LITERACY IN PORTUGAL

COUNTRY REPORT

CHILDREN AND ADOLESCENTS

March 2016

Lifelong Learning Programme

This project has been funded with support from the European Commission. This publication reflects the views of its authors only, and the Commission cannot be held responsible for any use which may be made of the information contained herein.

This document has been published by the European Literacy Policy Network (ELINET).

The report was completed in 2016.

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TABLE OF CONTENTS

1 Introduction

This report on the state of literacy in Portugal is one of a series produced in 2015 and 2016 by ELINET, the European Literacy Policy Network. ELINET was founded in February 2014 and has 78 partner organisations in 28 European countries[1]. ELINET aims to improve literacy policies in its member countries in order to reduce the number of children, young people and adults with low literacy skills. One major tool to achieve this aim is to produce a set of reliable, up-to-date and comprehensive reports on the state of literacy in each country where ELINET has one or more partners, and to provide guidance towards improving literacy policies in those countries. The reports are based (wherever possible) on available, internationally comparable performance data, as well as reliable national data provided (and translated) by our partners.

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

The Country Reports about Children and Adolescents are organised around the three recommendations of the HLG´s literacy report:

- Creating a literate environment
- Improving the quality of teaching
- Increasing participation, inclusion (and equity[4]).

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

Portugal participated in IEA's PIRLS (4th graders reading comprehension) in 2011, and in the OECD's PISA studies (15 year-olds' reading literacy) since 2000. This means it is possible to describe the change over time in average reading proficiency, according to different characteristics of the readers, only for the 15 years-old students. Portugal was involved only in the third cycle of the PIRLS Study; so trends cannot be examined among 4th graders, and the comparison between relative reading levels of proficiencies for different age groups will be limited.

Portugal performed above the EU average in PIRLS 2011 (541 vs 535 EU-average). Its performance in PISA 2012 was very close to the EU average (488 vs 489). A substantial increase was observed between PISA 2000 and 2012 (+18 score points), namely almost a half-year of schooling.

The proportion of pupils who can be considered as low-performing readers was somewhat lower than on EU average in PIRLS (16% vs 20%) and very close to it in PISA (18.8% 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 since PISA 2000 (by about 8%). Among girls, a decrease of 8.7% was observed while among boys, it is -6.3%. The proportion of top-performing readers was exactly the same as on EU average in PIRLS (9%) and slightly lower in PISA (5.8 vs 7% in EU).

The gap according to the pupils' socioeconomic background was somewhat lower than the EU average in PIRLS (50 vs 76 on average), indicating a relatively weaker relationship between parents' educational level and performance. In PISA, this gap was just below the EU average (86 vs 89 on average). However, the indices of socioeconomic background are not the same in PIRLS and PISA, so the comparison should be taken with caution.

In PISA 2009, the gap between native students and students with a migrant background was lower than in EU countries on average (26 vs 38 EU-average). Similarly, in PIRLS, the mean score difference between those who always spoke the language of the test at home, and those who sometimes or never did so was below the EU countries (12 vs 26). In PISA, the gap according to language spoken at home was 31 (vs 54 in EU).

In Portugal, the gender gap (in favour of girls) is slightly higher in PIRLS (14 vs 12 on average) than the corresponding EU average differences, while it was lower in PISA (38 vs 44 on average).

In conclusion, Portugal has increased its overall reading score overtime among 15 year-olds, rising to the same level of performance as EU countries on average. Portugal has a proportion of low-performing readers very close to EU average; it has decreased since 2000. The spread of achievement (gap between low and top performing readers) is smaller in Portugal than in the EU on average at both levels. The gap according to socioeconomic status, migration or language spoken at home tends to be somewhat lower in Portugal, which is then a little more equitable than EU countries on average.

There are no PIAAC data for Portugal because, due to a change in the Government, Portuguese participation in the assessment was interrupted after the collection of pre-test results.

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

Creating a Literate Environment

Pre-Primary Years

Providing a supportive home environment: In Portugal, as PIRLS data show, a vast majority of pupils have parents with some positive attitudes towards reading (19% like and 70.3% somewhat like reading); however, 10.7% of parents do not like reading. There are great differences in reading performance at grade 4 between children whose parents like to read (average achievement: 563) and those who do not (average achievement 524).

The availability of children's books at home in Portugal (12%) is close to the European average (11%); nevertheless, fewer pupils in Portugal, only 8%, reported having over 200 books compared to the European average (12%). The achievement gap between those with 0-10 books and those with more than 200 books is 62 points, which is the equivalent a one year and a half of schooling.

Since reading to the child is a predictor of future literacy achievement, the percentage of pupils whose parents engaged in literacy-relevant activities often or at least sometimes with them before the beginning of primary school is a matter of concern in Portugal. According to PIRLS data, although the percentage of parents who never or almost never engaged their children in literacy activities is very close of the EU average (2%), only 34.9% of pupils were often engaged in those activities (the European average is 40.7%).

Creating family literacy programmes: 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.

Children and Adolescents

Providing a literate environment in school: Based on data provided by teachers, PIRLS shows that 67.4% of students in Portugal are in classrooms which have class libraries; yet, only 14% of Portuguese students were in classrooms with more than 50 books, which is less than half of the EU-24 average of 32%, and 24% of students are in schools which do not have library at all (the international average is 14%).

This means that, in Portugal, the number of primary schools without library or with scarce resources for reading promotion is somewhat high compared to the EU average. As mentioned in PIRLS, libraries provide a range of reading materials and other resources from which teachers can draw to expand their instructional approaches and from which pupils can choose books for their own learning and enjoyment. Consequently, library users tend to be much more likely to read above their expected level, to enjoy reading and to have positive attitudes toward reading.

Supporting reading motivation especially among adolescents: In Portugal, there is a remarkable decrease in reading motivation from 4th grade (cf. PIRLS, 2011) to age 15 (cf. PISA, 2009). In PIRLS

2011, about 97 percent of Portuguese pupils reported that they like reading. According to PISA 2009, however, nearly 20 percent of 15-year-olds report being highly engaged in reading.

In PISA 2009, Portugal has a difference of 90 score points between students reporting being highly engaged in reading and those reporting being poorly engaged in that activity (OECD, 2010b).

Although schools and libraries already do a lot of work to overcome this problem, much more has to be done. Families and communities should do more in order to support reading motivation, reading habits and a stable self-concept as a reader among adolescents, especially boys and students from disadvantaged families (low SES).

Offering digital literacy learning opportunities at school: A literate environment can also be created by incorporating digital devices into the school environment.

Although, in Portugal, the curriculum recommendations stress that technology should assist reading instruction providing support for reading, writing and correction of students' work, the *Survey of Schools. ICT in Education: Benchmarking Access, Use and Attitudes to Technology in Europe's Schools* (European Commission, 2013b) highlights that ICT–based activities are not very common in Portugal and information technology only appears as a supplemental tool in the process of reading instruction.

The OECD study "Students on Line" (OECD, 2011, p. 321) shows that Portuguese students aged 15-16 have to rely more on private resources than school support to acquire digital literacy: 54% of students do not use the computer at school and more than 75% of pupils do not spend time at all on computers during the lessons of the different subjects. Also, according to teachers of students, in PIRLS 2011, only 47% of students are in classes where at least one computer is available for student use during reading lessons, which is well below compared with Nordic countries (e.g. 79% in Norway) Portugal is well below.

The discrepancy between steering documents and classroom practices is a problem to overcome.

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

Family Literacy Programmes: The project "Da promoção da Literacia Familiar ao Sucesso Escolar das Crianças" ("From the family literacy promotion to educational success of children"), carried out by the Higher Education School of the Polytechnic Institute of Coimbra, was developed between 2009 and 2011[6]. This project intended to understand how the attendance of training in New Opportunities Centres promotes the development of family literacy and the acquisition of literacy skills (Salgado et al. 2011).

The programme Plano Nacional de Leitura[7] (National Reading Plan) has been launching several initiatives which aim at promoting the development of skills in reading of families, from the parents to children. Among them are "Ler + em família" ("Reading + in families") and "Ler+ em casa" ("Reading + at home").

Programmes for introducing parents and children to libraries and bookshops: Almost all public libraries, integrated into *Rede Nacional de Bibliotecas Públicas* ("National Network of Public Libraries"), have been developing initiatives, aiming at raising awareness of the families for the importance of

[6] See http://literacia-familiar.blogspot.pt/ (accessed October 13, 2015).
[7] See http://www.planonacionaldeleitura.gov.pt/pnltv/english.php?idEnglish=1 (accessed March 31, 2015).

reading as a means for promoting book reading, which is crucial to acquire skills that will help in the learning of reading and writing. "Mimos e Livros à mão de semear – Promoting Emergent Literacy"; "Bibliófilo vai à escola" ("Bibliophile goes to school"); "Leituras em família" ("Reading in the family"); "OportunAidade - aprendizagem não formal ao longo da vida" ("OportunAidade" – non-formal lifelong learning); "Biblioteca para Avós" ("Library for Grandparents"); "Bebeteca" ("Library for Babies") are some examples of those public libraries initiatives.

Initiatives to foster reading engagement among children and adolescents: Working in close cooperation, RBE and "Plano Nacional de Leitura" have been carrying out several initiatives and actions, such as "Ler+Escolas" ("Reading+Schools"); "Ler+Jovem" ("Reading + Young"). All of these governmental initiatives have contributed to engage teachers and educators in reading activities inside and outside of the classrooms, covering all Portuguese people from kindergarten to adulthood. Additionally, training programmes for teachers and educators have been designed to encourage all professionals of reading to promote initiatives that encourage the pleasure of reading amongst children, young people and adults.

The *Rede de Bibliotecas Escolares* ("School Libraries Network") has been promoting projects in different fields, such as "Ideias com Mérito" ("Ideas with merit"), "aLeR+" ("Reading+"), "Ler é para já" ("Reading now") and "Newton gostava de ler" ("Newton enjoy reading"), with the purpose of improving the quality of learning and literacy levels of the education community.

Offering attractive reading material for children and adolescents in print and non-print: Portugal's curriculum provides a list of titles and authors as examples of what primary and lower secondary level pupils must read. The suggested books are organised into different categories such as books for reading with parents/teachers and books for students who do not read regularly. Also, one of the main focuses of the "Plano Nacional de Leitura" is budget provision for school libraries' acquisition of different types of books (fiction, poetry, drama and science books) magazines, internet resources, to be used in the classroom in reading and writing activities and to promote independent reading.

It is important to emphasise that all libraries of the *Rede de Bibliotecas Escolares* and of the *Rede Nacional de Bibliotecas Públicas* are properly equipped with a variety of texts and books, and their databases are updated every month, as required by UNESCO in the Manifesto of The International Federation of Library Associations and Institutions (IFLA).

RBE provides a range of services, such as Webpages, blogs, newsletters, social networks, learning platforms, encouraging the digital literacy practices and the ICT use and preparing students for search, use, production and communication through internet and social networks. In addition, one of the goals of the school libraries is to create a reading culture (digital and printed), exploring technological equipment and other strategies to improve and promote reading for pleasure (RBE/MEC, 2013).

Fostering digital literacy in and outside schools: In Portugal, public libraries are well organised in order to engage and to motivate the adolescents to visit them and to use and enjoy the available digital and multimedia resources. They also have a good broadband connection and students can use appropriate hardware, especially laptops.

Several public libraries of the *Rede Nacional de Bibliotecas Públicas* ("National Network of Public Libraries") have been developing a variety of initiatives, as "Leitur@s com TIC's" ("Reading with ICT´s"), "Num Click" ("At a click") "Literacia Inform@tica Para Todos" ("Computer literacy for all"), whose main

goal is to promote literacy skills, on new information and communication technologies, among the population, from children to senior citizens.

There is also an initiative, named Eduscratch[8], which was implemented, through a partnership between the Directorate-General for Education of the Portuguese Ministry of Education and Science and one of its ICT Competence Centres, in 2010. This project aiming at promoting the use of the Scratch software in the schools. Scratch is an intuitive programming tool to support computational thinking. In its early stages, some teachers participated in in-service training workshops to learn the programme. As teachers at different levels used EduScratch in very different ways, training was designed to meet their different needs. An important aspect of this programme has been its attention to substantive as well as technological issues. Ultimately, the objectives of this project are to promote the efficacy and innovation of the use of the technologies in the learning process, across all areas and contexts, and to make of each young person an inventor and creator, rather than simply a consumer of technologies.

Improving the Quality of Teaching

Pre-Primary Years

Providing free or affordable high quality preschool education for all children / investing more money in Early Childhood Education and Care (ECEC): The enrolment rate at age 4 is 95.4%. Portugal thus reaches the European benchmark for at least 95% of children between age 4 and the start of compulsory education participating in ECEC.

Portugal is at the lower end among European countries concerning: the total public expenditure per child on pre-primary education (0.4%); the ratio of children to teachers (15.8); the percentage of males among preschool teachers (1.8%).

Raising the professional qualification level of staff in ECEC: Portugal should improve and update teaching staff, by means of training courses of Continuous Professional Development (CPD), especially in the fields of pedagogical practice, special needs, and linguistic diversity as well as oral and written language. There is a lack of educators and teacher training in those areas (Ministério da educação e Ciência/Inspeção-Geral da Educação e Ciência, 2014). Continuing Professional Development, for teachers of kindergarten, should be mandatory in Portugal.

Improving early language and literacy screening and training: Policy makers should provide the effective technical and educational support, in order to ensure the pedagogical quality as well as the articulation between teachers, technical staff, the pedagogical directorate, and educators. It is also important to create an early intervention plan and/or an individual educational plan (Ministério da educação e Ciência/Inspeção-Geral da Educação e Ciência, 2014), where early language and literacy must have a crucial role.

The report *Caracterização dos Contextos de Educação pré-escolar: Relatório Final* (Ministério da Educação/DGIDC, 2006) highlights that there is a lack of material resources, documentation and teacher training concerning written language and emergent literacy and non-verbal communication.

Regular diagnosis of oral language proficiency for pre-primary years is needed and all kindergarten teachers should know how to conduct this diagnosis. The aim should be that all children entering

[8] See http://eduscratch.dge.mec.pt/ (accessed September 30, 2015).

school should be entitled to the development of the language of the school so that they can profit from reading instruction.

Introducing comprehensive literacy curricula in pre-primary schools: All kindergartens should fulfil a minimum of 5 hours per day for educational activities, which are intended to construct and to develop the curriculum (Ministério da educação e Ciência/Inspeção-Geral da Educação e Ciência, 2014), by giving special emphasis to those activities related to the development of language and literacy.

In preschool, children can be prepared for formal instruction in school. Kindergarten teachers should provide a literacy environment where children learn and engage in the communicative functions of reading and writing with the aim of developing curiosity and motivation to learn to read and write in school.

Children and Adolescents

Improving the quality of literacy instruction: In spite of what Portuguese teachers report in PIRLS 2011 (that they put a strong emphasis on a comprehension strategies), national research highlights their lack of knowledge on specific teaching of reading comprehension strategies (Dionísio et al. 2011).

In fact, data from PISA 2009 show that there is a need for explicit instruction of reading strategies, in Portugal: there is a gap of 89 score points between students who know which strategies are the most efficient to understand and remember a text (532 score points) and those who have a limited knowledge of that (443 score points); there is also a gap of 95 score points between students who know which strategies are the most efficient to summarise a text (530 score points) and those who have a limited knowledge of that (440 score points).

Research has demonstrated that there is also a serious teacher dependency on the textbooks, across all grades and subjects (Moreira et al. 2006). PIRLS data reinforce this trend: 67% of teachers reported to use textbooks as a basis for instruction (Mullis et al. 2012, p. 236). This dependency should be avoided, because textbooks hardly include the range of adequate strategies needed for reading comprehension.

Building a stronger focus on literacy into curricula: The absence of explicit teaching of literacy strategies in content areas is due to a general lack of knowledge regarding literacy strategies.

There is a need to mainstream reading / writing literacy across the curriculum, and to offer content area literacy instruction in all school subjects throughout secondary education, whether academic or vocational.

Strengthening remedial support for struggling literacy learners: As PIRLS shows, 37% of students, in Portugal, are in classes whose teachers wait to see if performance improves with maturation, and 99% of students are taught by teachers who ask parents to provide additional support to a student who falls behind in reading.

According to an analysis of guidelines for Initial Teacher Education institutions, tackling reading difficulties is not a topic at this training level in Portugal (EACEA/Eurydice, 2011, p. 99).

Also, the field of specific learning disabilities, in Portugal, is characterised by a lack of a technically adequate system of school-wide screening and progress monitoring (Mendonça & Martins, 2014).

Policy makers should provide support systems (additional instruction time, additional experts like reading experts, psychologists, speech therapists) for students falling behind in literacy.

Pupils with learning difficulties/disabilities or those who face personal, social or emotional challenges often have too little contact with education staff or other adults to support them. They need easy access to teachers and other professionals supporting their educational and personal development. They also need guidance and mentoring together with cultural and extra-curricular activities to broaden their learning opportunities. In addition, whether remedial training takes place or remedial courses are offered is dependent on the school's resources, and very often when classes have to be cancelled, remedial courses are the first. There is evidence that not all children in need of remedial support in literacy receive it. Students who do not reach a minimal standard of literacy level should have a legal right to individual support.

Improving the quality of pre-service and in-service teacher training: Literacy instruction in primary and secondary schools should become more cognitively demanding, more individualised and targeted at using higher-level strategies. One crucial prerequisite for achieving those goals is adequate preparation of teachers.

Not all teachers who are involved in teaching reading and writing skills in primary or secondary schools have a solid training in literacy. Only limited aspects of literacy are mentioned in the curricula on mother tongue education.

Although reading across the curriculum is being more and more recognised as necessary by schools, it is not yet a shared concept in Portugal. Policy and schools put on mother tongue teachers the responsibility for teaching reading, expecting that this learning may impact on the performance in other curricular subjects.

Literacy expertise should become a clear standard for teacher education in all grades and subjects, not only for primary teachers, but also for secondary teachers. It should be ensured that initial training as well as CPD courses cover topics such as the teaching of reading, tackling reading difficulties, assessing pupils' reading skills, and supporting those with persistent difficulties.

Improving the quality of literacy instruction: Programmes, initiatives and examples

Improving the quality of preschool: The curriculum for preschool education has been established in Portugal since 1997 enshrining the preschool as the first stage of the lifelong learning process. The *Orientações Curriculares para a Educação Pré-escolar* (Ministério da Educação/Núcleo da Educação Pré-escolar, 1997) ("Curricular Guidelines for Preschool Education") is the reference document for all educators, from the National Network of Preschool Education, and provides guidance for all educators' decisions in the educational process, leading to the development of the children. This guideline document aims at promoting an improvement of the quality of preschool education, in Portugal, and organising educational components. The curriculum for preschool emphasises the role of literacy for lifelong learning.

Providing more cognitively demanding literacy instruction in school: The projects **"***EMA – Escola Melhor***"** ("For a Better School") and "*FENIX – Mais sucesso Escolar*" ("More Educational achievement")

The goals of these projects, developed by schools and supported by national institutions, are to promote more and better learning across all school grades, from preschool to basic education, and consequently improve the educational achievement, motivate teachers about the relevance of literacy

practices in the acquisition of disciplinary knowledge, and providing conditions and opportunities for learning and consolidation of knowledge.

These projects are based on a school organisational model which provides a more personalised approach for students with learning difficulties in Portuguese, Mathematics or another subject, for instance through a pedagogical differentiation.

Early identification of and support for children and adolescents with literacy difficulties

"*Monitorização do Risco de Dificuldades de Aprendizagem Especificas na Leitura de Alunos do 4º ano*" ("Use of monitoring based on the curriculum as a way to identify students at risk of developing learning disabilities in the reading area")

Developed by the Research Centre in Education (CIEd) at the University of Minho and financed by The Foundation for Science and Technology, the main goal of this study was to describe the use of curriculum-based monitoring (CBM) of reading fluency for identifying students at risk for presenting dyslexia. One hundred and forty-six students in the 3rd grade from a group of schools in Braga, Portugal, have participated in the study. They were monitored twice during the school year. The students whose result was below or in the 20th percentile were considered at risk.

This project has contributed to the extension of the existing knowledge in the field of reading and risk of reading failure, in a population of 1,400 students who were screened from second through fourth grade with Curriculum-Based Measurement probes (Mendonça & Martins, 2014).

Pre-service and in-service teacher training: In Portugal, between 2006 and 2010, the government has implemented the *"Programa Nacional do Ensino do Português (PNEP)"* ("National Plan for the Teaching of Portuguese"). It was an initiative to improve the teaching of the Portuguese language in schools, in particular, the teaching of reading comprehension and oral and written communication. One teacher from each school applying for the programme was selected to be trained in a higher education institution for one school year. In the following year, this same teacher should disseminate the knowledge, gained by delivering the same training, to a group of teachers within the school (Legislative Order nr. 546/2007, 11th January).

Increasing Participation, Inclusion and Equity

Pre-Primary Years

Compensating socio-economic background: 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 Portugal, it is 34.5%, which is very close to maximum of inequality.

An indicator of child poverty is the percentage of children living in a household in which disposable income, when adjusted for family size and composition, is less than 50% of the national median income (UNICEF/Innocenti Research Centre, 2012). The range is from 4.7% in Iceland to 25.5% in Romania (for an overview of European countries see table A2 in Appendix B). With 14.7%, Portugal is in a group in the middle of the distribution.

The child's socio-economic and cultural background has a strong impact on literacy. Material poverty is a well-recognised main factor 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).

Encouraging preschool attendance, especially for disadvantaged children: The benefits of attending preschool institutions have been proven in many studies. The duration of attendance is associated with greater academic improvement.

In Portugal, 37% of pupils do not attended preschool institutions between the ages of 1 and 3. There is a significant difference in reading competence at grade 4 for students participating and not participating in preschool: 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.

Children and Adolescents

Support for children with special needs: In Portugal, in the school year 2014/2015, 71,301 pupils with special needs attended basic and secondary education institutions.

As mentioned in the report *Políticas Públicas de Educação Especial* ("Public policies in Special Education"), several improvements are needed in the area of Special Educational Needs: i) relevant mechanisms and support for students' progress between cycles; ii) adequate solutions for students when they have completed the school career; iii) educational resources and solutions concerning school organisation; iv) skills profile of students for teachers of Special Education Needs; v) a material and technological resources databases; vi) more human resources for a better inclusion of children into schools full-time (Conselho Nacional de Educação, 2014: 36).

Support for migrant children and adolescents whose home language is not the language of school: In Portugal, there is a considerable migrant gap in reading achievement, as PIRLS (12 score points) and PISA (26 score points) data show. The government should ensure that there are intensive programmes of language and literacy development to support all children and young people with migrant backgrounds or without adequate competence in the Portuguese language.

According to Santiago, Donaldson, Looney and Nusche (2012), given the importance of the language of instruction mastery level and the growing number of students whose mother tongue is not Portuguese, gathering information is sorely needed, not only to improve decision making at school level, but also to determine a national strategy and teachers' guidance for these populations. It would be also desirable to have more comprehensive data on the linguistic profiles of students, in planning a language strategy at the national level and making decisions about specific resources and support for second language learners.

Preventing early school leaving: Following the Eurostat, in Portugal, the rate of early school leavers was 19.2% in 2013, 1.6% less than in 2012. However, it is important to remember that the target value of the early school leaving (ESL) rate set for 2020 is 10% (European Commission, 2014: 2).

Despite the expansion of the education system and the several measures implemented toward reducing ESL, the educational attainment as well as the high share of students leaving school too early with low skills remains a challenge in Portugal.

According to Santiago, Donaldson, Looney and Nusche (2012), the high proportion of early school leavers could be related to the relatively low appreciation of schooling by large groups of the population. It could also result from the parents' low educational attainment and the availability of unskilled jobs.

Consequently, it is important to review and update the Portuguese educational system in order to make it even more inclusive, by allowing all individuals to acquire relevant skills (OECD, 2010). The impact of family background on the probability to drop out is also stronger in Portugal than elsewhere: 98.9% of men aged between 25 and 34 who dropped out before the end of upper secondary school have a low-educated father. This figure is more than 10% higher than on average across European OECD countries (OECD, 2010a).

Addressing the gender gap among adolescents: In Portugal, there aren't specific official (Ministry of Education and Science) measures to address the gender gap among adolescents.

However, data provided by PIRLS 2011 shows that there is a difference of 14 score points between girls (548 score points) and boys (534 score points) in Reading Achievement (table 6). In PISA 2012, the score difference in Reading performance between boys (468 score points) and girls (508 score points) is 60 score points.

Furthermore, in national examinations of Portuguese Language, girls perform better than boys: girls attain more levels 4 and 5 (on a scale from 0 to 5) than boys (Direção-Geral da Educação/Júri Nacional de Exames, 2014).

Given this gender difference, it is clear that programmes and policies specifically aiming at supporting boys´ reading engagement are needed in Portugal.

To underline the importance of the analysis and monitoring concerning gender differences could be desirable: the value of the national tests and national examinations in monitoring students' progress by gender could be enhanced in order to allow the tracking of improvement and permit the investigation of the impact of student gender on performance, and consequently the development of policies and programmes (Santiago et al. 2012).

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

Programmes for inclusion: The programme "Territórios Educativos de Intervenção Prioritária" (TEIP) ("Priority Intervention in Education Territories") programmes are designed to promote education in schools located in underprivileged areas with high dropout levels. The main goal of the last TEIP 3 Programme (Legislative Order nr. 20/2012, 3rd October) is to: "respond to social contexts that encourage the risk of failure in the normal education system, due to the fact that academic success is rarer in socially and economically disadvantaged areas than the national average, where violence, indiscipline, dropouts, school failure and child labour are examples of problems". It is expected that TEIP 3 promotes learning and academic success, makes more effective use of available resources, and achieves better results.

Tutoring and other kinds of support are organised for individual pupils and pupil groups. Intervention measures include, among others: pedagogical support, tutorials, cultural mediation supplementary activities, and parental involvement[9].

Family literacy programmes for migrant parents: The project "Programa Metropolitano de Leitura para Grupos Desfavorecidos" (Programme Reading Metropolitan for disadvantaged groups") was developed between 2004 and 2006, in the Metropolitan Area of Porto (AMP), in a partnership between

[9]See https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Portugal:Support_Measures_for_Learners_in_Early_Childhood_and_School_Education (Accessed August 27, 2014).

PRIMUS (Regional Development Agency) and Local Authorities from nine cities of the Metropolitan Area of Porto. The Programme had two targets: children and young people and immigrants.

The main objectives of the "Programme Reading Metropolitan for disadvantaged groups" are: i) to raise awareness and foster reading as a continuous and regular practice; ii) to promote the acquisition of the language knowledge and its correct use as well as of the new knowledge through reading; to foster the intercultural dialogue and citizenship, especially, along the road of cultural diversity; iii) to provide reading moments and spaces for reading; to increase the qualifications of reading professionals; to enhance the exchange between libraries and readers; iv) to encourage the partnerships between local authorities and cultural institutions (Lopes & Queiroz, 2006).

The programme *"K'Cidade - Programa de Desenvolvimento Comunitário Urbano"* ("K'City – community and urban development programme") was developed by the Aga Khan Foundation, in 2004, with the purpose of promoting the processes of social change that respect the communities, in a process of gradual autonomy and reinforcement of the different players. It also aims at responding to the challenges of urban communities, from Lisbon, especially the poor and socially excluded, such as those comprised of immigrants and ethnic or cultural minorities.

The activities were carried out in partnership with several local institutions. They were divided into four priority intervention axes:

1) Citizenship – encouraging the interventions in a territorial approach, intended to foster the empowerment of communities and other players.
2) Education and Childhood – promoting children's welfare, by improving quality and access to essential services.
3) Families into community – addressing the needs of the most vulnerable communities, through an integrated approach which should involve and support families.
4) Lifelong Learning and employment – strengthening of skills, knowledge and qualification, within a personal, civic, social and/or employment-related perspective, by promoting social inclusion, namely through the development of literacy and numeracy initiatives for adults, in a lifelong learning perspective.

The mission of the programme is to empower the excluded urban communities, with the aim of improving their quality of life[10].

Promoting school attendance, especially among disadvantaged children: A nationwide network called "Commissions for the Protection of At-Risk Children and Youth", was created in Portugal, managed by the municipalities. This team, which includes teachers, works directly with health services, education, security, parents and local associations – where ESL is a high and legal priority. By law, both teams are responsible for ESL and the protection of children's rights to remain in education until the age of 18 (European Commission, 2013a, p. 34).

In order to reduce grade repetition in basic education, Portugal has introduced an extraordinary period at the end of the school year where students from 4th and 6th grades who failed national exams (Portuguese and Math) receive additional support from teachers and have the opportunity to repeat the exam. Students or groups facing difficulties also have a Pedagogic Support Plan designed by teachers, parents and school psychologists if needed. (European Commission, 2013a, p. 37).

[10] See https://grupocomunitarioalta.wordpress.com/quem-somos/programa-kcidade/ (Accessed October 15, 2015).

Different programmes are specifically designed for territories, schools, classes or pupils who are at risk of ESL or who are performing below target. These secondary prevention programmes include the "TEIP" Programme (for schools located in socially and economically disadvantaged areas), the "Mais Sucesso Escolar" ("More School Success") Programme and the "Percursos Curriculares Alternativos" ("Alternative Curricula Pathways") Programme. They are run by the Ministry of Education and Science and have nationwide coverage. The "TEIP" and "Mais Sucesso Escolar" Programmes have recently been extended and now cover over 25% of pupils and schools in Portugal (15.6 % for "TEIP" and 10.2 % for "Mais Sucesso Escolar"). They provide extra support to pupils (academic, personal, social) inside and outside the classroom in the form of mentoring/tutoring, intercultural mediation, guidance and vocational experiences. They include in-service teacher training, as well as parent and community involvement. It is worth noting that "Mais Sucesso Escolar" was originally a teachers' initiative, later recognised and supported by the Ministry (European Commission, 2013a, pp. 39-40).

As a form of compensation, early school leavers over 15 years old can complete their lower secondary education in the Integrated Programme of Education and Training (PIEF). PIEF classes may be held in regular schools, NGOs, communities' facilities and enterprises. Each group has a full-time tutor and a small group of teachers develop a tailored curriculum with a high degree of flexibility and a strong vocational focus. Students may enrol and finish their studies at any time of the year and the duration of the course depends on their own pace. There are also some experiences of Second Chance Schools, namely in the Porto Metropolitan Area (European Commission, 2013a, p. 44).

3 General Information on the Education System in Portugal

In Portugal, the Ministry of Education and Science is responsible for defining, coordinating, implementing and evaluating national policies for education, science and information society, articulating them with the policies of qualification and training. The Ministry performs these responsibilities via direct administration services of the State, indirect administration, advisory bodies and other entities. In the Autonomous Regions of the Azores and Madeira, the Regional Governments, via the respective Regional Secretariats for Education, are responsible for defining the national education policy to a regional plan and manage human, material and financial resources. The Public schools are free of charge, while private schools may charge fees that in many instances are at least partially supported by the State.

The educational system is organised in four stages (Decree-law nr. 139/2012, 5th June):

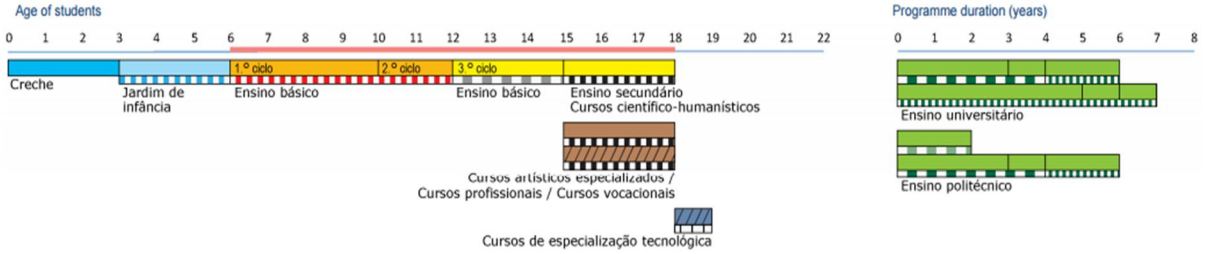
1) Early education (0-6 years): ante-preschool (0-3 years); preschool education (3–6 years);
2) Basic Education – 9 years, in three consecutive cycles:

   1st Cycle (Primary Education) - 1st to 4th grades;
   2nd Cycle - 5th and 6th grades;
   3rd Cycle (Lower Secondary Education) - 7th to 9th grades.

3) Secondary Education (named Upper Secondary Education) – 3 years (10th to 12th grades), with four types of courses:
   - Scientific-humanistic courses[11];
   - professional courses and vocational courses[12];
   - specialised artistic courses[13;]
   - Technological;
   - recurrent education[14].
4) Higher Education (university and polytechnic).

[11] The scientific-humanistic courses are focused on access to higher education.
[12] Professional and vocational courses are oriented to students' professional qualification towards active life, also allowing access to further studies
[13] Courses with specific study plans offered by some private schools submitted to approval of the Ministry of Education and Science.
[14] Recurrent education – addressed to adults who have not completed this level of education at the regular age.

Figure 1: Structure of the Portuguese School System[15]



The Portuguese school system offers opportunities for non-traditional students through a range of alternative options, which provide a second opportunity to those individuals who left school early, who are at risk of doing it or who want to acquire further qualifications at the school level, especially those in the labour force. Several training alternatives are available:

- Education and Training Courses (CEF courses) which are targeted at young people (15 years old or above), at risk of leaving school or who have already left the education system before concluding the 9th Grade, and which lead to a vocational qualification (at levels 1, 2 or 3);
- System of Recognition, Validation and Certification of Competences (RVCC) that is intended to formally validate learning gained in different contexts by adults who intend to obtain an academic or vocational certification;
- Learning Courses that are professional courses targeted at young people aged below 25, who have completed basic education but not secondary education.

A "major handicap for Portugal has been the very low starting point in terms of educational attainment and literacy of its population" (Santiago et al. 2012, p. 17), in the last decades, numerous programmatic policies were introduced in order to:

1) reinforce the student's basic knowledge through compulsory education, now extended to the 12th grade or 18 years of age;
2) emphasise the foundational knowledge and skills, namely literacy, numeracy, history, geography, and other basic subjects;
3) invest in student's English language proficiency;
4) promote more equitable system which enables the generalisation of the academic success and the attempting of student's difficulties;
5) improve the Vocational Education and Training system and reinforcing its dual character and flexibility;
6) increase the teachers' quality and the general teaching quality;
7) develop the autonomy of the schools[16].

Those policies had positive effects on student learning outcomes as well as on the results of the international surveys, in which Portuguese students are around or slightly below the OECD average, especially regarding reading literacy in PISA and PIRLS tests.

[15] See https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Portugal:Overview (Accessed August 27, 2015).
[16] See https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Portugal:Ongoing_Reforms_and_Policy_Developments (Accessed August 27, 2015).

4 Literacy Performance Data for Children and Adolescents

4.1 Performance Data for Primary Children

The performance data for primary children are derived from the IEA´s PIRLS studies.

Inaugurated in 2001 and conducted every 5 years, **PIRLS (Progress in International Reading Literacy Study)** is an assessment of pupils' reading achievement at fourth grade organized by the Association for the Evaluation of Educational Achievement (IEA). The survey was administered in 35 countries in 2001, 45 education systems in 2006, and 50 in 2011. PIRLS assesses different purposes for reading (literary and informational) and different reading processes (retrieve explicit information, make inferences, interpret and integrate ideas and information, examine and evaluate content, language, and textual elements). Both multiple choice and open-ended questions are used.

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

For all PIRLS data used in this report, detailed tables with data for all participating countries in ELINET are provided, together with the EU averages (see Appendix C: ELINET PIRLS 2011 Data; Appendix D: ELINET PIRLS 2006 Data).

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

Pupils in Portugal achieved an overall mean reading score of 541 in PIRLS 2011 (Table 1). This was significantly higher than the EU-24 average. Students in Portugal did marginally better on Reading for Information (544) than on Reading for Literacy Purposes (538), and on Interpret, Integrate & Evaluate (542) compared with Retrieve and Inference (539) (see Appendix C, Tables A2-A5).

Table 1: Overall Performance on PIRLS 2011 – Portugal and EU-24 Average

	Overall Reading –Mean Score
Portugal	**541**
EU-24	535

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

In Portugal, 16% of students performed at or below the Low benchmark on overall reading. This is lower than the EU average of 20% (Table 2). Though Portugal is behind countries such as Finland (8%), the Netherlands (10%) and Croatia (10%) in terms of the proportion of students' performance at or below the Low benchmark, Portugal's standing relative to most EU countries on this indicator is strong

(see ELINET PIRLS Appendix Table A.6). In Portugal, 9% of students achieve at the Advanced benchmark. This is the same as the EU average of 9%.

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

	Below 400	400-475 Low	475-550 Intermediate	550-625 High	Above 625 Advanced
Portugal	2	14	37	38	9
EU-24 Avg	5	15	36	35	9

Portugal's standard deviation of 66% was only 4 points below than the EU-24 average indicating a similar spread of achievement (Table 3). The difference between the scores of students at the 10th and 90th percentiles in Portugal – 169 points – is 11 points lower than the corresponding EU-24 average of 180.

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

	Standard Deviation	10th Percentile	90th Percentile	90th-10th
Portugal	66	454	623	**169**
EU-24	70	441	621	**180**

Portugal did not participate in PRILS 2001 or 2006 so trends cannot be examined.

4.1.2 4.1.2. Gaps in reading

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

Parents' educational achievement

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

Students in Portugal whose parent attended University or Higher achieved a mean score (573) that was some 50 points higher than students whose parents completed Lower Secondary or below (523) (Table 4). The average difference across the EU-24 was 76 points, indicating a relatively weaker relationship between parents' educational level and performance in Portugal. It is also notable that more students in Portugal have parents whose highest level of education is lower secondary or below (33%) compared with the EU_24 average (18%).

Table 4: Percentages of Parents Whose Highest Level of Education was Lower Secondary, and Percentages who Finished University or Higher – Portugal and EU-24

Level of Education	Lower Secondary or Below		University or Higher		Difference (Univ or Higher – Lower Sec)
	%	Mean	%	Mean	
Portugal	33	523	25	573	**50**
EU-24	18	495	30	571	**76**

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

Primary language spoken at home different from language used at school

In Portugal, 90% of pupils reported that they always spoke the language of the PIRLS reading test at home – above the corresponding EU-24 Average (80). Ten percent of students in Portugal reported that they sometimes or never spoke the language of the test at home. The difference in achievement between pupils in Portugal reporting that they always or sometimes/never spoke the language of the test was 12 score points – some 14 points lower than the corresponding EU-24 average difference (26).

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

Language of the Test Spoken at Home	Always		Sometimes /Never		Mean Score Difference (Always – Sometimes/Never
	%	Mean	%	Mean	
Portugal	90	542	10	530	**12**
EU-24 Avg	80	541	20	519	**26**

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

Gender

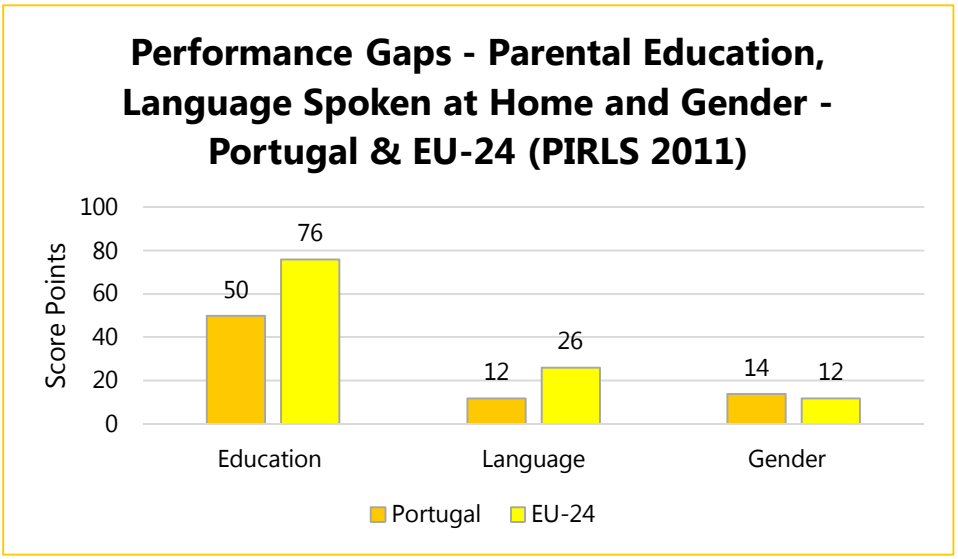
Girls in Portugal achieved a mean score on overall reading that was higher than boys by 14 points in 2011. This was about the same as the EU-24 average difference of 12 points (Table 6).

Table 6: Trends in Performance by Gender 2001-2011 (Overall Scale), Portugal and EU-24 Average

	Portugal			EU-24		
	Girls	Boys	Girls-Boys	Girls	Boys	Girls-Boys
2011	548	534	**14**	541	529	**12**
2006	-	-	-	541	528	**13**
2001	-	-	-	542	525	**17**

Significant differences in **bold**

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



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

Attitudes to Reading

There was a difference of 44 points between the top and bottom quartiles of the Like Reading scale in Portugal in 2011 (Table 7). On average across the EU-24, the difference between students in the top and bottom quarters of the Like Reading scale was 52 points, indicating a relatively weaker relationship between Liking reading and performance in Portugal. Seventy-two percent of students in Portugal agreed a lot that they enjoyed reading (one of the items on the Like Reading scale). The corresponding EU-24 average was 55%.

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

	Overall Reading Score		
Like Reading	Top Quartile	Bottom Quartile	Difference (Q4-Q1)
Portugal	561	517	**44**
EU-24	563	511	**52**

Significant differences in **bold**

In Portugal, 73% of students strongly agreed that they enjoyed reading (one component of the Like Reading scale). This compares favourably with an EU-24 average of 55%. Indeed, more students in Portugal than in any other EU-24 country strongly agreed that they enjoyed reading.

Students in Portugal in the top quarter of the Confidence in Reading scale achieved a mean score (571) that was some 76 points higher than students in the bottom quarter (498) (Table 8). The average difference across the EU-24 was 80 points, again indicating a relatively weaker relationship between Confidence and performance in Portugal than on average across the EU-24.

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

	Overall Reading Score		
Confidence in Reading	Top Quartile	Bottom Quartile	Difference (Q4-Q1)
Portugal	571	498	**76**
EU-24	570	490	**80**

Significant differences in **bold**

National Studies about Reading

In Portugal, several studies were produced within the scope of the programme "Plano Nacional de Leitura" ("National Reading Plan"), which was launched, in 2006, with the primary objective of raising the literacy level of the Portuguese people. The intention was to place the country on a par with its European partners and to create conditions for all Portuguese citizens to feel fully able to deal with written words under any life circumstances; interpreting information available in media, accessing scientific knowledge, and enjoying literature. Among those studies, which aim to provide updated information on reading, there are: *Práticas de promoção da leitura nos países da OCDE* ("Practices of

Reading Promotion in OECD Countries") (Neves et al. 2007); *Os Estudantes e a Leitura* ("Students and Reading") (Lages at al. 2007); *Para a avaliação do desempenho de leitura* ("For the assessment of reading performance") (Sim-Sim & Viana, 2007); *A Leitura em Portugal* ("Reading in Portugal") (Santos et al. 2007).

4.2 Performance Data for Adolescents

The data reported in this Performance section come from the PISA study.

The Programme for International Student Assessment (PISA) led by OECD[17] **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 or metacognition 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.

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% had not gone on to any post-school education by the age of 21; by contrast, more than half of the students (55 %) who had performed at Level 2 as their highest level were at college or university (OECD, 2010b, p.52).

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

Portugal has participated in PISA since 2000. It is therefore possible to describe the change in reading performance over twelve years on average, according to different characteristics of the readers.

Table 9: Reading performance in PISA 2012 – Portugal and EU-27 Average

	Mean	S.E.
Portugal	488	(3.8)
EU-27	489	(0.6)

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

In PISA 2012, the reading performance of Portugal is very close to the EU-27 average.

[17] See: http://www.pisa.oecd.org.

Table 10: Trends in reading performance – Portugal and EU-24 Average, PISA 2000-2012 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.
Portugal	470	(4.5)	489	(3.1)	488	(3.8)	**19**	(7.4)	-2	(5.5)	**18**	(8.3)
EU-27	489*	(0.7)	486**	(0.6)	489***	(0.6)	-3*	(5.0)	**5****	(2.7)	3*	(6.0)

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

The performance in reading of Portuguese students has increased between 2000 and 2012.

Table 11: Spread of achievement. Difference between 10th and 90th percentiles on the reading scale, all students and by gender – Portugal and EU-27 average (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.
Portugal	242	(6.3)	222	(8.3)	252	(7.7)
EU-27	251	(1.3)	230	(1.2)	259	(1.6)

The spread of achievement, defined as the difference in performance between students scoring at the 10th and 90th percentiles, is somewhat smaller in Portugal (242 points) than on average in the European countries (251) (Table 11). The spread is greater for boys (252 points) than for girls (222).

Table 12: 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.
Portugal	18.8	(1.4)	**5.8**	(0.6)
EU-27	19.7	(0.2)	7.0	(0.1)

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

In Portugal there are slightly less low-performing readers and slightly less top-performing readers than in the EU on average.

Table 13: 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	26.3	(1.9)	21.2	(1.9)	31.3	(2.2)
2009	**17.6**	**(1.2)**	**10.8**	**(1.1)**	**24.7**	**(1.6)**
2012	18.8	(1.4)	12.5	(1.5)	25.0	(1.8)

Significant differences between assessment cycles in **bold**

Between 2000 and the last two PISA cycles (2009 and 2012), the proportion of low-performing readers has decreased in Portugal (–7.5 %). Among girls a decrease of 8.7 % is observed, while among boys it is - 6.3 %. Most of these improvements had occurred by 2009 (Table 13).

4.2.2 Gaps in reading performance according to students' background characteristics

Socio-economic status

As at primary level, there are achievement gaps between different groups in Portugal when performance on PISA overall reading is considered.

Table 14: 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.
Portugal	**86**
EU-26	**89**

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

The gap in reading performance based on the positioning of Portuguese students on the PISA index of economic, social and cultural status (86 points) is close to the EU-26 average difference (89 points) (Table 14).

Gender

Table 15: Mean reading performance by gender and gender differences – PISA 2009 – Portugal and EU-26

	Boys		Girls		Difference (B – G)	
	Mean	S.E.	Mean	S.E.	Score diff.	S.E.
Portugal	470	(3.5)	508	(2.9)	-38	(2.4)
EU-26	463	(0.5)	506	(0.4)	-44	(0.5)

The gender difference in reading performance in Portugal in favour of girls (38 points in 2012) is slightly lower than in EU countries on average (44 points)

Table 16: Trends in reading performance by gender – PISA 2000-2012

	PORTUGAL				EU-27			
	Girls		Boys		Girls		Boys	
	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
2000	482	(4.6)	458	(5.0)	506*	(0.8)	473*	(0.9)
2009	**508**	(2.9)	470	(3.5)	507**	(0.7)	464**	(0.8)
2012	508	(3.7)	468	(4.2)	511***	(0.6)	468***	(0.8)

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

The average increase in reading performance observed between 2000 and 2012 is stronger among girls (+ 26 score points) than among boys (+ 10 score points). The trend is different in EU countries on average: between 2000 and 2012 the girls' performance increased by 5 score points while the boys' decreased by the same value.

Migration

Table 17: Percentage of students and reading performance by immigrant status – PISA 2009

	Native students				Students with an immigrant background (first- or second-generation)				Difference in reading performance between native and students with an immigrant background	
	Percentage of students	S.E.	Performance on the reading scale		Percentage of students	S.E.	Performance on the reading scale			
			Mean	S.E.			Mean	S.E.	Score dif.	S.E.
Portugal	94.5 (0.5)		492	(3.1)	5.5	(0.5)	466	(6.9)	**26**	(7.0)
EU-26	91.7	(0.02)	490	(0.4)	8.3	(0.02)	452	(6.4)	**38**	(6.4)

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

The percentage of students with an immigrant background is low (5.5%). The gap between native students and those with an immigrant background is 26 score points, which is equivalent to one half-year of schooling. The gap between native students and those with an immigrant background is somewhat lower in Portugal than in EU countries on average.

Language spoken at home

Table 18: Percentage of students and reading performance by language spoken at home – PISA 2012

	Speak test language at home				Speak another language at home				Difference in reading according to language spoken at home	
	Percentage of students	S.E	Performance on the reading scale		Percentage of students	S.E.	Performance on the reading scale		Score dif.	S.E.
			Mean	S.E.			Mean	S.E.		
Portugal	98.4	(0.2)	491	(3.1)	1.6	(0.2)	460	(9.4)	**31**	(9.3)
EU-27	86.7	(0.0)	494	(0.4)	13.3	(0.0)	441	(5.4)	54	(5.4)

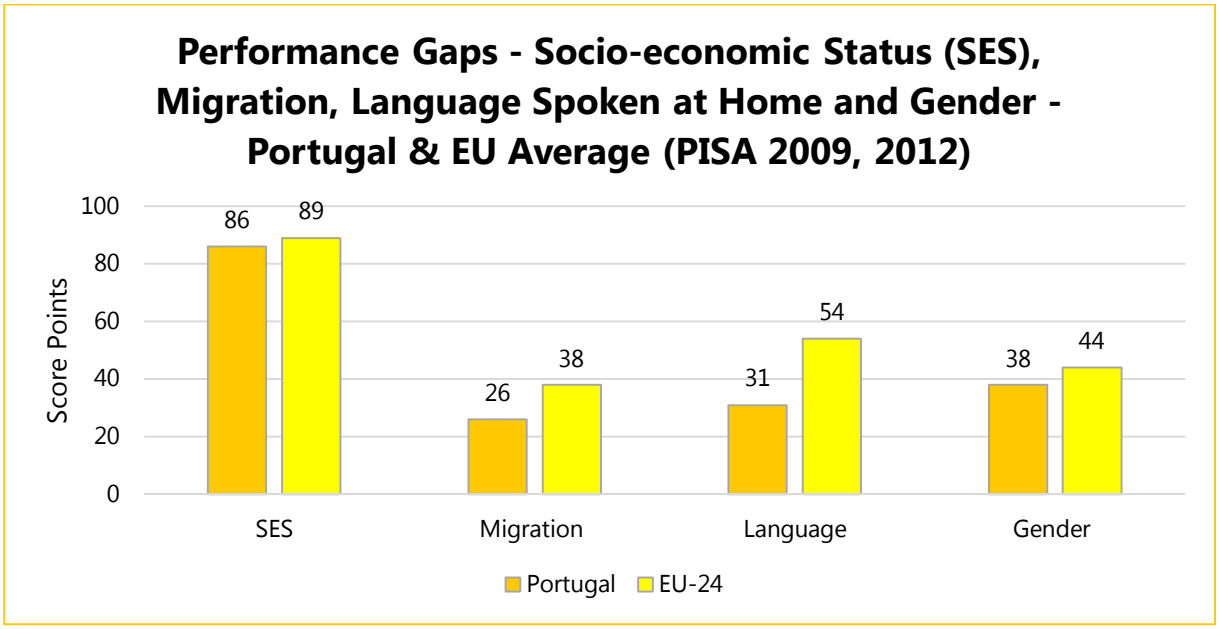
Significant differences according to language spoken at home in **bold**

In Portugal, the gap between students speaking the test language at home and those who do not (1.6 % of the students) is lower (31 score points) than the EU's average. It is equivalent to almost a year of schooling (Table 18).

However, the percentage of students who do not speak the test language at home (1.6%) is so low that this result has to be taken with a lot of caution.

These performance gaps are summarized in Figure 3.

Figure 3: Performance Gaps in Portugal 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

Table 19: 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.	
Portugal	452	(3.3)	541	(3.3)	90
EU-26	444	(0.8)	543	(0.8)	99

There is a gap of 90 score points – which is equivalent to more than 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. Not surprisingly, students who report being engaged in reading perform better in the PISA test. The difference between the most and the least engaged readers in Portugal is lower than the EU's average.

Table 20: 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.	
Portugal	443	(3.7)	532	(2.9)	**89**
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 Portugal, there is a gap of 89 score points - equivalent to slightly more than 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 (Table 20). On average, in the EU, the gap is somewhat higher (98 score points). This difference reflects how closely reading proficiency and awareness of efficient reading strategies are linked.

Table 21: Mean reading scores between students in low and top quarters of summarizing strategies

	Low quarter		Top quarter		Difference
	Mean	S.E.	Mean	S.E.	
Portugal	442	(3.7)	536	(3.2)	**95**
EU-26	440	(0.8)	530	(0.7)	**90**

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

The gap of 95 score points between the students who know which strategies are the most efficient to summarize a text, and those who have a limited knowledge of that is slightly higher than the EU's average (Table 21). This gap is equivalent to roughly 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.

State wide assessment

In Portugal, the state wide assessment was introduced, in 2000, for 1st cycle (4th grade), 2nd cycle (6th grade) and 3rd cycle (9th grade) in order to monitor schools and the education system. With the purpose of taking decisions about the school career of pupils, the Portuguese Ministry of Education introduced the national examinations, for Portuguese Language and Mathematics subjects, for 9th grade in 2005, and for 4th and 6th grade in 2012 (EACEA/Eurydice, 2009, p.16).

Every year, a report, which contains all information on students' performance, including the trends in performance by gender and by courses, is produced by the Júri Nacional de Exames[18] ("the national examination commission").

[18] See http://old.dge.mec.pt/jurinacionalexames/index.php?s=directorio&pid=21 (Accessed October 17, 2015).

5 Policy areas

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

1) Creating a more literate environment

2) Improving the quality of teaching

3) Increasing participation, inclusion and equity (with the term "equity" was added by ELINET).

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

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

5.1 Creating a literate environment for children and adolescents

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

> "Creating a more literate environment will help stimulate a culture of reading, i.e. where **reading for pleasure** is seen as the norm for all children and adults. Such a culture will fuel reading motivation and reading achievement: people who like to read, read more. Because they read more, they read better, and because they read better they read more: a virtuous circle which benefits individuals, families and society as a whole." (EU HLG, 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 (Cf. ELINET Country Reports, Frame of Reference, pp. 45ff).

5.1.1 Providing a literate environment at home

The **home learning environment**, particularly in the first three years, is extremely important (Brooks at 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, p. 120).

- Like: 19% (European average 35.3 %)
- Somewhat like: 70.3% (European average 52.6 %)
- Do not like: 10.7% (European average 17.9 %)
  (For an overview of European countries see table B1 in Appendix B).

A vast majority of pupils in Portugal have parents with some positive attitudes towards reading. The importance of parental attitudes to reading is shown by the fact that there are great differences in reading performance at grade 4 between children whose parents like to read and those who do not. In Portugal this difference is 39 score points (average achievement: 563 vs 524).

Home Educational Resources

PIRLS 2011 created a composite variable called "Home Resources for Learning". This included parents' education, parents' occupation, number of children's books at home, number of books at home, and availability of two study supports (Internet connection at home and their own room). The PIRLS Home Resources for Learning scale is based on questionnaire responses of both parents (education, occupation, number of children's books) and students (number of books, availability of student supports). The categories 'few', 'many' (and 'some') resources were defined with respect to

international cut-off points on the PIRLS Home Resources for learning scale (Mullis et al. 2012a, p. 112).

Thirty-four percent of parents in Portugal reported having few home resources for learning – well above the EU Average of 25%. Twenty-two percent of parents reported that they have access to many resources. It is 3 points below the EU-24 average (Table 22). The difference in achievement between pupils in Portugal whose parents reported having many home resources and few resources was 61 score points – 18 points lower than the corresponding EU-24 average difference (79).

Table 22: Percentages of Pupils Whose Parents Reported Having Few or Many Home Resources for Learning, and Corresponding Mean Overall Reading Scores – Portugal and EU-24 Average

Level of Home Resources	Few Resources		Many Resources		Difference (Many - Few)
	%	Mean	%	Mean	
Portugal	34	517	22	577	**61**
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 at home: the first refers to numbers of children's books at home (based on reports by parents); the second refers to books at 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 at home:

0-10: 15.5% (European average 11.8%)
11-25: 22.0% (European average 19.7%)
26-50: 30% (European average 29.4%)
51-100: 21.2% (European average 23.4%)
>100: 11.3% (European average 15.7%).

Table 23: Mean Overall Reading Scores of Pupil with 0-10 books at Home, and those with More than 200 Books – Portugal 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	
Portugal	12	496	8	558	**62**
EU-24	11	482	12	563	**81**

Statistically significant mean score differences in bold.

The availability of children's books at home is a little below the European average, with more children in Portugal have 0-10 books, than on average across the EU, and fewer having 100+ books.

In Portugal, 12% of students reporting having 10 or fewer books at home, compared with an EU-24 average of 11% (Table 23). Fewer pupils in Portugal (8%) reported having over 200 books, than on average across EU countries (12%). The achievement gap between those with 0-10 books and those with 200+ books is 62 points. This is 20 points less than the EU average of 81 points.

Early Literacy Activity Scale

PIRLS 2011 reports the percentage 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, 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 Portugal in the composite score for all these activities are below (for an overview of European countries see table B3 in Appendix B):

- Often: 34.9% (European average 40.7%)
- Sometimes: 63.0% (European average 57.4)
- Never or almost never: 2.1% (European average 1.9%).

This means that, in Portugal, 2% of parents never or hardly ever engage in the nine activities, the same as the EU-24 average (2%). The Early Literacy Activity Scale correlates with later reading performance in grade 4. The average reading score of pupils in Portugal who were engaged often in these activities was 558, as compared with 535 for those pupils who sometimes or never or almost never 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 generates a composite score, it is of interest to look at single items. If only the category "often" is considered, the percentage of pupils in Portugal whose parents engaged in literacy-related activities with them before the beginning of primary school is somewhat lower compared with the European average:

- read books to them often: 42.5% (European average 58.4 %)
- told stories to them often: 48.6% (European average 51. 5%)
- sang songs to them often: 42.8% (European average 50.6%)
- played games involving shapes (toys and puzzles) with them often: 60.2% (European average 63.5%).
  (For more details and an overview of European countries see table B 4 – B 7 in Appendix B).

5.1.2 Providing a literate environment in school

Challenge/Need for action: As we know from PISA and other studies, there is a high correlation between reading for pleasure and reading performance: there is a crucial difference between students who perform well in the PISA reading assessment and those who perform poorly. In PISA 2009, Portugal has a difference of 90 score points – which is equivalent to almost two-and-a-half years of schooling – between students reporting being highly engaged in reading and those reporting being poorly engaged in that activity (OECD, 2010b).

In Portugal there is a remarkable decrease in reading motivation from 4th grade (cf. PIRLS, 2011) to age 15 (cf. PISA, 2009). For instance, in PIRLS 2011 97% of Portuguese pupils reported that they do like reading. According to PISA 2009, nearly 20% of 15-year-olds report being engaged in reading.

Although schools and libraries already do a lot of work to overpass this problem, much more has to be done. Families and communities should do more in order to support reading motivation, reading habits and a stable self-concept as a reader among adolescents, especially boys and students from disadvantaged families (low SES).

Resources teachers use for teaching reading

Since the type of reading materials teachers use in literacy instruction may influence the motivation of students, it is of interest to have a closer look at this matter. PILRS 2011 provides some data. Just thirty-two percent of students, in Portugal, are taught by teachers who use a variety of children's books as a basis for reading instruction, compared with an EU average of 29%. Sixty-seven percent of Portuguese pupils, in Grade 4, are taught by teachers who use textbooks as the basis of reading instruction, compared with an EU average of 70%. Ten percent of students, in Portugal, are taught by teachers who report that computer software is used as a basis of reading instruction – about the same as the EU-24 average (5%) – while 50% of Portuguese students use computer software as a supplement, compared with 47% on average across EU countries (Mullis et al. 2012a, p. 236; EU averages obtained from PIRLS 2011 database, s. Table H1 in Appendix C).

Availability and use of classroom library

Based on data provided by their teachers, PIRLS shows that 67.4% of students in Portugal are in classrooms which have class libraries – below the corresponding EU-24 average of 72.9% (ELINET PIRLS 2011 Appendix, Table H2). In Portugal, 14% of students were in classrooms with more than 50 books, which is less than half of the EU-24 average of 32% (ELINET PIRLS 2011 Appendix, Table H2). Furthermore, 24% of Portuguese students are in schools which do not have a library at all (the international average is 14%) (Mullis ae al. 2012a, p.156).

Challenge/Need for action: Libraries provide a range of reading materials and other resources from which teachers can draw to expand their instructional approaches and from which pupils can choose books for their own learning and enjoyment.

According to the information available in PIRLS 2011, in Portugal, the number of primary schools without library or with scarce resources for reading promotion is somewhat high, compared to EU average. This is an area for improvement.

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, in PIRLS 2011, 47% of students in Portugal are in classes where at least one computer is available for student use during reading lessons, compared to the EU-average of 45% (Appendix C, Table I6). Compared to Norway (88%), for instance, Portugal is well below.

Regarding computer activities during reading lessons, PIRLS provides figures that refer to all students, including those who do not have access to a computer during reading lessons.

The percentage of students in Portugal who engage in specified computer activities during reading sessions at least monthly are below:

- to look up information: 45% (EU-24 average = 39%)
- to read stories or other texts: 41% (EU-24 = 32%)
- to write stories or other texts: 44% (EU-24 = 33%)
- to develop reading skills and strategies with instructional software: 36% (EU-24 =27%).

Hence, for each indicator, computer use is greater in Portugal than on average across the EU-24, though it might be noted that the EU-24 averages are quite low (Mullis at al. 2012a, p. 242). However, compared, for instance, to the following data concerning Norway, Portugal is well below:

- to look up information: 79% (EU-24 average = 39%)
- to read stories or other texts: 54% (EU-24 = 32%)
- to write stories or other texts: 77% (EU-24 = 33%)
- to develop reading skills and strategies with instructional software: 68% (EU-24 =27%).

Digital environment of secondary students

In PISA, 83.8% of the student population report that they spend no time at all on computers during Language-of-instruction lessons (OECD average: 74.0%) (OECD, 2010b, p. 321). More than 75% of students do not spend time using computers in other subjects, such as Science or Mathematics (OECD, 2011, p. 321). In comparison to the OECD average and especially in comparison to the well-equipped Nordic countries, the ICT coverage in Portugal schools still has room for improvement.

Also the *Survey of Schools. ICT in Education: Benchmarking Access, Use and Attitudes to Technology in Europe's Schools* (2013) highlights that ICT–based activities are not very common in Portugal and information technology only appears as a supplemental tool in the process of reading instruction.

PISA also shows that only 24.7% of Portuguese students report using laptops at school. In Denmark, for instance, this number is almost 3 times higher (73.2%) (OECD, 2011, p. 323).

Challenge/Need for action: Although the national curriculum stresses that technology, in the first cycle (Grades 1-4), should assist reading instruction, providing support for reading, writing and correction of students' work, according to PIRLS 2011 and PISA 2009, only a small number of Portuguese students use a computer at least monthly.

The discrepancy between steering documents and classroom practices across all grades is a challenge to overcome.

5.1.4 The role of public libraries in reading promotion

In an increasingly multifaceted society people will need to acquire new skills at various phases of their life. The public library has a crucial role in assisting this process, mainly by "supporting both individual and self conducted education as well as formal education at all levels"[19]. In this sense, the public libraries should provide material in different types of media in order to support formal and informal learning processes and to help the user to make use of these learning resources effectively, by also providing facilities that enable people to study (International Federation of Library Associations and Institutions, 2001). According to *The Public library service: IFLA/UNESCO guidelines for development* as

[19] See http://www.ifla.org/publications/iflaunesco-public-library-manifesto-1994 (Accessed October 29, 2015).

a "public service open to all, the public library has a key role in collecting, organizing and exploiting information, as well as providing access to a wide range of information sources" (International Federation of Library Associations and Institutions, 2001, p. 4).

In 1987, Portugal launched the *Rede Nacional de Bibliotecas Públicas* (RNBP)[20] ("National Network of Public Libraries") whose main goal is to provide all municipalities with a public library, by supporting them in their construction, installation, development and modernisation. Running in partnership with the municipalities, and supported technically and financially by the General Directorate of Library Services of Books and Libraries, the RNBP was implemented according to the principles stated by UNESCO in the Manifesto of the International Federation of Library Associations and Institutions (IFLA). RNBP integrates and supports all central public libraries that are in service, at the moment. The public libraries of the RNBP ensure that citizens across all age groups have access to a range of reading resources as well as to a variety of reading activities promoted by each library. In fact, they are responsible for boosting reading among all citizens. They have also a free loan system through which books can be borrowed absolutely free of charge. Public libraries are nowadays responsible for the promotion of reading. With their excellent conditions and updated resources, they are places that adolescents look for either during school time or holidays[21].

Another important initiative is the programme "Rede de Bibliotecas Escolares" (RBE)[22] ("School Libraries Network") launched in 1996. This is a governmental initiative coordinated by the Bureau of School Library Network in articulation with the Ministry of Education, regional education authorities, municipal libraries and other institutions. The main purpose of RBE is to develop libraries in a public school context, at all school levels, providing the resources needed on reading, as well as access, use and production of digital information. This programme, where the library is seen as an organisational structure that supports the school's pedagogic activity, should also promote cooperation/partnership systems (constitution of local work networks, sharing of resources, definition of common policies and strategies) in the following areas: organisation, management and disclosure of information; development of literacies; innovative pedagogical practices based on a crosscutting use of the library.

Both networks follow and are greatly assisted by the Librarians Association (BAD) that provides guidelines and training for teachers and librarians.

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

Portugal is among several European Countries that have adopted specific strategies, programmes or plans to improve the levels of literacy, especialy among children and adolescents.

In 2006, the Ministry of Education and the Ministry of Culture and Minister of Parliamentary Affairs have launched the Plano Nacional da Leitura (PNL) ("National Reading Plan"). PNL is a response to the concern about the literacy levels of the population in general, especially of young people. It has been implemented through a set of strategies aimed at promoting the development of skills in reading and writing, as well as the broadening and deepening of reading habits, especially among school populations. The primary objectives of the "National Reading Plan" are to raise the literacy levels of the

[20] See http://rcbp.dglb.pt/pt/Bibliotecas/Paginas/default.aspx (Accessed March 31, 2015).
[21] See https://www.portaldocidadao.pt/en/web/direcao-geral-do-livro-dos-arquivos-e-das-bibliotecas/apoio-aos-municipios-no-ambito-do-programa-rede-nacional-de-bibliotecas-publicas (Accessed March 31, 2015).
[22] See http://www.rbe.mec.pt/en/np4/19.html (accessed March 31, 2015).

Portuguese people and to place the country on a par with its European partners in international studies. Furthermore, the "Plano Nacional de Leitura" aims to encourage initiatives which cover the entire population, from infancy to adulthood, mobilising all national education authorities, educators, teachers, parents, guardians, librarians, entertainers and reading mediators.

The key actions of this programme are:

- to promote daily reading in kindergartens and classrooms of the 1st and 2nd phases of Basic Education School;
- to promote reading within a family context;
- to promote reading at public libraries;
- to promote reading in other social contexts;
- to use of media and public opinion awareness campaigns;
- to produce programmes centered around books and reading, to be broadcast both on radio and television;
- to create blogs and chat-rooms on books and reading for children, young people and adults.

To guarantee the communication of the programmes and interaction with schools and all the entities involved, a site has been created, which is constantly updated, with reading guidelines for each age and methodological tools aimed at educators, teachers, parents, librarians, mediators, entertainers and volunteers[23].

5.1.5 1.3.5. Improving literate environments for children and adolescents: Programmes, initiatives and examples

Family Literacy Programmes

The project "Da promoção da Literacia Familiar ao Sucesso Escolar das Crianças" ("From de family literacy promotion to educational success of children"), carried out by the Higher Education School of the Polytechnic Institute of Coimbra, was developed between 2009 and 2011[24]. This project intended to understand how the attendance of training in New Opportunities Centres promotes the development of family literacy and the acquisition of literacy skills (Salgado et al. 2011).

The programme Plano Nacional de Leitura[25] (National reading Plan) has been launching several initiatives which aim at promoting the development of skills in reading in families, from the parents to children. Among them are "Ler + em família" ("Reading + in families") and "Ler+ em casa" ("Reading + at home").

Programmes for introducing parents and children to libraries and bookshops

Almost all public libraries, integrated into *Rede Nacional de Bibliotecas Públicas* ("National Network of Public Libraries"), have been developing initiatives, aiming at raising awareness of the families for the importance of reading as a means for promoting book reading, which is crucial to acquire skills that will help in the learning of reading and writing. "Mimos e Livros à mão de semear – Promoting Emergent Literacy"; "Bibliófilo vai à escola" ("Bibliophile goes to school"); "Leituras em família"

[23] See http://www.planonacionaldeleitura.gov.pt/pnltv/english.php?idEnglish=1 (Accessed March 31, 2015).
[24] See http://literacia-familiar.blogspot.pt/ (Accessed October 13, 2015).
[25] See http://www.planonacionaldeleitura.gov.pt/pnltv/english.php?idEnglish=1 (Accessed March 31, 2015).

("Reading in family"); "OportunAidade - aprendizagem não formal ao longo da vida" ("OportunAidade" – non-formal lifelong learning); "Biblioteca para Avós" (Library for Grandparents"); "Bebeteca" ("library for babies") are some examples of those public libraries initiatives.

Initiatives to foster reading engagement among children and adolescents

Working in close cooperation, RBE and "Plano Nacional de Leitura" have been carrying out several initiatives, such as "Ler+Escolas" (Reading+Schools"); "Ler+Jovem" ("Reading + Young"). All of these governmental initiatives have contributed to engage teachers and educators in reading activities inside and outside of the classrooms, covering all Portuguese people from kindergarten to adulthood. Additionally, training programmes of teachers and educators have been designed to encourage all professionals of reading to promote initiatives that encourage the pleasure of reading amongst children, young people and adults.

The *Rede de Bibliotecas Escolares* ("School Libraries Network") has been promoting projects in different fields, such as "Ideias com Mérito" ("Ideas with merit"), "aLeR+" ("Reading+"), "Ler é para já" ("Reading now") and "Newton gostava de ler" ("Newton enjoy reading"), with the purpose of improving the quality of learning and literacy levels of the education community.

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

Portugal's curriculum provides a list of titles and authors as examples of what primary and lower secondary level pupils should read. The suggested books are organised into different categories such as books for reading with parents/teachers and books for students who do not read regularly. Also, one of the main focuses of the "Plano Nacional de Leitura" is budget provision for school libraries acquisition of different types of books (fiction, poetry, drama and science books) magazines, and internet resources, to be used in the classroom in reading and writing activities and to promote independent reading.

It is important to emphasise that all libraries of the *Rede de Bibliotecas Escolares* and of the *Rede Nacional de Bibliotecas Públicas* are properly equipped with a variety of texts and books, and their databases are updated every month, as required by UNESCO in the Manifesto of The International Federation of Library Associations and Institutions (IFLA).

RBE provides a range of services, such as Webpages, blogs, newsletters, social networks, learning platforms, encouraging the digital literacy practices and the ICT use and preparing students for search, use, production and communication through internet and social networks. In addition, one of the goals of the school libraries is to create a reading culture (digital and printed), exploring technological equipment and other strategies to improve and promote reading for pleasure (RBE/MEC, 2013).

Fostering digital literacy in and outside schools

In Portugal, public libraries are well organised in order to engage and to motivate the adolescents to visit them and to use and enjoy the available digital and multimedia resources. They also have a good broadband connection and students can use appropriate hardware, especially laptops.

Several public libraries of the *Rede Nacional de Bibliotecas Públicas* ("National Network of Public Libraries") have been developing a variety of initiatives, as "Leitur@s com TIC's" ("Reading with ICT´s"), "Num Click" ("At a click") "Literacia Inform@tica Para Todos" ("Computer literacy for all") whose main

goal is to promote literacy skills, on new information and communication technologies, among the population, from children to senior citizens.

There is also an initiative, named Eduscratch[26], which was implemented, through a partnership between the Directorate-General for Education of the Portuguese Ministry of Education and Science and one of its ICT Competence Centres, in 2010. This project is aimed at promoting the use of the Scratch software in schools. Scratch is an intuitive programme tool to support computational thinking. In its early stages, some teachers participated in in-service training workshops to learn the programme. As teachers at different levels used EduScratch in very different ways, training was design to meet their different needs. An important aspect of this programme has been its attention to substantive as well as technological issues. Ultimately, the objectives of this project are to promote the efficiency and innovation of the use of technologies in the learning process, across all areas and contexts, and to make of each young person an inventor and creator, rather than just a consumer of technologies.

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 *How the world best performing school systems come out on to*p (Mourshed et al. 2007) highlights the quality of an education system cannot exceed the quality of its teachers.

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 recognizing 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, 2012a, 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." (EU HLG, 2012, 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-

[26] See http://eduscratch.dge.mec.pt/ (Accessed September 30, 2015).

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 *Key Data on Early Childhood Education and Care in Europe. 2014 Edition* (European Commission/EACEA/Eurydice/Eurostat, 2014, p. 80), the total public expenditure per child in pre-primary education as a percentage of GDP in Portugal is 0.4%. Portugal belongs to the lower third of the distribution. The range is from 0.04% in Turkey to 1.01% in Denmark (for an overview of European countries see table D1 in Appendix B).

Ratio of children to teachers in pre-primary school

According to *Education at a Glance 2014: OECD indicators* (OECD 2014a, p. 451) the student/teacher ratio in pre-primary schools for children at the age of four in Portugal is 15.8. The range is from 5.8 in Hungary to 23.1 in Turkey. For the other European countries OECD (OECD, 2014a, p. 324) provides information about the student/teacher ratio in pre-primary schools (for an overview of European countries see table D2 in Appendix B).

Percentage of males among preschool teachers

According to Pordata (2015), 1.8% of the pre-primary teachers in Portugal are males. The range is from 0.2% in Bulgaria and Hungary to 17.7% in France (for an overview of European countries see table D3 in Appendix B). It can be assumed that a higher level of qualification (together with better payment) will attract more males for becoming kindergarten educators.

Preschool teachers' qualifications

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

Continuing Professional Development is a professional duty and a prerequisite for career development. In most European countries, CPD is generally considered a professional duty for staff. In Portugal CPD is not mandatory for pre-school teachers (European Commission/EACEA/Eurydice/Eurostat, 2014, pp. 104–105).

Challenge/Need for action: Portugal is at the lower end among European countries concerning: the total public expenditure per child on pre-primary education; the ratio of children to teachers; the percentage of males among preschool teachers.

Another problem of concern is the fact that CPD is not mandatory for pre-school teachers in Portugal. Since CPD is a duty and prerequisite for career development, it should be mandatory.

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 preschool 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 Portugal, the curriculum development in pre-primary education has as reference the Curricular Guidelines for Pre-primary Education (Legislative Order nr. 5220/97, 4th August of 1997), which constitute a set of general pedagogical and organisational principles to support childhood educators in the educational process to be developed with children. This document is a common reference for all childhood educators, but does not intend to be a syllabus. It is general and comprehensive, enabling the educator to justify the inclusion of diverse educational options[27].

In Portugal, there isn´t central steering documents for preschools. For older children, i.e. to those in kindergarten, the learning objectives for centre-based ECEC provision, as recommended in Portuguese central steering documents, are (European Commission/EACEA/Eurydice/Eurostat, 2014, p. 121):

- personal, emotional and social development;
- language development and communication skills;
- physical development and health education;
- reading literacy;
- numerical and logical reasoning;
- understanding the world
- expressive arts and development of creativity;
- early second/foreign language learning;
- adaptation to school life.

Under the guidance of the XVIII Portuguese Government, a new programme was established: *Metas de Aprendizagem para a Educação Pré-Escolar (2010)*[28] ("Learning goals for Preschool Education"). In this programme, each content area defines the learning benchmarks which all pupils should be able to achieve at the end of preschool. Those content areas are: knowledge of the world; expressions; personal and social training; oral language and written approach; mathematics; information and communication technologies.

According to the report *Jardins de Infância da Rede Privada: Instituições Particulares de Solidariedade Social. Relatório Global* (Ministério da educação e Ciência/Inspeção-Geral da Educação e Ciência, 2014), by the Directorate-General for Education and Science, it is recommended that all kindergartens should incorporate a minimum of 5 hours per day for educational activities, which are intended to construct and to develop the curriculum, by giving special emphasis to those activities related to the development of language and literacy.

[27] See https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Portugal:Teaching_and_Learning_in_Programmes_for_Children_over_3_years (Accessed September 30, 2015).

[28] See http://metasdeaprendizagem.dge.mec.pt/educacao-pre-escolar/apresentacao/ (Accessed October 14, 2015).

As shown in the report *Caracterização dos Contextos de Educação Pré-Escolar Inquérito Extensivo – Relatório Final* (FPCEUP/ISPA/MEC/DGE, 2014), of the Directorate General for Innovation and Curriculum Development of the Ministry of Education, nowadays, the classrooms are comprised of heterogeneous groups concerning age, culture and language.

Challenge/Need for action: The lack of training of educators and teachers in preschools concerning pedagogical practice, special needs, and linguistic diversity as well as oral and written language (maybe because Continuing Professional Development of kindergarten educators is not mandatory) (European Commission/EACEA/Eurydice/Eurostat, 2014, pp. 104–105), is really calling for urgent attention.

It is also a problem that activities developed, as well as the resources available, do not promote diversity (FPCEUP/ISPA/MEC/DGE, 2014).

Improving early language and literacy screening and training

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 Portugal, kindergarten teachers try to provide a literacy environment where children learn and engage in the communicative functions of reading and writing with the aim of developing curiosity and motivation to learn to read and write in school (Ministério da Educação/Núcleo da Educação Pré-escolar, 1997). Reading books aloud, telling stories, exploring rhymes, chants or tongue twisters, presenting picture books, using writing in communicative contexts (e.g. making real or imaginary telephone calls, communicate a message, asking questions) – these are the methods commonly used by teachers and recommended by central steering documents (Ministério da Educação/Núcleo da Educação Pré-escolar, 1997).

The assessment of children's progress in kindergarten, as recommended in central steering documents, is held in written records based on observation, in Portugal (European Commission/EACEA/Eurydice/Eurostat, 2014, p. 125).

Challenge/Need for action: The Ministry of Education should provide effective technical and educational support, in order to ensure the pedagogical quality as well as the articulation between teachers, technical staff, pedagogical directorate and educators.

It is important to create an early intervention plan and/or an individual educational plan as well, where language development must have a prominent role.

The lack of material resources, documentation and teacher training concerning written language and emergent literacy and non-verbal communication (Ministério da Educação/DGIDC, 2006), seems to be another area for improvement.

Regular diagnosis of oral language proficiency for pre-primary years is needed and all kindergarten teachers should know how to conduct this diagnosis. The aim should be that all children entering school can speak the language of the school so that they can profit from reading instruction.

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.

Literacy curricula in Portuguese schools have been heavily influenced by the publication of the PISA studies. In immediate reaction to the worrying results of the 2000 study, the Government had developed several changes to the curriculum of basic and secondary education. The first change is mentioned In the Decree-Law nr. 139/2012, 5th July, which defines the guidelines for the organisation and management of curricula. This Decree-Law also establishes that one of the guiding principles of the basic and secondary education curricula is the valorisation of the Portuguese language and culture in all curricular components (Decree-Law nr. 139/2012, 5th July).

Primary schools curricula

The first cycle of Portuguese language learning focuses on: to understand and write different kinds of texts; to retrieve information; to recognise the varieties and nuances of the Portuguese language and its contexts of use; to speak and write using proper structure and rules of spelling and punctuation; to find pleasure in writing and reading. Learning targets are combined for Grades 1–2 and Grades 3–4 (Gonçalves & Ferreira, 2012).

The content of the first cycle Portuguese language curriculum has five domains:

- oral comprehension,
- oral communication,
- reading,
- writing,
- language
- knowledge.

As recommended by the national curriculum, the total amount of instructional time in the first cycle is 25 hours per week. Eight hours are intended for Portuguese language, seven hours for mathematics, five hours for arts, and five hours for social and natural science subjects. Teachers from different levels can cooperate to implement the national curriculum for Portuguese language vertically, from Grade 1–12, due the fact that many schools are organised in clusters that include all levels of education (Gonçalves & Ferreira, 2012).

Reading for pleasure

According to PIRLS 2011 Encyclopaedia, four of the EU-24 countries in PIRLS 2011 reported that reading for pleasure was given a little or no emphasis and 11 countries that it had some emphasis (Mullis et al. 2012b, p. 36). Portugal is identified as a country in which there is some emphasis on reading for pleasure in the curriculum of the 4th grade. Reading to improve reading and reading for literary experience seems to be the purposes of reading activities in the curriculum.

Contents of literacy curricula

The Eurydice report *Teaching Reading in Europe* (EACEA/Eurydice, 2011) offers a broad range of information about the content of reading literacy curricula and official guidelines. In order not to

duplicate this work only two aspects were addressed in the ELINET country reports whose importance might not yet be acknowledged and therefore might be missing in the literacy curricula and official guidelines: explicit instruction of grapheme-phoneme correspondences (phonics), and reading strategies.

Explicit instruction of grapheme-phoneme correspondences

The Eurydice (EACEA/Eurydice, 2011) report on reading literacy indicates that just two of 15 early literacy skills in the areas of word recognition, phonics and fluency are taught at preschool level in Portugal – progression in recognizing words, short to long, and drawing forms of letters. On the other hand, 10 of the skills are taught at primary level, including enriching vocabulary, using word recognition as a reading strategy, using knowledge of letters, sounds and words when reading, and reading simple sentences and simple texts independently (EACEA/Eurydice, 2011, p.56). Along with France and Spain, Portugal is identified as a country in which phonics instruction is developed throughout primary schooling (EACEA/Eurydice, 2011, p. 58). In a number of countries, including Finland and Italy, phonics instruction is discontinued after the first cycle of primary schooling.

In the Portuguese language curriculum, knowledge of phonics is covered under the domain of language knowledge.

Instruction of reading strategies in primary schools

While literacy instruction in the early years is more focused on code-based skills, in later stages it is important to develop and foster a wide range of comprehension strategies with all children. Explicit teaching of comprehension strategies 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 (EACEA/Eurydice, 2011, p. 55).

According to the Eurydice (2011) report on reading, steering (curriculum) documents in Portugal include attention to three of seven comprehension strategies during primary schooling (summarizing texts, making connections between parts of a text, and using background knowledge). Strategies not addressed at primary level included monitoring own comprehension, constructing visual representations, and reflecting on own comprehension processes (EACEA/Eurydice, 2011, p. 60). The authors of *PIRLs 2011 Encyclopedia: Education Policy and Curriculum in Reading* (Mullis et al. 2012b, p. 54), drawing on data provided by the PIRLS 2011 national research coordinator for Portugal, reported that five comprehension strategies received a major emphasis in the curriculum for Grade 4: Retrieving explicitly-stated information from a sentence or phrase; locating or reproducing details from a clearly-defined section of text; identifying main ideas; recognizing plot sequences and character traits; and describing the overall meaning or message of a text. Strategies that were deemed to receive some emphasis in the intended curriculum included: Connecting two or more pieces of information or details; comparing information within and across texts; making generalisations and drawing inferences

with textual support; describing style or structure of a text; and determining the author's perspective or intention.

Literacy curricula in secondary schools

The programme in force until 2013, the *National Curriculum of Basic Education - Essential Competences* (Ministério da Educação e Ciência/ Departamento de Educação Básica, 2001), states that, at the end of basic education, students should be able to:

- properly use the language of different areas of cultural, scientific and technological knowledge to express themselves;
- recognise, confront and harmonise several nuances of language for the communication of an information, an idea, or an intention;
- use diversified ways of communication, adapting language and techniques to the contexts and needs;
- communicate, discuss and defend their own ideas, appropriately mobilising different nuances of language;
- translate ideas and information expressed in one style of language to another style
- value the different forms of language;
- properly use the Portuguese language to communicate adequately and to structure their own thinking;
- value and appreciate the Portuguese language, either as a mother tongue or a host language;
- use the Portuguese language in accordance with the communicative situations that are created in the several areas of knowledge, in a perspective of personal knowledge construction;
- use the Portuguese language respecting the rules of its operation/functioning;
- promote the interest for the correct and appropriate use of the Portuguese language;
- self-evaluate the correction and adequacy of linguistic performance, aiming to improve it (Ministério da Educação e Ciência/Departamento de Educação Básica, 2001).

Similar competences are foreseen in the new *Programa e Metas Curriculares de Português do Ensino Básico* (Buescu at al., 2015) ("Program and Curricular Benchmarks of Portuguese for basic education").

The curricula for secondary education also highlights reading and writing not only in the subject of Portuguese, but also in other subjects. For instance, one of the goals of *Programa de Física e Química A: 10º e 11º anos - Curso científico-humanístico de Ciências e Tecnologias* ("Programme of Physics and Chemistry A: 10th and 11th grades") *(*Ministério da Educação e Ciência, 2014a) it is to develop skills to recognise, interpret and produce different representations of scientific information, such as reports, schematics and diagrams, graphs, tables, equations, models and computer simulations. Moreover, the students should also be encouraged to investigate and to reflect, reporting their learning orally and in writing. In speech, they should use their own scientific vocabulary related to the discipline and they should show a scientific way of thinking, based on concepts, laws and scientific theories (Ministério da Educação e Ciência, 2014a).

Also the *Programa e Metas Curriculares Matemática A – Ensino Secundário* ("Programme and Benchmarks – Mathematics A: Secondary Education") (Ministério da Educação e Ciência, 2014b), highlights that the student's performance should contribute to the acquisition of knowledge, facts, concepts and procedures, for construction and development of mathematical reasoning, to solve

problems in different contexts, for an appropriate communication (oral and written) and for a perspective of mathematics as an articulated and coherent whole. In this subject, the students should be able to read, interpret, mobilise factual knowledge and concepts, and they should also be able to properly select and apply rules as well as procedures previously studied and trained (Ministério da Educação e Ciência, 2014b).

In the available resources, there is no information on time for literacy. It is however stressed how important it is, so it is likely that it is given time in schools. In *Current Changes in Portuguese School System. The Case of School Geography—From Contents to Competences* (Esteves, 2012) one can read: "The national curriculum's vision is to develop a concept of competence close to the concept of literacy. Through basic education all students should be able to achieve a certain degree of knowledge and develop thinking skills and attitudes" (Esteves, 2012, p. 3). Also, according to this study, "An analysis of the actions to be developed by each teacher shows a clear concern with the implementation of activities clearly centered in the development of students' competences and less centered in the specific contents of the several disciplines of basic education – they will of course give the development of specific competences, now related to the curricular contents" (Esteves, 2012, p. 3).

Challenge/Need for action: Although the new curricula define standards and benchmarks, it tends to privilege contents of declarative type to be assessed in the national examinations. Also, this tends to lead teachers to teach to the tests.

There is a need to mainstream reading / writing literacy across the curriculum and to offer content area literacy instruction in all school subjects throughout secondary education, whether academic or vocational.

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 Portugal. In order to describe the practice of reading instruction we would need extensive observational studies. However, since teachers, in Portugal, follow in a very strict way the textbook, it is possible to have a general idea what is going on in the classroom: reading aloud and answering questions seems to be the strategies commonly used.

PIRLS offer some data for primary schools, albeit based on self-reports by teachers (PIRLS), which might not be valid and may be biased by social desirability. In PIRLS 2006, fourth-grade reading teachers reported about instructional materials, strategies and activities. In a latent class analysis Lankes and Carstensen (2007) identified 5 types of instruction:

- Type 1: Teacher-directed instruction in the whole class without individual support
- Type 2: Individualized child-centred instruction, seldom whole-class instruction
- Type 3: Whole-class instruction with little cognitive stimulation and little variety in methods, without individual support
- Type 4: Variety of methods with high individual support
- Type 5: Highly stimulating whole-class instruction with didactic materials.

There were significant differences between countries concerning these types of instruction (Lankes and Carstensen 2007). Unfortunately, Portugal was not included in this study.

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. Therefore, one can observe that the instruction spent on time to teaching the Portuguese language in primary schools is 281 hours, somewhat higher than the International Average (232 hours). The average number of hours allocated to teaching reading as part of language instruction, each year, in Portugal is 82 hours, which is marginally more than the International Average (70 hours). Also in teaching reading across the curriculum and in reading classes, Portuguese teachers report allocating more time (235 hours) than the International Average (146 hours) (Mullis at al. 2012a, p. 214; EU averages from PIRLS 2011 database).

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

In PIRLS 2011, reading teachers were asked which activities they use to develop students' reading comprehension skills. The following are percentages of students whose teachers asked them to do the following daily or almost daily (Portugal and EU-24 average):

- Compare texts read with experiences: 59% (EU avg. = 35%)
- Compare what they have read with materials in other texts: 47% (EU avg. = 22%)
- Identify main ideas of what they had read: 95% (EU avg. = 55%)
- Explain or support or understanding of what has been read: 49% (EU avg. = 62%)
- Make predictions about what will happen next in the text: 42% (EU avg. = 22%)
- Make generalizations and draw inferences: 56% (EU avg. = 36%)
- Describe the style and structure of the text: 80% (EU avg. = 23%)
- Determine the author's perspective and intention: 45% (EU avg. = 21%)
- Locate information within the text: 95% (EU avg. = 66%)

Source: PIRLS 2011 database. See Mullis, Martin, Minnich, Drucker & Ragan, 2012a, p. 226; also see Table I1 in Appendix C.

PIRLS also assessed which instructional practices teachers use to **engage students in learning.** PIRLS 2011 demonstrates that students whose teachers used instructional practices to engage students learning in most lessons (items: summarizing 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, p. 220). In Portugal, 89% of students were in classrooms in which students were engaged 'in most lessons'. This compares favorably with the EU-24 average of 70%.

It is unclear why, on the one hand, teachers in Portugal report a relatively strong emphasis on a range of comprehension strategies during teaching and learning, when, on the other, several of those strategies, including those described in PIRLS 2011 as involving the examination of content, language and textual elements, are not strongly emphasised in the intended curriculum. Besides, national research highlights teachers' lack of knowledge on specific teaching of reading comprehension strategies (Dionísio et al. 2011). This might be due to the strong teachers' dependency of the textbooks, across all grades and subjects (Moreira et al. 2006). According to PIRLS: 67% of teachers reported to use textbooks as a basis for instruction (Mullis et al. 2012a, p. 236).

As pointed out above (table 20 and 21) there are remarkable gaps in reading achievement - equivalent to more than two years of schooling – between adolescent students with good knowledge of reading strategies and those who have a limited knowledge of strategies, including metacognitive ones. Data from PISA 2009 also shows that there is a need for explicit instruction of reading strategies: there is a

gap of 89 score points between students who know which strategies are the most efficient to understand and remember a text (532 score points) and those who have a limited knowledge of that (443 score points); there is also a gap of 95 score points between students who know which strategies are the most efficient to summarize a text (530 score points) and those who have a limited knowledge of that (440 score points).

Another matter of concern is the fact that the teaching of Portuguese Language, as well as Mathematics, in 4th grade, as in 6th and 9th grades, is heavily oriented towards national examinations that students must complete at the end of the school year.

Challenge/Need for action: Reading instruction cannot be totally dependent on textbooks, because these resources hardly include the range of adequate strategies needed for reading comprehension. Reading instruction shall not occur only because of national exams.

Explicit teaching of reading strategies, including metacognitive ones, is highly desirable.

Digital literacy part of the curriculum for primary and secondary schools

In Portugal there are national strategies covering training measures in ICT in schools, digital/media literacy and e-skills development. These strategies are documented in Central steering documents for all ICT learning objectives and for developing programme skills at secondary education level. According to these official steering documents, students and teachers should use ICT in all subjects in class and for complementary activities. The documents also contain recommendations on the use of ICT in student assessment. Public-private partnerships promote the use of hardware and software in schools, ICT training for teachers and students (European Commission, 2013b, p. 4).

ICT is integrated into the curriculum of secondary education since 2012 (by the Directorate-General of Education). ICT is an autonomous subject, but it had already been present as a practical, interdisciplinary, cross-curricular theme. So teachers from all subjects should implement ICT during classes. ICT is also assessed through a national exam and other types of certificates (Diploma in Basic ICT Skills). The Education Technology Plan provides ICT training for teachers at secondary school (Pérez-Tornero, 2014, p. 3).

It should be noted that these are only steering documents. It would be desirable to do more research on the implementation of these plans.

Following the available studies, in Portugal, on average, ICT-based activities are in fact planned only 'several times a month'. At 11th grade of vocational education, the score of frequency is the highest (2.18: more than 'several times a month' but less than 'at least once a week'). The frequency of students' ICT-based activities during lessons at all grades is nearly 'several times a month', but also at 11th grade of vocational education, the score of frequency is the highest (1.88). Student-centred learning seems to develop the frequency of ICT-based activities. Also, only nearly half of students at 8th and 11th grades of vocational education as well as 11th grade of general education, and only 13% of grade 8th and 10% of grade 11th of general education use a school desktop computer or laptop for learning purposes 'at least weekly'. Furthermore, only a litle more than one third of students of 8th grade students (36%), nearly one third of 11th grade students of general education (31%) and 11th grade students of vocational education (27%) use interactive whiteboards 'at least weekly' (European Commission, 2013b).

The level of connectedness and equipment depends on the type of digitally equipped school: at 8th grade, nearly one third have a high equipment level and fast broadband; at 11th grade of general education over half; at 11th grade of vocational education half the schools (European Commission, 2013b, p. 26).

The Emedus study points out that teachers have training in ICT and use ICT frequently in their lessons. In most schools an ICT coordinator helps in the implementation of new technologies within teaching and learning contexts, although teachers tend not to engage in innovative activities. This study also mentions that, in Portugal, all public schools have a good broadband connection and students can use appropriate hardware, especially laptops (Pérez-Tornero, 2014, p. 3).

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 HLG, 2012, 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 HLG, 2012, p. 43).

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

In Portugal, schools define assessment criteria at all levels, for each cycle and year of schooling, in agreement with guidelines outlined in the national curriculum. In 1st to 4th Grades, the teachers' council proposes the criteria, while in 5th to 12th Grades, curricular departments and cycle coordinators suggest them. Teachers are responsible for assessing students and awarding grades.

Screenings for reading competence to identify struggling readers

Pupil assessment in Portugal consists of diagnostic, summative and formative methods. Diagnostic assessment is carried out at the beginning of each school year, and it takes into account the definition of strategies for pedagogic differentiation designed to overcome learning difficulties, facilitates student integration and supports educational and vocational guidance and counselling. Formative assessment, then, is continuous and helps pupils and teacher regulate the learning process. Summative

assessment takes place at the end of school year and is based on formative assessment. Teachers are responsible for student assessment[29].

One of the main aims of the assessment is to support the education process in such a way as to sustain the success of all students and permit the readjustment of school and class curricular projects, particularly with regard to the selection of methodologies and resources, in accordance with the students' educational needs (OECD, 2012c).

In addition, the Decree-Law nr. 3/2008, 7th January establishes that the statementing of the pupils who have special needs is necessary. The statementing must be done as soon as it the need becomes apparent, and doing so is the responsibility of the parents, guardians, Early Intervention services, teachers, or other services involved with a child or young people. Statementing should be made to the administrative management bodies and management schools, through a document which explains all relevant reasons.

According to Gonçalves and Ferreira (2012), primary teachers in Grades 1–4 are responsible for the initial diagnosis of reading difficulties of their students. Once a teacher identifies a situation and explains it to the first cycle teaching department, the teacher then presents the issue to a school pedagogical board, which decides on the best way to support the student.

Monitoring students´ progress in reading and writing

Student assessment includes diagnostic assessment, as well as formative and summative assessment. Internal assessment of students takes place at the end of each term and school year. In basic and secondary school, assessment is organised into three different modalities:

- Diagnostic – carried out by each teacher at the beginning of each school year, or whenever considered opportune, taking into account the definition of strategies for pedagogic differentiation designed to overcome learning difficulties, facilitate student integration and support educational and vocational guidance and counselling;
- Formative – continuous and systematic, by using various instruments to collect information, adequate to the diversity of the teaching and learning process, acting as a regulator of the process, helping teachers and students to identify and overcome difficulties, to plan and to take decisions;
- Summative – takes place at the end of each school term using the information gathered from formative assessment. Classification and certification are the main functions of this modality (Decree-Law nr. 139/2012, 5th July).

Additionally, the national examinations take place at 4th, 6th and 9th grade for Portuguese language and mathematics, and at 11th and 12th grades for a range of subjects (depending on which subjects the student is enrolled in). Results from national examinations affect student's assessment and certification. In national examinations of Portuguese language at the end of the 4th, 6th, 9th, 11th and 12th grades, the performance of the students in reading and writing is also assessed.

The national examination and the tests completed during the school year assess reading in terms of comprehension, interpretation and reflection, as well as the knowledge and grammatical skills dictated by the curriculum guidelines for each school level.

[29]See https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Portugal:Assessment_in_Single_Structure_Education (Accessed July 31, 2014).

It falls to the Portuguese teacher to assess the adolescents' progress in reading and writing during the school year.

In PIRLS 2011, 92% of students in Portugal were taught by teachers who reported that a major emphasis was placed on the evaluation of students' ongoing work to monitor students' progress in reading; the corresponding EU-24 average is 84%. In addition, 72% of students were taught by teachers who reported placing a major emphasis on the use of classroom tests for this purpose (EU-24 average = 51%), and 19% were taught by teachers who reported placing a major emphasis on the use of national or regional tests (EU-24 average = 25%) (ELINET PIRLS Appendix, Table I8).

Challenge/Need for action: Urgent seems to be the identification of struggling readers and learners in order to systematically support them, allocating attention and resources accordingly, targeting low performing schools; and closely linking assessment and support programmes delivered by adequately qualified teachers and specialists.

Student assessments will need to be re-designed to measure complex competences and interdisciplinary approaches more efficiently, not only in terms of literacy (and digital literacy) but also in terms of other curricular key competences such as learning to learn; social and civic competences; cultural awareness and expression; and competence in science and technology.

Classroom-based formative assessments that provide information on learners' understanding of interconnections and processes (rather than fragments of knowledge), or ability to perform complex tasks (Looney & Michel, 2014, p. 5) are needed. Also it is important to integrate ICT to support collaborative work, to provide access to educational resources, to track learner progress and to assess higher-order thinking.

Supporting struggling literacy learners

In Portugal, the support measures for pupils with reading difficulties are largely the same at primary as at lower secondary level of education (EACEA/Eurydice, 2011).

Although one can say that the field of specific learning disabilities, in Portugal, is characterised by a lack of a technically adequate system of school-wide screening and progress monitoring (Mendonça & Martins, 2014), the Decree-Law nr. 3/2008, 7th January defines the specialised support given to pupils with permanent special educational needs. The support is implemented through the following measures:

- personalised pedagogical support;
- individual curriculum adjustment;
- adjustment to the enrolment process;
- adjustment to the assessment process;
- individual specific curriculum;
- support technology.

Grade repetition, which also could be considered a support form, is rather common in Portugal; concerning 30% of the 15-year-olds. Repetition has been seen as a tool to respond to an individual weakness and preserve an even attainment level within a classroom (OECD, 2012b).

Gonçalves and Ferreira (2012) note that, at primary level in Portugal, different courses of action are available, based on different sources of difficulty. A child who requires a major intervention due to a physical or cognitive difficulty may be designated as having special education needs. Alternatively,

remediation or temporary support may be provided. They note that, in all cases, the student's teacher is involved in the chosen programme to provide assistance or special instruction.

Number of struggling readers receiving remedial instruction

Based on a question that class teachers answered in PIRLS 2011, it is estimated that 11.2% of students in Fourth grade in Portugal are considered to be in need of remedial reading instruction. It is also estimated by teachers that 7.9% 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 Portugal, 15.9% 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 Portugal estimated to be in need of (11.2%) and in receipt of remedial reading instruction (7.9%) are below 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. Just 4% of students in Portugal were in classes where there was always access to specialised professionals to work with students who have reading difficulties, compared with an EU-24 average of 25% (Table 23). Six percent of students in Portugal were in classrooms where there was access to a teacher aide with the same frequency, while 1% were in classrooms where there was access to an adult/parent volunteer. Corresponding EU-24 averages were 13% and 3%. Hence, students in Portugal had less access to specialised professionals, teacher aides, and adult volunteers than on average across the EU-24.

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

	Portugal			EU-24 Average		
Access to...	Always	Sometimes	Never	Always	Sometimes	Never
Specialised professional	4	33	63	25	42	33
Teacher aide	6	66	28	13	34	53
Adult/parent volunteer	1	20	79	3	18	80

Source: ELINET PIRLS 2011 Appendix C, Tables K2-K4.

According to responses provided by teachers of Grade 4 students in PIRLS 2011, 27% of students in Portugal 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 25). The corresponding EU average is higher at 55%. Thirty-seven percent of students in Portugal are in classes whose teachers wait to see if performance improves with maturation – the same as the EU-24 average. Virtually all students in Portugal (100%) are taught by teachers who spend more time working on reading individually with a student who falls behind – above the EU-24 average (90%). Finally, 99% of students in Portugal and 97% on average across the EU-24 are taught by teachers who ask parents to provide additional support to a student who falls behind in reading.

Table 25: Percentages of Students in Classrooms Where Teachers Engage in Specified Activities to Support Students Who Begin to Fall Behind in Reading, Portugal and EU-24 Average – PIRLS 2011

	Portugal (Yes)	EU-24 Average (Yes)
I have students work with a specialised professional	27	55
I wait to see if performance improves with maturation	37	37
I spend more time working on reading individually with the student	100	90
I ask the parents to help the students with reading	99	97

Source: ELINET PIRLS 2011 Appendix, Tables K5-K8

Support for struggling readers – a legal right?

According to the Comprehensive Law on the Education System, one of the general aims of education is to provide children with special educational needs with conditions that are suitable for their development and enable them to make full use of their skills. Also, it is said that one of the main goals of education is to create conditions for educational success for all pupils[30]. In spite of this discourse, in the guidelines for Initial Teacher Education institutions, tackling reading difficulties is not a topic at this training level, in Portugal (European Commission/EACEA/Eurydice 2011, p. 99).

The Implementing Legislative Order nr. 50/05, 9th November of 2005, defines a set of measures promoting pupils' educational success:

- the recovery plan, which is applicable to pupils displaying learning difficulties in any subject, curriculum subject or non-subject area (including specific teaching of Portuguese to foreign pupils;)
- the monitoring plan, applicable to pupils that have fallen behind;
- the development plan, for pupils who demonstrate exceptional learning capacities[31].

Furthermore, in the case of dyslexia, if it is diagnosed by specialised professionals such as the school psychologist, parents may send their child to training and counselling or speech therapy sessions. Alternatively, students may attend a public school offering either an integrated programme or a

[30]See https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Portugal:Single_Structure_Education_(Integrated_Primary_and_Lower_Secondary_Education (Accessed July 31, 2014).

[31] See https://www.european-agency.org/country-information/portugal/national-overview/special-needs-education-within-the-education-system (Accessed July 31, 2014).

special needs-based curriculum that prioritises instruction for students with speech impairments or dyslexia (Gonçalves & Ferreira, 2012).

Students with special educational needs benefit from Individual Educational Programmes (IEP) and do not participate in the national assessment programme but have personalised targets and assessment criteria associated with their IEP (OECD, 2012c).

Challenges/ Need for action: Policy makers should provide support systems (additional instruction time, additional experts like reading experts, psychologists, speech therapists) for students falling behind in literacy.

Pupils with learning difficulties/disabilities or facing some kind of personal, social or emotional challenges should have more contact with professionals able to support and to guide them. These students deserve cultural and extra-curricular activities that may broaden their learning opportunities.

The great importance of remedial courses and remedial training should give them priority when managing school resources.

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

Entry requirements for Initial Teacher Education

In the *Key Data on Teachers and School Leaders in Europe* (European Commission/EACEA/Eurydice, 2013), one can read that the enrolment in Initial Teacher Training is exclusively determined at university level. Admission to tertiary education depends on the final examination of upper secondary education and can possibly be further determined by a general entrance examination. Furthermore, the general condition for enrolling in a Master's degree on Education Teaching is demonstrating mastery in the oral and written form of the Portuguese language (Decree-Law nr. 79/2014, 14th may).

Table 26: Percentages of Students Taught by Teachers with Varying Education Qualifications

Highest Qualification	Completed University Post-grad Degree	Completed Bachelor's Degree or Equivalent	Completed Post Secondary Education but not a Degree	No Further than Upper Secondary
Portugal	3	91	6	0
EU-24	27	53	14	6

Source: PIRLS 2011 Database (see Mullis et al. 2012a: 188; Appendix C., Table J1).

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

Minimum time devoted to in-school placement is centrally defined as 30 ECTS for ISCED 0 and first cycle of ISCED 1 teachers, and 36 ECTS for 2nd cycle of ISCED 1 and ISCED level 2 teachers (EACEA/Eurydice, 2011, p. 102).

Length of required training of secondary teachers

Initial teacher training, in Portugal, takes five years in total, which corresponds to master's level (European Commission/EACEA/Eurydice, 2015).

The role of literacy expertise in Initial Teacher Training

In Portugal, broad competencies for teachers' training are defined by the State, and must be considered by teacher education institutions (Universities and Education Colleges) in their Master Courses on Teaching. The components of training, ensuring their proper integration in line with the requirements of professional performance, are: general educational training; specific didactics; introduction to professional practice; cultural, social and ethical education; training in methodologies of educational research; training in the teaching area/subject (Decree-Law nr. 79/2014, 14th may).

The new system of qualification for teaching values, in particular, the dimension of disciplinary knowledge, the foundation of teaching practice in research and the introduction to professional practice. It also requires the oral and written domain of the Portuguese language as a common dimension of qualification of all educators and teachers (Decree-Law nr. 79/2014, 14th may).

The assessment of oral and written domain of Portuguese Language is carried out through a test that includes two components: written domain of the Portuguese Language, in the form of a test that evaluates comprehension and text production (50%); oral domain of the Portuguese Language, in the form of an interview which falls upon the experience and area of professional training of the candidate (50%) (Decree-Law nr. 79/2014, 14th may).

However, during the course, only Mother Tongue and Foreign Languages future teachers learn about literacy and how to teach reading and writing: for 2nd and 3rd school cycles, Mother Tongue and Foreign Languages future teachers learn reading and writing theory and teaching strategies to enhance reading and writing skills and promote literary reading; for secondary, Mother Tongue and Foreign Language future teachers learn comprehension skills and teaching strategies to enhance reading and writing skills, and to promote literary reading; to create motivation and engagement. Math and Science future teachers, for example, learn about languages, communication or literacy but only in their content area (Dionísio & Arqueiro, 2015).

Challenges/ Need for action: Important topics to be addressed in teacher training are:

a) assessment of students' communicative strengths and weaknesses;
b) selection of appropriate instructional methods;
c) effective ways of literacy teaching and development

Not all teachers who are involved in teaching reading and writing skills in primary or secondary schools have a solid training in literacy. Besides, only limited aspects of literacy are mentioned in the curricula on mother tongue education.

In PIRLS 2011, primary teachers were asked to indicate the level of emphasis given to a number of topics deemed relevant to teaching literacy in their pre-service teacher education. The data in table 27 suggest that, In Portugal, 72% of the fourth grade students had reading teachers who reported an emphasis on the language in initial teacher education, 61% had teachers with an emphasis on pedagogy/teaching reading, and 29% had teachers with an emphasis on reading theory. These figures are similar to 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).

Table 27: Percentages of Students Taught by Teachers who Reported each of Several Topics to be Areas of Emphasis during Initial Teacher Education – Portugal and EU-24 Average

Topic	Test Language*	Reading Pedagogy	Reading Theory	Remedial Reading	Assessment Methods in Reading
Portugal	72	61	29	27	26
EU-24	74	59	30	22	27

Source: PIRLS 2011 Database (see Mullis et al. 2012a, p.190; Appendix C, Table J2 – J3).

If we assume that 100 percent of primary teachers should have solid expertise in Reading Pedagogy, Reading Assessments and Remedial Reading, teachers in Portugal (as well as teachers in general across the EU-24) are far from reaching this goal!

Although reading across the curriculum is being more and more recognised as necessary by schools, it is not yet a shared concept in Portugal. Policy and schools put on mother tongue teachers the responsibility for teaching reading, expecting that this learning may impact on the performance in other curricular subjects. Maths teachers (elementary, basic and secondary), for instance, are nowadays (due the national curriculum) learning about the relevance of including language activities in their teaching – to learn Maths is to learn how to talk Maths is more or less the principle that underlies the Maths curriculum, whose most prominent aspect is the use of texts to organise and to present maths information: procedures for explaining and presenting problem solving.

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

Literacy expertise should become a clear standard for teacher education in all grades and subjects, not only for primary teachers, but also for secondary teachers. It should be ensured that initial training covers topics as the teaching of reading, tackling reading difficulties, assessing pupils' reading skills, and supporting those with persistent difficulties.

"Make every teacher a teacher of literacy": it is of crucial importance to make secondary teachers of all subjects (languages, maths, sciences, history, arts etc.) aware of their task to embed instruction of content-related literacy skills into their subject classes.

Content area literacy should become a compulsory part of ITE for all secondary teachers.

Continuing Professional Development (CPD)

Seen in an international context, professional learning of teachers in Portugal seems to be an area with several possibilities for improvement.

As highlighted by Dionísio and Arqueiro (2015), there are numerous courses, workshops, and short courses about literacy and reading for all elementary teachers (6-12 years). Although mother tongue and foreign languages basic teachers (low secondary 13-15) and secondary teachers (16-18) also learn about literacy and teaching reading, there isn't a similar offer for this group of professionals. Because of this lack, more and more secondary teachers are demanding training in these areas. After 2000, the Ministry of Education, in order to prepare teachers for the new school curricula, has begun organised in-service teacher training regarding literacy. Due to the great success it is worth to mention: the

continuous training in Math; the National Plan for the Teaching of Portuguese; training for librarian teachers; training for information literacy; training for media literacy (Dionísio & Arqueiro, 2015).

Research on Content Area on Literacy (CAL) conducted at University of Minho concludes that: i) teachers recognise the relevance of reading, but not immediately for learning; ii) reading outside school is highly expected, but teachers hardly guide students to do that and also hardly check students' readings; iii) reading and writing outside school are taken as recreatiional activities that will be part of personal development, and not learning tasks; iv) reading and writing inside the classes are invisible means to acquire knowledge about disciplinary content; v) teachers do not feel responsible for literacy development (Dionísio et al. 2011).

The main conclusions of these studies reinforce the urgent need for:

- raising the awareness of the role of literacy in the learning of all content areas;
- the development in all teachers of a shared vocabulary and 'grammar' about reading and writing regarding texts and literacy skills;
- the recognition by teachers that to know instructional strategies includes literacy development strategies;
- the promotion of classroom conditions for students to intentionally interact with texts, through texts and about texts through which they acquire knowledge (Dionísio et al. 2011).

Time, frame and quality standards of CPD

CPD is conducted by Professors (at Universities or Education Colleges) or by teachers who have been certified as trainers. The modalities of the CPD are Courses, Workshops, Study circles, Short courses, Conferences or Seminars, and varying from 12 hours (usually theoretical lectures) up to 50 hours (with practice in classrooms). Teachers must attend a minimum of 50 hours every two years: 2/3 of that time training in the content area; 1/3 may concern more general topics or any other subject of their choice, such as special education, school administration, socio-cultural stimulation, educational guidance, curriculum development and organisation, teaching-practice supervision and training the trainers, training management and stimulation, communication in education and information management (Decree-Law nr. 22/2014, 11th February).

According to information available in Eurypedia, recently, the Portuguese Ministry of Education and Science came to an agreement with teaching federations and trade unions in relation to the legal framework for in-service teacher training.

This new legislation foresees that in-service training focuses on: improving the quality of teacher performance, emphasising training system on priorities identified by the school and teachers' professional performance; supporting the human resources of training bodies and schools by creating pools of internal trainers; ensuring the training quality given by the different regulating mechanisms of the Directorate-General of School Administration and the external assessment undertaken by the Inspectorate-General of Education and Science.

Although it is compulsory for teachers to grow in their careers many of these training courses are not free.

Moreover, school associations identify individual and school professional development needs, and provide training directly or in association with higher education institutions. The Ministry of Education may establish protocols with teacher education institutions or other bodies to implement specific plans for priority areas (European Commission/EACEA/Eurydice, 2015)

Participation in CPD

Following the information available in Eurypedia, in Portugal, "On-going education is ensured as a right and a duty and has the aim of up-grading and up-dating the teacher's professional knowledge and competences, his/her professional mobility and progress in his/her career" and "25 hrs of CPD per year are mandatory".

According to Key data on education in Europe 2012 (European Commission/EACEA/Eurydice, 2012: 118) and the Decree-Law nr. 22/2014, 11th February, CPD is clearly linked to career progression or promotion, i.e. advancement to a different occupational grade; non-participation in CPD activities may even be penalised or regarded as a negative element in teachers' appraisal. Thus, teachers need to complete successfully a minimum of 25 or 50 hours (depending on their grade) of accredited in-service training sessions (European Commission/EACEA/Eurydice, 2015).

Support by the employer for attending CPD

The Decree-Law nr. 22/2014, 11th February sets out that the Ministry of Education shall ensure that all teachers have access to free actions in continuous training. Additionally, it is established that if the training is offered by the Government, it is free of charge and the Government should give days off. Another incentive is the fact that the training course is deemed working time and, as such, is remunerated. Yet, teachers may only attend the training after the school /Group of schools ensure that there will not be a break in the lessons that the teacher usually gives and, if the training course is an initiative of the teacher's, it will have to be done when there is no teaching (for instance, during the school holidays).

According to the *Teaching Profession in Europe: Practices, Perceptions, and Policies* (European Commission/EACEA/Eurydice, 2015), in Portugal, teachers have their travel expenses to attend CPD courses paid by Government, but only if the distance between a teacher's home and place of training is greater than a fixed minimum.

In Portugal 29% of teachers undertook professional development activities without receiving any type of support. This fact might reflect a high commitment of teachers in that country to improving their effectiveness and performance (OECD, 2014b, p.97).

Time spent on professional development related to literacy

In PIRLS 2011 teachers were asked how much time they had spent on professional development in reading in the past two years. In Portugal, 45% of the students have teachers who spent 16 hours or more (EU-24 average: 18%), 36% had teachers who spent some time but less than 16 hours (EU-24 average 53%), and 1% had teachers who spent no time (EU-24 average 29%) (Table 28). These figures show a relatively high engagement of Portuguese teachers in CPD (as defined by PIRLS).

Table 28: Percentages of Students with Teachers Allocating Varying Amounts of Time to Professional Development Related to Reading in the Last Two Years – Portugal and EU-24 Average

	More than 35 hours	16-35 hours	6-15 hours	Less than 6 hours	None
Portugal	33	11	22	14	19
EU-24	9	9	25	28	29

Source: PISA 2011 database (see Mullis et al. 2012a: 196 ; Table J4 in Appendix C).

Challenge/Need for action: Improving the quality and participation rates of continuing professional development targeted at building literacy expertise of teachers is needed. CPD should closely connect theory to practice and systematically integrate practical application of the newly learned content and methods into the teachers' regular classrooms.

Literacy promotion and literacy instruction across the curriculum should be a systematic part of CPD addressing teachers of all grades and all subjects

5.2.5 Digital literacy as part of initial teacher education and Continuing Professional Development

Following the Portuguese Legislative Order nr. 13608/2012, the Ministry of Education of Portugal has launched the ERTE, a multidisciplinary team that develops activities under the guidance of the Directorate of Educational Project Services. Among others, the ERTE has as its goals: to manage, to keep, to widen and to improve the educational repository of educational digital resources; to create the guidelines for educational use of ICTs to be used in the context of initial teacher training and continuing professional development (Legislative Order nr. 13608/2012).

Moreover, in order to ensure the technological modernisation of education, in 2008 the Portuguese Ministry of Education published "Technological Plan for Education". According to the Ministry of Education's diagnostic study on technological modernisation of the educational system in Portugal, ICT ought to be totally and transversally integrated in teaching and learning methods (Rizza, 2011, p. 12).

So, although the steering documents recommend ICT as part of the initial education of all teachers, in *Key Data on Learning and Innovation through ICT at School in Europe*, it is said that institutions are still free to decide whether or not to include ICT in initial teacher education courses (European Commission/EACEA/Eurydice, 2011, p. 66).

Challenge/Need for action: Classroom practice should be more aligned with steering documents.

Investments in research and development as well as in identifying effective support tools for teaching are urgent (Looney & Michel, 2014).

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

Improving the quality of preschool

In Portugal, the curriculum for preschool education was established in 1997, enshrining the preschool as the first stage of the lifelong learning process. The *Orientações Curriculares para a Educação Pré-escolar* (Ministério da Educação/Núcleo da Educação Pré-escolar, 1997) ("Curricular Guidelines for Preschool Education") is the reference document for all educators, from the National Network of Preschool Education, and it provides guidance for all educators' decisions in the educational process leading to the development of the children. This guideline document aims at promoting an improvement of the quality of preschool education in Portugal, and organising the educational component. The curriculum for preschool emphasises the role of literacy for children and for lifelong learning.

Providing more cognitively demanding literacy instruction in school

The project "EMA – Escola Melhor – Amares" ("For a Better School")

In 2014, the Schools Grouping of Amares has implemented the project "EMA – Escola Melhor – Amares" ("For a Better School"), which was supported by the Calouste Gulbenkian Foundation, through the programme EMA- Estímulo à Melhoria das Aprendizagens ("Stimulating the Learning Improvement"). The main goals of "EMA – Escola Melhor Amares" are to promote more and better learning across all school grades, from preschool to basic education, and consequently improve the educational achievement, and motivate teachers about the relevance of literacy practices in the acquisition of disciplinary knowledge. The intervention of the project builds in three action plans:

- consolidation of a set of students' support mechanisms, extending their scope and improving their efficacy, by, for instance, providing support to students in the grades with national examinations (4th , 6th , 9th grades)
- Development of reading across all grades and subjects.
- Opportunity to broaden the use of information literacy within classrooms32

The project "FENIX – Mais sucesso Escolar" ("More Educational achievement")

This is a national initiative which aims at providing conditions and opportunities for learning and consolidation of knowledge. This project is based in a school organisational model which enables the provision of a more personalised approach for students with learning difficulties in Portuguese, Mathematics or other subjects, for instance through pedagogical differentiation[33].

Early identification of and support for children and adolescents with literacy difficulties

"*Monitorização do Risco de Dificuldades de Aprendizagem Especificas na Leitura de Alunos do 4º ano*" ("Use of monitoring based on the curriculum as a way to identify students at risk of developing learning disabilities in the reading area")

Developed by the Research Centre in Education (CIEd) of University of Minho, and financed by The Foundation for Science and Technology, the main goal of this study was to describe the use of curriculum-based monitoring (CBM) of reading fluency for identifying students at risk for presenting dyslexia. One hundred and forty-six students in the 3rd grade from a group of schools in Braga, Portugal, have participated in the study. They were monitored twice during the school year. The students whose result was below or in the 20th percentile were considered at risk.

The results of the project show that:

1) The CBM reading fluency test was economic, quick and easy to apply and measure and well accepted by teachers and students;
2) On average, the students' results for the first application were 85.21 (SD=28.41) correct words per minute (cwpm), and 97.46 (SD=30.07) cwpm in the second application (at the end of the school year);
3) The weekly increase was 0.49 (SD=0.38) cwpm;
4) After the second application, 11 boys and 18 girls were considered at risk for presenting dyslexia;
5) The difference in results between class groups was statistically significant;

[32] See http://correiodominho.pt/cronicas.php?id=6124 (Accessed October 13, 2015).
[33] See http://agrupamentodmariaii.pt/userfiles/file/Projeto_Fenix.pdf (Accessed October 13, 2015).

6) Considering the sample results, at the end of the school year in two classes, more than 30% of students were at risk;
7) 70.55 % did not reach the goal of 110 cwpm stipulated by the Ministry of Education for that school level;
8) The Cronbach's Alpha coefficient for the first application was 0.981 and 0.978 for the second application.

This project has contributed to the extension of the existing knowledge in the field of reading and risk for reading failure, in a population of 1,400 students who were screened from second through fourth grade with Curriculum-Based Measurement probes (Mendonça & Martins, 2014).

Pre-service and in-service teacher training

"Programa Nacional do Ensino do Português" (PNEP) ("National Plan for the Teaching of Portuguese")

In Portugal, between 2006 and 2010, the government has implemented the 'National Plan for the Teaching of Portuguese'. It was an initiative to improve the teaching of the Portuguese language in schools, in particular, the teaching of reading comprehension and oral and written communication. One teacher from each school applying for the programme was selected to be trained in a higher education institution for one school year. In the following year, this same teacher should disseminate the knowledge gained, by delivering the same training, to a group of teachers within the school (Decree-law nr. 546/2007, 11th January).

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 (EU HLG, 2012, pp. 46–50). These gaps derive from the reading literacy studies that repeatedly show unequal distribution of results among groups of children and adolescents (PIRLS, PISA).

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

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

Another alarming gap in reading literacy in many countries is the **gender difference,** which is more vital for adolescents than for children. In all PISA studies, 15-year-old girls outperformed boys in

reading in all the European countries, and boys are frequently overrepresented among the low performers. PISA 2009 results showed that these differences are associated with differences in student attitudes and behaviours that are related to gender, i.e. with reading engagement, and not gender as such. Therefore the gender gap is also related to growing up in a family or in a school environment that values reading and learning and considers reading as a meaningful activity.

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

In the section below we address the following questions:

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

This section (s. 1.5) refers to children and adolescents who, for 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).

According to Santiago, Donaldson, Looney and Nusche (2012) little is known about educational disadvantage in the Portuguese education system. There is no differential analysis on student performance across specific groups such as migrant students, students from disadvantaged families or those who live in a remote location. The authors also highlighted that no measures of equity in the education system have been developed in order to monitor progress towards reducing inequities (Santiago et al. 2012, p.31). "The absence of good information about the socio-economic background of students hinders the ability to conduct good research about its impact on student performance, and therefore limits the ability of the system to assess whether it is achieving its equity objectives" (Santiago et al. 2012, p. 125).

Challenge/Need for action: Equity and inclusion are areas for further policy attention, and also targets for school and teachers actions.

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 is well-recognized main factor 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 34.5% Portugal is very close to Spain.

Child poverty

An indicator of child poverty is the percentage of children living in a household in which disposable income, when adjusted for family size and composition, is less than 50% of the national median income (UNICEF/Innocenti Research Centre, 2012). The range is from 4.7% in Iceland to 25.5% in Romania (for an overview of European countries see table A2 in Appendix B). With 14.7%, Portugal is in a group in the middle of the distribution.

Mother's education level

The PIRLS 2011 database offers information about mother`s level of education referring to ISCED levels. The figures for Portugal are presented below and point to a high level of 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: 0.38% (0.6%)

ISCED 1: primary education: 19.1% (5.3%)

ISCED 2: Lower secondary education: 18.8% (16.7 %)

ISCED 3: Upper secondary education: 33.13% (36.1%)

ISCED 4: Post-secondary non-tertiary education: 3.7% (7.1 %)

ISCED 5B: Tertiary education (first stage) with occupation orientation: 3.33% (9.5%)

ISCED 5A: Tertiary education (first stage) with academic orientation: 18.08% (13.9%)

BEYOND: 3.35% (10.1%)

Not applicable: 0.84% (0.9%).

Teenage mothers

According to UNICEF (2001) the percentage of teenage mothers is 21.2% for Portugal. The range for the European countries participating in ELINET is from 5.5% in Switzerland to 30.8% in United Kingdom (for an overview of European countries see table A4 in Appendix B).

Single parent

According to Eurostat (2012, Figure A 7), in Portugal the percentage of children living mainly with a single parent is 7.90%. 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 Background

About 5.5% of students of 15 years old, in Portugal, have an immigrant background. In the last decade the number of immigrants has increased considerably, many of whom do not have Portuguese as a mother tongue. This is a development which represents a new challenge to the education system (Donaldson et al. 2012).

In Portugal, according the General Directorate of Statistics on Education and Science (Direção-Geral de Estatísticas da Educação e Ciência/Direção de Serviços de Estatísticas da Educação, 2015, p. 28), in the school year 2013/2014, there were 56,184 students of other nationalities enrolled in the educational or training system.

Primary language spoken at home different from language used at school

In Portugal, 90% of pupils reported that they always spoke the language of the PIRLS reading test at home – above the corresponding EU-24 Average (80). Ten percent of students in Portugal reported that they sometimes or never spoke the language of the test at home. The difference in achievement between pupils in Portugal reporting that they always or sometimes/never spoke the language of the test was 12 score points – some 14 points lower than the corresponding EU-24 average difference (26).

According to Santiago, Donaldson, Looney and Nusche (2012), given the importance of the mastery level of the language of instruction and the growing number of students whose mother tongue is not Portuguese, gathering information is surely needed, not only to improve decision making at school level, but also to determine a national strategy and teachers' guidance for these populations.

Challenge/Need for action: Due to the socio-economic and cultural factors that influence emergent literacy, policies and action for parental support is urgent, together with more cognitively stimulating school activities.

It is desirable to gather more comprehensive data on the linguistic profiles of basic and secondary students, when planning a language strategy at the national level and when making decisions about specific resources and support for second language learners.

5.3.2 Support for children with special needs

Not only children from culturally disadvantaged families are "at risk" in their literacy development but also those with very low birth weight and severe prematurity, factors that are associated with developmental disabilities, including reading and writing disabilities. Also cognitive and sensory disabilities must be considered.

Very low birth weight and severe prematurity

According to the report *European Perinatal Health Report. The health and care of pregnant women and babies in Europe in 2010* (EURO-PERISTAT Project/SCPE/EUROCAT, 2013, p. 149) the percentage of live births with a birth weight under 2500 grams in Portugal was 7.3%. The range is from 3.0% in Iceland to 8.8% in Cyprus (for an overview of European countries see table E1 in Appendix B).

According to the same source (EURO-PERISTAT Project/SCPE/EUROCAT, 2013, p. 155) the percentage of live births with a gestational age <32 weeks is 1% in **Portugal** (with a range from 0.7% in Iceland to 1.4% in Hungary). The percentage of live births with a gestational age between 32 and 36 weeks was

6.6% (with a range from 4.5% in Lithuania to 7.5% in Hungary (for an overview of European countries see table E2 in Appendix B).

Cognitive or sensory disabilities

In Portugal, to achieve political correctness, the terms disability and impairment are no longer in use. The term now is 'special educational needs'. Special educational needs are classified with regard to pupils' special educational requirements into the following categories (percentage of children in parenthesis) (Correia, 2008):

- physical development (1.10%);
- learning (48%);
- communication development (22%);
- hearing (1.3'%);
- vision (0.5%);
- mental illness (14%);
- behavioural problems (10%);
- autism (0,12%);
- Oher health problems (1%);
- skull fracture (0,01%);
- multiple (1,95%);
- Others (6%).

In the school year 2014/2015, there were 75.032 students (boys and girls) with Special Educational Needs that attended public and private schools[34].

Figure 4: Number of students (boys and girls) with Special Educational Needs that attended public and private schools, in the school year 2014/2015.

Educational level	Type of school					
	Total		Public		Private	
	Boys and girls	Girls	Boys and girls	Girls	Boys and girls	Girls
Total	75 032	28 408	67 695	25 603	7 337	2 805
Preschool education	3 731	1 168	2 906	917	825	251
Basic education	62 323	23 641	57 226	21 643	5 097	1 998
Secondary education	8 978	3 599	7 563	3 043	1 415	556

Challenge/ Need for action: As mentioned in the report *Políticas Públicas de Educação Especial* ("Public policies in Special Education") (Conselho Nacional de Educação, 2014, p. 36), several improvements are needed in the area of Special Educational Needs:

- relevant mechanisms and support for students' progress between cycles;
- adequate solutions for students when they have completed the school career;

[34] See http://www.dgeec.mec.pt/np4/224/ (Accessed October 13, 2015).

- educational resources and solutions concerning school organisation;
- skills profile of students for teachers of Special Education Needs;
- a material and technological resources databases;
- more human resources for a better inclusion of children into schools full-time.

5.3.3 Promoting preschool attendance, especially among disadvantaged children

According to European Commission/EACEA/Eurydice/Eurostat (2014, Figure C1 p.62), the enrolment rate at age 4 is 95.4%. Portugal almost reaches the European benchmark for at least 95% of children between age 4 and the start of compulsory education participating in ECEC (for an overview of European countries see table C1 in Appendix B).

The OECD Family Database (2014) offers more differentiated figures for participation rates at ages 3, 4 and 5. According to 2010 statistical data, the participation rate is 97.5% for 5-year-olds, 86.2% for 4-year-olds, and 68.0% for 3-year-olds (OECD 2014) (for an overview of European countries see table C2 in Appendix B).

The benefits of attending preschool institutions have been proving 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 in Portugal and the average reading score in grade 4, as PIRLS 2011 data show (Mullis et al. 2012a, p. 128). These are the figures for Portugal:

- 3 years and more: 45% (average reading score 549)
- Between 1 and 3 years: 37% (average reading score 544)
- 1 year or less: 8% (average reading score 533)
- Did not attend: 9% (average reading score 522)
  (For an overview of European countries s. table C3 in Appendix B).

In Portugal, there is a significant difference in reading competence at grade 4 for students participating and not participation in preschool: 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.

5.3.4 Provisions for preschool children with language problems

Literacy competence strongly builds on oral language proficiency, word knowledge, and syntactic knowledge. Measures must be taken by governments and institutions to ensure that children with poor language development (second-language speaking children and those from a low socio-cultural background, as well as others who experience difficulty in learning language) acquire adequate levels of oral language in kindergarten, preschool institutions and in school.

In Portugal, the new programme "Metas de Aprendizagem para a Educação Pré-Escolar" ("Learning goals for Preschool Education"), defines, for the content area oral language and written approach, that, at the end of the preschool, all pupils should be able to mobilise linguistic knowledge which is crucial not only in the learning process of written language, but also in school success. In this document verbal interaction abilities are emphasised, the phonological awareness as well as emergent behaviours of reading and writing[35].

[35] See http://metasdeaprendizagem.dge.mec.pt/educacao-pre-escolar/apresentacao/ (Accessed October 15, 2015).

Also, in the specific profile of professional development for kindergarten teachers, in the area of expression and communication, it is mentioned that the teacher should:

- create a communication environment in order to provide specific opportunities of interaction for children with other kids and with adults;
- promote the development of oral language, especially among children of disadvantaged groups;
- foster the development of emergent behaviours of reading and writing, through the use of written materials;
- organise activities and projects that allow the motor development, in order to develop narrative capabilities and verbal and non-verbal Communication skills (Decree-Law nr. 241/2001, 30th August).

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

When a foreign pupil enters the public education system, they first take a Portuguese as non-mother tongue (Português Língua Não Materna, PLNM) diagnostic test at school. The test provides teachers with information on the pupil's knowledge of Portuguese and, according to the results obtained, permits the student to be placed at an according level of linguistic proficiency to carry out specific PLNM activities.

In order for teachers to define specific strategies to these students, information is gathered on pupils' prior formal education, language spoken at home and expected length of stay in Portugal, among others[36].

In national examinations at Grades 6 and 9, considering pupils' progress, some students are given the option of taking the Portuguese examination as non-mother tongue speakers (OECD, 2012b).

Foreign pupils are integrated in the school year equivalent to that of their country of origin, considering their previous formal education. Foreign pupils will attend regular classes, but will benefit from specific language support.

The Portuguese Ministry of Education and Science believes that knowledge of Portuguese is essential for pupils, in order to access the curriculum and hence achieve academic success. Knowledge of the language of the host country also favours the integration of students, not only at an educational level, but also at a socio-affective level[37].

Challenge/Need for action: There is a considerable migrant gap in reading achievement, as PIRLS (12 score points) and PISA (26 score points) data show. The government should ensure that there are intensive programmes of language and literacy development to support all children and young people with migrant backgrounds or without adequate competence in the Portuguese language.

[36]See https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Portugal:Support_Measures_for_Learners_in_Early_Childhood_and_School_Education (Accessed August 27, 2014).
[37]See https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Portugal:Support_Measures_for_Learners_in_Early_Childhood_and_School_Education (Accessed August 27, 2014).

5.3.6 Preventing early school leaving

The rate of early school leavers

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.

Following the Eurostat, in Portugal, the rate of early school leavers was 19.2% in 2013, 1.6% less than in 2012. However, it is important to remember that the target value of the early school leaving (ESL) rate set for 2020 is 10%. (European Commission, 2014, p. 2).

Regarding students (ISCED 1-6) aged 15-24 years, in Portugal, 61.8% were in some form of education in 2011, which was around the average EU-27 value of 61.9%. This indicator is on a slightly increasing trend: by 2012 it stood at 62.1%. The percentage of 18-year olds in education was 77.5% in 2011, and by 2012 this indicator increased somewhat to 77.7% (European Commission/EACEA/Eurydice, 2012).

According to Santiago, Donaldson, Looney and Nusche (2012), the high proportion of early school leavers could be related to the relatively low appreciation of schooling by large groups of the population. It could also result from the parents' low educational attainment and the availability of unskilled jobs. The impact of family background on the probability to drop out is also stronger in Portugal than elsewhere: 98.9% of men aged between 25 and 34 who dropped out before the end of upper secondary school have a low-educated father. This is more than 10% above the average across European OECD

Challenge/Need for action: It is important to review and update policies in order to make the Portuguese educational system even more inclusive, by allowing all individuals to acquire relevant skills (OECD, 2010b).

Programmes such as "I will not give up" or "New Opportunities" should be reimplemented.

Besides making national the fight against early school leaving, local authorities should identify specific situations and act accordingly, at the same time, accountability measures and the motivation of communities to tackle this problem are recommended (Coimbra & Fernandes, 2013).

5.3.7 Addressing the gender gap among adolescents

In Portugal, there aren't specific official (Ministry of Education and Science) measures to address the gender gap among adolescents.

However, data provides by PIRLS 2011 shows that there are a difference of 14 score points between girls (548 score points) and boys (534 score points) in Reading Achievement (table 6). In PISA 2012, the score difference in Reading performance between boys (468 score points) and girls (508 score points) is 60 score points (table 16).

Furthermore, in national examinations of Portuguese Language, girls are better performance than boys: girls have more levels 4 and 5 (on a scale from 0 to 5) than boys (Direção-Geral da Educação/Juri Nacional de Exames, 2014).

Challenge: Given the difference between boys and girls in international surveys and in the National Assessments, programmes and policies specifically aiming at supporting boys´ reading engagement are needed, in Portugal.

It is desirable to enhance monitoring measures of students' progress by gender in order to allow the tracking of improvement and to permit the investigation of the impact of student gender on performance, and consequently the development of policies and programmes (Santiago et al. 2012).

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

Programmes for inclusion

The programmes named "Territórios Educativos de Intervenção Prioritária" (TEIP) ("Priority Intervention in Education Territories") (TEIP) are designed to promote education in schools located in underprivileged areas with high dropout levels. The main goal of the last TEIP 3 Programme (Legislative Order nr. 20/2012, 3rd October) is to: "respond to social contexts that encourage the risk of failure in the normal education system, due to the fact that academic success is rarer in socially and economically disadvantaged areas than the national average, where violence, indiscipline, dropouts, school failure and child labour are examples of problems". It is expected that TEIP 3 promotes learning and academic success, makes more effective use of available resources, and achieves better results.

Thus, its objectives can be listed as follows:

- Improving the quality of learning, and hence pupils' achievement;
- Combating indiscipline, early school leaving and school absence;
- Enhancing educational guidance and support transition from school to working life;
- Promoting cooperation among schools, social partners and training institutions in the same educational area.

Tutoring and other kinds of support are organised for individual pupils and pupil groups. Intervention measures include, inter alia: pedagogical support, tutorials, cultural mediation supplementary activities, and parental involvement. These are designed for pupils at risk of early school leaving[38].

Family literacy programmes for migrant parents

"Programa Metropolitano de Leitura para Grupos Desfavorecidos"

The project "Programa Metropolitano de Leitura para Grupos Desfavorecidos" (Programme Reading Metropolitan for disadvantages groups") was developed between 2004 and 2006, in the Metropolitan Area of Porto (AMP), in a partnership between PRIMUS (Regional Development Agency) and Local Authorities from nine cities of the Metropolitan Area of Porto. Those nine cities were divided into two groups: one group, dedicated to children and young people, which was comprised of Maia, Matosinhos, Porto, Póvoa do Varzim, Vila Nova de Gaia and Vila do Conde; a second group dedicated to immigrants, which has involved Espinho, Gondomar and Valongo.

[38]See https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Portugal:Support_Measures_for_Learners_in_Early_Childhood_and_School_Education (Accessed August 27, 2014).

The project was based on two priority actions:

- Creating regular Reading Workshops aiming to train Readers and improve their skills as well as to provide new opportunities to enhance reading skills of disadvantaged groups such as immigrants.
- Creating a Reading Metropolitan Network, comprised of librarians, technical experts and other responsible persons for reading services in the Metropolitan Area of Porto, with the purpose of encouraging the exchange of information in order to coordinate the work developed in Reading Workshops.

The main objectives of the "Programme Reading Metropolitan for disadvantages groups" are to raise awareness and foster reading as a continuous and regular practice; to promote the acquisition of language knowledge and its correct use as well as of new knowledge through reading; to foster the intercultural dialogue and citizenship, especially, along the road to cultural diversity; to provide reading moments and spaces for reading; to increase the qualifications of reading professionals; to enhance the exchange between libraries and readers; to encourage the partnerships between local authorities and cultural institutions (Lopes & Queiroz, 2006).

"K'Cidade - Programa de Desenvolvimento Comunitário Urbano" ("K'City – community and urban development programme")

This programme was developed by the Aga Khan Foundation, in 2004, with the purpose of promoting the processes of social change that respects the communities, in a process of gradual autonomy and reinforcement of the different players. It also aims to respond to the challenges of urban communities, from Lisbon, especially the poor and socially excluded, such as immigrants and ethnic or cultural minorities.

The activities were carried out in partnership with several local institutions. They were divided into four priority intervention axes:

1) Citizenship – encouraging the interventions in a territorial approach, intended to foster the empowerment of communities and other players.
2) Education and Childhood – promoting children's welfare, by improving quality and access to essential services.
3) Families into community – addressing the needs of the most vulnerable communities, through an integrated approach which should involve and support families.
4) Lifelong Learning and employment – strengthening of skills, knowledge and qualification, within a personal, civic, social and/or employment-related perspective, by promoting social inclusion, namely through the development of literacy and numeracy initiatives for adults, in a lifelong learning perspective.

The mission of the programme is to enable the excluded urban communities, with the aim of improving their quality of life[39].

Promoting School attendance, especially among disadvantaged children

In Portugal, there is a nationwide network of "Commissions for the Protection of At-Risk Children and Youth", managed by the municipalities. Each commission is composed of a small executive team of 3

[39] See https://grupocomunitarioalta.wordpress.com/quem-somos/programa-kcidade/ (Accessed October 15, 2015).

to 5 full-time members which usually include staff from the municipality, social security services, local NGOS and teachers. This team works directly with a larger team too, representing health services, education, security, parents and local associations – where ESL is a high and legal priority amongst the additional and broader duties of these different teams. By law, both teams are responsible for ESL and the protection of children's rights to remain in education until the age of 18 (European Commission, 2013a, p. 34).

Portugal has a national database that collects, on a monthly basis, information from school staff, students and social support benefits. It collects information on students on an individual basis. Information is biographic (age, special needs, social support benefits, information on parents such as profession and employment status as well as education level) and refers to the activity of each student in the system: absences, class, school year, evaluation. Data is accessible at individual, school, regional and national level and is delivered on a business intelligence system that is a support system for school managers and other decision makers (European Commission, 2013a, p. 35).

In order to reduce grade repetition in basic education, Portugal has introduced an extraordinary period at the end of the school year where students from 4th and 6th grades who failed national exams (Portuguese and Math) receive additional support from teachers and have the opportunity to repeat the exam. Students or groups facing difficulties also have a Pedagogic Support Plan designed by teachers, parents and school psychologists if needed (European Commission, 2013a, p. 37).

Regarding multi-professional cooperation in schools, in Portugal, school multidisciplinary teams are composed of counsellors, psychologists, social workers and mediators who support individuals and groups facing difficulties. In some cases, when learning difficulties are more severe, additional resources are deployed to cooperate with external specialised therapists that come to schools to support students (European Commission, 2013a, p. 38).

Different programmes are specifically designed for territories, schools, classes or pupils who are at risk of ESL or that are performing below target. These secondary prevention programmes include: the "Territórios Educativos de Intervenção Prioritária" (TEIP) ("Priority Intervention in Education Territories") – for schools located in socially and economically disadvantaged areas; the "Mais Sucesso Escolar" ("More School Success"); the "Percursos Curriculares Alternativos" ("Alternative Curricula Pathways"). They are run by the Ministry of Education and Science and have nationwide coverage. The "TEIP" and "Mais Sucesso Escolar" Programmes have recently been extended and now cover over 25% of pupils and schools in Portugal (15.6 % for "TEIP" and 10.2 % for "Mais Sucesso Escolar"). They provide extra support to pupils (academic, personal, social) inside and outside the classroom in the form of mentoring/tutoring, intercultural mediation, guidance and vocational experiences. They include in-service teacher training, as well as parent and community involvement. It is worth noting that "Mais Sucesso Escolar" was originally a teachers' initiative, later recognised and supported by the Ministry (European Commission, 2013a, pp. 39-40).

Regarding individual support as a form of ESL prevention, EPIS – Empresários Pela Inclusão Social ("Entrepreneurs for Social Inclusion"), which is a NGO established in 2006 and supported by more than 250 corporate and business associates, has the aim to empower low performing pupils (12 to 15 years old) and motivate them to complete compulsory education. The programme is full-time, and delivered by specially trained 'mediators for school success', who work in cooperation with schools (but outside classes). Based on a well-established methodology, EPIS mediators help selected at-risk pupils develop

their non-cognitive skills that will enhance their beliefs, self-esteem, conscientiousness and openness to experience, which are essential for school success (European Commission, 2013a, p. 43).

Besides that, as a form of compensation, early school leavers over 15 years old can complete their lower secondary education in the Integrated Programme of Education and Training (PIEF). PIEF classes may be held in regular schools, NGOs, communities' facilities and enterprises. Each group has a full-time tutor and a small group of teachers develop a tailored curriculum with a high degree of flexibility and strong vocational focus. Students may enrol and finish their studies at any time of the year and the duration of the course depends on their own pace. There are also some experiences of Second Chance Schools, namely in the Oporto Metropolitan Area (European Commission, 2013a, p. 44).

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