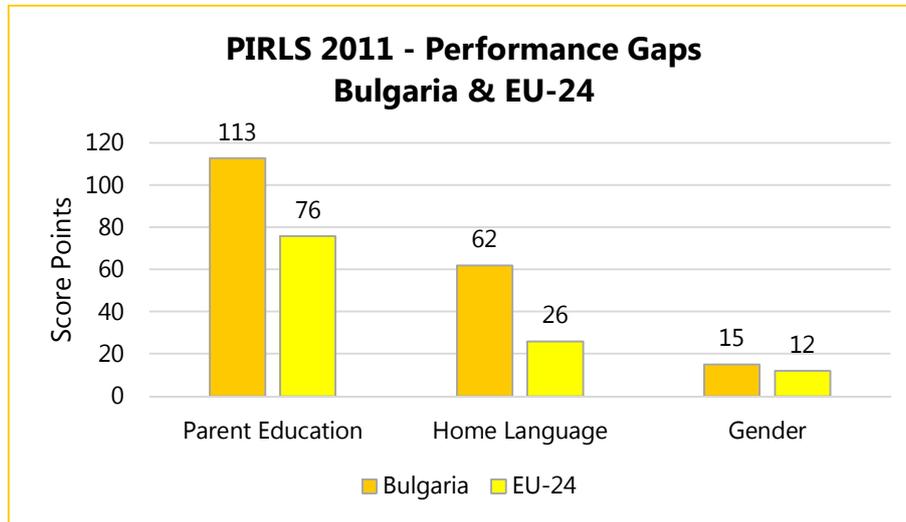
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<sup>10</sup> Source: Peycheva-Forsyth, R. (2010), the qualification and career development of Bulgarian teachers – current status, issues, perspectives [http://ec.europa.eu/education/policies/2010/doc/jir\\_council\\_final.pdf](http://ec.europa.eu/education/policies/2010/doc/jir_council_final.pdf).

### 4.3 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).

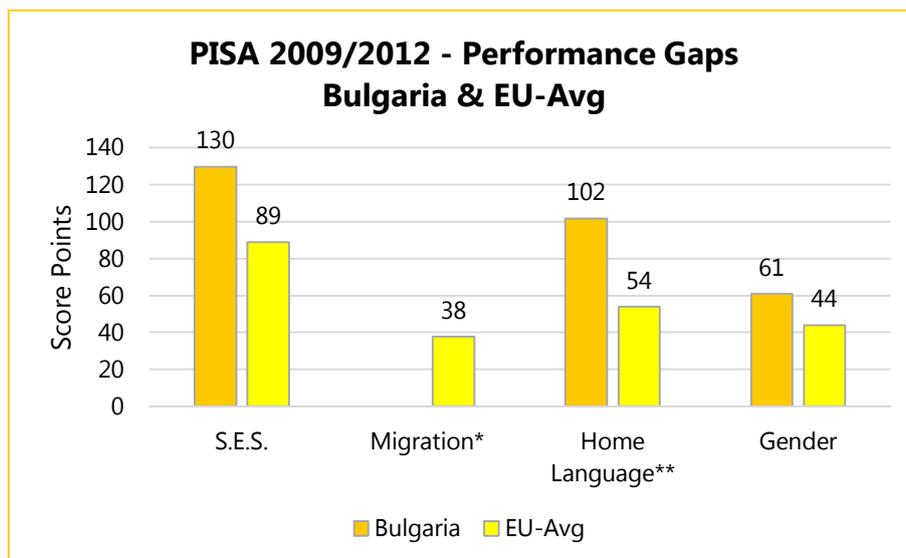
Figure 2: Performance Gaps –, Education and Language Spoken at Home



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 3 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 3: 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)<sup>11</sup>.

#### 4.3.1 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.

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.

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**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

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<sup>11</sup> 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).

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 children<sup>12</sup>.

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.

#### 4.3.2 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.

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

<sup>12</sup> See: [https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Bulgaria:Assessment\\_in\\_Early\\_Childhood\\_Education\\_and\\_Care](https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Bulgaria:Assessment_in_Early_Childhood_Education_and_Care) (accessed June 25, 2015).

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"<sup>13</sup>.

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<sup>13</sup> See: <http://sf.mon.bg/?go=page&pageId=32>.

### **4.3.3 Adults**

**Increasing offers for second-language learners:** Integration Centers for Refugees (ICR) support the integration of refugees living in Bulgaria. This work includes the planning and organisation of Bulgarian language courses for refugees and asylum seekers, or referring people to relevant training. Integration Centres have their own language teachers and facilities for running courses; they also have the capacity and capability to offer vocation qualification and re-qualification.

## 5 References

- Analysis of the Centre for Control and Assessment of the Quality of School Education. Retrieved from: [http://www.ckoko.bg/upload/docs/2014-12/Analiz\\_CKOKO\\_FZVC.pdf](http://www.ckoko.bg/upload/docs/2014-12/Analiz_CKOKO_FZVC.pdf).
- Bulgarian library-information association (2015). *National Campaigns*. Retrieved from: <http://www.lib.bg>.
- Council of Ministers (2012). *National Development Program Bulgaria 2020*. Retrieved from: <http://www.strategy.bg/StrategicDocuments/View.aspx?lang=bg-BG&Id=766>.
- Council of Ministers (2013). *Action Plan on the National Strategy for Reducing Poverty and Promoting Social Inclusion 2020 for the period 2015-2016*. (in Bulgarian). Retrieved from: <http://www.strategy.bg/StrategicDocuments/View.aspx?lang=bg-BG&Id=790>.
- European Agency for Development in Special Needs Education (2008). *Special Needs Education Country Data 2008*. Retrieved from: [https://www.european-agency.org/sites/default/files/special-needs-education-country-data-2008\\_SNE-Data-2008.pdf](https://www.european-agency.org/sites/default/files/special-needs-education-country-data-2008_SNE-Data-2008.pdf) (assessed December 12, 2015).
- European Commission (2013). Reducing early school leaving: Key messages and policy support. Final Report of the Thematic Working Group on Early School Leaving. Retrieved from: [http://ec.europa.eu/education/policy/strategic-framework/doc/esl-group-report\\_en.pdf](http://ec.europa.eu/education/policy/strategic-framework/doc/esl-group-report_en.pdf) (accessed August 22, 2014).
- European Commission/EACEA/Eurydice/Eurostat (2014). *Key Data on Early Childhood Education and Care in Europe. 2014 Edition*. Eurydice and Eurostat Report. Luxembourg: Publications Office of the European Union. Retrieved from: [http://eacea.ec.europa.eu/education/eurydice/documents/key\\_data\\_series/166EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/key_data_series/166EN.pdf).
- European Commission/EACEA/Eurydice (2015). *Early Childhood Education and Care Systems in Europe. National Information Sheets – 2014/15. Eurydice Facts and Figures*. Luxembourg: Publications Office of the European Union. Retrieved from: [http://eacea.ec.europa.eu/education/eurydice/documents/thematic\\_reports/191EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/thematic_reports/191EN.pdf).
- European Commission, Directorate-General of Education and Culture (2014). *Education and Training Monitor 2014*. Retrieved from: [http://ec.europa.eu/education/library/publications/monitor14\\_en.pdf](http://ec.europa.eu/education/library/publications/monitor14_en.pdf).
- European Parliament (2013). *Child poverty and social exclusion. A framework for European action*. Retrieved from: [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).
- European Roma Rights Center (2007). *The impact of legislation and policies on school segregation of Romani children*. Retrieved from <http://www.errc.org/cms/upload/media/02/36/m00000236.pdf> (accessed August 5, 2014).
- Eurydice (2009). Integrating Immigrant Children into Schools in Europe: Measures to foster communication with immigrant families and heritage language teaching for immigrant children, p. 8, 24. Retrieved from: [http://eacea.ec.europa.eu/education/eurydice/documents/thematic\\_reports/101EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/thematic_reports/101EN.pdf).

- Eurydice (2010). *Gender differences in educational outcomes: Study on the Measures Taken and the Current Situation in Europe*, p. 34, 77. Retrieved from: [http://eacea.ec.europa.eu/education/eurydice/documents/thematic\\_reports/120en.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/thematic_reports/120en.pdf).
- Eurydice (2011). *Teaching Reading in Europe: Contexts, Policies and Practices*, p. 45, 48, 69, 106, 168. Brussels: Education, Audiovisual and Culture Executive Agency. Retrieved from: [http://eacea.ec.europa.eu/education/eurydice/documents/thematic\\_reports/130en.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/thematic_reports/130en.pdf).
- Eurydice (2012). *Key Data on Education in Europe 2012*. Education, Audiovisual and Culture Executive Agency. Retrieved from: [http://eacea.ec.europa.eu/education/eurydice/documents/key\\_data\\_series/134EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/key_data_series/134EN.pdf) (accessed August 22, 2014).
- Eurydice (2013). *Education and Training in Europe 2020: Responses from the EU Member States, Eurydice Report*. Brussels: Eurydice. Retrieved from: [http://eacea.ec.europa.eu/education/eurydice/thematic\\_reports\\_en.php](http://eacea.ec.europa.eu/education/eurydice/thematic_reports_en.php) (accessed August 22, 2014).
- Eurydice (2014). *Facts and Figures. Compulsory Education in Europe 2013/14*. Retrieved from: [http://eacea.ec.europa.eu/education/eurydice/documents/facts\\_and\\_figures/compulsory\\_education\\_EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/facts_and_figures/compulsory_education_EN.pdf) (accessed August 22, 2014).
- Eurostat. *Early leavers from education and training by sex and labour status*. Retrieved from: <http://open-data.europa.eu/data/dataset/gIdTu1ciIvuJQGqYeFRGjQ> (accessed Aug 22, 2014).
- Eurostat (2015). *Gini coefficient of equivalised disposable income*. Retrieved from: <http://ec.europa.eu/eurostat/tgm/table.do?tab=table&language=en&pcode=tessi190>
- Eurostat (2013). *Living condition statistics - family situation of today's adults as children*. Retrieved from: [http://ec.europa.eu/eurostat/statistics-explained/index.php/Living\\_condition\\_statistics\\_-\\_family\\_situation\\_of\\_today's\\_adults\\_as\\_children](http://ec.europa.eu/eurostat/statistics-explained/index.php/Living_condition_statistics_-_family_situation_of_today's_adults_as_children).
- Eurostat (2013). *Parents' level of education*. Retrieved from: [http://ec.europa.eu/eurostat/statistics-explained/index.php/Living\\_condition\\_statistics\\_-\\_family\\_situation\\_of\\_today%27.adults\\_as\\_children#Parents.E2.80.99\\_level\\_of\\_education](http://ec.europa.eu/eurostat/statistics-explained/index.php/Living_condition_statistics_-_family_situation_of_today%27.adults_as_children#Parents.E2.80.99_level_of_education).
- Eurostat (2015). *Women in the EU gave birth to their first child at almost 29 years of age on average*. Eurostat Press Office Retrieved from: <http://ec.europa.eu/eurostat/documents/2995521/6829228/3-13052015-CP-EN.pdf/7e9007fb-3ca9-445f-96eb-fd75d6792965>.
- Eurostat (2015). *Women teachers over-represented at early stages of education in the EU*. Eurostat Press Office. Retrieved from: <http://ec.europa.eu/eurostat/documents/2995521/7017572/3-02102015-BP-EN.pdf/5a7b5406-4a0d-445b-8fa3-3558a8495020>.
- ICF (2013). *Peer Review on Early School Leaving. Background paper: Bulgaria*. Retrieved from: [http://ec.europa.eu/education/events/2013/documents/peer-backbg\\_en.pdf](http://ec.europa.eu/education/events/2013/documents/peer-backbg_en.pdf).
- Global Libraries Bulgaria Program (2009-2013). *Glob@l Libraries Bulgaria – Access to Information for All*. Retrieved from: [www.glibulgaria.bg](http://www.glibulgaria.bg).
- McKinsey et al. (2007), *How the world best performing school systems come out on top*". Retrieved from: [http://mckinseysociety.com/downloads/reports/Education/Worlds\\_School\\_Systems\\_Final.pdf](http://mckinseysociety.com/downloads/reports/Education/Worlds_School_Systems_Final.pdf).
- Mavrodieva, M. & Angelova, T. (2012). Bulgaria. In I.V.S.Mullis, M.O.Martin, C.A.Minnich, K.T.Drucker, & M.A.Ragan (Eds.), *PIRLS 2011 Encyclopedia. Educational Policy and Curriculum in Reading (Vol. 1 A-K)*, pp. 111-120). Boston: Lynch School of Education, Boston College, TIMSS and PIRLS

- International Study Centre. Retrieved from: [http://timssandpirls.bc.edu/pirls2011/downloads/PIRLS2011\\_Enc-v1.pdf](http://timssandpirls.bc.edu/pirls2011/downloads/PIRLS2011_Enc-v1.pdf).
- Mullis, I.V.S., Martin, M.O., Minnich, C.A., Drucker, K.T., & Ragan, M.A. (Eds.), *PIRLS 2011 Encyclopedia. Educational Policy and Curriculum in Reading (Vols 1 and 2)*. Boston: Lynch School of Education, Boston College, TIMSS and PIRLS International Study Centre. Retrieved from: [http://timssandpirls.bc.edu/pirls2011/downloads/PIRLS2011\\_Enc-v1.pdf](http://timssandpirls.bc.edu/pirls2011/downloads/PIRLS2011_Enc-v1.pdf).
- Ministry of Education and Science (2015). *Education for All 2015 National Review Report: Bulgaria*. Retrieved from: <http://unesdoc.unesco.org/images/0023/002311/231176e.pdf>.
- Ministry of Education and Science (2014). *National Strategy for Enhancement and Increasing Literacy (2014 – 2020)* (in Bulgarian). Retrieved from: <http://www.mon.bg/?go=page&pageId=74&subpageId=143>.
- Ministry of Education and Science (2014). *National Plan for Implementation of the National Strategy for Enhancement and Increasing Literacy 2015 – 2016* (in Bulgarian). Retrieved from: <http://www.mon.bg/?go=page&pageId=74&subpageId=143>.
- Ministry of Education and Science (2014) *National Strategy for Effective Implementation of ICT in Education and Science (2014-2020)* (in Bulgarian). Retrieved from: <http://www.mon.bg/?go=page&pageId=74&subpageId=143>.
- Ministry of Education and Science. *National Strategy for Reducing Early School Leaving (2013-2020)* (in Bulgarian). Retrieved from: <http://www.mon.bg/?go=page&pageId=74&subpageId=143>.
- Ministry of Finance, Bulgaria. *Convergence Programme (2013-2016)* (in Bulgarian). Retrieved from: [http://ec.europa.eu/europe2020/pdf/nd/cp2013\\_bulgaria\\_en.pdf](http://ec.europa.eu/europe2020/pdf/nd/cp2013_bulgaria_en.pdf).
- Ministry of Labour and Social Policy (2013). *National Strategy on Reducing Poverty and Promoting Social Inclusion 2020*. Retrieved from: <http://www.mlsp.government.bg/index.php?section=CONTENT&I=382&lang>.
- Mullis, I.V.S., Martin, M.O., Minnich, C.A., Drucker, K.T., & Ragan, M.A. (2012). *Pirls 2011 Encyclopedia: Education Policy and Curriculum in Reading*, IEA.
- National Network for Children (2015). Report Card 2015: What is the average score of State's care for children? Retrieved from: <http://nmd.bg/en/report-card-2015-what-is-the-average-government-score-for-childcare/>.
- National Statistical Institute (2015) *Education in the Republic of Bulgaria for 2014-2015 school year*. Retrieved from: <http://www.nsi.bg/sites/default/files/files/publications/education2015.pdf>.
- Nikolov, A. (2013), *School education in Bulgaria: state and tendencies*. Sofia, Institute for market economics (in Bulgarian). Retrieved from <http://ime.bg/bg/articles/uilishtnoto-obrazovanie-v-bygariya-systoyanie-i-tendencii/>.
- OECD (2014). PISA 2012 Results in Focus: What 15-year-olds know and what they can do with what they know.
- OP "Science and Education for Intelligent Development" <http://sf.mon.bg/?go=page&pageId=32>.
- Park, M. & McHugh, M. (2014). *Immigrant Parents and Early Childhood programs: addressing barriers of literacy, Culture, and System Knowledge*. Washington DC: Migration Policy Institute. Retrieved

- from: <http://www.migrationpolicy.org/research/immigrant-parents-early-childhood-programs-barriers>.
- Peer Review on Early School Leaving Background paper: BULGARIA, available at: [http://ec.europa.eu/education/events/2013/documents/peer-backbg\\_en.pdf](http://ec.europa.eu/education/events/2013/documents/peer-backbg_en.pdf).
- Petrova, S. & Vasileva, N. (2013). *Challenges facing the school education: Results from the participation of Bulgaria in PISA 2012*. Sofia, Center for Control and Quality Assessment of Education (in Bulgarian). Retrieved from: [http://www.ckoko.bg/upload/docs/2013-12/PISA\\_2012.pdf](http://www.ckoko.bg/upload/docs/2013-12/PISA_2012.pdf).
- Petrova, S. (2013) Четивната грамотност на българските четвъртокласници: резултати от участието на България в международно изследване на напредъка в четивната грамотност на учениците – PIRLS 2011. *Strategies for Policy in Science and Education*, Volume 21, Number 1, 2013.
- Petrova, S. et al.(2014), Изследване на четивната грамотност на учениците в VI клас. Анализ на резултатите. София, 2014 г.
- Peycheva-Forsyth, R. (2010), the qualification and career development of Bulgarian teachers – current status, issues, perspectives. Retrieved from: [http://ec.europa.eu/education/policies/2010/doc/jir\\_council\\_final.pdf](http://ec.europa.eu/education/policies/2010/doc/jir_council_final.pdf).
- Public Education Act (1991) (in Bulgarian). Retrieved from: <http://www.mon.bg/?go=page&pageId=7&subpageId=57>.
- Pre-school and School Education Act (2015). Retrieved from: <http://www.mon.bg/?go=page&pageId=7&subpageId=57> (in Bulgarian).
- Reducing early school leaving: Key messages and policy support /Final Report of the Thematic Working Group on Early School Leaving, November 2013: [http://ec.europa.eu/education/policy/strategic-framework/doc/esl-group-report\\_en.pdf](http://ec.europa.eu/education/policy/strategic-framework/doc/esl-group-report_en.pdf).
- State agency for child protection (2014). *SASP will develop National strategy for the prevention of early births*. (in Bulgarian). Retrieved from: <http://sacp.government.bg/novini/2014/04/01/dazd-she-izgotvi-nacionalna-strategiya-za-prevenci/>.
- Strategy for Reducing Early School Leaving 2013-2020*, available in Bulgarian language at: <http://www.mon.bg/?go=page&pageId=74&subpageId=143>.
- Terzieva,V., Paunova,E., Kademova-Katzarova,P.and Stoimenova,Y. (2014) *Implementation of ICT-based teaching in Bulgarian schools*. Sofia, Institute of Information and Communication Technologies - Bulgarian Academy of Sciences – Bulgaria. Retrieved from: [http://iict.bas.bg/acomin/docs/sci-forums/7-9-July-2014/paper\\_2.pdf](http://iict.bas.bg/acomin/docs/sci-forums/7-9-July-2014/paper_2.pdf).
- UNESCO (2011). *World Data on Education. Bulgaria*. Retrieved from: [http://www.ibe.unesco.org/fileadmin/user\\_upload/Publications/WDE/2010/pdf-versions/Bulgaria.pdf](http://www.ibe.unesco.org/fileadmin/user_upload/Publications/WDE/2010/pdf-versions/Bulgaria.pdf) (accessed August 6, 2014).
- UNICEF Innocenti Research Centre (2012). *Measuring Child Poverty: New league tables of child poverty in the world's rich countries*. Innocenti Report Card 10. UNICEF Innocenti Research Centre, Florence.

- World Bank (2013). SABER. *Early Childhood Development, Bulgaria Country Report 2013*, SABER. Retrieved from: [http://wbfiles.worldbank.org/documents/hdn/ed/saber/supporting\\_doc/Country\\_Reports/ECD/SABER\\_ECD\\_Bulgaria\\_CR\\_Final\\_2013.pdf](http://wbfiles.worldbank.org/documents/hdn/ed/saber/supporting_doc/Country_Reports/ECD/SABER_ECD_Bulgaria_CR_Final_2013.pdf) (accessed December 7, 2015).
- World Bank (2013). SABER. *Teacher Country Report: Bulgaria 2013*. Retrieved from: <http://documents.worldbank.org/curated/en/2013/01/18451501/bulgaria-teachers-policy>.
- World Bank (2013). *GINI index*. Retrieved from: <http://data.worldbank.org/indicator/SI.POV.GINI>.
- Zahariev, B. & Yadkova, L. & Peneva, L & Yordanov, I. (2010). *Early children's wellbeing in Bulgaria*. Sofia, Open Society Institute (in Bulgarian). Retrieved from: <https://www.unicef.bg/assets/PDFs/new/44.pdf>.