



LITERACY IN CROATIA

COUNTRY REPORT
CHILDREN, ADOLESCENTS AND
ADULTS

March 2016

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1 Introduction

This report on the state of literacy in Croatia 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 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

Croatia participated in IEA's PIRLS (4th graders reading comprehension) in 2011, and in OECD's PISA (15 year-olds' reading literacy) in 2009 and 2012. This means it is possible to describe the change over time in average reading proficiency, according to different characteristics of the readers, only for 15 years-old students, and to compare relative reading levels of proficiencies for different age groups. Croatia took part in PIRLS 2011 only, no trends can be reported for 4th graders.

In PISA 2012, Croatia performed just below the EU average (485 vs 489 EU average), a somewhat higher performance than at the previous cycle (+ 9 points).

The proportion of pupils who can be considered as low-performing readers was close to the EU average (18.7% vs 19.7%). These students can read simple texts, retrieve explicit information, or make straightforward inferences, but they are not able to deal with longer or more complex texts, and are unable to interpret beyond what is explicitly stated in the text. The proportion of low-performing readers has decreased between 2009 and 2011 (by almost 3%). The proportion of top-performing readers was 4.4%, lower than in EU countries on average (7%).

In PISA 2009, the gap according to the pupils' socioeconomic background was lower than the EU average (73 vs 89 on average). The gap between native students and students with a migrant background was higher than in EU countries on average (18 vs 38 EU-average), although the distribution was nearly equivalent. The mean score difference between those who always spoke the test language and those who spoke another language was just below the EU-26 on average (52 vs 54). It should be underlined that the number of students who spoke another language was 1.5% in Croatia (vs 13.3 % on EU average).

In Croatia, the gender gap (in favour of girls) was higher than the corresponding EU average difference (51 vs 44 on EU average), namely more than one year of schooling. It remained nearly unchanged between 2009 and 2012: the girls' performance increasing by 6 score points, boys' by 9.

In conclusion, Croatia has slightly increased its performance in reading between 2009 and 2012 among 15 year-olds. Nevertheless, it remains just below the EU average. Croatia has a proportion of low-performing readers close to the EU countries on average. The data point to a low percentage of top performers, below the EU average. The spread of achievement (gap between low and top performing readers) is lower than in the EU on average. The gap according to the gender is higher than on EU average in both studies. The gap according to socioeconomic status is very much higher in PIRLS and very much higher in PISA. The gap according to migration or language spoken at home was lower than in EU on average at both levels.

In PIRLS 2011, Croatia performed above the EU's average (553 vs 535) and the proportion of low-performing readers was limited (10% only vs 20% in EU). The spread in achievement between top and low performers was lower than the EU-24 average difference (154 vs 177). The gender gap with 14 points difference was higher than the EU average with 12. In Croatia, fewer students had parents whose highest level of educational attainment was university or higher (18%) than on average across the EU-21 (30%), while fewer had parents whose highest level was lower secondary or below (Croatia: 7%; EU-24: 18%). Pupils in Croatia whose parents attained a University degree or higher had a mean

score (590) some 69 points higher than students whose parents completed lower secondary or below (521). The average difference across the EU-24 countries was 76, indicating a slightly weaker relationship between parent's educational achievement and students' reading achievement in Croatia, which is coherent with what was observed among 15 year-olds. The educational system seems somewhat more equitable in Croatia than in European countries on average.

The causes of PISA and PIRLS results was never openly discussed in public in Croatia, but they however encouraged the Ministry of Culture of the Republic of Croatia to draft the National Strategy for the promotion of reading. The Strategy was developed in 2015 but has not yet been accepted by the Government.

There is a need for programmes for raising awareness among all parents that literacy is a key to learning and it gives more opportunities and more secure jobs. In Croatia, there have been several national campaigns and programmes for raising literacy awareness (national campaign Read to me!, Croatian Book Month, Books for Babies, photo-contest Smile... While Reading, Ow(l)etter party, Reach for the Stars through Reading, Interliber...).

Croatia did not take part in the Program for the International Assessment of Adult Competencies (PIAAC) and information about literacy among adults is provided by The Ministry of Science, Education and Sports of the Republic of Croatia, The Croatian Agency for Vocational Education and Training and Adult Education, and The Croatian Bureau of Statistics. In Croatia, primary education is compulsory and free. However, 62,092 citizens aged 15 or older did not finish primary school, 3% of whom did not have any education.

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

Creating a Literate Environment

Pre-Primary Years

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. Compared to the European average, many pupils in Croatia have parents with positive attitudes towards reading, as PIRLS 2011 data show. Parents engage often or at least sometimes in literacy related activities with their children. Since reading to the child is a predictor of future literacy achievement it is a matter of concern that 23% of parents of six-month-old children in Croatia do not read or look at picture-books with their babies, and that reading together does not count among the daily habits of 9 % of the parents of one-year-old children, 7 % of the parents of three-year-old children and 14 % of the parents of six-year-old children. (UNICEF, 2012.)

Strengthen and support libraries: The most successful programs and projects are perceived by librarians and implemented in the libraries such as *Read to me!*, the first Croatian national campaign promoting reading aloud to children from the earliest age (National campaign "Read to me!", 2013), or projects such as *Books for Babies* by the Public library of Koprivnica "Fran Galović", which comprises of packages given to every newborn in Koprivnica hospital (Knjižnica i čitaonica "Fran Galović" Koprivnica. Knjige za bebe). But a great obstacle to accessing reading and literacy programmes in public libraries is the annual membership fee. There is a need for free public libraries in Croatia so that libraries are available to all.

More family literacy programs needed: There is a need for programmes to raise awareness of all parents that literacy is a key to learning. In Croatia, there are a number of projects that serve as examples of "best practices" but they are often isolated and rarely have positive, systemic effects on literacy.

Primary Children and Adolescents

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.

Providing a literate environment in school: Based on data provided by their teachers, PIRLS 2011 shows that 51.2% of students in Croatia are in classrooms which have class libraries – below the corresponding EU-24 average of 73%. In Croatia, 9.6% of students are in classrooms whose teachers report that the students use computers to write stories or other texts at least monthly, compared to the EU-average of 33%.

Supporting reading motivation and reduce gaps in literacy: 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. Not only children from culturally disadvantaged families are “at risk” in their literacy development but also those with “special educational needs”.

Strengthening the role of public libraries in reading promotion: There are Croatian libraries with excellent infrastructure and innovative services currently supported by the latest technology, but there are also libraries that do not have even the most basic equipment for their core operations. Croatian libraries in poorer places are not systematically funded, which results in insufficient infrastructure and reduced services.

Take advantage of opportunities of school libraries and librarians: In the Croatian educational system, the school library has highly educated school librarians with, in many cases, the widest and the longest education from all of the employees in their school. At this moment Croatian school libraries have the strongest potential for the change of educational system, although they are still inadequately recognised.

Improving literate environments for children and adolescents: Programmes, initiatives and examples: Programmes such as *The Croatian Book Month* and *Book Night* are organised at national level and they are already very popular among children and adolescents. *Ow(l)etter party* is a national campaign to popularise reading with primary and secondary school pupils, help pupils to develop a positive attitude towards reading, and raise their self-esteem (Hrvatska udruga školskih knjižničara. Tulum slova [project]). Many schools have developed projects in cooperation as *CARNet - Croatian Academic and Research Network* provides cheaper Internet access in school, but also at home, by providing pupils with an *AAI@Edu.hr* electronic identity. With their *AAI@Edu.hr* electronic identity, pupils can ensure cheaper Internet access at home and can also use it to access digital databases such as *eReadings* (CARNet. eLektire).

Adults

Croatia did not take part in the Program for the International Assessment of Adult Competencies (PIAAC) but data can be obtained from different sources: The Croatian Agency for Vocational Education and Training and Adult Education, the Croatian Bureau of Statistics, Official Gazette.

According to the law, a person is adult at the age of 15. The education of adults in Croatia is accepted as an integral part of a unique educational system according to the Law on educating Adults which was passed in 2007 as a precaution according to The Strategy for Adult Education from the year 2004.

Participation of adults in learning is low in Croatia but positive developments are visible. In 2003, the Government of the Republic of Croatia adopted a ten-year project on literacy for adults "For a Literate Croatia a Path to a Desirable Future", in accordance with the framework of the UN Resolution "Decade of Literacy 2003-2012". The Government allocated considerable funds for primary adult education.

Fostering literacy provision for adults: Although the Government of the Republic of Croatia in 2003 adopted a ten-year project on literacy for adults "For a Literate Croatia a Path to a Desirable Future", there is still need to correct the implementation of the project:

- lack of campaign that would provide necessary information to the public
- modified curriculum, textbooks and other learning materials, teachers with an andragogic knowledge or skills for adult education

Improving the Quality of Teaching

Pre-Primary Years

Investing more money in Early Childhood Education and Care (ECEC): According to Eurostat (2014, Figure D3), the total public expenditure per child in pre-primary education as a percentage of GDP in Croatia is 0.5% (the range is from 0.04% in Turkey and 0.1% in Ireland to 1.01% in Denmark).

Raising the professional qualification level of staff in ECEC: In many European countries, teachers in kindergarten have a lower level of qualification regarding the minimum required level to become a qualified teacher. In Croatia, the minimum required level to become a qualified teacher is Bachelor level (ISCED 5), length of study is 3 years.

Introducing comprehensive literacy curricula in pre-primary schools: In preschool, children can be prepared for formal instruction in school. In Croatia, one of the particular goals that the curriculum sets for preschool education refers to children's involvement in educational activities that motivate and help children to use various means of communication and expression (speech, vocabulary enrichment, visual arts expression, musical expression) (Vican, Rakić, & Milanović Litre, 2007 p. 16).

Primary Children and Adolescents

Ensuring adequate time for language and literacy instruction in primary and secondary schools: According to PIRLS 2011, in Croatia, students spend 46 instructional hours per year on reading as part of language, compared with an EU-24 average of 68, though the EU-24 average is itself low. Teachers in Croatia report allocating less time to teaching reading across the curriculum and in reading classes (116 instructional hours per year) than on average across EU-24 countries (147 hours).

Building a stronger focus on literacy into curricula: Croatia does not have a separate curriculum for reading and writing (Mullis et al. 2012, Vol.1, exhibit 5, p. 31). Reading is a part of the national language curriculum that also includes writing and other communication skills. There is a need to mainstream reading / writing literacy across the curriculum and integrate literacy skills across subjects.

Ensuring screenings to identify struggling readers: While Croatia is identified as having goals and standards in the curriculum for each grade at primary level, it is not clear how these inform assessment of student performance or the identification of reading difficulties (Mullis et al. (Exhibit 7, 2012). 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 and learners in order to systematically support them, allocating attention and resources accordingly, targeting low performing schools - in need of additional funding and resources - as well as low performing students within schools. Assessments therefore need to be closely linked with support programmes and adequate qualifications of teachers and specialists.

Supporting struggling literacy learners: Schools should provide *support systems* (additional instruction time, additional experts like reading experts, psychologists, speech therapists) for students falling behind in reading.

Improving the quality of teacher training: PIRLS 2011 provides information about additional staff and availability of support persons for reading. Based on teacher responses, 22% of students in Croatia 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%. Nineteen percent of students in Croatia are in classrooms where there is access to a teacher aide with the same frequency, while 7% are in classrooms where there is access to an adult/parent volunteer. Corresponding EU-24 averages are 13% and 3%. Hence, teachers in Croatia have marginally less access to specialised professionals, somewhat greater access to teacher aides, and adult volunteers as on average across the EU-24, where full availability is concerned. There are no compulsory courses for teachers, but all teachers have to attend certain number of courses organised by the Croatian Education and Teacher Training Agency during one school year, and some of the offered courses focus on literacy development.

Improving the quality of literacy instruction: Programmes, initiatives and examples: As a result of ongoing reforms, Croatian policy makers have taken promising steps to strengthen literacy performance. Namely, in 2015, an expert group for implementing Comprehensive Curricular Reform for early and pre-school, primary and secondary education started their work (Cjelovita kurikulumna reforma, 2015). The curricular reform will focus on increasing functional literacy levels of students. The reform includes drafting curricular documents, establishing a system for evaluation, assessment and reporting, training of teachers and other staff and preparing new manuals, textbooks, auxiliary teaching resources and digital content. The results of research carried out in Croatian schools has shown that our school children aged 6-10 achieved above-average results, but later as teenagers, they achieved below-average results at all three levels of literacy (natural, mathematical, reading) according to the PISA studies. Statistically, Croatian average 15 years old students know how to count in different mathematical operations, but it seems to be difficult for them to apply those operations to tasks that simulate life situations. This school reform, comprehensive and highly professional, will focus on developing basic competences for lifelong learning.

Adults

Improving the curricula for adult literacy: The national curricula for adult literacy consists of six terms, each lasting 18 weeks. Within the project on literacy for adults "For a Literate Croatia a Path to a Desirable Future", apart from being given an opportunity to finish primary school, the participants will also be given an opportunity to complete vocational training, required for less complicated jobs in the labour market.

It is not possible to identify an explicit focus on literacy in VET provision. It is possible that there are different literacy elements in VET teaching practices; however, this content is dependent on the individual provider and trainer. Adult literacy provision in Croatia has a focus on addressing literacy needs in the workplace.

Improving the qualification and status of teachers of adult literacy: In Croatia, it is not possible to report on adult literacy teachers as a profession. Adult education teachers usually come from regular schools so their qualifications are the same as those in the regular system. They are paid by the hour and the amount depends on the agreement with the employer. It is necessary to start and develop a professional adult literacy workforce.

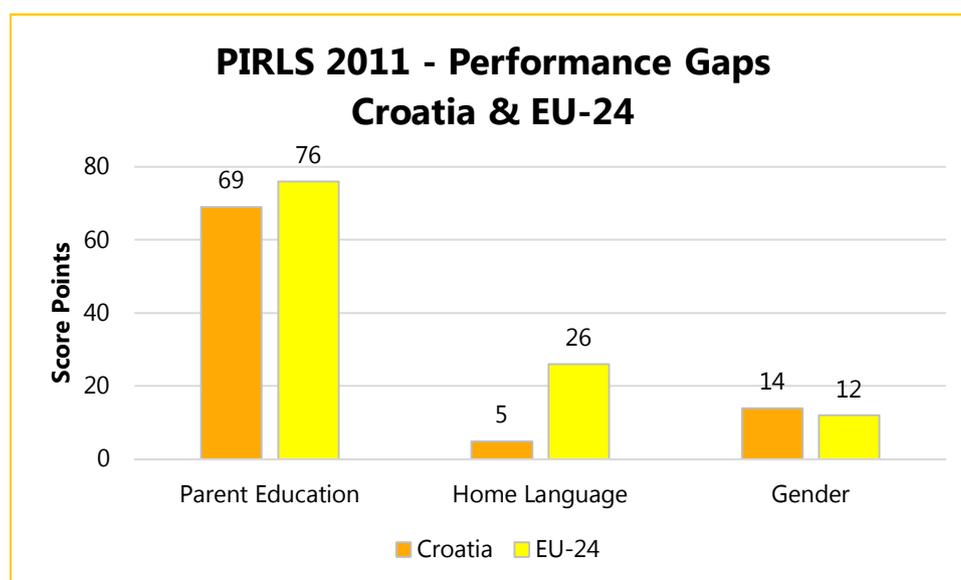
Increasing Participation, Inclusion and Equity

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).

Performance gaps in Croatia and on average across the EU-24 are shown in Figures 1 and 2.

Students in Croatia whose parent completed University or Higher achieved a mean score (590) that was some 69 points higher than students whose parents completed Lower Secondary or below (521). The average difference across the EU-24 is 76 points, indicating a broadly similar relationship between parents' educational level and performance in Croatia. In Croatia, the gap in reading performance according to the students' socioeconomic background is lower than in the EU countries on average. Girls in Croatia achieved a mean score on overall reading (560) that was higher than boys' (546) by 14 points in 2011. This was about the same as the EU-24 average difference of 12 points. The gap in performance between students who always speak the language of the PIRLS test at home and those that hardly ever or never do so is small in Croatia.

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



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

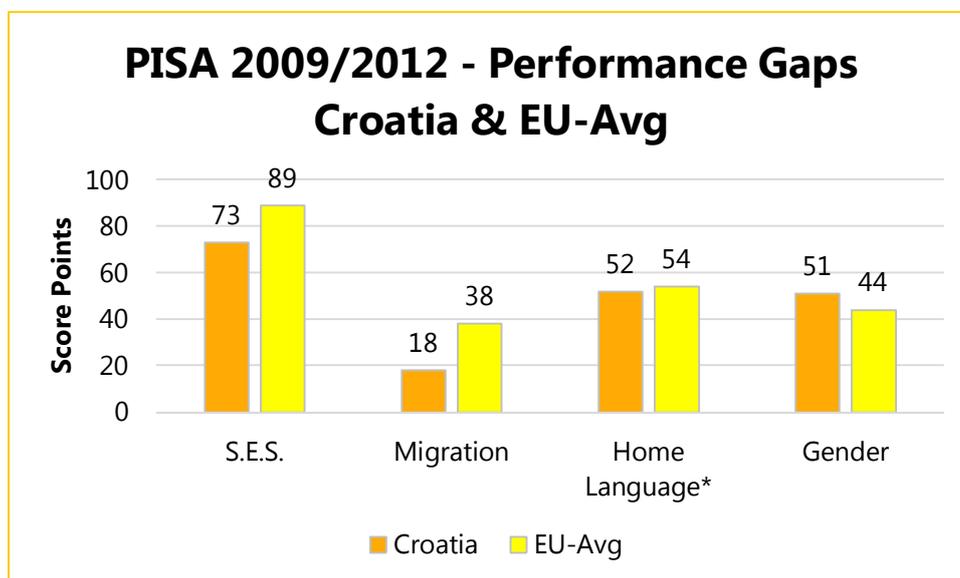
The performance in reading among Croatian students increased by 9 points between 2009 and 2012, though the increase was not statistically significant. In Croatia, the gap in reading performance according to the students' socioeconomic background is lower than in the EU countries on average. The gap between native students and those with an immigrant background is much smaller in Croatia than in EU countries on average.

The gap between students speaking the test language at home and those who do not (1.5 % of the students) is close to (52 score points) the EU's average. It is equivalent to more than a year of schooling.

However, the percentage of students who do not speak the test language at home (1.5%) is so low that this result has to be taken with a lot of caution.

In Croatia, between 2009 and 2012, the girls' performance increased by 6 score points while the boys' increased by 9 (Table 17). The trend is similar to the EU countries on average in the same period: the girls' and boys' performance increased respectively by 4 score points.

Figure 2: Performance Gaps in Croatia and on Average across EU Countries - Post-Primary Level



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

Pre-Primary Years

Compensating socio-economic and cultural background factors: About 10 per cent of children under the age of 14 live in poor households, the most vulnerable among them being Roma. The vulnerability of this group continues in spite of the participation of Croatia in the intergovernmental initiative Decade of Roma Inclusion (2005-2015). Despite the fact that Croatia offers good overall social protection coverage, new policies are needed to strengthen social recovery. The development, analysis and monitoring of such policies are hampered by inadequate data disaggregated by sex, age and social groups, and by insufficient monitoring of child poverty. (UNICEF 2011. Country programme document 2012 -2016 for Croatia).

Increasing pre-school attendance of disadvantaged children: According to European Commission/EACEA/Eurydice/Eurostat (2014, Figure C1 p.62), the enrolment rate at age 4 is 70.6%. Croatia does not yet reach the European benchmark of at least 95% of children between age 4 and the start of compulsory education participating in ECEC. The benefit of preschool attendance in Croatia 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 27 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 Croatia pre-primary education is not always free. In most - but not all - cases, parents participate in the costs of pre-primary education through fees (EURYDICE, 2013).

The Republic of Croatia has a regulated education system for children with developmental difficulties from an early, pre-school age, which is important for early intervention and inclusion in the suitable pre-school and rehabilitation programmes. But still, UNICEF reports that integration of children with developmental difficulties and disabilities in the regular education system continues to be a challenge because insufficient support is given to education for such children in the form of access, transport and teaching assistants (UNICEF 2011. Country programme document 2012 -2016 for Croatia).

Primary Children and Adolescents

In Croatia, fewer students had parents whose highest level of educational attainment was university or higher (18%) than on average across the EU-21 (30%), while fewer had parents whose highest level was lower secondary or below (Croatia: 7%; EU-24: 18%). Pupils in Croatia whose parents attained a university degree or higher had a mean score (590) some 69 points higher than students whose parents completed lower secondary or below (521). The average difference across the EU-24 countries was 76, indicating a slightly weaker relationship between parents' educational achievement and students' reading achievement in Croatia, which is coherent with what was observed among 15 year-olds.

Preventing early school leaving: 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. According to Eurostat, in Croatia, the rate of early school leavers was 3.7 % in 2013. The target value of the early school leaving (ESL) rate set for 2020 is 4.0% (European Commission, 2013). According to Eurostat, in 2011, the percentage of 18-year olds in education was 66.9%, which situated Croatia well under the EU-27 average (80.7%). By 2012, this indicator increased to 68.1%.

According to the National Reform Programme of the Republic of Croatia, adopted on 24th April 2014, in order to prevent early school leaving, a number of measures have been envisaged, such as (co)funding of textbooks for elementary and high school students who live in poor socio-economic conditions, (co-)funding of textbooks for blind high school students, (co-)funding of transportation for elementary and high school students who live in poor socio-economic conditions, and funding of continuing education for students who have completed the two-year and three-year vocational programmes to ensure vertical mobility (National Reform Programme, 2014). There are plans to extend compulsory education beyond the elementary school, but for now, this has not happened.

Devolve responsibility/decision making to schools: All Croatian policy/strategy papers promote the idea of decentralisation and deregulation as such, but do not explicitly and consistently deal with these processes, leaving the issue of decision-making largely undefined. A direct top-down control still prevails in the government-school relations, especially in the area of curriculum development. It is necessary to stress the importance of defining relations between the national (framework) and the school-based (applied) curriculum.

Adults

According to national law, migrants have the right to learn the Croatian Language for free. Provision is the responsibility of the Ministry of Science, Education and Sports, and providers are adult education institutions.

Although there are no national programmes to support adults in acquiring digital skills, many public libraries provide free courses. Public libraries also have a role in organising family reading programmes which often include all members, from all ages. Public libraries in Croatia play a vital part in bridging the gap between formal and informal education, providing different programmes promoting reading and literacy, but it is not enough and it is not continuous, and there is no coherent structure in those programmes to fulfill all needs of adults in Croatia. Croatian libraries, especially Zagreb City Libraries (ZCL), are very successful in organising library services and providing programmes for homeless people in the capital of Croatia, Zagreb. The number of homeless people is steadily growing every day with a very small number of quality social inclusion programmes intended for them.

3 General Information on the Croatian Education System

Croatia, officially known as the Republic of Croatia (Republika Hrvatska) is a parliamentary democracy situated in Southeast Europe. The country's population, estimated at 4.5 million in 2010, consists of various minorities, including Serbians, Bosnians, Hungarians, Slovenes, Czechs, Roma and Italians. Croatia is a full member of the European Union since July 2013. The Ministry of Science, Education and Sports is responsible for designing education strategies and policies. It determines what is taught and is responsible for relevant financial policy.

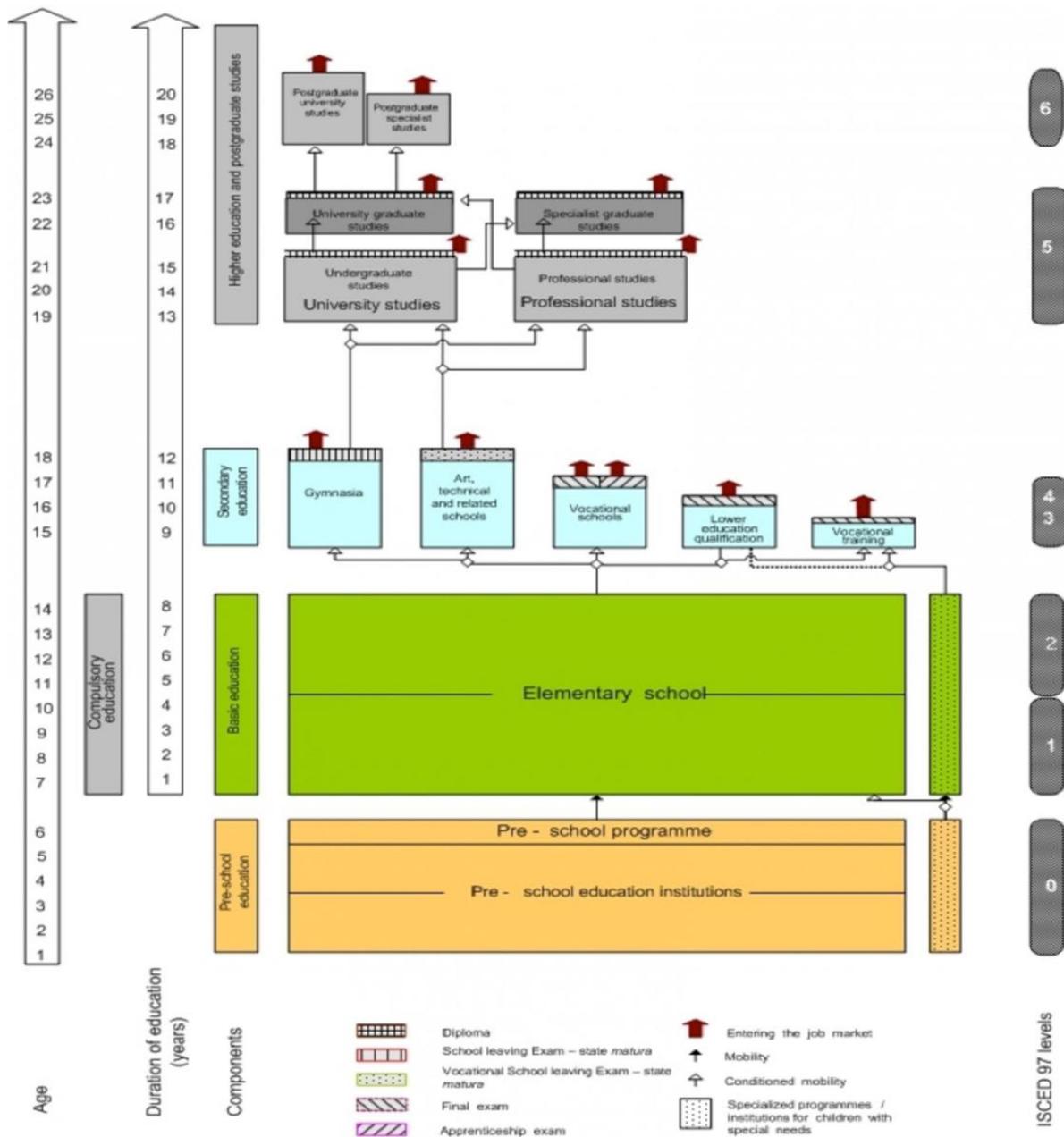
Education in Croatia is a constitutional right in terms of which primary education is free and all other education is available to all. Preschool education lasts according to parents' needs – children can enter preschool education at the age of 6 months, but such is not compulsory. The compulsory preschool programme starts one year before elementary education and it is compulsory for all children. Children that enter preschool education before the compulsory preschool programme do not have to change their kindergartens or groups, they continue their regular group programme and it is valid as the compulsory preschool programme.

Elementary education in Croatia is free and compulsory for all pupils from the age of 6 to 15 years, with the exception of primary education for students with extensive developmental disabilities which can last until the age of twenty-one (European Agency). The first four years of primary education are characterised by unitary class teachers who teach all subjects except language classes and physical education, which are taught by specialist teachers. Most teachers involved in the first four years of primary education are usually taught at the Teacher Education Faculties, with the exception of some physical education teachers. Subjects taught are Croatian language, Mathematics, Visual art, Nature and society, Physical education, Music education and at least one foreign language that is compulsory from 1st grade. Religious education is an elective subject.

After the first four years of primary education in Croatia, the curriculum widens to include specialist teachers and additional scientific subjects. Children are taught the following subjects: Croatian language, Foreign language, Mathematics, Visual art, Physical education, Music education, History, Geography, Biology, Chemistry, Physics, IT, Religious education, Ethics and in addition to the 1st foreign language, often a second language (usually German, French or Italian). All subjects are taught from 5th grade except Chemistry and Physics, which are added to the curriculum in the 7th grade. All subjects are compulsory except Religious education and Ethics between which children have to choose in 5th grade and attend until the end of their primary schooling.

Upon completion of primary schooling, secondary education gives everyone, under equal conditions and based on individual abilities, the opportunity to acquire knowledge and the competence needed to enter the work force and to continue with further education. Children can enrol in different school types, but their success depends on their grades in the last two years of primary school. They can either enrol in general, classic, language or math grammar school (gimnazija) or vocational schools, which last either three or four years.

Figure 3: Detailed structure of the Croatia School System⁶



In the area of higher education, all students, including young people from disadvantaged groups, are guaranteed the right to education, good quality study programmes and educational processes, as well as the equality of all applicants during admission to Croatian higher education institutions. In Croatia, there is a binary higher education system, with higher professional education programmes offered by polytechnics and schools for higher professional education, on the one hand, and academic programmes offered by universities, on the other. Most of Croatia's higher education institutions are public institutions. The language of education is Croatian. However, under the influence of the Bologna Process, the number of higher education programmes being offered in English is growing slowly but surely.

⁶ See: <https://www.european-agency.org/country-information/croatia/national-overview/complete-national-overview>.

CHILDREN AND ADOLESCENTS

4 Literacy Performance Data for Children and Adolescents

4.1 Performance Data for Children and Adolescents

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 Croatia achieved an overall mean reading score of 553 in PIRLS 2011 (Table 1). Only Finland (568) and Northern Ireland (559) had significantly higher mean scores than Croatia. Performance in Croatia was 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 – Croatia and EU-24 Average

	Overall Reading – Mean Score
Croatia	553
EU-24	535

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

In Croatia, 10% of students performed at or below the Low benchmark on overall reading (Table 2). This is half the EU average of 20%, and is slightly higher than the proportion in Finland (8%). Croatia's standing relative to most EU countries on this indicator is strong (see Appendix Table A.6). In Croatia, 11% of students achieve at the Advanced benchmark. This is above the EU average of 9%, but is well behind countries such as Northern Ireland (19%), England (18%) and Finland (18%).

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
Croatia	1	9	36	43	11
EU-24	5	15	36	35	9

Croatia's standard deviation of 60 is 10 points lower than the EU-24 average indicating a slightly smaller spread of achievement (Table 3). Among EU countries, the Czech Republic (62) had similar Standard Deviations.

The difference between the scores of pupils at the 10th and 90th percentiles in Croatia – 154 points – is 26 points below the corresponding EU-24 average of 180. This indicates that there narrower range of achievement between the 10th and 90th percentiles than there is on average across the EU-24.

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

	Standard Deviation	10 th Percentile	90 th Percentile	90 th -10 th
Croatia	60	474	628	154
EU-24 Avg	70	441	621	180

Statistically significant differences in **bold**

Croatia did not participate in PIRLS 2001 or 2006; therefore trends in performance cannot be reported.

4.1.2 Gaps in reading

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

Parent's educational achievement

Students in Croatia whose parent completed University or Higher achieved a mean score (590) that was some 69 points higher than students whose parents completed Lower Secondary or below (521) (Table 4). The average difference across the EU-24 is 76 points, indicating a broadly similar relationship between parent's educational level and performance in Croatia.

This gap needs to be interpreted with reference to the proportion of students with parents who have completed university or higher (18% in Croatia, compared with an EU-24 average of 30%), and the proportions with parents completing lower secondary or below (7 % in Croatia, 18% on average across the EU-24). Hence, the majority of parents in Croatia fall into a middle category, where they have either completed upper secondary or post-secondary education below university level.

Table 4: 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	
Croatia	7	521	18	590	69
EU-24	18	495	30	571	76

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

Challenge/need for action: As more parents complete higher education, efforts should be made to facilitate those students who have lower educational qualifications, to ensure that the gap in reading performance among students remains narrow.

Primary language spoken at home different from language used at school

In Croatia, 85% of pupils reported that they always spoke the language of the PIRLS reading test at home – above the corresponding EU-24 Average (80) (Table 5). Fifteen percent sometimes or never spoke the language of the test at home. The corresponding EU-24 average percentages are similar. The difference in achievement between pupils in Croatia reporting that they always or sometimes/never spoke the language of the test was 5 score points – a difference that was not statistically significant.

Table 5: Percentages of Students Reporting that They Always or Sometimes / Never Speak the Language of the PIRLS Test at Home, and Associated Mean Score Differences – Croatia and EU-24 Average

Language of the Test Spoken at Home	Always		Sometimes /Never		Mean Score Difference (Always – Sometimes/Never)
	%	Mean	%	Mean	
Croatia	85	554	15	549	5
EU-24 Avg	80	541	20	519	26

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

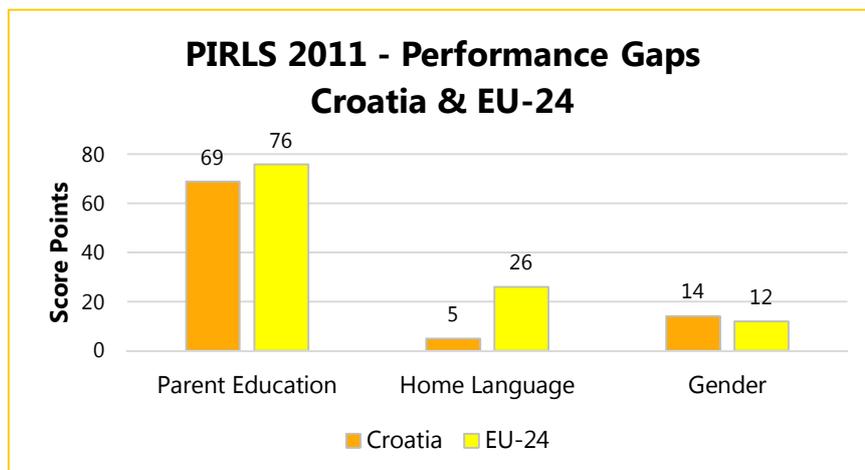
Challenge: The gap in performance between students who always speak the language of the PIRLS test at home and those that hardly ever or never do so is small in Croatia. It would be important to ensure that this gap remains small in the context of any changes in immigration patterns in the next few years.

Gender

Girls in Croatia achieved a mean score on overall reading (560) that was higher than boys (546) by 14 points in 2011. This was about the same as the EU-24 average difference of 12 points.

The equity gaps described above are summarised in Figure 1.

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



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

Attitudes to Reading

There was a difference of 25 points between the top and bottom quartiles of the like Reading Scale in Croatia in 2011 (Table 6). On average across the EU-24, the difference between students in the top and bottom quarters of the Like Reading scale was 50 points. Hence, the relationship between Liking Reading and performance in Croatia is weaker than on average across EU countries. Just 18% of students in Croatia were categorised as 'liking reading' – among the lowest in the study (Mullis et al., 2012, p. 204).

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

Like Reading	Overall Reading Score		
	Top Quartile	Bottom Quartile	Difference (Q4-Q1)
Croatia	568	544	25
EU-24	563	511	52

Students in Croatia in the top quarter of the Confidence in Reading scale achieved a mean score (580) that was some 64 points higher than students in the bottom quarter (516) (Table 7). The average difference across the EU-24 was 80 points, again indicating a relatively weaker relationship between Confidence and performance in Croatia.

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

Confidence in Reading	Overall Reading Score		
	Top Quartile	Bottom Quartile	Difference (Q4-Q1)
Croatia	580	516	64
EU-24	570	490	80

4.2 Performance Data for Adolescents

The performance data are derived from the OECD PISA study.

The Programme for International Student Assessment (PISA) led by OECD⁷ **assesses the skills and knowledge of 15-year-old students every three years in all OECD countries and** in a number of partner countries.

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

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

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

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

Croatia took part in three PISA tests – in 2006, 2009 and 2012.

In PISA 2012, the reading performance of Croatia is close to the EU's average (Table 8).

Table 8: Reading performance in PISA 2012

	Mean	S.E.
Croatia	485	(3.3)
EU-27	489	(0.6)

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

The performance in reading of Croatian students increased by 9 points between 2009 and 2012, though the increase was not statistically significant (Table 9).

⁷ See: <http://www.pisa.OECD.org>

Table 9: 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.
Croatia	-	-	476	(2.9)	485	(3.3)	-	-	9	(5.1)	-	-
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 Croatia, the spread of achievement is smaller than in the EU countries on average (Table 10).

Table 10: 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.
	Croatia	223	(6.4)	198	(8.0)	227
EU-27	251	(1.3)	230	(1.2)	259	(1.6)

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

In Croatia, the proportion of low-performing students is close to the average of European countries, while the percentage of high-performing readers is somewhat lower in the EU on average (Table 11).

Table 11: 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.
Croatia	18.7	(1.3)	4.4	(0.7)
EU-27	19.7	(0.2)	7.0	(0.1)

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

Between 2009 and 2012, in Croatia the proportion of low-performing readers has decreased (by - 3.7%) among girls (by - 3%) and boys (by - 3.6%) (Table 12)

Table 12: 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	-	-	-	-	-	-
2009	22.4	(1.3)	12.5	(1.3)	31.2	(1.8)
2012	18.7	(1.3)	9.5	(1.0)	27.6	(1.9)

Significant differences between assessment cycles in **bold**

4.2.2 Gaps in reading performance (PISA 2009)

Socio-economic status

In the Croatia, the gap in reading performance according to the students' socioeconomic background is lower than in the EU countries on average (Table 13).

Table 13: Difference in reading performance between bottom and top national quarters of the PISA index of economic, social and cultural status – PISA 2009

Difference between bottom and top national quarters of the PISA index of economic, social and cultural status	
Score diff.	
Croatia	73
EU-26	89

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

Migration

In Croatia, the percentage of students with an immigrant background is slightly higher (10.7%) than in the EU countries on average (Table 14). The gap between native students and those with an immigrant background is low (18 score points), which is equivalent to less than a half year of schooling. The gap between native students and those with an immigrant background is much smaller in Croatia than in EU countries on average.

Table 14: 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.	Mean	S.E.	Percentage of students	S.E.	Mean	S.E.	Score dif.	S.E.
Croatia	89.3	(0.6)	479	(2.9)	10.7	(0.6)	461	(5.3)	18	(5.1)
EU-26	91.7	(0.0)	490	(0.4)	8.3	(0.0)	452	(6.4)	38	(6.4)

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

Language spoken at home

In Croatia, the gap between students speaking the test language at home and those who do not (1.5 % of the students) is close to (52 score points) the EU's average (Table 15). It is equivalent to more than a year of schooling.

However, the percentage of students who do not speak the test language at home (1.5%) is so low that this result has to be taken with a lot of caution.

Table 15: 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 performance 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.		
			Croatia	98.5			(0.3)	444		
EU-27	86.7	(0.02)	494	(0.4)	13.3	(0.02)	441	(5.4)	54	(5.4)

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

Gender

The gender difference in reading performance in Croatia is somewhat higher than in the European countries on average (Table 16).

Table 16: Mean reading performance by gender and gender differences – PISA 2009

	Boys		Girls		Difference (B – G)	
	Mean	S.E.	Mean	S.E.	Score diff.	S.E.
Croatia	452	(3.4)	503	(3.7)	-51	(4.6)
EU-26	463	(0.5)	506	(0.4)	-44	(0.5)

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

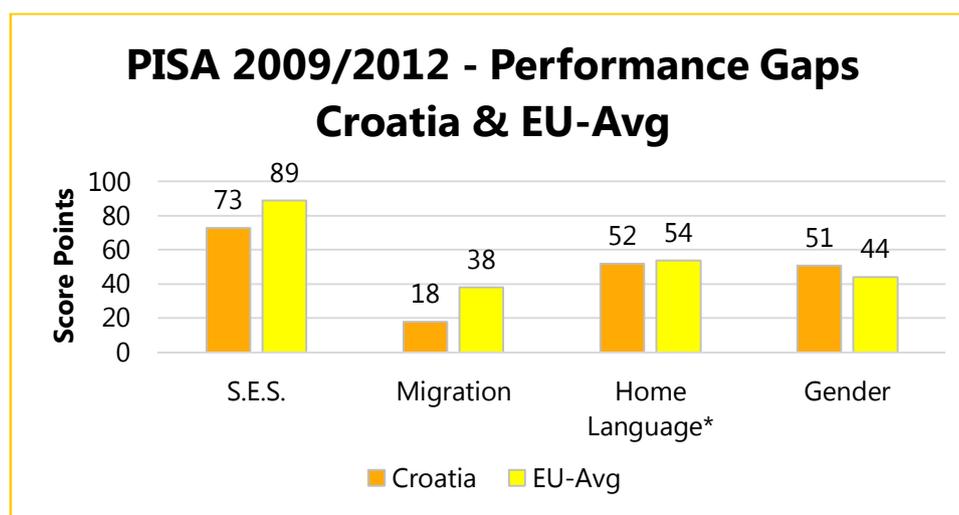
In Croatia, between 2009 and 2012, the girls' performance increased by 6 score points while the boys' increased by 9 (Table 17). The trend is similar to the EU countries on average in the same period: the girls' and boy's performance increased respectively by 4 score points.

Table 17: Trends in reading performance by gender – PISA 2000-2012

	Croatia				EU-27			
	Girls		Boys		Girls		Boys	
	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
2000	-	-	-	-	506*	(0.8)	473*	(0.9)
2009	503	(3.7)	452	(3.4)	507**	(0.7)	464**	(0.8)
2012	509	(3.3)	461	(4.1)	511***	(0.6)	468***	(0.8)

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

Figure 2: Performance Gaps in Croatia and on Average across EU Countries - Post-Primary Level



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

Engagement and metacognition

In Croatia, there is a gap of 84 score points - which is equivalent to two years of schooling - between the students reporting being highly engaged in reading (top quarter), and those reporting being poorly engaged (bottom quarter) in that activity (Table 18). 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 is somewhat lower in Croatia than in the EU country on average.

Table 18: 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.	
Croatia	441	(3.7)	525	(3.3)	84
EU-26	444	(0.8)	543	(0.8)	99

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

In Croatia, there is a gap of 87 score points- equivalent to two years of schooling- between the students who know which strategies are the most efficient to understand and remember a text, and those who have a limited knowledge of that (s. Table 19) This gap is slightly lower than the EU's average (98 score points).

Table 19: Mean reading scores between students in low and top quarters of understanding and remembering strategies

	Low quarter		Top quarter		Difference
	Mean	S.E.	Mean	S.E.	
Croatia	431	(3.4)	518	(3.3)	87
EU-26	433	(0.8)	531	(0.8)	98

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

In Croatia the gap of 96 score points between the students who know which strategies are the most efficient to summarise a text, and those who have a limited knowledge of this is close to the EU's average (Table 20.). This gap is equivalent to almost two years and a half of schooling - This difference between students in low and top quarters reflects how closely reading proficiency and awareness of efficient reading strategies are linked.

Table 20: Mean reading scores between students in low and top quarters of summarising strategies

	Low quarter		Top quarter		Difference
	Mean	S.E.	Mean	S.E.	
Croatia	421	(3.1)	517	(2.8)	96
EU-26	440	(0.8)	530	(0.7)	90

Significant differences according to the degree of awareness of reading strategies (summarising 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 overlap may occur.

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

5.1 Creating a literate environment for children and adolescents

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

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

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

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

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

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

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

5.1.1 Providing a literate environment at home

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

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

Parental attitudes to reading

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

- Like: 36.3% (European average 35.3 %)
- Somewhat like: 50.9% (European average 52.6 %)
- Do not like: 12.8% (European average 17.9 %)

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

Compared to the European average, many pupils in Croatia have parents with positive attitudes towards reading. The importance of parental attitudes to reading is shown by the fact that in Croatia there are significant differences in reading performance at grade 4 between children whose parents like to read (average achievement 567) and those who do not (average achievement 537).

Home Educational Resources

Thirty-five percent of parents in Croatia reported having few home resources for learning – 10 percent more than the EU Average of 25%. A 13 percentage point gap between the EU Average (25%) for many resources and the Croatian average (12%) suggests that pupils in Croatia have less access to home resources for learning. The difference in achievement between pupils in Croatia whose parents reported having many home resources and few resources was 67 score points – 15 points lower than the corresponding EU-24 average difference (79) (ELINET PIRLS 2011 Appendix C, Table E2). This weak association may be linked to a shortage of home resources for learning in Croatia (see Table 21).

Table 21: Percentages of Pupils Whose Parents Reported Having Few or Many Home Resources for Learning, and Corresponding Mean Overall Reading Scores – Croatia and EU-24 Average

Level of Home Resources	Few Resources		Many Resources		Difference (Many - Few)
	%	Mean	%	Mean	
Croatia	35	529	12	593	64
EU-24	25	495	25	573	79

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

Number of (children's) books in the home

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

The PIRLS 2011 database provides the figures below about the number of children's books in the home based on the report of parents:

- 0-10: 25.2% (European average 11.8%)
- 11-25: 31.6% (European average 19.7%)
- 26-50: 27.7% (European average 29.4%)
- 51-100: 11.4% (European average 23.4%)
- >100: 4.1% (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 lower in Croatia.

Also students reported about the number of books, including children books, in the home. In Croatia, 17% of students reported having 10 or fewer books at home (ELINET PIRLS Appendix C, Table E1). This is above the EU-24 average of 11%. Six percent of students in Croatia have 200 or more books, compared with an EU-24 average of 12%. The mean score difference in favour of students with 200 books, compared with those who had 10 or fewer books was 48 points in Croatia, compared with an average of 82 across the EU-24 (s. Table 22). Hence, the association between number of books and reading achievement is considerably weaker in Croatia than on average across the EU-24.

Table 22: Mean Overall Reading Scores of Pupil with 0-10 books at Home, and those with More than 200 Books – Croatia 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	
Croatia	17	524	6	572	48
EU-24	11	482	12	563	82

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

Challenge/need for action: The large proportions of students in Croatia 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, since students who do not experience a home environment that is conducive to learning may struggle in their educational journey

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

- Often: 50.3% (European average 40.7%)
- Sometimes: 49.3% (European average 57.4)
- Never or almost never: 0,4% (European average 1.9%).

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 562, as compared with 544 for those pupils who sometimes 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 gives composite score, it is of interest to look at single items. These numbers are below:

- read books to them often: 46.9% (European average 58.4 %)
- told stories to them often: 63.6% (European average 51. 5%)
- sang songs to them often: 51.7% (European average 50.6%)
- played games involving shapes (toys and puzzles) with them often: 69.0% (European average 63.5%).

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

Recently, there have been several national programmes for raising literacy awareness – starting from preschool. "Read to me!" is the first Croatian national campaign promoting reading aloud to children from the earliest age. It is organised by the Croatian Reading Association, the Croatian Library Association - Children and Youth Services Commission, the Croatian Paediatric Society, and the Croatian Association of Researchers in Children's Literature with support of UNICEF. The campaign was launched on the occasion of the European Year of Reading Aloud (2013), and it is sponsored by the Ministry of Social Policy and Youth.

Challenge: Since reading to the child is a predictor of future literacy achievement, it is a matter of concern that to more than half of the children books are not read often. 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

Availability and use of classroom library

Based on data provided by their teachers, PIRLS shows that 51.2% of students in Croatia are in classrooms which have class libraries – below the corresponding EU-24 average of 73% (ELINET PIRLS 2011 Appendix C, Table H2). In Croatia, 10% of students were in classrooms with more than 50 books, which is below the EU-24 average of 21% (ibid.). However, 78.8% of pupils were in classrooms where the teacher reported taking students to a library other than the class library at least once a month.

Challenge: It would seem important to increase students' access to books in their classroom libraries, though it is recognised that external (public) libraries play a more important role in promoting reading development, than in a number of EU countries.

5.1.3 Providing a digital environment

Digital environment of primary students

A literate environment can also be created by incorporating digital devices into the school environment. According to teachers' reports, 13.0% of fourth grade students in Croatia have a computer available for reading lessons, compared to the EU-average of 45% (ELINET PIRLS 2011 Appendix C Table I6). In Croatia, 12.7% use a computer at least monthly to look up information. The corresponding EU-24 average is higher at 40% (ibid.). In Croatia, 9.6% of students are in classrooms whose teachers report that the students use computers to write stories or other texts at least monthly. The corresponding EU-24 average is 33%.

According to Buljan Culej (2012), government support for e-learning has focused on providing Internet access to all schools, and to ensure that students on island schools have access to e-learning.

All primary pupils also have access to e-Lektire (eReadings) which is a service that offers comprehensive works of Croatian and foreign authors, including those which are on the lists of mandatory school reading assignments, in electronic form. Access to the eLektire contents is free, and they are available to school and university students, as well as their teachers, by using their AAI@Edu.hr electronic identity. The goal of this joint project of the "Bulaja naklada" publishing company and CARNet is to eventually make all elementary and high school reading assignments available on the Internet, including the mandatory and the optional ones, as well as other works of Croatian and foreign authors, all according to regular standards for publication of literary works which are on the lists of school reading assignments, accompanied by corresponding additional contents, such as notes on authors and works, commentaries and explanations, glossaries of less common words, various interesting information, but also graphics, audio and video recordings, as well as other multimedia contents (Carnet. eLektire).

Digital environment of secondary students

Most secondary schools have IT classrooms which are available for use to all students. Some schools have completely transformed their classrooms. Besides other such examples in Croatia, IX. gimnazija in Zagreb has *Classroom from the Future* – a classroom that has one central teacher computer, tablets for all students and a digital whiteboard which enables interactive learning and knowledge sharing between all students.

The 'Nikola Tesla' National Distance-Learning Portal is a system that allows computer-assisted classes and learning to be conducted with the use of digital educational materials. The Portal contains:

- secondary school mathematics, physics, biology, chemistry and English materials
- ECDL modules which include materials required for the basic computer literacy diploma
- courses on the application and use of the Internet and Internet content development tools.

Secondary school mathematics, physics, biology, chemistry and English materials with the 'student material' indication are intended for students who can use them for independent study, while teachers can use the same material with the 'instructional material' indication for teaching. Multimedia presentations of lessons include animated examples, audio-visual simulations of experiments and interactive elements to make the coursework more interesting and easier to understand (Carnet. Nikola Tesla).

The vast majority of projects that involve ensuring digital environment and cheaper Internet to students of all ages are supported by CARNet, Croatian Academic and Research Network (Carnet).

Challenge: As the focus internationally shifts from reading and writing printed texts to reading and writing both printed and electronic texts, it would seem important to increase access to digital texts in Croatian classrooms, and to provide students with opportunities to write electronic texts.

5.1.4 The role of public libraries in reading promotion

Public libraries are an important agent in reading promotion. Where and when local and national authorities together with schools do not show interest, public libraries offer various projects and programmes for reading promotion. According to data of the National and University Library based on the reports of the county public libraries, library services are available for 80% of the Croatian population. 20% of the population do not have the possibility to use library services so mobile libraries make up for that (Republic of Croatia Ministry of Culture, 2014).

The year 2006 marked the commencement of the scientific project "Information needs and reading interests of Croatian citizens". The project is being carried out at the University of Zadar. Its aim is to determine the reading habits and information needs of children, youth and adults in Croatia and to determine how much and what the libraries are doing in the area of promoting reading and the development of literacy (Stričević, I.; Jelušić, S. 2011). The research included parents of preschool children, primary school pupils in forms 7 and 8, adult users of public libraries, heads/directors of public libraries, publishers and the mass media. A part of the survey referred to the most successful programmes and/or projects (as perceived by librarians) implemented in the previous two years by the library in three areas: popularisation of reading, development of basic literacy, and the development of information literacy. Regarding the number of described programmes and projects, those relating to the popularisation of reading are in the lead, followed by programmes for the development of information literacy and programmes for the development of basic literacy (Stričević, I.; Jelušić, S., 2013).

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

All mentioned agents actively cooperate in literacy promotion. Sometimes cooperation is more difficult because there are not enough resources and there are a lot of administrative operations before

cooperation begins, but teachers, librarians and parents show a lot of interest in the realisation of such programmes, especially in local communities.

Challenge: A great obstacle to accessing reading and literacy programmes in libraries is the annual membership fee. Public libraries are not free in Croatia (with some exceptions) and many times people cannot afford themselves to be a member of a library.

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

There are many programmes and initiatives for raising literacy with children and adolescents. Those that are listed here are not all programmes, because many schools and small-town public libraries have programmes that are not nationally recognised or visible.

Family literacy programs

Read to me! is the first Croatian national campaign promoting reading aloud to children from the earliest age. It is organised by the Croatian Reading Association, the Croatian Library Association - Children and Youth Services Commission, the Croatian Paediatric Society, and the Croatian Association of Researchers in Children's Literature with support of UNICEF. The campaign was launched on the occasion of the European Year of Reading Aloud (2013.) and it is sponsored by the Ministry of Social Policy and Youth (National campaign 'Čitaj mi!', 2013).

The *Smile, read!* photography contest for the best photography of a person reading (winning photographs are published on the Croatian Reading Association's website, in newsletter and promotional material – bookmarks, brochures etc.) has become very popular since it was organised for the first time, and the winners are awarded with a selection of books (Photo contest: Smile...Read!, 2015).

Čitamo mi u obitelji svi (Family Reading Time) - a national project to promote reading organised by the Croatian Network of School Librarians - is carried out in the third grade of elementary school in collaboration with teachers. There are 8 books in the backpack from the following groups: optional reading from Croatian writer (story or novel) for children, optional reading from Croatian poet for children, optional reading from Croatian writer of books for parents (adult readers), picture books (for students who read less), popular science books about nature, animals, medicine, science, etc., manual for raising children (for parents), manual for quality leisure time and popular book on the history of Croatia (or tradition) for children. The project is being carried out according to pre-planned, timed specific stages within the Croatian Network of School Librarians, which gives full logistic support (selecting the titles, procurement, distribution, analysis of the results, evaluation). Every Friday the backpack goes to one of the interested students. In the backpack there is a notebook in which students with their family members write / draw their experiences. Every Wednesday the student who brings a backpack to school has an opportunity to retell in a few minutes to other students everything interesting that happened to him over the past few days when his family members read books from the library backpacks. After completion of the project books are placed on the shelves in the school library, so that other members of the library can use them, and in that way we fill the library holdings (Čitamo mi u obitelji svi [project]).

Programmes for introducing parents and children to libraries and bookshops

The Croatian Reading Association has launched many interesting projects that were adopted by many libraries and developed into national projects, such as *Informative-educational packages for new-borns* and their parents, containing information on the need for reading to children at an early age, a short list of quality picture books for children aged 0 to 3, and a picture book that babies could read themselves. Packages are not distributed in all Croatian hospitals but only in some, and those local libraries give a voucher for free library membership for new-borns (Informativni paketi, 2009).

The Croatian Book Month is a special national programme promoting reading as an activity of great social value and the book as a cultural asset. Almost all Croatian libraries and bookshops are included and organise lectures, workshops for all age groups, offer free membership or forgive all overdue fines (Knjižnice grada Zagreba. Mjesec hrvatske knjige 2015⁸).

The Book Night is organised by the *Publishers' and Booksellers' Association* of the Croatian Chamber of Economy, *Knjižni blok – Inicijativa za knjigu* pro-book association, National and University Library in Zagreb, Zagreb City Libraries, *Publishers' Reprographic Rights Association – ZANA* (Udruga za zaštitu prava nakladnika), and the *Moderna vremena* Info portal dedicated to books and culture. Libraries, museums, bookshops, schools and other public spaces such as hospitals and prisons stay open until late (1 a.m.) and offer various programmes for book lovers (Noć knjige⁹).

My First Book is a contest for children writers opened to all primary school pupils. Participants have to write and illustrate their books and the prize is to get their works published (Moja prva knjiga, 2015).

Zadar Reads (Zadar reading promotion project is assembled of numerous public reading and other events aimed at reading promotion. *Zadar Reads* traditionally begins around the beginning of Spring. Traditionally, volunteers read at the department of Paediatrics in the local hospital, Zadar university students chose the cosy ambient of the *Back Door café* to stage their public readings and there are many more events (Gradska knjižnica Zadar. Izvještaj, 2014.¹⁰).

Initiatives to foster reading engagement among children and adolescents

Campaigns and programmes such as *Croatian Book Month* and *Book Night* are organised at national level and they are already very popular among children and adolescents.

The National Reading Aloud Competition (for pupils from 3rd to 8th grade) is organised by the Vlado Gotovac Public Library and Reading Room in Sisak and the Croatian Library Association's Committee on Library Services for Children and Young People. The aim of this action is to encourage children to read for pleasure and to read aloud, while at the same time it is also developing reading habits, popularising books and encouraging a positive, competitive spirit in children of elementary school age. A similar project is *Let us Read together, let us read aloud!* but it encourages children to read old books (Narodna knjižnica i čitaonica Vlado Gotovac Sisak, Natjecanje u čitanju naglas, 2014).

Ow(lette)r party is a national campaign to popularise reading with primary school pupils, help pupils to develop positive attitude towards reading and raise their self-esteem. There are two project phases - meetings which include reading in the school library at night and reading in the local community. Pupils can stay in the library only for one part or they can sleep there, if the library is equipped and has

⁸ See: <http://www.kgz.hr/default.aspx?id=12040>.

⁹ See: <http://nocknjige.hr/>.

¹⁰ See: <http://www.gkzd.hr/?q=hr/taxonomy/term/816>.

the necessary conditions for facilitating this. Reading in the local community implies reading aloud in various institutions, associations, companies and public places. The most active school library is awarded at the closing ceremony (Hrvatska udruga školskih knjižničara. Tulum slova [project]).

Reach for the Stars through Reading is a competition in knowledge and creativity that is implemented in the upper grades in primary schools and in high schools. In order to participate, primary school pupils should read three books related to one topic (for example a crime novel for children, a science-fiction novel, a modern novel, characters of Slavic mythology in the works of Ivana Brlić Mažuranić, friendship). Students will take a written test on the basis of these books. Only three members of the team take the test and their results are added together and considered as one result for the whole team. A special category of the competition involves making a poster which is a creative work of one student and represents a kind of advertisement for the particular book. The poster is then presented to the commission. There are three levels of the competition: school level, regional level and national level. This competition has been running since 2010. High school students need to read four literary works by foreign and domestic authors. They take a written test and move on to a higher level, while questions also become more difficult, detailed and include information on the writer and illustrations if they exist, period, genre, general questions which are related to places. All tests in Croatia are written at the same time. Students can also apply via creativity competitions, by making multimedia pieces for the assigned topic, trying to encourage their peers to read the chosen book (Hrvatska mreža školskih knjižničara. Čitanjem do zvijezda 2014./2015).

Offering attractive reading material for children and adolescents in print and non-print

Interliber is an international book fair including many activities such as publishers presenting numerous new titles, talks with Croatian and foreign star authors, interviews with authors with book signings, meetings of publishers, booksellers and librarians, literary workshops, panel discussions etc. Admission is free and publishers offer books at discounted prices (Interliber Book Fair Zagreb, 2015).

Zagreb Book Festival - The literary and cultural event Zagreb Book Festival was formed as a celebration of the written word and its particular power to enrich the human mind. Its mission is, at this time of growth of the new media, to raise interest in reading, writing and literary communication, but not excluding intermediality of modern artistic expression. The Festival want to put strong emphasis on children's rights and the integration of young people in the cultural life within the society. Books are also offered at special discounted prices. (Zagreb Book Festival, 2015.)

Book Fair(y) in Istria is a festival of books and authors, the most important Croatian gathering point of books and authors with its authentic presentation model of books and authors. More than 300 publishers from Croatia and the region exhibit their books at the Book Fair; 60 to 80 thousand booklovers visit the Book Fair; it has around one hundred various programme items (presentations of books and authors, conversations, gathering of professionals, speaker's platforms, round tables, performances, concerts...) and every year it presents more than 200 authors. Today it is the biggest festival of writers in South-eastern Europe (Sa(n)jam knjige, 2015).

Monte Librić (The Book Mountain) holds the important position of the largest and most important literary festival for children in Croatia. Every year it hosts countless Croatian, Italian and other European authors, and gathers around 50 publishers presenting over 2000 titles. The Festival's central idea is to present as many authors and promote as many new editions as possible, as well as to introduce the entire literary production for children through numerous programmes, workshops, shows, films,

exhibitions etc. Against such a backdrop, the Festival keeps growing year after year, expands its programme and captures the growing attention of children and parents (Monte librić, 2015).

Children's Book Week is organised every year, together with other festivals such as *Children's' Book Fair*, *Children's Picture book Festival 'Sheep in the Box'*, *'Pick a Book'* etc.

Fostering digital literacy in and outside schools

Many schools participate in *Erasmus* projects. Some of earlier mentioned projects also raise digital literacy awareness, such as *Reach for the Stars through Reading* (Hrvatska mreža školskih knjižničara, 2014/15). Schools have developed projects in cooperation with CARNet to provide cheaper Internet access in school but also at home by providing pupils with their AAI@Edu.hr electronic identity. With their AAI@Edu.hr electronic identity, pupils can ensure cheaper Internet access at home (they can get discounts with some of the leading Internet providers in Croatia) but they can also use it to access digital databases such as *eReadings*.

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 Croatia is 0.5%. The range is from 0.04% in Turkey and 0.1% in Ireland to 1.01% in Denmark (for an overview of European countries see table D1 in Appendix B).

Ratio of children to teachers in pre-primary school

There are no available data, but the State pedagogical standard for preschool education determines maximum quotas. Children of employed parents at the age of six months can attend pre-primary school programmes. For a group of maximum 5 children aged 6-12 months, there should be 3 teachers. There should not be more than 22 children aged 4-6 years in a group with minimally two teachers (Agencija za odgoj i obrazovanje. Pedagoški standardi).

Percentage of males among preschool teachers

According to the Croatian Bureau of Statistics, the percentage of employed men in the profession of preschool teachers increased only slightly from 3.6% (2005) to 3.9% (2008) and it will be necessary to make further efforts in the affirmation of this profession in the male population (Official Gazette 88/11, National Policy for Gender Equality for the Period 2011-2015). (For an overview of European countries see table D3 in Appendix B.)

Preschool teachers' qualifications

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

Continuing Professional Development is a prerequisite for promotion (Eurostat 2014, pp. 104–105).

Challenges: Croatia is at the lower end among European countries for the total public expenditure per child on pre-primary education. Compared with most other European countries, preschool teachers have a lower level of qualification regarding the minimum required level to become a qualified teacher (post-secondary non-tertiary level, ISCED 4) and the academic degree (which is a bachelor's degree in most countries).

Preschool language and literacy curriculum

The design of the kindergarten curriculum is an important aspect of quality. Therefore it is included in this section and not in the next section "Literacy curricula in schools". It also takes into consideration that young children have learning needs than are sometimes different to those of school children. Pre-school programmes should focus on developing children's emergent literacy skills through playful experience rather than systematic training in phonics or teaching the alphabet. There is no evidence that systematic instruction of reading in preschool has any benefit for future learning (Suggate 2012).

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

We consider the following to be key components: oral language development, including vocabulary learning and grammar, familiarisation with the language of books (e.g. through hearing stories 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 Croatia, one of the particular goals that the curriculum sets for preschool education refers to children's involvement in educational activities that motivate and help children to use various means of communication and expression (speech, vocabulary enrichment, visual arts expression, musical expression) (Vican, Rakić, & Milanović Litre, 2007 p. 16).

At early and pre-school age, children can have a recording of a graphic or some other form, which are the basis for development of the early literacy. Therefore, early and preschool age encourages children to develop awareness of understanding the importance and usefulness of letters and literacy.

Among the eight key competencies for lifelong learning, which is the educational policy adopted by the EU in the first place is communication in the mother tongue. At early and pre-school age, this competence strengthens training of children for proper oral expression and to record their own thoughts, feelings, and experiences in various activities. To develop cultural awareness and expression with children, creative expression of ideas is encouraged, same as experiences and emotions of a child in various artistic areas including music, dance, theatre, literature and visual arts. In addition, it promotes the importance of training the child to understand the cultural and linguistic diversity of Europe.

Educational procedure and programme implementation is supported by various aids which may include, among others, means of speech and theatrical expression: picture books, spelling books, occasional prose texts and lyrics, encyclopedias, books with reproductions of the masters of fine art, Croatian and important world historical and cultural monuments and images of living communities (Eurypedia 2013).

According to the pre-primary educational programme, children are engaged in various pre-exercises for reading and writing such as: "recognizing characters, identifying and merging identical shapes on different surfaces, recognizing simple shapes and colouring, recognizing identical signs in different positions, colouring surfaces - finding hidden characters, the ability to sequence (straight and curved lines), drawing a line, continuing the sequence, analysis and linking of voices, analysis and linking of voices into words, the story according to the series of images" (Eurypedia 2013).

As it is referred in the pre-primary educational program "the acquisition of graphomotor skills includes by systemically raising awareness of the connection between grapheme and phoneme, acquisition of internal representation of letter forms, and "pre-exercises" and exercises in the service of writing a message" (Eurypedia 2013).

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

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

Reading and writing instruction in Croatia are integrated into the Croatian language curriculum. This curriculum includes four underlying components:

- 1) Croatian language – training students to successfully manage everyday situations, developing an awareness of the need for linguistic knowledge, and gradually adopting the standard Croatian language.
- 2) Literature – Developing a familiarity with literary works, developing good reading habits, and training for independent reading of literacy works.
- 3) Linguistic expression – developing the ability to express experiences, feelings, thoughts and attitudes; achieving a successful level of oral and written communication.
- 4) Media culture – Training for communication with various media, including theatre, radio, the press, comic books, and computers; learning to critique presentations in theatre, in film and television and radio (Buljan Culej, 2012, p. 157).

Reading for pleasure

According to PIRLS 2011 Encyclopaedia, there is 'some' emphasis on reading for pleasure in the intended language/reading curriculum in Croatia. Croatia is among a group of 11 countries participating in PIRLS 2011 which reported some emphasis on reading for pleasure in the curriculum. Four of the EU-24 countries in PIRLS 2011 reported that reading for pleasure was given a little or no emphasis and 9 countries that it had major emphasis (Mullis et al. 2012b, Vol.1, exhibit 9, p. 36). The following are given as expectation for reading pleasure during the first cycle (Grades 1-4) in the national curriculum document (Ministry of Science, Education and Sports, 2010), where students will:

- Acquire interest in and a positive attitude towards reading inside and outside of the classroom
- Adopt the habit of reading inside and outside of the classroom
- Recognise the everyday importance of simple, non-literary and literary texts, either assigned or individually selected
- Assess their selections and the pleasure they derive from them when reading simple, non-literary and literary texts
- Acquire key frameworks for developing valid personal reading preferences vis-à-vis simple, nonliterary and literary texts. (p. 34)

Contents of primary school literacy curriculum

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

literacy curricula and official guidelines: explicit instruction of grapheme-phoneme correspondences (phonics), and reading strategies.

Explicit instruction of grapheme-phoneme correspondences

The Croatian curriculum fosters use of grapheme-phoneme correspondences beyond First grade. According to Buljan Culej (2012), the following word-related skills:

- Grade 1 – Write letters of the alphabet and connect them to phonemes; understand and distinguish between sound, letter and word; combine phonemes and letters into words; read and write words (and sentences), and distinguish lowercase from uppercase letters.
- Grade 2 – Use correct spelling and pronunciation of sounds such as ije, je, e and i; recognize and distinguish between the letters *cx* and *č*, and use this knowledge in real-life situations; practice the correct writing and pronunciation the sounds *dž* and *d*; and practice writing capital letters.

From Grade 3 onwards, there is a shift to grammar (e.g., distinguishing common nouns from proper nouns, recognise verbs in sentences), as well as a strong shift towards comprehension and a focus on spelling and writing.

Teaching of reading strategies in primary schools

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

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

The curriculum for Croatia, summarised by Buljan Culej (2012) describes a range of strategies for developing reading comprehension. They include:

- Distinguishing among story characters on the basis of their ethical qualities (Grade 1)
- Identifying parts of a poem (stanza and verse) (Grade 2)
- Deriving meaning from text and distinguishing between main and secondary characters (Grade 2)
- Identify the sequence of events in a story according to the plot (Grade 2)
- Recognise time and place in a short story (Grade 2)
- Recognise and identify a theme in prose and poetry (Grade 3)
- Understand a reference as a type of text that is verifiable and has the same meaning for all readers (Grade 3)
- Identify the compositional structure of text (introduction, main part, conclusion) (Grade 3)
- Predict new events and combine them into a new story (Grade 4)
- Learn how to interpret text (Grade 4)
- Formulate and express opinions about characters (Grade 4).

Most of these comprehension strategies are emphasised in language curricula in Croatia and teachers really try to achieve set goals in literacy instruction. PIRLS data (s. below) support this view.

Literacy curricula in secondary schools

The National Curriculum Framework is the document that presents the elements of the curriculum system, i.e. values, goals, principles and content etc. of the educational areas. The focus of the curriculum is on competences. Croatia has adopted the key competences of the European Union. Three of the competences are dealing with communication, mother tongue, foreign languages and digital competences, have directly to do with literacy. The competences learning to learn and cultural awareness and expression can also be mentioned. Reading and writing are essential parts of the language and communication area through the whole school system.

Language and communication is one of the seven educational areas of the framework. The importance of the mother tongue and foreign languages is stressed in the curriculum and how the mother tongue is the basis for learning other languages and the basis of all other areas as well. Listening, speaking, reading and writing are the main elements in the teaching of the language. Advanced reading and writing skills are pointed out and stressed both in lower secondary and upper secondary education.

Under the heading Reading, the following points are mentioned: preparation for reading, applying reading strategies, reading comprehension (traditional and electronic format), reading for pleasure and becoming familiar with and respecting the Croatian culture, the cultures of minorities in the Republic of Croatia and other cultures; Writing: preparing to write, applying writing strategies, composing written texts, writing for pleasure, becoming familiar with and respecting the Croatian culture, the culture of national minorities in the Republic of Croatia and other cultures¹¹.

Challenge: Building a stronger focus on literacy into secondary schools curricula, not only related to literary texts. The curricula should offer opportunities for pupils to develop reading and writing, speaking and listening skills through work that makes cross-curricular links with other subjects.

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 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, students in Croatia spent fewer hours per year at school (776) than on average across EU-24 countries (850 hours). Students in Croatia spent 172 hours (about 20 percent of all instructional hours) on instruction in the language of the PIRLS test, compared to an EU-24 average of 241 hours. In Croatia, 46 instructional hours per year are spent on reading as part of language, compared with an EU-24 average of 68, though the EU-24 average is itself low relative to, for example, the United States and New Zealand (both 131 hours). Teachers in Croatia report allocating less time to teaching reading

¹¹ See: <https://sites.google.com/a/knjiznicari.hr/knjiznicari/projekti-i-aktivnosti/citanjem-do-zvijezda-2012---kviz>.

across the curriculum and in reading classes (116 instructional hours per year) than on average across EU-24 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 the PIRLS 2011 Encyclopaedia, the curriculum for Croatia specifies that 28% of instructional time (in grades 1-4) should be spent on language/reading time (Mullis et al., 2012, Vol. 1, Exhibit 6). In the same volume, Buljan Culej (2012) notes that, while the curriculum for primary school (Grades 1-4) emphasises reading and writing, it does not specify how much time teachers need to devote to each component. She adds that “teachers determine the order of addressing various objectives, as well as the numbers of lessons required to introduce, practice, review and evaluate the knowledge and skills required” (p. 157).

No comparable data are available for secondary schools.

Challenge: Consideration should be given to increasing the instructional time allocated to language, including reading and writing, with a view to establishing a stronger base for students’ future learning.

Teaching of reading strategies

As noted in earlier sections, there are remarkable gaps in reading achievement among adolescents - equivalent to more than two 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.

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

- Locate information within the text: 88.6% (EU-24 = 65.5%)
- Identify main ideas of what they have read: 75.3 % (EU-24 = 55.5%)
- Explain or support their understanding of what they have read: 78.8% (EU-24 = 61.6%)
- Compare what they have read with experiences they have had: 54.3% (EU-24 = 34.7%)
- Compare what they have read with other things they have read: 33.4% (EU-24 = 22.4%)
- Make predictions about what will happen next in the text: 18.8% (EU-24 = 22.4%)
- Make generalisations and inferences: 72.9% (EU-24 = 36.5%)
- Describe the style or structure of the text: 47.4% (EU-24 = 22.7%)
- Determine the author’s perspective or intention: 44.9% (EU-24 = 21.0%)

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

More students in Croatia than on average across the EU-24 are engaged in each strategy on a daily or almost daily basis. Surprisingly, given that it appears in the curriculum, marginally fewer students make predictions about what will happen next in the text (18.8%) than on average across the EU-24 (22.4%).

Challenge: PIRLS indicates that reading comprehension strategy instruction is widespread in Croatian 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.

Engaging students in learning

PIRLS also assessed which instructional practices teachers use to engage students in learning (for an overview of responses in Croatia and other European countries S. Table I.2 in Appendix C). PIRLS 2011 demonstrates that students whose teachers used instructional practices to engage students learning in most lessons (items: summarising the lesson's goals, relating the lesson to students' daily lives, questioning to elicit reasons and explanations, encouraging students to show improvement, praising students for good effort, bringing interesting things to class) had higher scores in reading than those with such practices used in only about half the lessons or less (Mullis et al. 2012a, exh. 8.6, p.220).

In PIRLS 2011, teachers were asked a series of questions designed to ascertain the extent to which students are engaged in learning. 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, 87% of students in Croatia 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). These findings, together with those based on frequency of student engagement in reading comprehension strategies suggest high levels of reading engagement classrooms in Croatia, though they may need to be verified by observational studies.

Challenges: It is well documented in research studies that explicit teaching of comprehension strategies may improve reading comprehension among readers with different levels of ability. While there are no data available for secondary schools, some PISA data suggest that there is a need for explicit instruction of reading strategies: As reported above, in Croatia, there are gaps of 87 and 96 score points – equivalent to more than 2 years of schooling – between the students who know which strategies are the most efficient to understand and remember a text, and those who have a limited knowledge of these metacognitive activities. This remarkable difference reflects the close relationship between reading proficiency and awareness of efficient reading. While PIRLS data reported above indicate that reading comprehension strategy instruction in primary grades is widespread in Croatian classrooms, it is not clear whether this also is true for secondary schools.

Digital literacy part of the curriculum for primary and secondary schools

Digital literacy is a cross-curriculum subject that is being taught in many subjects at the same time like Croatian language, Foreign language, IT but also in the school library. School librarians are the ones who have to educate pupils on digital literacy the most – changes in the curriculum emphasise raising media literacy in schools, such as finding and using different media.

There are programmes such as *Writers online* that offer children on islands and in smaller communities the chance to meet writers on the Internet, but it is not compulsory for children to take part in them (Pisci na mreži, 2015). Other projects are developed in cooperation with school librarians, such as *Reach for the Stars through Reading* (Hrvatska mreža školskih knjižničara. Čitanjem do zvijezda 2014./2015. - srednje škole [project]., 2014).

5.2.4 Early identification of and support for struggling literacy learners

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

Standards as basis of assessment of reading difficulties

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

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

Challenge: There may be value in specifying stronger links between curriculum goals and standards for literacy and assessment activities. The current curriculum advises teachers to avoid using standards and norms set in advance. However, teachers are required to specify criteria associated with the grades they assign in literacy, and there may be value in re-examining if a more uniformed approach to literacy assessment might be implemented, where assessment standards for different grade levels or levels of performance are identified at national level.

Mullis et al. (Exhibit 7, 2012a) note that, while Croatia is identified as having goals and standards in the curriculum for each grade at primary level, it is not clear how these inform assessment of student performance, or the identification of reading difficulties.

According to Buljan-Cullej, all children are assessed during admission to First grade. The focus of this assessment is on general school readiness, as a team of experts evaluates the child's psycho-physical state. Beyond this, schools are supported in implementing school self-evaluation.

Screenings for reading competence to identify struggling readers

In Croatia, the identification of children with reading difficulties is considered to be the responsibility of the school. There were no mandatory comprehensive screening tests in use to identify children with reading difficulties, but if the team of experts on admission in the First grade of elementary school noticed difficulties, it must refer the child to a speech therapist for treatment. Also, the team of experts may decide that the child is referred to pedagogical observation. Pedagogical observation means watching a child over a certain period of time (up to three months), establishing and weigh up difficulties, and decide on the form of education that is optimal for the child - this is legally regulated

(Ministry of Science, Education and Sports, Republic of Croatia, 2014). The assessment procedure is performed at school admission or during the First grade, but it can also occur later for students where the need does not become apparent until a later stage. The school must meet certain criteria for observation students. This means that schools must have a pedagogue or psychologist and secured the cooperation of special education teachers, doctors and social workers. But still, the biggest responsibility for screening struggling readers rests with classroom teachers.

Source: PIRLS 2011 database (see ELINET PIRLS 2011 Appendix C, Table I8)

Do teachers use formative assessments?

In the curriculum for Croatia (Ministry of Science, Education and Sports, 2011), there is a detailed outline of the basis for assigning marks in language and in other subject areas. For example, teachers of students in Grades 1-4 are advised that:

assessment based on numerical marks will have a prominent place, but with a clear description and justification of the mark and the meaning of each mark. Students of that age find it easier to comprehend verbal description of their performance, and they find it more difficult to understand the abstract quality of a numerical mark (p. 205).

Teachers are themselves expected to establish standards associated with each numeric grade and to implement various formative assessments to assess performance. The curriculum places some emphasis on student self-assessment.

Challenge: Croatia hasn't got any mandatory comprehensive screening tests in use to identify children with reading difficulties/struggling readers. So the primary focus must be on early identification of children at risk for problems in learning to read, as well as methods for monitoring the growth of early reading skills. The goal is to produce procedures that will allow teachers to identify children who need extra help in reading before they experience serious failure, and to monitor the early development of reading skill to identify children who may require extra help as reading instruction proceeds through elementary school.

Supporting struggling literacy learners

Education of children with more significant developmental difficulties is conducted in 21 special education institutions. Three special schools were founded by the counties, 16 special schools were founded by the towns and municipalities, and 2 special schools were founded by other physical and legal persons (Ministry of Education, Science and Sports, Elementary Education, 2014).

According to Ana Žnidarec Čučković (Forum for Freedom in Education, Croatia, interviewed by Skype on Aug 5, 2014), outside special schools, teachers spend time one-on-one with struggling readers after lessons and assign extra work for students.

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 16.0% of students in Fourth grade in Croatia are considered to be in need of remedial reading instruction. It is also estimated by teachers that 14.3% are in receipt of remedial reading instruction (ELINET PIRLS 2011 Appendix, Table K1). On average

across EU-24 countries, 18.1% of students in Grade 4 are identified by their teachers as being in need of remedial teaching, while 13.3% are identified as being in receipt of such teaching.

In Croatia, 10.2% of students in Fourth grade performed at or below the PIRLS low benchmark on overall reading (ELINET PIRLS 2011 Appendix, Table A6). Hence, the percentages of students in Croatia in receipt of remedial reading instruction (14.3%) exceeds the percentage who 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 22% of students in Croatia 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 23). Nineteen percent of students in Croatia are in classrooms where there is access to a teacher aide with the same frequency, while 7% are in classrooms where there is access to an adult/parent volunteer. Corresponding EU-24 averages are 13% and 3%. Hence, teachers in Croatia have marginally less access to specialised professionals, somewhat greater access to teacher aides, and adult volunteers as on average across the EU-24, where full availability is concerned.

Table 23: Percentages of Students in Classrooms with Access to Additional Personnel to Work with Children with Reading Difficulties, Croatia and EU-24 Average

Access to...	Croatia			EU-24 Average		
	Always	Sometimes	Never	Always	Some-times	Never
Specialised professional	22.0	39.4	38.6	24.9	41.8	33.3
Teacher aide	18.9	41.3	39.8	13.2	33.6	53.2
Adult/parent volunteer	6.7	21.7	77.7	2.8	17.5	79.7

Source: ELINET PIRLS 2011 Appendix, Tables K2-K4

According to responses provided by teachers in PIRLS 2011, 76% of students in Croatia 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 24). The corresponding EU average is lower at 55%. Thirty-six percent of students in Croatia are in classes whose teachers wait to see if performance improves with maturation – about the same as the EU-24 average of 37%. Almost all students in Croatia (98%) are taught by teachers who spend more time working on reading individually with a student who falls behind, while a similar proportion are taught by teachers who ask parents to provide additional support to a student who falls behind in reading.

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

	Croatia (Yes)	EU-24 Average (Yes)
I have students work with a specialised professional	75.5	55.2
I wait to see if performance improves with maturation	36.2	36.6
I spend more time working on reading individually with the student	98.4	90.1
I ask the parents to help the students with reading	98.0	96.9

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

The Croatian Dyslexia Association organises professional meetings, seminars and other forms of exchange findings and experiences among teachers and parents. The association publishes a lot of educational and therapeutic tools which are focused on children suffering from a dyslexic disorder.

Support for struggling readers – a legal right?

If certain difficulties are noticed by the expert committee during the psychophysical check-up before starting First grade, the child needs to see speech specialist. They, together with the speech specialist, can propose either a three-month pedagogical observation or immediate suitable education for children to local authorities. Also, if teachers notice difficulties after First grade and during primary schooling, they can react the same way for the child to get appropriate help (Hrvatska udruga za disleksiju, 2015). This right is regulated by the Regulation on the Process of Assessing the Psychophysical State of Children and Students and the Structure of Expert Committees (Hrvatska udruga za disleksiju, 2015).

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

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

What are the entry qualifications for Initial Teacher Training?

To enter Initial Teacher Training, a number of conditions is combined. 25% of the score depends on grades achieved in relevant subjects during their secondary education, 30% of the score depends on their score in A level of Croatian language in the State graduation exam, 20% of the score depends on their score in B level of Mathematics in the State graduation exam and 10% of the score depends on their score in B level of Foreign language in the State graduation exam. There is also a Special knowledge, skills and abilities test that contributes 10% to the final score, while 5% of the score is extra for gifted students or talented athletes (Postani student. Studijski programi, 2015).

Are there specific selection methods for admission to initial teacher education?

Yes, there is a Special knowledge, skills and abilities test that contributes 10% to the final score.

What is the level of qualification for primary teachers and what is the length of the required training?

Croatia requires primary teachers to have a master's degree which takes five years' study, and after study comes an induction period which lasts one year. 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).

More information about reading teachers' formal education in Croatia is offered by PIRLS 2011 (Mullis et al. 2011, exh. 7.1, p. 188). 1% of fourth grade students have teachers who completed a Postgraduate University Degree, 30% had teachers who completed a Bachelor's Degree or equivalent but not a Postgraduate Degree, 69% had teachers who completed post-secondary education but not a Bachelor's Degree, and 1% had teachers with no further than upper secondary education. The EU-24 average for the last category is 6%.

Length of required training of secondary teachers

Secondary teachers need to achieve

- Master's level (5 years) to lower secondary teachers;
- Master's level (5 years) to upper secondary teacher.

(European Commission/EACEA/Eurydice, 2013. Key Data on Teachers and School Leaders in Europe.)

Entry qualifications for Initial Teacher Education of secondary teachers are very diverse. Because there are different faculties that offer different study programmes, they all have different scoring and combination of entry requirements. But all universities combine (with different levels and percentages) grades achieved on relevant subjects during their secondary education, scores on the State graduation exam and sometimes the score from the Special knowledge, skills and abilities test.

The European Commission/EACEA/Eurydice, 2013. Key Data on Teachers and School Leaders in Europe determines the following entry requirements for ITE of secondary teachers.

- certificate of final examination of upper secondary education decided at the level of the education authority;
- performance at upper secondary level decided at institutional level;
- a general entrance examination to tertiary education decided at institutional level;
- a (written or oral) examination specific for admission to teacher education decided at institutional level;
- an interview specifically for admission to teacher education decided at institutional level.

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.

Do all teachers of reading (normally classroom teachers) have training in language/literacy?

Teachers have courses during their faculty education and later they have lectures organised by the Croatian Education and Teacher Training Agency, which are not compulsory. The undergraduate and graduate teacher studies last 5 years; the respective number of ECTS is 300. Mentors advise students about the module they have to choose after the first semesters. The elective modules are:

- a) Module A - Developmental Studies, through which, by means of selected courses in pedagogy, psychology and teaching methods, students are trained for a deeper understanding of issues specific for education and child development.
- b) Module B – Computer Science, which, to a greater extent, gives students knowledge and skills for using ICT in educational processes, and enables them to teach computer science in the first four grades of primary school (a project of the Ministry of Science, Education and Sports, September 1, 2003).
- c) Module C – Foreign Language (Module C1 – English Language or Module C2 – German Language), which, in addition to core subjects, trains future teachers to teach a foreign language to young learners (aged 6/7 to 10/11).

Within the teacher studies, the curriculum is comprised of 70% mandatory courses and 30% of elective courses offered by the Faculty of Teacher Education or any of the constituents of the University (Faculty of teacher education in Osijek, 2005).

In PIRLS 2011, teachers reported about their areas of specialisation in their formal education and training (Mullis et al. 2012a, exh. 7.2, p. 190). In Croatia, 90% of the fourth grade students had reading teachers with an educational emphasis on language, 87% had teachers with an emphasis on pedagogy/ teaching reading, and 34% had teachers with an emphasis on reading theory. These figures are above the corresponding EU-24 means. On average across the EU-24, 74% of the fourth grade students had reading teachers with an educational emphasis on language, 59% had teachers with an emphasis on pedagogy/teaching reading, and 30% had teachers with an emphasis on reading (PIRLS 2011 Database).

Is tackling reading difficulties a topic in Initial Teacher Training?

Yes, there are special courses – sometimes not compulsory, that can help future educators learn how to deal with reading difficulties.

Is assessing pupils' reading skills a topic in Initial Teacher Training?

Yes, learning how to assess all parts of pupils' performance during primary school is a special course on Teacher Faculties. Assessing pupils' reading skills is also mentioned during a course on the Methodology of Croatian language in primary school.

Is teaching to read on-line texts a topic in Initial Teacher Training?

Digital literacy is part of ITE and future educators learn how to teach reading on-line texts.

Teaching practice for prospective teachers of reading: Duration of in-school placement in Initial Teacher Training

In-school placement is compulsory for all future teachers, but the duration is different and it depends on which year they are attending. For example, during their last year in college, future teachers spend one whole day every week in the same school and class they have chosen.

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

Continuing Professional Development (CPD)

Is there compulsory continuing professional development (in-service training) for teachers which focuses on literacy development?

There are no compulsory courses for teachers, but all teachers have to attend a certain number of courses organised by the Croatian Education and Teacher Training Agency during one school year and some of the offered courses focus on literacy development (about 35 hours for joint training of teachers with 70 hours of individual training per school year). School librarians can also attend courses that focus on literacy development, because they are usually the ones that emphasize literacy awareness the most.

Are there courses for enhancing teachers' skills to deal with struggling readers?

All teachers have to attend a certain number of courses organised by the Croatian Education and Teacher Training Agency during one school year and some of the offered courses focus on pupils with difficulties.

Time frame and quality standards of CPD

The time frame of each course depends on the course itself, but each teacher has to attend a certain number of courses to gather enough points to complete their CPD for that school year (about 35 hours for joint training of teachers with 70 hours of individual training per school year). This means that all teachers have to attend a number of courses during one school year and they need to repeat the process every year, with different courses. Courses organised by the Croatian Education and Teacher Training Agency are certified by the Croatian Ministry of Science, Education and Sports.

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 of fourth grade students were asked how much time they had spent on reading professional development in the past two years before the study. In Croatia, 11% of the students have teachers who spent 16 hours or more (EU-24 average: 18%), 75% had teachers who spent some time but less than 16 hours (EU-24 average 53%), and 14% had teachers who spent no time (EU-24 average 29%) (Mullis et al. 2012a, exh. 7.4, p. 196 and Table J4 in Appendix C). These figures show a quite high engagement of Croatian teachers.

Challenge: Improving the quality and participation rates of continuing professional development targeted at building literacy expertise of teachers.

5.2.6 Digital literacy as part of initial teacher education

Digital literacy is not taught as one unified programme or course, but it is a part of different courses – IT, Croatian language, Foreign language etc.

Challenge: Fostering digital literacy skills of teachers and students needs a stronger emphasis.

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

Different programmes, initiatives and examples were mentioned earlier (3.1.5.) – such as *Family Reading Time*, *Book Night*, *Croatian Book Month*, *My First Book* and different programmes by the Croatian Reading Association such as *Smile...Read!*,

A Backpack full of culture is a part of the Government policy for kindergartens, elementary and high schools, meaning that the beneficiaries of this programme are three-year old children and pupils from 6 to 18 years of age. *A Backpack (full of) culture* is a national complementary programme of support to the elementary and high school curriculum related to art and culture which is implemented in Croatian schools by experts (writers, fine artists as well as theatre, music and dance artists). The programme provides children and young people access and brings them closer to art and culture, develops their aesthetic culture and in general makes children and young people sensitive to the field of art and culture. The pupils are trained for a positive approach to all types of art and culture Republic of Croatia Ministry of Culture (Republic of Croatia Ministry of Culture. A backpack (full of) culture [project]¹²).

In February 2015, an expert group for implementing comprehensive curricular reform for early and pre-school, primary and secondary education started their work. The curricular reform will focus on:

- developing basic competences for lifelong learning;
- increasing functional literacy levels of students;
- linking education to needs and interests of students;
- linking education to needs of society and the economy.

Another expected result of the reform is transition to nine-year primary school.

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

¹² See: <http://www.min-kulture.hr/default.aspx?id=10094>.

socioeconomic background) show below average performance if the language of school is not supported at home, which signals the importance of a good command of the language used at school.

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

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

In the section below we address the following questions:

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

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

5.3.1 Compensating socio-economic and cultural background factors

The child's **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 30.5% Croatia is slightly above the average.

Child poverty

“About 10 per cent of children under the age of 14 live in poor households, the most vulnerable among them being Roma. The vulnerability of this group continues in spite of the participation of Croatia in the intergovernmental initiative Decade of Roma Inclusion (2005-2015). Despite the fact that Croatia offers good overall social protection coverage, new policies are needed to strengthen social recovery. The development, analysis and monitoring of such policies are hampered by inadequate data disaggregated by sex, age and social groups, and by insufficient monitoring of child poverty.” (UNICEF. Country programme document 2012 -2016 for Croatia, 2011).

Mother’s education level

The PIRLS 2011 database offers information about mother’s level of education referring to ISCED levels. The figures for Croatia are presented below and point to a higher level of mothers with upper secondary education, compared with the average figures for the European countries participating in PIRLS (shown in parentheses) (for an overview of European countries see table A3 in Appendix B).

No schooling: 0.2% (0.6%)

ISCED 1: primary education: 0.3% (5.3%)

ISCED 2: Lower secondary education: 12.4% (16.7 %)

ISCED 3: Upper secondary education: 57.0% (36.1%)

ISCED 4: Post-secondary non-tertiary education: 7.7% (7.1 %)

ISCED 5B: Tertiary education (first stage) with occupation orientation: 8.8% (9.5%)

ISCED 5A: Tertiary education (first stage) with academic orientation 11.5% (13.9%)

BEYOND: 1.8% (10.1%)

Teenage mothers

There are no recent available data, but there is a research for the period 2008-2010. In Croatia, a total of 5,237 girls aged 14 to 19 and 25 girls under the age of 14 have given birth during the mentioned period. Although in most cases these underage pregnant girls and mothers had the support and help of their families, some of them needed the special care and support of institutions because their families could not or did not want to provide it (UNICEF. Kad djeca imaju djecu, 2010).

Single parent

According to Eurostat (2012, Figure A 7), in Croatia the percentage of children living mainly with a single parent is the lowest in Europe. 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

In Croatia, the percentage of students with an immigrant background is slightly higher (10.7%) than in the EU countries on average. The Institute for Migration and Ethnic Studies has published a research carried out in the period 1991-1995. The results of the research show that 68% of returnee children

have problems with different method of teaching and 65% have problems due to their insufficient knowledge of their mother tongue (Institute for Migration and Ethnic Studies).

Primary language spoken at home different from language used at school

According to PIRLS 2011 (Mullis et al. 2012a, exhibit 4.3 - Students Spoke the Language of the Test Before Starting School, p. 118), the proportion of children speaking a different language at home from the one used at school is very low in Croatia, at 0,5% (for an overview of European countries s.see table A7 in Appendix B).

5.3.2 Support for children with special needs

Not only children from culturally disadvantaged families are "at risk" in their literacy development but also those with "special educational needs".

"A child (pupil/student) with special educational needs in terms of Croatian education system is any child with learning difficulties significantly exceeding those of his/her peers, calling for special educational support for the child. Similarly, any particularly gifted child, continuously achieving above-average results due to highly developed particular capabilities, personal motivation or external stimulation in one or more areas, is considered to be a pupil/student with special educational needs and, thus requiring special educational support..." (Eurydice. Special Needs Education)

The Republic of Croatia has a regulated education system for children with developmental difficulties from an early, pre-school age, which is important for early intervention and inclusion in the suitable pre-school and rehabilitation programmes. This also includes professional support and spatial, pedagogical and didactic adjustment in order to ensure suitable education for children with developmental difficulties and improved quality of life and integration in community life after the end of schooling. Professionals in the education area who work with children with developmental difficulties include educational rehabilitators, speech and language therapists, social pedagogues, special teachers, and other experts, such as kinesiotherapists, music therapists, physical therapists, occupational therapists, nurses and pedagogical assistants, including sign language interpreters.

But still, UNICEF reports that integration of children with developmental difficulties and disabilities in the regular education system continues to be a challenge. Approximately 2,115 children with disabilities (aged 5-14, with 40 per cent of them girls and 60 per cent boys) are referred to special schools because insufficient support is given to education for such children in the form of access, transport and teaching assistants (UNICEF. Country programme document 2012 -2016 for Croatia). Some progress has been made in advancing the inclusion of socially vulnerable groups, including children with disabilities. However, promotion of family-oriented care as an alternative to institutional care has been slow. In 2010, the Ministry of Health and Social Welfare decided to prevent institutionalisation of children younger than four years of age, demonstrating a clear determination to promote the child's right to care within a family.

5.3.3 Promoting preschool attendance, especially among disadvantaged children

According to the European Commission/EACEA/Eurydice/Eurostat (2014, Figure C1 p.62), the enrolment rate at age 4 is 70.6%. Croatia does not yet reach the European benchmark of 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).

According to a research carried out by UNICEF, overall preschool enrolment increased from 43 per cent in 2005 to 58 per cent in 2009. However, access to quality preschool enrolment for the poorest boys and girls, the Roma children, and children with disabilities remains very limited. One reason is that kindergartens are still perceived as services for working parents. For preschool and higher levels of schooling, exclusion and stereotyping are still widespread for children living in poverty and children with disabilities, slowing down the realisation of the right to education for these children. About 97 per cent of Roma children do not complete elementary school, and only 2 per cent enter secondary school (UNICEF Country programme document 2012 -2016 for Croatia). The lack of an interdisciplinary approach to community services for parents and children adds to disparities in child development, especially for Roma children and children with disabilities (UNICEF, Country programme document 2012 -2016 for Croatia).

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).

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

- 3 years and more: 44.0% (average reading score 567)
 - Between 1 and 3 years: 19.0% (average reading score 551)
 - 1 year or less: 10.0% (average reading score 538)
 - Did not attend: 27.0% (average reading score 540)
- (For an overview of European countries s. table C3 in Appendix B).

The benefit of preschool attendance in Croatia 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 27 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 Croatia pre-primary education is not always free. In most - but not all - cases, parents participate in the costs of pre-primary education through fees (EURYDICE, 2013).

5.3.4 Provisions for 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.

Are there screenings/assessments to identify children at risk in their language?

No data are available for Croatia.

Is there specialist support for children with delays in their language development?

The SUVAG Polyclinic is a health institution dealing with diagnostic and consultative health protection of persons with problems of speech communication. The SUVAG Polyclinic is a specific institution specialised in all kinds of problems connected to hearing-listening speech and language, and their services are used by a lot of clients from Croatia and abroad: about 1000 patients per day, more than 80% of them being children with hearing and/or speech impairments.

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

Children in centre-based ECEC settings receive language support. "Croatia seek to employ staff from migrant or minority background. These staff are involved in the teaching process to provide language support to migrant children and those from ethnic minorities to help them integrate in ECEC. Croatia run projects to support Roma children in ECEC, and help to build links between settings and the Roma community." (European Commission/EACA/Eurydice/Eurostat 2014, p. 145-146).

"Dedicated schools provide instruction in the language of national minorities. Members of national minorities are guaranteed the right to education in their language as defined by constitution of the Republic of Croatia, the constitutional law on the rights of national minorities, and the law on education in the language of national minorities" (Buljan Culej, 2012). Three basic models and three specialised educational frameworks are in place:

- 1) Model A Schools- Classes are conducted in the language of a national minority, with compulsory learning of the Croatian language for the same number of hours in which the mother tongue of the national minority is conducted (Czech, Hungarian, Serbian, and Italian).
- 2) Model B Schools- Classes are conducted bilingually, with science subjects taught in Croatian and social science subjects taught in the minority language (Czech or Hungarian);
- 3) Model C Schools- Classes are taught in Croatian, with an additional 2-5 school hours designed to foster the language and culture of national minorities (Albanian, Austrian, Czech, Hungarian, Macedonian, Slovak, Slovene, Serbian, Ukrainian, and Rusyn);
- 4) A Class Framework – The language of the national minority is taught as the language of the social environment;
- 5) Special Classes (e.g. summer school, winter classes, correspondence classes); and
- 6) Special Programs (e.g. for the inclusion of Roma students in the educational system).

Members of national minorities propose and choose a model programme in line with existing legislation and their ability to complete the programme. All models and frameworks are part of the regular education system of the Republic of Croatia. The Ministry of Science, Education and Sports currently oversees the implementation of the national program for the Roma. (Buljan Culej, p. 161).

For **children who are members of the Roma national minority**, inclusion in pre-school, primary and secondary education programmes is ensured in order to bridge the gap caused by the socio-economic situation in which they live, and to increase the possibilities for their successful inclusion during compulsory primary education.

Children who are members of the Roma national minority are included in a pre-school programme which gives good results and points to the necessity of organising pre-school education groups for all Roma children as preparation for their inclusion in the education system, especially in areas where

there are too few possibilities for organising integrated pre-school education (Republic of Croatia, Nacionalni program za Rome, 2003).

The number of Roma children in primary education has risen in recent years, and the trend continues. However, at the same time, the data on the number of Roma students who leave primary education after having repeated a grade several times indicates that the rate of primary education completion among Roma children is very low. When it comes to repeating a grade, the data at the end of the school year shows an increased number in comparison with the beginning of the school year. Within the system, data are also collected on the number of Roma students who are offered additional help in learning Croatian, and the number of students included in after-school activities within the school.

The number of Roma children included in the secondary education system is also increasing. The National Programme for the Roma sets forth instructions for awarding certain advantages to Roma children during the process of enrolment in secondary school, which have been adopted by the Ministry of Science, Education and Sports. Although most Roma children continue their education in three-year rather than four-year programmes, the number of children enrolling in schools which offer four-year programmes is increasing. It is also evident that students drop out of school, i.e. they leave their secondary education. The Ministry of Science, Education and Sports awards scholarships to all secondary school students who are members of the Roma national minority (Ministry of Science, Education and Sports, 2014a).

The Ministry of Science, Education and Sports ensures that all Roma students who study at higher education institutions in the Republic of Croatia are awarded scholarships.

Challenges: The rate of primary education completion among Roma children is very low.

5.3.6 Preventing early school leaving

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

Rate of early school leavers

According to Eurostat, in Croatia, the rate of early school leavers was 3.7% in 2013. The target value of the early school leaving (ESL) rate set for 2020 is 4.0% (European Commission, 2013).

The duration of compulsory education in Croatia is 8 years. Children start school at the age of 6; compulsory schooling ends at 14 years (Compulsory Education in Europe 2013/14, Eurydice report).

According to Eurostat, in 2011, the percentage of 18-year olds in education was 66.9%, which situated Croatia well under the EU-27 average (80.7%). By 2012, this indicator increased to 68.1%.

As concerns students (ISCED 1-6) aged 15-24 years, we find that in Croatia, 55.3% of 15-24 year olds were in some form of education in 2011, which – though an improvement as compared to earlier years, was well below the average EU-27 value of 61.9%. This indicator increased by 2012, when it stood at 56.7%.

Policies to prevent early school leaving

According to the National Reform Programme of the Republic of Croatia, adopted on 24th April 2014, in order to prevent early school leaving, a number of measures have been envisaged, such as (co)funding of textbooks for elementary and high school students who live in poor socio-economic conditions, (co-)funding of textbooks for blind high school students, (co-)funding of transportation for elementary and high school students who live in poor socio-economic conditions and funding of continuing education for students who have completed the two-year and three-year vocational programmes to ensure vertical mobility (National Reform Programme, 2014).

5.3.7 Addressing the gender gap among adolescents

Gender difference in reading performance in Croatia is somewhat higher than in the European countries on average. A project addressing this issue is reported below.

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

The Teens for teens project of Rijeka City Library started in autumn 1998, culminated in autumn 2001, and, with certain changes and improvements, still goes on. Purpose of the project is to promote reading and socialisation of the young, training them to become trainers, stimulate creativity, fulfil the need of teens to communicate, increase the efficiency of acquiring new skills, motivate teens and increase their feeling of self-confidence, intensively learn social skills, prepare teens for the world of work. The project is intended for teenagers, and younger children as well, members of the Library and those who are to become library members. Contents and structure of the workshops are very diverse, as a result of different personal preferences of young people creating and moderating the workshops. Workshops are moderated by teenagers-volunteers. Their voluntary work is the result of years and years of living with(in) the Library (Gradska knjižnica Rijeka, 2015).

Programmes against poverty

With a per capita income over US\$ 4,500 Croatia is the second richest of the former republics of Yugoslavia (UNICEF, 2002). Social indicators, such as infant mortality, literacy and life expectancy are at par with rich countries. The system of social transfers is one of the most extended in the region. However, these factors do not preclude the existence of absolute poverty, whose extent depends on how wealth, income and transfers are distributed. At the beginning of 2001, a group of experts organised by the Ministry of Labour and Social Welfare developed a Programme for Combating Poverty and Exclusion in Croatia. The Programme was drafted by experts from different institutions including The Social Work Study Centre of the Faculty of Law, the Croatian Employment Agency, the State Institute for the Protection of the Family, Maternity and Youth, the Ministry of Labour and Social Welfare and other governmental agencies. The editing work was done by Dr Zoran Šućur (The Ministry of Labour and Social Welfare, Republic of Croatia, 2001).

According to the Law on Health Insurance, parents have the right to financial compensation to help purchase equipment for the newborn baby. Children's facilities (nurseries and kindergartens) attend about a third of children and they are subsidised by the state with regard to the social status of the user. Child Benefit is a significant support to poor families with children.

Family literacy programmes for migrant parents

No data available for Croatia.

The Croatian Ministry of Education, Science and Sports, in 2011, published a document concerning the establishment of a Curriculum of the Croatian language for asylum seekers, those in receipt of asylum and people under subsidiary protection older than 15 years to ensure access to secondary education and adult education (Ministry of Education, Science and Sports, 2011).

Policies/programmes to prevent early school leaving

There are plans to extend compulsory education beyond the elementary school. As of now, according to Ana Žnidarec Čučković (Forum for Freedom in Education, Croatia), this has not happened.

The Croatian Parliament adopted on 21 June 2007 the National Programme of Measures for the Introduction of Compulsory Secondary Education (Official Gazette NN, 71/07) including the following goals: Increase the enrolment rate of pupils and the rate of finishing regular secondary education; Improve the quality of Croatian secondary education, while coordinating it with the European educational systems and the standards of the European Union member countries. In order to achieve the above, special attention has been devoted to increasing the rate of enrolment into and of finishing regular secondary education; improving the quality of Croatian secondary education and coordinating it with the European educational systems; reducing the rate of early school leaving through the process of advancing the educational system. Pursuant to the abovementioned goals, the following incentive measures are being implemented: a. supplying schools with free textbooks; b. covering transport costs; c. providing free accommodation and meals at student dormitories. Parallel with these measures, 55 new teaching plans and programmes for the acquisition of lower educational qualification have been passed, the hiring of teachers and expert associates at high schools has been increased (349 were employed in the school year of 2006 /2007, while 476 new teachers were employed in 2007/2008). Both the vertical and horizontal transition through the educational system has been enabled, i.e. transition from a higher to a lower level, and vice versa. The State Pedagogical Standard has been created, aimed at setting up equal staff and material conditions in all high schools, and the enactment of the National Framework Curriculum is underway.

A project addressing the gender gap

Rijeka City Library conducts *the BookBall* project that was created as a result of connecting interests and collaboration with Football Club Rijeka (FC Rijeka), one of the most influential and popular Croatian football clubs. The BookBall project was brought to life in 2013 through connecting interests of FC Rijeka to advance the Football School program and create additional content for the attendees, and the wish of Rijeka City Library to work with boys more actively, a population that, usually, through social prejudice, is not connected with the world of books. This is a unique project in Croatia and it consists of intertwining the FC Rijeka and Rijeka City Library's existences through various activities – all Football School participants (around 400 children and teenagers) have the opportunity to become members of the Library free of charge and borrow specifically chosen literature appealing to boys and sportsmen from the Little Library established on the stadium premises. The project evoked positive reactions in children, parents and society (Gradska knjižnica Rijeka, Knjigomet (in Croatian))¹³.

¹³ See: <http://gkr.hr/Magazin/Najave/Knjigometom-do-sadrzajnog-sportskog-razvoja>.

ADULTS

6 Performance data for adults in literacy

Croatia did not take part in the Program for the International Assessment of Adult Competencies (PIAAC) and the data about literacy among adults was provided with help of The Croatian Agency for Vocational Education and Training and Adult Education, and the Croatian Bureau of Statistics.

According to the public census from 2011., the Republic of Croatia had 4 284 889 residents and amongst them 2 066 335 men (48,2%) and 2 218 554 women (51,8%). In 2011., the population of the Republic of Croatia was approximately 41,7 years old (men 39,9, women 43,4), which makes it the oldest population in Europe.

According to the gathered data, 1,7 % residents of the Republic Croatia never attended any sort of school, 7,8% didn't finish primary school, but 21,3% of the population finished primary school, 52,6% finished high school, and 16,38% of the population graduated college or university (Državni zavod za statistiku RH, 2011). The education of adults in Croatia is accepted as an integral part of a unique educational system according to the Law on educating Adults (Official Gazette, 17/07., 107/07. i 24/10.) which was passed in 2007. as a precaution according to the Strategy for Adult Education from the year 2004. (Ministry of Science, Education and Sports, Republic of Croatia, 2007.)

According to the law, a person is adult at the age of 15. That is the age at which primary education is completed and the lowest age at which a person is allowed to work according to the Labour Act (Official Gazette, 149/09. i 61/11., čl. 17. st. 1.).

Institutions that deal with the observance and development of the Educational system in Croatia are:

- The Council for the Education of Adults as professional and advice giving institution of the Republic of Croatia, and whose job is to observe and suggest measures for developing the educational system for adults and giving opinions on the suggestions of regulations of the educational system, etc.
- The Agency for Vocational Education and Training and Adult Education as a public institution founded by the state - obligated to deal with the analytical, developmental and investigational jobs, for training experts in the system of vocational professions and monitoring the institutions for education of adults.

In Croatia, institutions that educate adults include: public open universities (public and private) which were founded as public institutions for permanent education according to the Law on public open universities (Official Gazette, 54/97., 5/98., 109/99. i 139/10.), primary and highschoools which engage in programs for educating adults, high-colleges and universities (university programs for employed people and unemployed people who pay for the education themselves), educational centres in businesses, private schools (eg. Language schools), driving schools, non-governmental organisatio, political parties, syndicates, unions of employers, educational programs for the elderly, penological institutions, religious institutions and foreign institutions. (Ministry of Science, Education and Sports, Republic of Croatia, 2004).

The Government of Croatia had, in accordance with the Resoluton of the UN on the decade of literacy in the time between 2003. and 2012., started a project under the name "For a Literate Croatia: The Way to a Desirable Future - Decade of literacy in Croatia 2003.-2012." (Ministry of Science, Education and Sports, Republic of Croatia., 2009)

In Official Gazette, 17/07, Croatian Government published The Adult Education Act and in Article 5 it says:

Article 5: (1) Adult education encompasses such educational programmes as enable adults to enhance their knowledge of, and skills in:

- reading, writing and mathematical operation,
- mastery of their mother tongue and foreign languages,
- mastery of information/communication technologies,
- working within their given profession,
- entrepreneurship and management,
- creative expression and participation in arts and cultural events,
- responsible practice of basic civic rights and duties and awareness of active civic participation,
- protection/preservation of the environment, special social skills and abilities, as well as other types of knowledge, skills and abilities.

Article 17: (1) An adult education student may be a person who is at least 15 years of age and fulfils other requirements prescribed by the programme.

7 Adult Literacy Policy

7.1 Provision¹⁴

What types of adult literacy provision are there? What do you consider to be adult literacy provision in your country?

In Croatia primary education is compulsory and free. However, 62.092 citizens 15 years of age and older did not finish primary school, 3% of whom did not have any education. Unlike in 1990, in 2003 the Government of the Republic of Croatia adopted a ten-year project on literacy for adults "For a Literate Croatia a Path to a Desirable Future", in accordance with the framework of the UN Resolution "Decade of Literacy 2003-2012". The Government allocated considerable funds for primary adult education.

The target group of the project is the age group 15-50. Apart from being given an opportunity to finish primary school, the participants will also be given an opportunity to complete vocational training, required for less complicated jobs on the labour market.

The implementation of the project has shown some flaws which need to be corrected:

- lack of marketing and campaign that would provide necessary information to the public and those interested in the project;
- curriculum, which is only slightly modified in comparison with the curriculum of regular primary education;
- textbooks and other learning materials are almost non-existent, so the lessons rely solely on the teachers' notes;

¹⁴ Information for chapter Adults provided by The Croatian Agency for Vocational Education and Training and Adult Education <http://www.asoo.hr/>.

- classes are taught by teachers working in regular primary schools, who have no andragogic knowledge or skills, and a large number of them, no experience at all in teaching adults.

How is adult literacy provision funded?

The Government allocated funds for primary adult education.

Is there a statutory entitlement to literacy provision up to a certain level?

Yes, according to national legislation there is a free and open access for any individual.

What is the rate of participation in adult learning, workplace training, liberal adult education?

The available Eurostat data on the percentage of adults participating in lifelong learning for Croatia, for the 2008 and 2014 amounted for 2.5% and 2.6%, respectively. This information is derived from the statistical data collected from the Labour Force Survey (LFS) and refers to a period of four weeks preceding the time of the survey. In contrast to this information, which may seem alarming and worrying given the low level of participation, the data provided by one another survey – the Adult Education Survey (AES), points out to the values which might be more realistic for the Croatian practice. Although the data for Croatia is available only for 2007 (pilot study), since Croatia has not participated in the second round of the survey, which was carried out in 2011, they are currently the only available information which "measure" the level of participation in adult education through a period of 12 months preceding the survey. The data analyzed show that 4.5% of adults participated in formal education, 18.4% in non-formal education and 44.6% in informal adult education.

The Agency for Vocational Education and Training and Adult Education (AVETAE) holds a register on the number of active adult education institutions, and on the number of adults who have enrolled a formal adult education program. However, while the adult education institutions are bound by existing legislation to regularly report into the Agency's database on the number of participants of formal adult education programs, they seem not to be up to date. This means that the number of participants from the Agency's database is incomplete. More precisely, in 2013, around 48.147 adults participated in formal adult education, whereas for 2014 the figure was 34.4544. If we take into account that the population of adults of 25-64 years of age (estimate - mid 20135) is 2.348,818, it can be calculated that in 2013 about 2.04%, adults attended formal adult education programs, whereas for 2014, the number seems to be lower - 1.46% adults (25-64 years) in formal adult education programs. However, it should be noted again that the data is incomplete.

Are studies available on factors that inhibit or prevent participation in literacy education and in using literacy outside educational contexts? If yes, what are the factors?

No; no studies available.

What progression routes are there from adult basic education courses to VET/HE courses?

Within project on literacy for adults "For a Literate Croatia a Path to a Desirable Future" apart from being given an opportunity to finish primary school, the participants will also be given an opportunity to complete vocational training, required for less complicated jobs on the labour market.

Does a right to advice and guidance regarding educational opportunities exist? If yes, who provides this advice?

Croatian Employment Service (CES) has been identified by the ETF in 2005 as the main holder of systematically organised activities of information, guidance and counselling aimed at different users – from pupils and students in their finishing years of basic and secondary school to different groups of adults, the unemployed persons and job seekers, as well as the employers. Expert teams work in 22 CES Regional Offices, together with a coordination team at the CES Central Office.

7.2 Quality Monitoring

Is there an inspection service to monitor the quality of adult literacy providers (including classroom practice)?

There is an inspection service within Ministry of science, education and sports and supervision of professional work of adult education institution within Agency for vocational education and training and adult education.

Are there national quality standards for the quality of adult literacy providers?

There are no national quality standards for adult literacy providers.

Are there national benchmarks/standards for adult literacy performance? How are adults' progress in reading and writing assessed/monitored?

No there are no national benchmarks and standards for adult literacy performance.

What accountability measures are in place for adult education institutions?

N/A

7.3 Literacy Curricula/Reading Instruction

Is there a national literacy curriculum for adults? How is this linked to school curricula?

The programme (curriculum) consists of six terms, each lasting 18 weeks. The first (I) and second (II) terms are equivalent to the level of the first four grades of primary education. These terms are designed for adults who have not completed the first four years of primary school.

Terms three (III) to six (VI) match the level of the remaining four years of primary education and are, therefore designed for adults who have completed only the first four years of regular primary education. After completing this part of the programme, participants get a learning voucher for 150 hours of training and they are free to choose the training and the provider. After the completion of vocational training the participants hand over the learning voucher to the provider, who then cashes the voucher. The curriculum is adjustable to the needs and previous knowledge of adult learners. As can be seen, classes for the training programmes for basic occupations are included in the timetable for the terms V and VI; one of the programmes offered can be chosen and completed in parallel to primary school education. Total programme duration is three years. The additional, parallel training programme covers a total of 150 hours.

What is the accepted methodology for the teaching of literacy to adults?

N/A

How do curricula and learning materials cater for diversity of learner groups and learning needs?

N/A

Is there a specific focus on literacy in VET provision for adults?

It is not possible to identify an explicit focus on literacy in VET provision. It is possible that there are different literacy elements in VET teaching practices; however, this content is dependent on the individual provider and trainer.

7.4 Screenings/Assessments/Support

How are adults with literacy needs identified?

For now only by Population Census.

How are adults' prior literacy knowledge and skills recognized and validated?

There are procedures for assessing prior learning.

As a general principle, adult can have their prior learning recognised both for the basic education and vocational modules.

Are there any standard tests to assess literacy needs or learning progress in literacy programmes?

No.

How are adults with dyslexia identified and supported?

No data/information available.

7.5 Special Support for Second-Language Learners/Migrants

Is there provision for adult migrants whose home language is not the official language of the host country?

According to national law, migrants have the right to learn free Croatian Language. Provision is the responsibility of the Ministry of Science, Education and Sports and providers are adult education institutions.

Who pays for this provision?

The Government allocated funds.

Does this provision employ specialist teachers?

Usually they are teachers without any specific training on how to teach adults.

Is there specialist provision for those who have poor literacy skills in their L1?

No.

Is there a separate curriculum for this type of provision?

No.

Reading Environments to Stimulate

7.6 Reading Motivation

Are there schemes to promote reading for pleasure among adults?

Within national education campaign Lifelong learning week Agency for vocational education and training and adult education promote variety ways to learn including reading for pleasure.

Is there systematic cooperation with civil society – e.g. libraries, bookstores, literature institutions, theatres, media, newspapers, publishers etc. in reading promotion for adults?

In order to celebrate International literacy day (8th of September 2012.), the Agency for vocational education and training and adult education and the Croatian reading society (Zagreb and Zagreb county branch) have organized a round table on promotion of learning and literacy "Through reading to literacy". At the round table results of big research project "Reading habits and information needs of Croatian citizens" have been presented.

Are there family literacy programmes with a focus on supporting adult literacy?

There are some private family literacy initiatives. Many public libraries provide family reading programs which often include all members, from all ages.

7.7 Digital Environments/Use of Technology in Education

Is there a digital gap? How are adults supported in acquiring digital skills / digital literacy?

There are no national programmes or initiatives to support adults in acquiring digital skills.

Which population groups are excluded from access to ICTs?

There are no statistics or any other official data.

Are there any web-based programmes for adults to improve their literacy & numeracy skills?

No.

What classroom resources (E-books, notebooks, internet, mobile phones...) are used to support the development of adults' literacy?

There are no official data collected on this subject.

7.8 Teachers

What are the professional roles within adult education?

It is not possible to report on adult literacy teachers as a profession.

What is the status/reputation of teachers and other professionals who work in adult education?

Adult education teachers usually comes from schools so their status is the same as those in regular system.

What are their working conditions?

They usually have service contract with institutions.

How do salaries compare to the national average?

They are paid by hour and the amount depends on the agreement with the employer.

What are the statutory qualification requirements?

Different Bachelor qualifications are required.

What are the entry requirements for ITE?

N/A

7.9 Teacher Education

What are the statutory qualification requirements for adult literacy teachers?

There is no distinct category of adult literacy teachers.

Are there specialist qualification routes for adult literacy teachers?

No

What are the entry requirements for Initial Teacher Education?

N/A

Who pays for training?

N/A

Is there a curriculum for initial teacher training?

N/A

Are there compulsory (or optional) language and literacy modules in all adult education ITE?

No

What is the length of the required training?

N/A

Is there a curriculum/quality standards?

No

Is there continuous professional development (in-service training) for teachers which focuses on literacy development?

No

What is the take-up among teachers?

N/A

Who delivers this training?

N/A

How is it quality assured?

N/A

7.10 Policy-Making

Who is involved in policy-making for adult literacy education?

Ministry of science, education and sports.

How is inter-sectoral and interministerial cooperation promoted and coordinated?

The main responsibility for policy making falls under the Ministry of science, education and sports.

What financing mechanisms exist that facilitate inter-sectoral cooperation?

N/A

Which policies promote for the provision of broad and varied access to adult literacy education?

N/A

How are the motivation, interests and needs of adults taken into account in the policymaking processes?

No data available

7.11 Lifelong learning

According to Eurostat, only 2,5% of croatian adults aged 25 to 64 stated that they received any education or training in the four weeks preceding the EU Labour Force Survey in 2014. It is among the lowest percentages in Europe (Eurostat. Lifelong learning, 2014).

Lifelong learning programs are available to all professionals through professional societies. For example, Croatian librarians are able to follow developments in the professional field via Centre for Continuing Lifelong Learning (Centar za stalno stručno usavršavanje, 2015). Carnet, Croatian Academic

and Research Network also provides its users with many courses, seminars, conferences for improving skills and gaining knowledge (Carnet. Edukacijski programi).

Croatian libraries, especially Zagreb City Libraries (ZCL) are very successful in organising library services and providing programs for homeless people in the capital of Croatia, Zagreb. S. Bunić is coordinator of the programs. The number of homeless people is steadily growing every day with a very small number of quality social inclusion programmes intended for them. In 2011 ZCL received a 15,000 USD grant from the international non-profit organisation EIFL under its Public Library Innovation Programme for the project *Knjigom do krova (A Book for a Roof)* in the category of "Improving People's Employment Prospects". It was a one-year project whose main objective was to encourage the homeless to enter the labour market. Information Literacy Workshops were held both at the City Library and at the biggest shelter located in the suburbs of Zagreb. Four computers and a printer were also donated to the shelter (Bunić, S. 2013). Library services for the homeless are based on 4 fundamental activities that are carried out continually: Information Literacy Workshops at the City Library; Bring Along a Friend gatherings; donations of used computer and books to organisations that take care of the homeless; and continuous promotional activities (Bunić, S. 2013).

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