

# FRAME OF REFERENCE

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2

# **TABLE OF CONTENTS**

1	Intr	oduction	n		5	
	1.1	Purpose				
	1.2	Backgro		5		
	1.3	Our visi	r a literate Europe	8		
	1.4	Our theoretical framework				
		1.4.1	Wh	at is literacy?	9	
		1.4.2	Dig	ital literacy	9	
		1.4.3	Lite	racy performance data	10	
		1.4.4	Per	formance data for primary children	11	
		1.4.5	Per	formance data for adolescents	11	
		1.4.6	Per	formance data of adults	12	
		1.4.7	Wh	o is a struggling literacy learner?	12	
2	Pre	requisite	s for	positive literacy development	14	
	2.1 Pre-primary years				14	
2.2 Primary-age children				children	17	
	2.3 Adolescents				18	
	2.4	Adults			19	
3	Pol	icy Areas	<b>.</b>		21	
	3.1	Creating a more literate environment				
		3.1.1	Pro	viding a literate environment at home	22	
				viding a literate environment in school	24	
				viding a digital environment	25	
		3.1.4	The	role of public libraries in reading promotion	25	
				proving literate environments for children and adolescents: grammes, initiatives and examples	26	
		3.1	.5.1	Family literacy programmes		
			.5.2	Book-gifting programmes		
			.5.3	Reading (and writing) promotion programmes for children and adolescer		
		3.1.6		viding a positive literate environment for adults		

3	3.2	Improving the quality of teaching					
		3.2.1	Quality of preschools	29			
		3.2.2	Literacy curricula in schools	33			
		3.2.3	Literacy instruction	36			
		3.2.4	Early identification of and support for struggling literacy learners	39			
		3.2.5	Initial teacher education (ITE) and continuous professional development (CPD) of teachers	40			
		3.2.6	Digital literacy as part of teacher education	45			
		3.2.7	Improving the quality of literacy teaching for children and adolescents: programmes, initiatives and examples	46			
3	3.3	Increasing participation, inclusion and equity					
		3.3.1	Compensating socio-economic and cultural background factors	49			
		3.3.2	Support for children with special needs	50			
		3.3.3	Promoting preschool attendance, especially among disadvantaged children	51			
		3.3.4	Provisions for preschool children with language problems	51			
		3.3.5	Support for children and adolescents whose home language is not the language of school	51			
		3.3.6	Special support for adult second-language learners/migrants	52			
		3.3.7	Preventing early school leaving	52			
		3.3.8	Addressing the gender and other achievement gaps among adolescents	53			
		3.3.9	Increasing participation, inclusion and equity for children and adolescents: programmes, initiatives and examples	53			
		3.3.10	Adults: issues of equity and inclusion	53			
4	Co	nclusions		55			
Ref	References						
Ар	Appendix E						

# 1 INTRODUCTION

# 1.1 Purpose

This document is the frame of reference for all 30 of ELINET's country reports. Each of those reports presents the information on literacy specific to one country, using both quantitative and qualitative data. For each quantitative indicator used, the reports give a brief description of the significance of the indicator and some Europe-wide data for comparison. For both forms of data the sources are named. In order to keep the country reports as brief as possible, all background and contextual information is contained in this document.

In addition to the 30 country reports, this Frame of Reference also sits alongside the *European Framework of Good Practice in Literacy Policy (EFGP)*, which ELINET has developed, and a database of examples of "good practices" covering different areas and age groups, but aiming at the common objective of increasing *all* European citizens' access to high-quality literacy provision. ELINET requested its partner organisations, and all interested parties, to supply these. Both the EFGP and the database of examples can be found on the ELINET website (www.eli-net.eu) in the Good Practice section.

# 1.2 Background

One in five 15-year-old Europeans, as well as nearly 55 million adults, lack basic reading and writing skills. Not only does this make it hard for them to find a job, but it also increases their risk of poverty and social exclusion, by limiting their opportunities for cultural participation, lifelong learning and personal growth. Literacy is fundamental to human development, as it enables people to live full and meaningful lives and contribute towards the enrichment of their communities. "Literacy is a basic human right", the former Secretary-General of the UN Kofi Annan claimed; it is the "bridge from misery to hope".

The European Literacy Policy Network, ELINET, aims to improve literacy policies in its members' countries in order to reduce the number of children, young people and adults with low literacy skills. The ambitious aim that inspires all ELINET work is for *every* European to achieve functional literacy, defined as the ability to read and write at a level that enables personal development and functioning in society, the home, school and work.

ELINET continues the work of the **European Union High Level Group of Experts on Literacy** which was established by the European Commission in January 2011 and reported in September 2012<sup>1</sup>. That group examined how to support literacy throughout lifelong learning, identified common success factors in literacy programmes and policy initiatives, and came up with proposals for improving literacy.

ELINET was established by the European Commission in February 2014, and was funded until March 2016. The ELINET project was coordinated by the University of Cologne, and had 78 partner organisations in 28 European countries. One of its major aims was to produce reliable, up-to-date and comprehensive reports on the state of literacy in each country where ELINET has one or more partners,

<sup>&</sup>lt;sup>1</sup> In the following, the final report of the EU High Level Group of Experts on Literacy is referenced as "HLG report".

and to provide guidance (recommendations) 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.

Some states have marked differences in educational systems in different regions. We have therefore produced two reports for Belgium (Flemish and French communities) and the UK (England and Scotland – there are no partner organisations in Northern Ireland or Wales). For Germany, however, there is one report generalising as far as possible across the 16 Länder.

ELINET's perspective is lifelong and lifewide; consequently, the country reports cover the lifespan from birth to old age ('cradle to grave'), and within that are organised in sections relating to children, adolescents, and adults. The section on children is further divided into the pre-primary and primary years, with the 'boundary' between these varying according to the age of entry to formal education in each country. Similarly, the boundary between young children and adolescents varies between age 10 and age 12, and that between adolescents and adults between age 16 and age 18, depending on the relevant datasets and on national systems.

Three overall points about the data used for the reports should be noted immediately. First, there is a necessary difference in the sources of data between the pre-primary years and later stages. For students aged 9-11 and 15, and for adults, there are (some) data from international surveys of reading performance, but the pre-primary section instead assembles information on prerequisites to the successful initial acquisition of literacy.

Secondly, while ELINET works with a definition of literacy that includes both reading and writing, all the available international survey data concern attainment in reading – there are effectively none on writing. The only international survey of attainment in writing, of pupils aged 13/14 in 1983, was deliberately constructed and reported to make quantitative comparisons impossible. A recent review of research on writing commissioned by the EC (Carpentieri 2011) found little to analyse; a task for the future would be to search out anything more recent and produce an update, when time and resources permit.

Finally, there is much less relevant information on adults than on the younger age-ranges. In particular, there have only ever been three international surveys of adults' attainment in reading, in 1994-98, 2002-04 and 2008-13, and even in the last of these only about half of all European countries took part; thus data from the earlier surveys are not reported. Consequently, the adult sections of all our reports are shorter and simpler in organisation than the other sections, and many have substantial gaps.

In the chapters on primary-age children, adolescents and adults, existing data from international surveys of reading literacy were used to provide information about reading performance, the proportions of students and individuals who can be considered as struggling readers, and gaps in reading achievement according to gender, socioeconomic status and migration background. In each of these surveys, a representative sample of the population under consideration was tested using a variety of texts, reading processes, situations, purposes, and question formats. IEA-PIRLS (Progress in International Reading Literacy Study, 2001, 2006 and 2011) tested pupils attending grade 4 in primary education (their ages ranged from 9 to 11); 24 EU countries participated in PIRLS in 2011. OECD-PISA (Programme for International Student Assessment, 2000, 2003, 2006, 2009 and 2012) tested 15-year-old students, whatever grade they were in; the majority of EU countries took part in each PISA cycle; others started participating from 2006 after they became EU members. OECD-PIAAC (Programme for International Assessment of Adult Competencies, also called Survey of Adult Skills) was conducted

between 2008 and 2013 in 33 countries (among them 17 EU countries), and tested adults aged 16 to 65 in their homes.

Several indicators have been selected consistently across the different age groups, in order to reflect not only the average performance in the country (effectiveness), but also equity issues (% of struggling readers, gaps according to socioeconomic status, migration background and gender). Close attention is paid to trends over time (from 2000 to 2012) in achievement and gaps, as well as to changes across age groups (from primary education grade 4 to the oldest adult group).

Three teams of experts (researchers and practitioners) on the different age groups (children, adolescents, and adults) worked together on the country reports and agreed on a common outline for them. The sections on primary-age children and adolescents are written to a common framework, but the different nature of the information for pre-primary children and adults dictated that those sections have frameworks which differ from that for primary-age children and adolescents, and from each other. However, the use of these frameworks across countries ensured that both valid comparisons and gaps in the evidence base could be identified. Furthermore, ELINET established two taskforces dealing with the cross-cutting topics "reading for pleasure" and "digital literacy", which were incorporated into the framework of the country reports as well.

The **adult sections of the country reports** are shorter than the sections on the younger age ranges as there is less relevant information to draw on. This is partly a consequence of the limited attempts to collect data on adult literacy compared with children and young people (see section 5.4.3 below). But it also evidences a crucial distinction between adult literacy and school phase literacy: in many countries there is not a "system" for adult literacy education. Such a system should have many parts: awareness and recognition of need; laws, policies and regulations; public funding; quality monitoring; a professionalised workforce; recognised qualification frameworks; and curricula and other teaching resources. Although individual countries may have some or all of these component parts in place, there is no consistency or coherence across countries. Adult literacy initiatives, where these exist, differ from country to country, in basic criteria such as who learns, where they learn, what they learn, who funds their learning, and who they learn from. These differences, and the considerable "gaps" in provision, make adult literacy a highly complex area. This complexity pervades each section of our reporting framework.

Finally, it is important to emphasise that, unlike school education, where systems are long established, the landscape for adult literacy education is evolving rapidly. Recently, PIAAC results have stimulated some new thinking and, while this is likely to contribute to adult literacy policy developments in the participating countries, the full impact is not yet known.

Adult literacy education and learning cut across multiple policy areas and impact on multiple areas of people's lives. Support strategies for adults with low basic skills can be part of education and training or skills policy, but also welfare or employment policy. Improved literacy facilitates adults' access to healthcare, and enhances the support they can provide for the learning of their children, as well as preparing them for employment.

Effective policy-making in this area requires inter-sectoral cooperation. Adult literacy education and learning should be embedded in lifelong learning policies and consideration of literacy should inform the development of policy in other areas. It is important to increase participation in adult literacy education. Among other approaches, policy makers should listen to adult learners and give them '... a say in how policies and educational programmes are designed' (Schreuer & Buyssens, 2011, p.3).

The structure of this **Frame of Reference** document is as follows:

The remainder of this chapter states ELINET's vision for a Literate Europe and the overall theoretical framework of the country reports. Chapter 2 outlines the prerequisites for positive literacy development of the 4 age groups: pre-primary children, primary-age children, adolescents, and adults. In chapters 3 to 5 the performance data and policy areas covered by the country reports are described according to the three key issues defined by the HLG report: Creating a more literate environment, Improving the quality of teaching, and Increasing participation, inclusion and equity<sup>2</sup>.

# 1.3 Our vision for a literate Europe

Just as ELINET sprang from, and continues, the work of the European Union High Level Group of Experts on Literacy, so ELINET shares the vision for literacy in Europe set out in their report:

#### "Our vision for a literate Europe:

- All citizens of Europe shall be literate, that is, able to read and write at a level that enables
  them to function and develop in society, at home, at school and at work, in order to achieve
  their aspirations as individuals, family members, workers and citizens.
- Radically improved literacy will boost innovation, prosperity and cohesion in society, as well
  as the wellbeing, social participation and employability of all citizens.
- EU Member States will view it as their legal obligation to provide all the support necessary to realise our vision, and this support will include all ages."

To give substance to the aspiration that "All citizens of Europe shall be literate" in practical terms, ELINET has also produced the European Declaration of the Right to Literacy. The full version of the Declaration can be found on the ELINET website<sup>3</sup>; it contains **11 conditions required to put this basic literacy right into practice**, each followed by recommendations that all countries involved in the network should strive to implement. Here we reproduce just the **11 conditions**:

- Young children are encouraged at home in their language acquisition and literacy development
- 2) **Parents** receive support in helping their children's language acquisition and literacy development.
- 3) **Affordable high-quality preschool, or kindergarten**, fosters children's language and emergent literacy development through play.
- 4) **High-quality literacy instruction** for children, adolescents and adults is regarded as a core goal for all educational institutions.
- 5) **All teachers** receive effective initial teacher education and professional development in literacy teaching and learning in order to be well prepared for their demanding tasks.
- 6) **Digital competence**, including critical and creative use of digital media, is promoted across all age groups.
- 7) **Reading for pleasure** is actively promoted and encouraged.

<sup>&</sup>lt;sup>2</sup> The term "equity" has been added by ELINET.

<sup>&</sup>lt;sup>3</sup> See www.eli-net.eu.

- 8) **Libraries** are accessible and well resourced.
- 9) **Children and young people who struggle with literacy** receive appropriate specialist support.
- 10) **Adults are supported** to develop the literacy skills and knowledge necessary for them to participate fully in society.
- 11) **Policy-makers, professionals, parents and communities** work together to ensure equal access to literacy by closing the gaps in social and educational levels.

### 1.4 Our theoretical framework

#### 1.4.1 What is literacy?

The OECD PISA and PIAAC studies work with the following definition of reading literacy:

"...the ability to understand, evaluate, use and engage with written texts to participate in society, to achieve one's goals, and to develop one's knowledge and potential." (OECD, 2009; OECD, 2012)

In ELINET, we build on the multi-layered definition of literacy, from baseline literacy to functional and multiple literacy, which the HLG report provided:

"Baseline literacy means having the knowledge of letters, words and text structures that is needed to read and write at a level that enables self-confidence and motivation for further development.

**Functional literacy** stands for the ability to read and write at a level that enables someone to develop and function in society, at home, at school and at work.

**Multiple literacy** corresponds to the ability to use reading and writing skills in order to produce, understand, interpret and critically evaluate written information. It is a basis for digital participation and making informed choices pertaining to finances, health, etc." (HLG report 2012, p. 103)

#### 1.4.2 Digital literacy

ELINET added to these definitions a special focus on **digital literacy**, which was provided by a taskforce working on this topic across work teams and age-groups. One result of this taskforce was the **ELINET Position Paper on Digital Literacy** (November 2015) which suggested the following definition:

The centrality and ubiquity of digital devices in contemporary life has led to profound changes in literacy practices at home, school, work and play. Literacy now includes the use of a range of meaning-making resources, and manipulation of multiple modalities in diverse media devices. Based on the body of research that has emerged in recent years around Digital Literacy, which encompasses concepts such as Information Literacies, 21st Century Literacy, Multimodal Literacies, Multiliteracies and New Media Literacy, the ELINET network proposes the following definition of Digital Literacy:

Digital Literacy is a broad term used to describe three interrelated dimensions of literate practice in the contemporary age<sup>4</sup>:

- The operational dimension includes the skills and competences that enable individuals to read and write in diverse digital media (including making meaning with and from diverse modes such as spoken and written language, static and moving images, sounds, screen design, etc.);
- 2) **The cultural dimension** refers to developing a repertoire of digital literacy practices in specific social and cultural contexts (such as constructing and/or maintaining effective social, educational and/or professional relationships online);
- 3) **The critical dimension** recognises that meaning-making resources are selective and operate as a means of social control (e.g. knowing what Facebook is up to when it reminds you that your profile is not complete). Becoming critically literate with digital media therefore includes not simply participating competently in digital literacy practices but also developing the ability to transform them actively and creatively.

This definition of the dynamic processes involved in developing digital literacy is enriched by the following considerations:

- **Digital literacy is transversal to many different activities**: It is about making "confident, critical and creative use of diverse digital devices to achieve goals related to work, employability, learning, leisure, inclusion and/or participation in society"<sup>5</sup>.
- **Digital literacy is part of everyday literacy**: That is to say, it can be viewed as both similar to and different from traditional literacy. To read and write digitally, students and teachers must learn to create and interpret texts in diverse modes (such as static and moving images and icons, spoken and written language, screen layout, etc.), and to navigate texts across diverse digital platforms which offer a variety of learning opportunities, formats for creation, and spaces for expression that were not previously available<sup>6</sup>.
- **Digital literacy is a complex and socio-culturally sensitive issue:** It is much more than the capacity to use ICT tools, but should be regarded as a set of social and sense-making competences associated with interacting with a range of digital devices, where the central issue is about the diverse literacies needed to communicate and collaborate with others and to find and make sense of the available information<sup>7</sup>.

#### 1.4.3 Literacy performance data

The PIRLS, PISA and PIAAC surveys provide internationally comparable data on reading achievement. For the country reports a framework for the presentation of the data of these surveys was developed, including a selection of specific aspects to describe the reading performance (average achievement in the country, number of students at the lowest and highest reading competence levels, spread of

<sup>&</sup>lt;sup>4</sup> Adapted from Green, B. (1988) Subject-specific literacy and school learning: a focus on writing, Australian Journal of Education 32 (2), 156-179; Green, B. and Beavis (2012) Literacy in 3D: An Integrated Perspective in Theory and Practice. Australian Council Educational Research (ACER); and Sefton-Green, J., Marsh, J., Erstad, O., and Flewitt, R. (2016) Establishing a Research Agenda for the Digital Literacy Practices of Young Children: A White Paper for COST Action IS1410.

<sup>&</sup>lt;sup>5</sup> Ala-Mutka, K. (2012). Mapping digital competence: towards a conceptual understanding. IPTS, Seville.

<sup>&</sup>lt;sup>6</sup> Chase, Z. & Laufenberg, D. (2011). Embracing the Squishiness of Digital Literacy, Journal of Adolescent & Adult Literacy 54(7).

<sup>&</sup>lt;sup>7</sup> Lankshear, C. and Knobel, M. (2008). Digital Literacies: Concepts, Policies and Practices. Peter Lang, New York.

achievement in a given country, achievement gaps in literacy according to social-economic-status, home language, migration and gender), as well as motivational and metacognitive variables. This set of indicators allows cautious comparisons across the age groups of primary children, adolescents and adults on the one hand, and comparisons of a country with the EU average<sup>8</sup> on the other hand.

#### 1.4.4 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 International 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, PISA 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).

#### 1.4.5 Performance data for adolescents

The Programme for International Student Assessment (PISA) led by OECD<sup>9</sup> assesses the skills and knowledge of 15-year-old students every three years in all OECD countries and in a number of partner countries.

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

The PISA tests assess different aspects of reading literacy – retrieve information, interpret, reflect and evaluate on texts – and use a variety of texts – continuous (prose) and non-continuous (texts including graphs, tables, maps, ...). About half 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 which all 15-year-olds should reach and will enable them to participate effectively in society. Since 2015, PISA has been administered on computers only in most participating countries.

<sup>&</sup>lt;sup>8</sup> The number of countries used to compute this average differs from one survey to another, depending on which EU countries took part in PIRLS, PISA or PIAAC.

<sup>&</sup>lt;sup>9</sup> See: http://www.pisa.OECD.org.

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

#### 1.4.6 Performance data of adults

The performance data for adults are derived from the OECD's Survey of Adult Skills, part of its Programme for International Assessment of Adult Competences (PIAAC). The Survey of Adult Skills assessed the proficiency of adults from age 16 onwards in literacy, numeracy, and problem-solving in technology-rich environments. In addition, the survey collected a range of information on the reading-related activities of respondents, the use of information and communication technologies at work and in everyday life, and on a range of generic skills. In the first round of the survey 166,000 adults aged 16-65 were surveyed in 24 countries and sub-national regions. 17 of the ELINET member countries took part in the survey. The results of the first round of PIAAC were published by OECD in 2013 (OECD, 2013b).

#### 1.4.7 Who is a struggling literacy learner?

Which and how many children and adolescents suffer from literacy (reading) problems, be it difficulties, disabilities, disorders or dyslexia<sup>10</sup>? The answers to these pedagogically relevant questions are still unsatisfactory. The prevalence rates vary considerably, due to a variety of definitions and operationalizations (Büttner & Hasselhorn, 2011; Valtin, Voss & Bos, 2015). The definition of struggling literacy learners is not yet satisfactory.

In empirical studies poor reading achievement generally is defined according to norms on standardized tests in which test-takers are compared to a sample of their peers or classmates. Results at the end of the distribution (the last 1, 5, 10 or 15 percent) or more than 1 or 1.2 or 1.5 or 2 standard deviation below the average point to difficulties or disabilities. Thus prevalence rates differ considerably, depending on the definition employed.

Another way to define struggling readers (literacy learners) is to use a criterion-oriented test like PIRLS or PISA. Performance is defined according to reading competency levels or international benchmarks. In PIRLS, for instance, struggling readers are students whose performance at the end of grade 4 equals or is below the low international benchmark. When reading texts they are able to retrieve information only if it is explicitly stated or easy to locate. They are not (yet) able to solve more demanding reading tasks such as distinguishing significant actions and information, making inferences and interpretations with text-based support, and evaluating content and textual elements. However we lack reliable and valid criterion-oriented literacy tests. The PIRLS and PISA tests are not published.

As ELINET focuses on *struggling readers and writers* among children, adolescents and adults, it is important to understand that those persons identified as "low achievers" by national and international

<sup>&</sup>lt;sup>10</sup> In this report we do not refer to the concept of dyslexia, which we do not regard as useful (Stanovich, 2005; Valtin, 2012a). For more information see the term "dyslexia" in the ELINET analytic glossary of the initial teaching and learning of literacy (Brooks, G. and Burton, M. (2016) *ELINET analytic glossary of the initial teaching and learning of literacy*, published on www.eli-net.eu in the Research Section.)

assessments (such as PIRLS, PISA and PIAAC) are not illiterate. *Instead they struggle* with the increasing literacy requirements of contemporary societies: "Changes in the nature of work and the role of the media, as well as in the economy and society more generally, have made reading and writing much more important" (HLG report 2012, p. 23). Furthermore, the HLG report sees digitisation and the internet as factors that have radically changed the nature and frequency of reading and writing, both in the workplace and in private settings. Due to digitisation, the written word pervades everyday life even on the most fundamental levels, one reason Langenbucher (2002) describes modern societies as "mercilessly demanding in terms of literacy". For this reason ELINET intends to draw the attention of policy-makers, stakeholders, professionals and volunteers active in this field to literacy as a fundamental skill and basic human right.

#### To sum up the features of the country reports:

- ELINET focuses on the concept of "literacy" in a comprehensive way, including digital literacy, reading for pleasure, family literacy, literacy in school education, adult literacy and much more.
- ELINET covers **all age groups** ("from cradle to grave"): pre-primary, primary, adolescents, and adults.
- ELINET follows a cross-sector approach covering informal, non-formal and formal learning: from family literacy to workplace literacy, from teacher education to 'reading for pleasure' or digital literacy.
- ELINET's work in the country reports and collection of good practices brings together the
  perspectives and expertise from researchers and practitioners, professionals, volunteers
  and policymakers.
- ELINET aims to **transfer knowledge across countries**, helping to strengthen a literacy support culture in all European countries.

# 2 PREREQUISITES FOR POSITIVE LITERACY DEVELOPMENT

In order to identify the key elements of good practice for children's and adolescents' literacy development, it is important to be aware of the "developmental tasks" (Havighurst, 1953; Dreher and Dreher, 1985) of the different age groups. In Germany, Garbe et al. (2006) combined findings from developmental psychology with literacy and literary socialization research, and outlined a model of literacy acquisition consisting of three different "plateaus" in early childhood, childhood and adolescence. However, they proposed the term "acquisition tasks" instead of developmental tasks: "(...) we will not speak about developmental tasks but about acquisition tasks, because we start out from normative standards", i.e. from the desirable final condition of fully literate children and adolescents (Garbe et al. 2006, p. 13, English version).

# 2.1 Pre-primary years

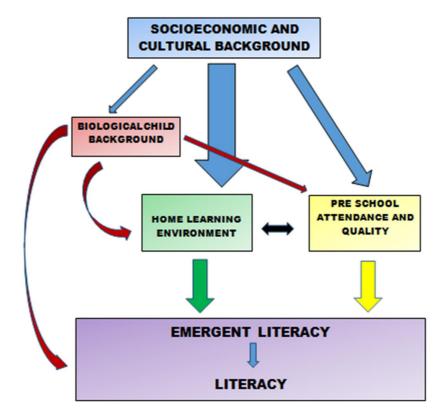
This part of the country reports deals with children from birth until the beginning of primary school, which starts – depending on the country – between age 5 and age 7.

In contrast to other age groups, it is not possible to describe literacy performance in this age group since most children have not yet had any literacy instruction or been tested. Instead we discuss data on prerequisites to literacy development, and present a causal framework which provides the rationale for the forms of data collected.

Here we describe, based on the available information, the factors influencing emergent literacy and the policies that may influence them positively (or negatively). By identifying these factors and by understanding the mechanisms through which they influence first the family environment, then the child's emergent literacy, and ultimately literacy acquisition, we can provide a solid basis for policies and interventions aimed at promoting literacy from the first years of life.

The proposed framework (Figure 1) is an attempt to identify the main factors influencing emergent literacy and their causal pathways. The framework is based on an ecological and bio-psycho-social approach and identifies four main groups of factors influencing emergent literacy.

Figure 1: Causal framework of main factors influencing emergent literacy



- 1) The child's **socioeconomic and cultural background** has a strong impact on literacy. Material poverty and educational level, particularly of the mother, are well-recognized main factors influencing literacy (World Bank, 2005; Naudeau et al., 2011). Socio-economic background also influences biological risks to children, by determining early exposure to risk factors and increased susceptibility (Jednoróg et al., 2012). The primary language spoken at home also influences literacy development (Sylva et al. 2004).
- 2) **Biological child background**. Inherited genetic factors, such as those determining intellectual or language impairment or acquired brain damage, adverse pregnancy and perinatal conditions, may lead to impaired functioning in key areas such as hearing, language and interpersonal communication. These conditions altogether may affect as many as 5% to 6% of children, including developmental disabilities among very low birth weight/ very premature babies, and cognitive impairment due to genetic syndromes or acquired diseases (Cattaneo et al., 2012). The combined effect of genetics and pre- and post-natal events influences the child's neurobiological features and thus vision, hearing, executive functions and consequently language (articulation, vocabulary, grammar), as well as verbal intelligence and general cognitive development (concepts).
- 3) The **home learning environment**, particularly in the first three years, is extremely important (Brooks, Hannon and Bird, 2012). It determines the quantity and quality of interactions between the infant and the primary caregivers, which are the most powerful determinants of language development, both receptive and expressive, in the first three years when experience-dependent creation of synapses is maximal. We know that the more words the children are exposed to, the more they learn. Caregiver-child relations in their turn strongly influence the ability to learn, by influencing self-esteem, general knowledge and motivation.

4) **Preschool attendance** is also associated with the development of emergent literacy and literacy. The earlier and the longer the exposure, the greater the effect, as shown by many studies and by the PIRLS results (Mullis et al., 2012). Of course, it is not only a matter of quantity but also of quality of day care, and quality standards, starting from teachers' qualifications and children to educator ratios, make a big difference, although they are certainly more difficult to measure and compare.

All four groups of factors interact with each other in ways that may differ from one population group to another, and even from one individual to another. Factors may play a bigger or smaller role depending on the influence of other factors. Favourable conditions in one main domain may represent protection against adverse situations in another. It is also well recognized that early investment in human capital produces great and sustainable benefits for social and economic development (Carneiro and Heckman, 2003; World Bank, 2005) and is crucial for fighting inequity.

For each main group of factors, core indicators were chosen, most of which could be calculated based on current statistics or data provided by national institutions – thus providing comparability across countries. The indicators are useful for describing the situation in each country not only in terms of current status, but also of current policies (e.g. policies to increase access to early day care, or to support generic parenting skills or specific ones, such as reading aloud). Besides quantitative indicators, qualitative information was used (e.g. for describing literacy curricula in preschool institutions). In the policy areas outlined below all the indicators are described. For more information on the criteria and the choice of the indicators, see **Appendix A**. **Appendix B** contains, for each indicator, a table of the data of all European countries participating in ELINET to provide an overview.

Fig. 2 shows how policies in a variety of domains can influence the factors outlined in our model. The aim of this expanded causal framework is to identify policies that create an enabling environment for the development of family literacy, emergent literacy, and ultimately child literacy. Policies may require different time spans to produce effects. For example, policies in the upper part of the schema, most of which are typically adopted by the whole government, usually require a longer time frame to produce results, but their effects are more sustained. Policies in the lower part, by improving literacy-relevant family practices (such as parenting programmes) or improving access and quality of day care and preschool institutions, may produce more immediate effects. The proposed schema may be helpful in classifying the policies aimed at improving family literacy and children's emergent literacy.

Family benefits, minimum wage etc. Macroeconomic / Fiscal policies SOCIOECONOMIC AND Health policies/ Reproductive, maternal **CULTURAL BACKGROUND** newborn and child health Day- care policies: access and BIOLOGICAL CHILD quality BACKGROUND Generic parenting HOME LEARNING **PRE SCHOOL** programs **ENVIRONMENT** TENDANCE AND QUALITY Specific reading promotion programs **EMERGENT LITERACY** LITERACY

Figure 2: Child literacy: causal framework of main factors and policies influencing them

# 2.2 Primary-age children

Primary school age, mostly from age 6 to age 12, is a critical time to lay the foundation of reading and writing ability, to go from "learning to read and write" to "reading and writing to learn", and to close any gaps in language and literacy development that are already present when children start school. It is also an important phase for developing and maintaining children's motivation to use written language. For definitions and analysis of many relevant terms, see the ELINET analytic glossary of the initial teaching and learning of literacy (Brooks and Burton, 2016).

The early foundation phase of reading and writing development is a crucial stage in pupils' literacy acquisition. In order to grasp the alphabetic code, pupils must gain cognitive clarity about the function and structure of written language (Valtin 2000). Systematic, explicit teaching of grapheme-phoneme correspondences (or phonics knowledge) is essential so that children grasp the symbol-sound relationships between the oral and written forms of language, and use them in decoding words when reading and in analysing words into phonemes when writing (Ehri et al., 2001; Torgerson et al., 2006). Higher-level phonics instruction may include syllabification and use of prefixes and suffixes, depending on the character of particular languages and their orthographies.

Languages differ in their degree of consistency of orthography – for substantial detail on this, see the essay on 'Regularity and consistency' in the ELINET glossary. In languages with less consistent orthographies, the rate of learning development of beginning readers is slower, as the EU-project PROREAD (Blomert, 2009) showed.

Initial reading instruction should use a balanced approach: reading for meaning and understanding should not be taught separately from direct instruction about grapheme-phoneme relationships, and learning to read and to write should be parallel activities. Instead of "reading wars" between phonics

and whole-language approaches, a balanced method in initial reading instruction is favoured by many researchers: Children are provided with words/texts and with explicit instruction about grapheme-phoneme correspondences. They receive explicit instruction in how to grasp the alphabetic code, but embedded in reading texts.

Pupils should be taught to read and write not only accurately but also fluently. Without fluency or automaticity the reader or the writer lacks cognitive capacity that is needed for comprehension or for composing a text.

After children have learnt to read and write in the first grades of primary school it is important that the newly-acquired reading skills are practised in pleasurable contexts. Some of the competences that need to be developed in this phase (roughly speaking between the ages of 8 and 12) are: Developing a "pleasure expectation relating to age-appropriate narrative texts through extensive reading"; developing the ability "to get emotionally involved in stories with the help of various identification mechanisms and temporarily live in a *transitional room* of fantasy" and story-related daydreams; developing "preferences for certain genres" (selection competence) (Garbe, Holle and von Salisch, 2006, English version, p. 28).

From reading biographical research we know that in middle childhood the central acquisition task related to building stable reading motivation and habits is developing "independent literary practices" in order to become an autonomous reader (and writer). In contrast to depending on "competent others" in early childhood, when children cannot yet read and write for themselves, now the child as a reading (and writing) individual is in the foreground. So this stage is characterized by the concept of the individual getting more and more independent in dealing with words and texts. Ideally, the child's reading motivation could be expressed in a sentence like: "I want to become a reader in order to read alone all that I like to read" (Garbe et al. 2010, p. 35).

Learning to read and write by grasping the alphabetic code, developing a stable reading *motivation* and engagement and building up a stable self-concept as a reader (including reading for pleasure) can be considered as central acquisition tasks in literacy development in middle childhood.

## 2.3 Adolescents

Here we refer to 12- to 18-year olds, i.e. students in the secondary grades, which might comprise grades 6 to 12. According to the "International Standard Classification of Education" (EURYDICE, EACEA, & European Commission, 2012), adolescents are allocated to ISCED 2 (lower secondary education) and ISCED 3 (upper secondary education). Upper secondary education can comprise both the more specialized preparation for tertiary education and vocational secondary education in preparation for future employment. In the EU-funded project ADORE ("Teaching Adolescent Struggling Readers – A comparative Study of Good Practices in European Countries", 2006–09), the study partly included pre-adolescents (10- to 12-year-olds, 5th and 6th graders) as well as post-adolescents (18- to 20-year-olds) (Garbe et al. 2010, pp. 25–26). This might occasionally be necessary for our report as well, as secondary schools start and end in different grades in EU countries.

Within adolescence Garbe et al. conceptualized the two major acquisition tasks in literacy and literary socialization as the acquisition of "functional literacy" and "reflective literary practices". International research and numerous reports, studies and programmes on adolescent literacy provide us with a rich knowledge base about these topics. Especially in the anglophone world "adolescent literacy" has been

the subject of many studies, reports and programmes since the 1980s (see, for example, Christenbury et al., 2009,; Hinchman and Sheridan-Thomas, 2008; International Reading Association, 2012).

Where **functional literacy** is concerned, Sulkunen states that it is "assumed" or "expected" that adolescents have already successfully mastered these literacy acquisition tasks:

"Adolescents are in a crucial phase in their lives from the perspective of their education and literacy development. In most European countries, they are about to leave or have recently left basic education, assuming that they *master functional literacy* required for further studies, citizenship, work life and a fulfilling life. They are expected to *master basic reading and writing skills*, but also to use their literacy for various purposes in all their roles in their immediate and broader communities. Most importantly, they are expected to use and develop their literacy as a *key competence for lifelong learning* in a changing world."

(Sulkunen 2013, p. 538, emphases added)

International assessments like PISA show, however, that many adolescents have not mastered those skills even by the end of compulsory schooling, which leads Sulkunen to conclude her article about "Adolescent Literacy in Europe" by saying that "An Urgent Call for Action" is needed.

Whereas "functional literacy" first and foremost refers to the essential literacy skills needed to thrive in a modern society, "**reflective literary practices**" comprise both personal and social dimensions. On the personal level, reflective literacy means reading as a way to develop one's own identity and personality, as well as a means to reflect narratives and representations of one's own self through literature. On the social level, then, these narratives gain added value through communication with others about reading and about personal readings of literary texts. The term "literary" is meant here in its broad sense, including literature and other media (like TV, film, video games) which are used to build and reflect one's own personal and cultural identity.

# 2.4 Adults

The sections of the ELINET country reports on adult literacy focus on people aged 16 years and over who have left compulsory secondary education; the school-leaving age in EU countries varies between 15 and 18 years of age. Three sub-groups are important, both in terms of education and training strategy/policy and in terms of empirical data collection and analysis:

- The "young adult" population, aged 16-24 years these adults are likely to be continuing their post-school education and training in some form (higher education, further education, apprenticeships, initial and continuing vocational education and training).
- The "working age" population, aged 25-64 years.
- The "post-retirement" population aged 65+. (Again, retirement age varies between countries, and in many countries is higher for men than for women, though this is slowly being harmonised.)

Evidence from the OECD's PIAAC Survey of Adult Skills (OECD, 2013b) suggests that across the 17 European countries that took part, one in five adults (aged 16-64) had a low level of achievement in literacy. While the proportion of adults in each country that scored at or below Level 1, the lowest rung on the scale, differed, the data suggest that each country has significant numbers of adults lacking in the literacy skills deemed necessary to function effectively in daily life.

PIAAC data also suggest that current understanding of the low-literate target group is less than accurate, with the danger of stereotypes unhelpfully informing policy in this area. Research has shown correlations between levels of skills and poor life outcomes in areas such as employment, wages, health and many others (Bynner and Parsons, 2006). However, the relationship between poor literacy and life outcomes is not as straightforward as might be imagined. While the low-literate population are more likely than the rest of the adult population to exhibit certain characteristics, the difference between them and the rest of the adult population is a question of degree, rather than clear differentiation. For example, while those with poor literacy are more likely than the rest of the adult population not to have completed upper secondary level education, the majority of them have. Or, to take another example, while adults with poor literacy are more likely than others to be unemployed, they are, nevertheless, much more likely to be employed than unemployed (Grotlüschen et al., 2016, p. 133).

# **3 POLICY AREAS**

The Final Report of the EU High Level Group of Experts on Literacy (2012) concluded that for EU Member States to find the most efficient, effective ways of addressing the literacy needs of all their citizens there were **three key issues** that all Member States should focus on:

- Creating a more literate environment
- Improving the quality of teaching
- Increasing participation and inclusion<sup>11</sup>.

We have used these three issues as the framework for the primary and adolescents sections of the country reports (for the framework for the pre-primary phase, see section 2.1 above and Appendix A; and for the framework for the adult phase, see section 2.1 above and Appendix E). We built upon those three issues and defined the "policy areas" covered by this framework in differentiating those general topics as follows:

#### 3.1 Creating a more literate environment

- 3.1.1 Providing a literate environment at home
- 3.1.2 Providing a literate environment in school
- 3.1.3 Providing a digital environment
- 3.1.4 The role of public libraries in reading promotion
- 3.1.5 Improving literate environments for children and adolescents: Programmes, initiatives and examples
- 3.1.6 Providing a positive literacy environment for adults.

#### 3.2 Improving the quality of teaching

- 3.2.1 Quality of preschool
- 3.2.2 Literacy curricula in schools
- 3.2.3 Reading Instruction
- 3.2.4 Early identification of and support for struggling literacy learners
- 3.2.5 Initial Teacher Education (ITE) and Continuous Professional Development (CPD) of Teachers
- 3.2.6 Digital literacy as part of initial teacher education
- 3.2.7 Improving the quality of literacy teaching for children and adolescents: Programmes, initiatives and examples

#### 3.3 Increasing participation, inclusion and equity

- 3.3.1 Compensating socio-economic and cultural background factors
- 3.3.2 Support for children with special needs
- 3.3.3 Promoting preschool attendance, especially among disadvantaged children
- 3.3.4 Provisions for preschool children with language problems

<sup>&</sup>lt;sup>11</sup> EU High Level Group of Experts on Literacy, Final Report, 2012, p. 38. However, ELINET complemented the third issue by adding "equity".

- 3.3.5 Support for children and adolescents whose home language is not the language of school
- 3.3.6 Preventing early school leaving
- 3.3.7 Addressing the gender gap among adolescents
- 3.3.8 Increasing participation, inclusion and equity for children and adolescents: Programmes, initiatives and examples.

# 3.1 Creating a more literate environment

In contemporary societies demands on literacy are becoming more and more complex for everybody in all sectors of private and public life. Children, young people and adults therefore need to be provided with a rich and inspiring "literate environment" in order to develop the necessary skills and attitudes to deal with these increasingly complex literacy demands:

"It all starts with motivation. So the primary objective of a literate environment is to increase literacy motivation and engagement by encouraging and supporting reading and writing for pleasure. This means cultivating a culture of reading<sup>12</sup>, increasing the visibility and availability of reading materials and promoting reading in all its forms, through diverse materials, online and offline."

(EU High Level Group 2012: 39)

In a rich literacy environment books and other reading materials, in print or digital, are easily available at home, in schools, libraries and beyond. Motivation and support for engaging with literacy starts in the family and in pre-school institutions. Schools and public libraries offer inspiring programmes and opportunities for students to access appealing reading materials and to engage in reading and writing for pleasure.

Schools play an important role in offering a literate environment for children and adolescents. 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. As PIRLS 2011 showed, pupils had higher reading achievement when their parents had a favourable attitude towards reading, and when they had many learning resources in their home. 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. As children develop, those who choose to read for pleasure are likely to perform better at school and have more chances in life.

While literate environments may inspire the motivation to read and write, it is also important to note that motivation is correlated with success or failure in literacy achievement. The experience of being competent and successful leads to better attitudes towards reading, resulting in a "virtuous circle". To support engagement and motivation is also an important aim in reading *instruction*.

#### 3.1.1 Providing a literate environment at home

The **home learning environment**, particularly in the first three years, is extremely important (Brooks et al. 2012). It determines the quantity and quality of interactions between the infant and the primary

<sup>&</sup>lt;sup>12</sup> Although "literacy" is referring to "written language" and thus comprising reading and writing, our focus here and in the submitted examples as well is on reading. Most of the examples were related to reading promotion programmes targeted at fostering "reading for pleasure" and stable reading habits.

caregivers, who are the most powerful agents of language development, both receptive and expressive, in the context of everyday activities and experiences. We know that the more words the children are exposed to, the more they can learn (Kail & Cavanaugh 2016). Caregiver-child relations in their turn strongly influence the ability to learn, by influencing self-esteem, general knowledge and motivation.

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. Book sharing is a practical and easy way for parents to talk with their child from the first year of life; it exposes young children to new language and extends vocabulary. Singing rhymes regularly helps children develop phonemic awareness. Having favourite stories at an early age is associated with children having good literacy skills later on. Importantly, encouraging enjoyment in reading stories together helps parent and child bond and develop a good relationship.

In the country reports several indicators are used to describe the literate home environment of very young children, 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. Children who live in a supportive home environment where parents like reading books read more and read better (Mullis et al. 2012a, p. 120). The importance of parental attitudes to reading is shown by the fact that internationally there are great differences in reading performance at grade 4 between children whose parents like to read (average achievement 535) and those who do not (average achievement 487).

**Number of children's books in the home:** Children living in homes with more children's books performed better in PIRLS 2006 (Mullis et al. 2012).

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

**ELA (Early Literacy Activities) Scale before beginning primary school**: Engaging in early literacy activities is strongly associated with school achievement (Mullis et al. 2012). Research has shown that children socialized in reading retain or even increase their advantage in language performance compared to their classmates when entering primary school (Kloostermann et al. 2009). PIRLS 2011 reports the percentages of students whose parents (often, never or almost never) engaged in literacy-relevant activities with them before the beginning of primary school (Mullis et al. 2012a, exhibit 4.6 - Early Literacy Activities Before Beginning Primary School, p. 126). Nine activities are considered: reading books, telling stories, singing songs, laying with alphabet toys, talking about things done, talking about things read, playing word games, writing letters or words, reading signs and labels aloud.

The Early Literacy Activity Scale correlates with later reading performance in grade 4. The international average reading score in Grade 4 of pupils who often engaged in these activities with their parents before the beginning of primary school was 529, compared with 506 for pupils who sometimes

engaged in these activities, and 430 for those who never or almost never engaged in them. These data demonstrate the importance of the time devoted to literacy-related activities in early childhood and their association with achievement in grade 4.

While the Early Literacy Activity Scale gives composite score, it is of interest to look at single items, f.i. reading books to children often before the beginning of primary school. Reading aloud to children raises their interest in reading and learning. It develops children's language and reading skills (Bus et al. 1995, Duursma et al. 2008). Shared book reading experiences have a special role in fostering early literacy development by building background knowledge about the world and concepts about books and print. Since reading to the child is a predictor of future literacy achievement it is a matter of concern that on European average only 58.4% of parents read often to their children before the beginning of primary school.

#### 3.1.2 Providing a literate environment in school

Schools play an important role in offering a literate environment for children and adolescents. 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.

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

In the country reports the following topics/questions concerning primary school children will be addressed. The information stems from PIRLS 2011 where teachers and principals were questioned.

- Availability and use of classroom library
- Resources teachers use for teaching reading
- Creating the digital environment: availability of computers and computer activities during reading lessons.

In primary and lower secondary schools, sustained silent reading formats (such as reading Olympics) can be productive, provided basic reading skills and fluency are sufficiently developed. In currently developed formats like "scaffolded silent reading" (Reutzel et al. 2008) these problems are taken into account.

In their reading-acquisition model for childhood and adolescence, Garbe, Holle and von Salisch (2006) emphasize that "reading for pleasure" – connected with "literary practices" – is in itself developing and thus changing its character and conditions of support in the different age-groups of early childhood, middle childhood and adolescence. After the phase of *intimate reading for pleasure* through daydreaming in middle childhood, adolescents turn towards the outer world, as this phase is characterized by establishing and exploring relationships with others: "Consciously reflected experience of otherness now becomes accessible and enhances the formation of the young person's own identity, as well as the readiness to open up towards the concerns of the world." (Garbe et al., 2010, p. 36) In adolescence, reading of fictional and non-fictional texts can develop into a valuable source of nurturing ideas about one's own identity and place in the world.

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, communicating, reflecting on and exchanging ideas about texts with peers and 'competent others', e.g. teachers or parents.

#### 3.1.3 Providing a digital environment

Our questions in the country reports concerning "digital environments / use of technology in education" were:

- Is digital literacy part of the curriculum?
- How are students supported in acquiring digital literacy? / How are students supported in contributing with their skills and knowledge?
- What classroom resources (books, notebooks, internet...) are used to support the development of adolescents' digital literacy?

#### 3.1.4 The role of public libraries in reading promotion

As an important provider of reading materials and environments alongside schools and families, **public (and school) libraries** have an important role to play within reading promotion inside and outside school. Literacy policies and programmes addressing libraries (book and media equipment, rooms and spaces for reading, qualification of staff, specific reading promotion offers) should be investigated.

Promising practices in fostering reading motivation and stable reading habits among children and adolescents have to offer a **broad variety of reading materials**:

"There should not be a hierarchical ranking of reading material. Books, comic books, newspapers, magazines and online reading materials are equally valid and important entry points to reading for children and adults alike. A literate, motivating environment is one that encourages and supports a wide **diversity of reading materials and reading practices**. Books and other printed texts are important. But in recognition of the digital opportunities, people should be encouraged to read what they enjoy reading, in whatever format is most pleasurable and convenient for them. This includes reading and writing online."

(HLG report, p. 42)

Besides the criteria of *multi-modal texts* and *multiple genres* (without canonical hierarchical selection) reading materials should also take into account *gender differences* in reading preferences between boys and girls and *ethnic diversity*.

Furthermore, promising **reading environments** to stimulate pleasure-reading among children and adolescents should offer spaces for communication and exchange of ideas – either face-to-face (like in reading clubs) or online, e.g. in social media. It is very important that those environments are truly *open spaces* which invite young readers to authentically express what they think and feel about a topic. A broad variety of approaches to texts should be offered including creative reader-response-interactions so that children and adolescents feel appreciated in their individual approaches to texts. The "three-pillar model" of good reading environments for adolescents developed by the ADORE-

team outlines those three aspects: "interesting reading offers", "motivating reading locations" and "diverse reading orientations" (Kruse & Sommer in Garbe et al. 2010, p. 134f.).

In the **country reports** we collected information on the following questions concerning "reading environments to stimulate reading motivation and engagement":

- Do schools (together with community institutions) offer attractive / diverse / gendersensitive reading materials and environments in print and non-print?
- Is there systematic cooperation with parents, libraries, bookshops, etc. in reading promotion for adolescents?
- Are reading / writing activities part of regular extra-curricular activities in school programmes?

# 3.1.5 Improving literate environments for children and adolescents:programmes, initiatives and examples

In our country reports, we asked for examples of good practice in the following domains:

- Family literacy programmes
- Programmes for introducing parents and children to libraries and bookshops
- Initiatives to foster reading engagement among children and adolescents
- Offering attractive reading material for children and adolescents in print and non-print
- Fostering digital literacy in and outside schools.

In the European Framework of Good Practice we defined features of good practice in those domains.

#### 3.1.5.1 Family literacy programmes

Family literacy programmes may differ widely in their objectives; they may also differ in the means for achieving those objectives. Family literacy programmes may seek to: 1) improve children's reading skills through the involvement of other family members, or 2) improve the literacy skills of children and at least one other family member. In most European countries, family literacy programmes typically focus on the first objective: the aim of the intervention is to improve the literacy skills of the child, in part by improving the parent's ability to *support* the child's literacy development. (In this discussion, 'parent' is used a generic term. Family literacy programmes may involve other adults, e.g. grandparents.) Family literacy programmes in the UK and Ireland often add an additional element. In these two countries, many family literacy programmes seek to improve the literacy skills of children and parents. Such interventions are known as 'dual track' programmes.

An intervention's focus on literacy skills may be direct or indirect. Programmes with a direct focus may seek to help children improve specific literacy skills. In contrast, other programmes may focus on improving children's and/or parents' literacy practices, e.g. encouraging them to read for pleasure more often. Such programmes conceptualise improved literacy practices as a valuable outcome in its own right, but may also view it as an intermediary step towards improved literacy skills.

While some family literacy programmes focus only on literacy skills (e.g. as measured by test scores), other programmes take a more holistic approach. Programmes may, for example, complement a focus on literacy skills with an emphasis on child or parent non-cognitive skills, e.g. self-regulation or good parenting practices.

Family literacy programmes may also differ with regard to the family members that are involved at various stages of the implementation process. Many programmes bring children and parents together

for joint instruction in a classroom-like setting. In dual track programmes in Ireland and the UK, this approach may be supplemented by sessions in which parents receive specialist instruction from an adult literacy expert, while children receive specialist instruction from a child literacy expert. Other implementation strategies include approaches in which only parents have direct contact with instructors. In Turkey's Mother-Child Education Programme, for example, instructors work with mothers; these mothers then work with their children at home to apply the lessons the former have learned.

Pedagogical objectives are programme- and age-group dependent, but many family literacy programmes share features of successful programmes in other areas described in this framework, e.g. 'Fostering emergent literacy'. However, given the wide range of family literacy programme types and objectives, it is difficult to define general criteria for successful family literacy programmes. Some criteria are often shared across programme types. In particular, successful programmes typically emphasise the importance of reading for pleasure, and the parent-child bonds that are strengthened through joint reading. Programmes targeted at younger children (e.g. 0-3) are particularly likely to encourage parents to talk with their children, and to support parents in improving their child interaction skills. Amongst book gifting programmes and other interventions focused on reading for pleasure and parent-child bonding, successful programmes often seek to establish strong working partnerships across a number of policy areas. In such programmes, there is an emphasis on reaching out to families through a broad range of family services. Programmes may thus involve paediatricians, nurses, libraries, and early childhood education and care centres, among others.

#### 3.1.5.2 Book-gifting programmes

Book-gifting programmes promote reading in the home through the distribution of free books for children and their families. In most cases, book-gifting programmes are directed towards families with children 0-3 years though there are examples of schemes for older children. Programmes range from simple book distribution schemes to those that combine guidance, additional resources and added value activities.

Book-gifting programmes are funded through governmental bodies, charities and commercial organisations and generally involve a number of partners such as publishers, health, libraries and early years/kindergarten. Book ownership, as part of a broader literacy environment, is associated with language and literacy development and later attainment; receiving books as gifts and visiting libraries and bookshops are positively associated with reading attainment. Book-gifting schemes are most effective when book-gifting intersects with the broad range of provision for early years development.

#### 3.1.5.3 Reading (and writing) promotion programmes for children and adolescents

Reading promotion programmes make an important contribution to reading motivation and in helping to create a positive culture for reading. Such programmes or 'promotions' stimulate and motivate readers, bring authors, publishers, bookshops and libraries in touch with readers, and making the enjoyment of reading visible to the wider public. The rich variety of reading promotion programmes and the extent to which they are received by the public at large are important indicators of the culture of reading of a particular region or nation. Increasingly programmes do not concentrate only on reading but on writing as well, as there is no writing without reading and because both activities are often combined in literacy practices: Reading and writing are separate activities but also offer, for the literate person, complementary ways of communicating

Reading and writing promotion programmes are particularly effective in generating positive images of literacy in the media and therefore in the public perception, which reinforces the messages of professionals in classrooms and elsewhere, of the fundamental importance of literacy.

Empirical research up to now has focused on reading for pleasure and indicates that regular reading for pleasure improves the literacy skills of children, young people and adults, which can lead to greater participation in society and wider employment opportunities. This includes access to appropriate learning environments in and outside schools as well as committed and well-trained educators who support students' engagement in reading and writing for pleasure, with access to books and other reading materials in all formats. Support is needed from parents, teachers and the wider community, including publishers and booksellers, schools and public libraries, and health and early years professionals. Of special importance are those programmes that address struggling readers and writers and bring diverse cultural backgrounds or generations into meaningful exchange. The Eurydice report on "Teaching Reading in Europe", however, highlights one problem which especially impacts the "promotion of reading outside school" (ch. 3) and is known in reading research as the "Matthew effect" in reading development (Stanovich, 1986): The rich get richer, the poor get poorer:

"A plethora of large-scale state-funded programmes exist in Europe which promote reading either across the whole society or in particular sections. However, many reading promotion initiatives take the form of literacy activities which may largely attract those already interested in reading. Targeted programmes for groups with low literacy levels, or for boys, appear to be rare."

(Eurydice et al. 2012, p. 133)

#### 3.1.6 Providing a positive literate environment for adults

The literate environment constitutes the demands on and supports for adults' literacy in any particular domain. Adults engage with written texts in the workplace and the home, when accessing government services and responding to government demands for information, when using public transport and healthcare services, when dealing with their children's schools and of course through the marketing of goods and services, which generate a great deal of the written text that adults encounter. These written texts can be in print or on a screen, with digital accounting for an increasing proportion of the texts that we encounter. Consideration of the uses of written texts in each of these domains, both in print and digital, is vital for the creation of a positive literate environment.

One of the important messages emerging from analysis of PIAAC data centres on the importance of adults' literacy practices – what people do with reading and writing and how often, at work and (even more strongly) outside work. PIAAC provides rich data on the use adults make of their skills. Practices appear to have a positive relationship with performance in literacy. The OECD's preliminary analysis of PIAAC data found that "Adults who read frequently ... outside work have higher scores on the literacy scale, on average, than their counterparts who rarely engage in such activities" (OECD 2013b, p.190). It can be argued that adults' literacy practices contribute to the development and maintenance of their skills.

Such literacy practices are carried out with reference to the literate environment in which particular adults live and work. Encouraging adults to engage in literacy practices, and supporting them to do so, should be central to any strategy to improve literacy levels. However, large numbers of adults are not engaged with reading, others not with writing at work. Many others are not engaged with some of these domains of practice outside work. In the same way as use of skills appears to

develop proficiency, data from PIAAC on prior educational attainment suggests that skills can also decline over time: 15% of adults who scored at Level 1 and below had completed tertiary education and 33% had completed upper secondary.

As adults' reading and writing skills and practices respond to and are shaped by the demands on and supports for their reading and writing in any particular domain, consideration should be given to these demands and the support available to adults in all areas of their lives. It is important to offer a broad range of reading and writing opportunities so that adults are motivated to make use of their literacy skills, as it is the use of reading and writing that enhances people's literacy skills. As adults read in many domains it is clear that the literate environment involves different institutions and so systematic cooperation between policy makers is of great importance.

It is important that adults are offered a broad range of reading and writing opportunities so that they are motivated to make use of their literacy skills. The literate environment includes written materials, electronic and paper, that we see in our daily lives on walls and noticeboards, through print and broadcast media, in emails, and social media posts, or that we engage with at work, or in the home, or to pay our taxes or vote in an election.

The primary objective of policy-makers in engaging with the literate environment should be to influence it to increase skills use by encouraging and supporting engagement in reading and writing practices. This requires the cultivation of a culture of literacy, increasing the visibility and availability of reading materials and promoting reading and writing in all its forms, through diverse materials, online and on paper.

# 3.2 Improving the quality of teaching

"Access to education means little without high-quality provision and specialised support targeted at those who most need it."
(EU High Level Group 2012: 46)

The quality of *teaching* is a key determinant of students' educational success. To improve the quality of teaching for all ages, important aspects need to be considered: the quality of preschool, coherent literacy curricula, high- quality literacy instruction, early identification of and support for struggling literacy learners, highly qualified teachers and creative and coherent print and digital material. In schools there is a need for regular screenings and assessments to identify struggling literacy learners in order to provide early intervention and support for those with literacy difficulties. In adult provision accurate screening to place learners in appropriate provision and ongoing assessment to monitor their progress is of great importance.

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

#### 3.2.1 Quality of preschools

While early childhood education has long been neglected as a public issue, nowadays early childhood education and care (ECEC) has been recognized as important for "better child well-being and learning outcomes as a foundation for lifelong learning; more equitable child outcomes and reduction of poverty; increased intergenerational social mobility; more female labour market participation;

increased fertility rates; and better social and economic development for the society at large" (OECD 2012, p. 9). In all European countries pre-primary education is an important part of political reflections and actions.

Pre-primary education (ISCED 0) is defined as the initial stage of organised instruction. It is centre or school-based and designed for children at least three years of age. In most European countries, ECEC is split into two separate phases according to age; the age break is usually around 3 years old. The responsibility for ECEC governance, regulation and funding is divided between different authorities.

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."

(HLG report 2012, p. 59).

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

The following indicators for structural quality of ECEC are used in this report:

- **Annual expenditure on pre-primary education:** More investment in pre-primary education may offer better quality in teaching.
- Ratio of children to teachers in pre-primary school: Small preschool class size can increase educational effectiveness. When groups are smaller and staff-child ratios are higher, teachers provide more stimulating, responsive, warm, and supportive interactions (Barnett et al. 2004). Children in smaller classes had greater gains in receptive language, general knowledge, cooperative behaviour, and verbal initiative, and showed less hostility and conflict in their interactions with others (Espinosa 2002). The effects of class size have been found to be larger for younger children (Barnett et al. 2004).
- Percentage of males among preschool teachers: Improving the gender balance of ECEC staff is one of the quality criteria proposed by the Commission on Early Childhood Education and Care (COM/2011/0066 final). The ECEC profession is still predominantly female. It is widely acknowledged that young children, especially boys, need male role models for social behaviour and attitudes toward literacy.
- Preschool teachers' qualifications: ECEC staff play the key role in ensuring healthy child development and learning (OECD 2012, p. 11). There is growing evidence that teacher preparation is a powerful predictor of children's achievement, perhaps even overcoming socioeconomic and language background factors. Furthermore continuing professional development is seen to be important for staff working with younger children. Of interest is the minimum required level to become a qualified teacher, the length of initial teacher training, and whether Continuing Professional Development (CPD) is obligatory.

The minimum qualification for becoming a teacher at pre-primary education is in most European countries a tertiary education degree at bachelor level. However, for some countries the minimum required qualification is a post-graduate degree at master's level (e.g. Italy, France), but for some others only an upper secondary or non/tertiary post- secondary level of education is required (e.g. Malta). The length of initial teacher training varies from 2 to 5 years, but for most countries 3 or 4 years of training are required (European Commission/EACEA/Eurydice/ Eurostat 2014, pp. 98-102). In most countries, CPD is generally considered a professional duty for the staff.

#### Concepts of literacy curricula in pre-primary education (age 3 to 6)

It seems evident that the nature and the quality of the preschool programme have an impact on later literacy achievement in school. Up to now we do not have measures of quality of literacy curricula. However there are attempts to describe programme types. Our analysis builds upon two reports which have analysed steering documents concerning curricula in pre-primary education and listed components of the curricula.

In this report we have a closer look at **language and literacy curricula in preschool institutions**. A framework of curricular content was developed taking into consideration linguistic features of written language and cognitive-developmental knowledge of how young children gradually acquire literacy (Downing and Valtin 1984, Valtin 1997, Clay 2000). A relevant theoretical model on the acquisition of reading and spelling was outlined by Downing (1984) in his theory of cognitive clarity: the learner must reconstruct the linguistic insights possessed by the inventors of the alphabetic script. During this process the learner has to gain cognitive clarity or insight into the function of print (that the squiggles on the page are a visual representation of language and not merely a set of symbols whose content is arbitrary), and the structure of our alphabetic system, that is the recognition of certain linguistic units represented in print.

Various studies (Downing and Valtin 1984, Clay 2000) have demonstrated that children before entering school have vague concepts about both the function of reading and writing and the concepts of print (what is a letter, a word, a sentence?). Learning the alphabetic code requires the ability to shift from content to form and an analysis of speech: segmenting utterances into words, words into sounds. Children acquire these insights only gradually, mostly by direct instruction and their experience with print. Longitudinal studies (among others Valtin 1997, Tafa & Manolitsis 2008, Scheerer-Neumann 2015) demonstrate the existence of a developmental sequence, which is the result of an interaction between children's emerging insights, the structure of orthography and the teaching method. Preschool children normally lack insight into the mechanisms of reading and they imitate the outer behaviour by "pretend reading" and scribbling.

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. Reading books aloud, telling stories, presenting picture books, using writing in communicative contexts (e.g. the teacher writes down words or sentences from the child's dictation) – these are all well-known methods.

In our framework for assessing and developing emergent literacy skills the following aspects are regarded as important and should be **components of a literacy curriculum**:

- Oral language and vocabulary learning. Competence in the language of the school is the key to learning to read and spell, so many children need a comprehensive programme to develop their oral language before entering school. ECEC and pre-school programmes should be comprehensive, with the aim of improving children's clarity of speech (volume and enunciation, both of which depend on and reinforce self-confidence) and broadening their vocabulary, grammatical accuracy and range as well as their communicative abilities. Kindergarten teachers should provide situations where children can experience different functions of language, in social play and role play in conflict situations, and problem solving.
- Familiarisation of children with the language of books (e.g. reading and telling stories) with the aim of getting them familiar with decontextualized language and the tighter syntax of written text.
- Motivating children for literacy-related activities: "Reading" picture books, preparing picture books, using writing in communicative contexts, exploring different materials for painting, drawing, scribbling or "writing". These activities also help children develop their fine motor control, which is needed for good handwriting and use of the keyboard. Curricula should state explicitly that children should not only be engaged in these literacy-related activities but motivated to practise and learn literacy.
- Providing a **literacy-rich environment**. Engaging children in literacy-related activities should imply the provision of a literacy-rich environment. However, this aspect is so important that in the curriculum there should be an explicit statement.
- **Concepts of print.** Children should develop the awareness that print carries meaning. By having their attention drawn to features of print, e.g. direction of print, letters, words, punctuation, children get to know the technical vocabulary of units of print (page, line, word, sentence, number, letter) and of literacy-related activities such as reading, writing and painting (Downing and Valtin 1984; Clay 2000).
- Language awareness (metalinguistic awareness). We prefer the broader concept of language awareness to the widely-used but vague concept of phonological awareness (Downing and Valtin 1984, Valtin 2012b). The ability to shift attention from content to form may be fostered in language games, by using rhymes, tongue-twisters and poems, and by singing and clapping syllables. With specific tasks, embedded in playful contexts, children can be prepared for phonemic awareness, the ability to analyse words into sounds and to synthesize sounds into words, which is an essential part of word recognition ("I spy with my little eye something beginning with... [initial sound]").

Pre-school programmes should focus on developing children's emergent literacy skills through playful experience, not by systematic training in phonics and teaching the alphabet. There is no evidence that systematic instruction of reading in preschool has any benefit for future learning (Suggate 2012).

In the country reports, steering documents are analysed as to whether there exists a literacy curriculum for preschools at all and, if so, which components are referred to. The overall impression from the general objectives statements in relation to curriculum and teaching and learning is the lack of explicit attention to reading and writing in preschool curricula. It may be that more explicit attention to reading and writing, while being careful to ensure developmentally appropriate requirements, could be

a recommendation from ELINET and a basis for future action – keeping in mind that there could be a gap between good intentions and misguided or neglected application. Therefore solid preschool teacher training is essential.

#### 3.2.2 Literacy curricula in schools

Curricula provide a framework for teachers with guidelines for their teaching aims, methods, materials and activities. Good literacy curricula are based on clear educational standards and embedding literacy instruction and promotion systematically across all school subjects and all year groups in education.

Although the concept of curriculum is difficult to define, we adopt a common agreed definition, i.e., a 'plan for learning' (Beacco et al, 2010), or a common programme of study in schools that is designed to ensure nationwide coherence of content and/or competence standards in education. The development of a curriculum implies several processes: political agreement, consultation, planning and development, piloting implementation, evaluation. This complex and lengthy process also involves various levels of the school system: Supra (international and/or comparative), macro (education system, state or region), meso (school or institution), micro (class, group, teaching sequence or teacher) and nano (individual). It is important to highlight that, in this process, "schools ('meso' level) and class teachers ('micro' level) always play a decisive part in implementing the curriculum" (Beacco et al 2010: 14). 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 schools.

As to the quality of **literacy curricula** for primary and secondary schools, they should be based on clear educational standards and embedding literacy instruction and promotion systematically in all school subjects and all grades (school years). Other features of good curricula are:

- Allowing adequate time for language and literacy instruction: School curricula should allow adequate time for language and literacy instruction (however, this is dependent on the quality of instruction).
- Using formative assessment as an integral part of teaching literacy: 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 teaching that matches their learning needs. This should prevent children leaving primary school with unrecognised literacy problems (HLG report 2012a, p. 67).

#### Literacy curricula in primary schools

The Eurydice report "Teaching Reading in Europe" offers a broad range of information about the content of reading literacy curricula and related official guidelines (European Commission/EACEA/Eurydice 2011).

In order not to duplicate this work only two aspects were addressed in the ELINET country reports whose importance might not yet be acknowledged and therefore might be missing in the literacy curricula and official guidelines. The first aspect relates to explicit instruction of grapheme-phoneme correspondences (phonics): Do reading literacy curricula and official guidelines in primary schools

foster the use of grapheme-phoneme correspondences not only in the first year but also in the higher grades?

"Especially in languages with complex spelling-sound relationships, systematic teaching of so-called 'grapheme-phoneme correspondence rules' – also called phonics – should not be stopped too early at primary level. Successful teaching methods must be continued. Systematic phonics instruction embedded in reading tasks and within a broad and rich language and literacy curriculum enables both normally developing children and those at risk of failure to make better progress in reading than incidental or no phonics instruction. Most EU Member States currently have curricular guidelines for phonics instruction, but in many it stops after the first few years of primary education, on the false assumption that the task has been completed."

(HLG report, p. 66).

The second aspect relates to reading comprehension strategies. Because the teaching of reading comprehension is more effective when several strategies are combined we asked: Do reading literacy curricula and official guidelines in primary schools include a wide range and a combination of several reading strategies? According to the Eurydice report "Teaching Reading in Europe" (Eurydice 2011) the literacy curricula and official documents mainly mention the first three of the strategies mentioned above whereas references to the other reading strategies are less frequent. Since self-monitoring of comprehension or reflecting on one's own reading process is a very important aspect in reading comprehension, it is remarkable that it is rarely mentioned in literacy curricula.

In the country reports the following questions are posed concerning literacy curricula in primary schools:

- Does the country have a national curriculum specifically for reading (literacy?), or is reading usually taught as part of the national language curriculum that also includes writing and other communication skills (Reading as a separate curriculum area13)?
- Do reading literacy curricula and official guidelines in primary schools besides word recognition and fluency which are normally an element foster the use of grapheme-phoneme correspondences not only in the first year but also in the higher grades?
- Do reading literacy curricula and official guidelines in primary schools include a wide range and a combination of several strategies?
- Are there detailed standards at each grade (school years) which form the basis of assessments allowing early identification of literacy difficulties?

#### Literacy curricula in secondary schools

Since literacy is crucial to support students' acquisition of knowledge across all school subjects and in a lifelong and life wide learning perspective, high quality comprehensive literacy curricula not only in the language subjects, but across all "content areas" are urgently needed. Such curricula should play a significant role in the design of school curricula, by demonstrating how reading and writing can contribute to learning, how to integrate literacy skills into each school subject and across the curriculum.

<sup>&</sup>lt;sup>13</sup> "Only six countries had a national curriculum specifically for reading, namely France, Hungary, the Netherlands, Northern Ireland, the Russian Federation, and Sweden. Reading usually is taught as part of the national language curriculum that also includes writing and other communication skills". (Mullis 2012a, p. 12)

Acquiring functional literacy is more than mastering the decoding processes of reading in elementary school. Actually, mastering functional literacy includes the transition from "learning to read (and write)" in the primary grades to "reading (and writing) to learn" in all subject areas in the secondary grades. More specifically, adolescents are exposed in and outside schools to a variety of increasingly complex texts - written texts as well as "non- continuous texts" (a combination of text, graphs, diagrams, tables, illustrations etc.) - in different "content areas", which means different disciplinary fields with highly specialized academic vocabulary, different text structures and different ways of producing and constructing knowledge. This kind of non-continuous text is actually guite common and can be encountered frequently in everyday life. Adolescents therefore need to develop a high level of "content area literacy" which means that the literacy skills acquired in school are not just connected to one school subject, e.g. mother tongue education. Developing content area literacy has to be supported by teaching discipline-specific literacy skills in all school subjects in all grades (school years) in secondary schools. Because content area literacy is such an important issue spanning all subjects, we will have a closer look at which role literacy plays in secondary school curricula. Our questions in the country reports concerning literacy curricula / reading instruction in secondary schools are:

- Are advanced literacy skills part of the national curricula in all school subjects and grades?
- How is the transition from "learning to read/write" to "reading/writing to learn" in secondary grades organized?
- Is "content area literacy" / disciplinary literacy incorporated in the teaching of all subjects?
- Is there a specific focus on literacy in VET (*vocational education and training*) provision for adolescents?
- What is known about the 'implemented' curriculum?

#### Literacy curricula for adults

(For the full set of questions asked about adult literacy, see Appendix E.)

For adults a distinction should be made between a curriculum framework, which outlines the overall approach to adult literacy education, but does not specify the content of such programmes, and a curriculum, which specifies the content of adult literacy programmes. Both are important elements of any literacy policy valid and provide valuable support for adult literacy practitioners.

From a lifelong learning perspective, a curriculum for adult literacy education focuses on literacy activities that are relevant for adults and adult lives. The Eur-Alpha Manifesto, developed by a transnational group of adult literacy learners (Schreuer & Buyssens 2011, p. 6) lists some of these: dealing with administrative texts, Information and Communication Technologies (ICTs), education, travel, safety, work, and civil rights.

In developing an adult literacy curriculum, thought needs to be given to the breadth of what literacy means or involves for different adults, and the ever-present question of who or what determines literacy curricula and who decides what is relevant for adults and their lives. We need to ask how it has been created, and what else it may be linked with, besides school curricula.

There are many methodologies for the teaching of adult literacy. Some of these are research-based and others have been developed locally by practitioners working with specific groups of learners. Practitioners learn about methodology formally through teacher education programmes, and informally through engagement with other practitioners. In some countries there will be one dominant

methodology, with tried and tested methods, in others a variety of methods, with supporting resources, will be employed.

Good adult literacy provision is responsive to the needs of adults and so, while an adult literacy curriculum may specify possible content of adult literacy programmes in terms of skills and knowledge, it should be used by practitioners as a guide rather than a prescription.

#### 3.2.3 Literacy instruction

While most literacy researchers have clear concepts about effective literacy instruction, we do not know much about what is actually going on in classrooms in European countries. There is a noteworthy shortage of data on actual reading / literacy instruction in schools, with the exception of self-reports by teachers which might not be valid and may be biased by social desirability. In order to describe the practice of literacy instruction we would need extensive observational studies. However, currently there are only a few observational studies available (Philipp 2014).

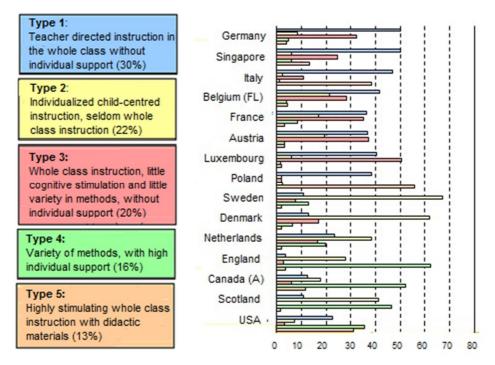
#### **Literacy instruction in primary schools**

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.

As can be seen from figure 3 there were significant differences between countries concerning these types of instruction (Lankes and Carstensen 2007).

Figure 3: Distribution of types of Reading Instruction (PIRLS 2006 data)



Source: Adapted from Lankes & Carstensen 2007

Also, the analysis of PIRLS 2011 teacher self-reports revealed differences between the approaches to reading instruction in European countries (Mullis et al. 2012a, Tarelli et al. 2012). While PIRLS at least offers some insights into self-reported activities of reading teachers in fourth grade, there is a remarkable lack of comprehensive, comparative data on how initial literacy is actually taught in the European countries.

The Eurydice Report about "Teaching Reading in Europe" (European Commission/EACEA/ Eurydice 2011) offers information about approaches in reading instruction by providing an overview of the academic research literature on reading instruction with a focus on teaching methods and activities which are **helpful for struggling readers**. In the academic literature we find a general consensus about the following components and aims of reading instruction:

**Helping the child to grasp the alphabetic code** and thus establishing a good foundation of early literacy development

**Fostering creative writing or inventive spellings**: Children who are encouraged to write spontaneously have fewer difficulties in understanding the alphabetic code (Valtin 2000). Through spontaneous writing children experience the communicative function of written language. In literacy learning programmes reading and writing should be integrated.

**Developing reading comprehension:** 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 (Duke and Pearson 2002). Learners need explicit or formal instruction in the application of comprehension strategies. Explicit teaching of comprehension strategies may improve reading comprehension among readers with different levels of ability. These strategies include:

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

Research shows that the teaching of comprehension strategies is more effective when it takes place in a context where multiple strategies are explained, demonstrated and practised (Eurydice 2011, p. 62). However, as PIRLS 2011 found out, reading teachers, in order to develop the reading comprehension skills of pupils, sometimes rely on a single strategy, with a pre-dominance of summarising (Mullis et al. 2012a).

**Instruction should engage students in learning:** PIRLS 2011 demonstrated that students whose teachers used instructional practices to engage students' learning in most lessons<sup>14</sup> had higher scores in reading than when such practices were used in only about half the lessons or less (Mullis et al. 2012a, exh. 8.6, p.220).

<sup>&</sup>lt;sup>14</sup> The items were: 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.

**Cooperative and collaborative learning** motivates students to become actively and constructively involved in the task and has positive results such as deeper understanding of content, higher motivation to remain on task and improved self-esteem.

In the country reports the following questions are posed concerning reading instruction. The answers are derived from PIRLS 2011 teachers` reports.

- How much instructional time is spent on language and reading, as reported by principals and teachers?
- Which reading strategies do teachers use to develop students' reading comprehension skills?
- Which instructional practices do teachers use to engage students' learning?
- Does the language/reading curriculum prescribe assessment standards and methods?
- Do teachers use formative assessment?

### Literacy instruction in secondary schools

As for **adolescents** we do not have comparable international data available (e.g. from the PISA studies) we did not tackle this issue in our country reports related to secondary schools.

#### **Literacy instruction for adults**

The EU High Level Group placed great importance on the quality of the teaching available for adults with literacy needs. Improving the quality of adult education and training means improving all the components that shape it, including learner recruitment and assessment processes, pedagogy and curricular strategies, teacher recruitment and training, and support for particular groups. It also means being clear about the level of commitment required to produce long-term literacy improvements.

Adult learning in Europe is fragmented and diverse. As adults enter and exit education when they (or their employers) choose, and at varying stages through their lives, participation can be hard to quantify, achievement hard to measure, and learning journeys hard to track (Litster et al 2010). The same observations are true for adult literacy learning, making it difficult both to define and difficult to locate, in talking about adult literacy provision, that is, provision that aims to improve reading and writing skills.

The adult sections of the country reports refer to a broad spectrum of opportunities available to meet the needs of adult learners. A Eurydice report on *Adult Basic Education and Training in Europe* (Eurydice 2015) describing the main types of provision for adults with poor basic skills in Europe suggests that such programmes are varied in approach. They involve a range of providers and types of provision, delivered in a variety of settings including dedicated adult education and training providers, the workplace and the community.

This provision may take the form of formal courses, working within countries' qualifications frameworks and structures and leading to recognised qualifications, but they may equally be non-formal, with the main aim being to build confidence and to engage adults who may have had negative prior experiences of learning, and for whom a formal course is inappropriate.

Provision can be embedded, combined with vocational or other programmes of study; discrete, focused exclusively on literacy; or part of a more general course in basic skills alongside numeracy and perhaps ICT. Some are centrally controlled, and with others there is a great deal of local autonomy. Funding for such programmes varies greatly across the countries.

The Eurydice report notes that "the effectiveness of basic skills programmes should be evaluated over an extended period of time since adult learners, in particular those facing difficulties with basic skills, do not tend to follow a direct or uninterrupted learning path." This supports the findings of other research, such as the NRDC Adult Learners' Lives project in England (Barton et al 2006) which shows us how adult literacy learners often 'dip in and out' of different programmes and resources in response both to changing and developing life circumstances and goals, and to the relevance and effectiveness of the provision available to them at the time. This is often particularly true of people in community settings, whose lives are often characterised by disadvantage, and difficult and unpredictable events and situations. From the perspective of educational provision this can be seen as failure or 'drop- out', but within the broader picture of these individuals' lives it is often a positive and necessary step. Often, they are exploring new possibilities for their lives and learning, developing confidence in accessing formal learning, or accumulating social capital, as well as developing their literacy practices. The effects of this engagement are not always apparent at the time but can be seen unfolding over longer periods. Accordingly, higher drop-out rates in literacy programmes should not be regarded as a programme failure. Indeed, attending a short course, or even part of a course, can represent an important milestone in the learning pathway of an adult returning to education or training.

Adult literacy provision should be accessible to all learners, whatever their financial means. It is important that appropriate guidance on how to access such educational opportunities is available.

### 3.2.4 Early identification of and support for struggling literacy learners

Concerning struggling literacy learners (as defined in section 1.4.2), early identification of literacy difficulties and tailored support are crucial to prevent and eliminate literacy problems. All persons should receive tailored support and remedial teaching when needed, and opportunities to engage with diverse and interesting reading materials to motivate and encourage them to read and write more thus improving their skills.

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

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

All EU countries have defined learning objectives in reading (and writing) 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.

It is crucial that teachers provide support measures to help struggling literacy learners. 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 literacy difficulties.

The country reports provide information about relevant data concerning the identification of and support for struggling literacy learners:

- Are there regular screenings for reading (and writing) competence to identify struggling literacy learners?
- Do all pupils receive remedial instruction when needed? (PIRLS 2011)
- What support is offered? Is there provision for additional instruction time? Is that support
  delivered by special needs experts/literacy experts? (s. Appendix C, ELINET PIRLS 2011,
  Tables K2-K4).
- Additional staff what is the availability of support persons?
- Is there a legal right for support for struggling readers?

# 3.2.5 Initial teacher education (ITE) and continuous professional development (CPD) of teachers

To improve students' performance and establish cognitive and affective ground for their future development as life-long readers and writers, teacher expertise and the quality of teacher education are increasingly regarded as critical.

The European Commission (2008) confirms that the quality of teaching staff has implications for shaping the future of Europe in terms of economic and social development. Within this perspective, the Ministers of Education agreed in 2007 to give high priority to improving the quality of teacher education. This is a very effective way of influencing student performance according to the OECD because there is "...substantial research indicating that the quality of teachers and their teaching are the most important factors in student outcomes that are open to policy influence" (OECD 2005b, p. 9).

To lay the foundations that all students can thrive in every subject, the High Level Group of Experts on Literacy recommended: "Make every teacher a teacher of literacy" (HLG report, p. 92). The experts identified three main obstacles which need to be addressed when it comes to teaching literacy:

"**Time:** if literacy is treated as an extra to be added onto an already crowded curriculum, then it will not be integrated on a systemic level, even when teachers have the best of intentions.

**Training:** for content area teachers to integrate literacy into their teaching, literacy must be integrated into their education and training – both pre-service and in-service – and into the curriculum.

**Leadership:** literacy must be seen as essential not just by literacy specialists, but by the entire school system. School leadership plays a crucial role in fostering teacher collaboration on reading." (HLG report 2012, p. 73)

The particularly complex task that is the teaching of reading and writing requires that prospective teachers should learn to develop resources based on these three dimensions during their initial training. Future teachers and those already in service need specific knowledge and skills regarding "foundational knowledge on reading and writing processes and instruction: curriculum and instruction;

assessment and evaluation; diversity; literate environment; professional learning and leadership" (International Reading Association, 2010).

Internationally, there is a growing recognition that pre-service teacher education is a crucial stage in teachers' development as lifelong learners (see Framework for TALIS 2013, OECD 2005b), and that the identification of relevant competencies serves to strengthen the work of beginning and established teachers (e.g. International Reading Association Standards for Reading Professionals, 2007). The McKinsey Report on "How the world's best performing school systems come out on top" (2007) identified the three biggest impact factors on the quality of schools and learning outcomes (as measured in the PISA studies). Two of them are related to teacher education:

- "1) Getting the right people to become teachers,
- 2) Developing them into effective instructors,
- 3) Ensuring that the education system is able to develop the best possible instruction for each child."

The first factor, "getting the right people to become teachers", requires **selective teacher recruitment policies**. OECD (2005) suggests broadening the selection criteria for new teachers to ensure that the applicants with the greatest potential are identified, by interviews, preparation of lesson plans and demonstration of teaching skills in selection processes for new teachers, and consideration of characteristics such as commitment and sensitivity to student needs. However, according to Key data on Teachers in Europe (European Commission/EACEA/Eurydice 2013), only a third of all European countries have specific selection methods for admission to initial teacher education in place. Overall, admission to initial teacher education seems to be governed by the general entrance requirements for entry to tertiary education.

The second factor, "develop them [i.e. future teachers] into effective instructors", requires high quality **initial teacher education (ITE)** and **continuous professional development (CPD)**. Regarding the quality of effective literacy instruction, prospective teachers, as well as those in in-service training, need to develop and extend their knowledge and understanding of what literacy is and how it can be used, of the various ways in which their students learn, of how they can be helped to do so most effectively and of what children, adolescents and adults are capable of achieving at particular stages of their development. They also need substantial experience of working with students in the target age group in appropriate contexts.

It also implies that continuous professional development (CPD) is an important part of lifelong learning for all professionals engaged in literacy promotion and instruction of children, adolescents and adults. While much can be achieved in good courses of Initial Teacher Education, regular CPD is essential if teachers and other professionals are to profit from research-informed advances in understanding of what literacy learning involves and how it can best be facilitated.

## **Primary schools**

It is still not the case that all literacy teachers in primary schools in Europe have a **solid training in literacy**. Based on reviews of the academic research literature (IRA 2007, Eurydice 2011) the following elements of the **content of teacher preparation** might be distinguished:

• Foundation in theory and research concerning children's language and literacy development, learning theory and motivation

- Instructional strategies at the word and text levels
- Reading-writing connections
- Instructional approaches in remedial reading and materials
- Assessment techniques
- Training in educational research methods and practice.

According to PIRLS 2011, fourth-grade students are typically taught reading by general-purpose primary school teachers who are responsible for teaching all basic subjects. Most primary school teachers were not required to have training in teaching reading (and writing) per se (Mullis et al. 2012a, pp. 15-16).

Concerning the training of literacy teachers, the **country reports** contain the following information on the **organisation** of ITE and CPD:

- Are there specific selection methods for admission to initial teacher education?
- What are the entry qualifications?
- What is the length of the required training?
- Do all teachers of reading (normally classroom teachers) have a training in language/ literacy?
- Is there compulsory continuing professional development (in-service training) for teachers which focuses on literacy development?
- How much time has been spent on professional development related to reading in the past two years?
- Are there courses for enhancing teachers' skills to deal with struggling readers?
- How is its quality assured?

Important teacher competences are a) the assessment of the strengths and weaknesses of each individual student they teach, b) selection of appropriate instructional methods, and c) instructing in an effective and efficient manner. The results of PIRLS 2011, however, provide evidence that in some countries there exist shortfalls in teaching skills and difficulties in dealing with heterogeneous groups (gender, migration background, students from lower social classes). All these findings point out to the necessity of better professional development of literacy teachers. International studies such as TALIS (2013) provide comparative data on European teacher education systems, and many theoretical and empirical studies provide information on good literacy teaching, but no study exists which helps to identify the quality of initial education of future teachers of literacy.

For the ELINET country reports we focus on those aspects of knowledge and skills that are important for preventing literacy difficulties and helping struggling literacy learners:

- To what extent does initial training particularly emphasise the teaching of reading and writing?
- Is tackling reading difficulties a subject in ITE?
- Is assessing pupils' literacy skills a topic in ITE?
- Teaching practice for prospective teachers of literacy: What is the duration of in-school placement in ITE?

#### **Secondary schools**

The reading (and writing) difficulties of adolescents in many European countries as measured by the PISA studies may to a considerable extent be caused by the lack of a systematic reading (and writing) instruction in secondary schools in all academic subjects. Researchers and literacy educators recommend that understanding content area texts (or disciplinary texts) should be taught in all subjects and all grades systematically. But in European countries, content area teachers are not trained to fulfil this task: The mathematics, history or science teachers in secondary schools are usually *not* prepared to teach literacy skills in their classrooms. Therefore those subject teachers consider only the mother tongue teachers to be responsible for the reading and writing skills of their students.

However, we know from extensive research during the last decades that this is a wrong concept (Garbe et al. 2010, Garbe 2014 and 2015).<sup>15</sup> The idea that reading and writing skills have to be taught "across the curriculum", which means related to discipline-specific texts in *all* school subjects, is called "content area literacy" (CAL) in international research and education practice. In the United States, for example, research and development around content (area) literacy has a history of more than 100 years; from the late 1960s up to today extensive research and study books around CAL have been published, as well as nearly 20 national reports and position statements on adolescent literacy in the U.S.(see overview in Brozo 2014).

In the ELINET **country reports** the following questions related to teacher education of secondary teachers were raised:

- What are the statutory qualification requirements for secondary educators?
- Is there a curriculum for initial teacher training? Are there quality standards? Are there compulsory (or optional) language and literacy modules in secondary ITE?
- Is "content area literacy" a compulsory part in initial teacher training of all secondary teachers?
- What is the length of the required training?

Regarding **continuing professional development of secondary teachers**, we know from research that it is very important that teachers continue to foster their professional skills in professional development opportunities after they have completed the induction phase of their training. Following the TALIS definition, professional development activities "aim to develop an individual's skills, knowledge, expertise and other characteristics as a teacher" (OECD, 2014c, p. 86) and are as such key to improving classroom instruction and student achievement (Yoon, 2007, p. 44). Furthermore, teachers' continuing professional development is central to education policy debates "...because it is highly relevant both for improving educational performance and effectiveness, and for enhancing teachers' commitment, identity and job satisfaction." (European Commission, 2013, p. 113; European Commission, 2013, p. 9)

Since the teaching profession today needs to "be able to constantly reflect on and evaluate their work and to innovate and adapt accordingly" (OECD, 2014c, p. 97), professional development needs to be more than what happens from time to time in a workshop. "Improving literacy instruction through professional development is an ongoing process involving all of the members of a schoolwide literacy

<sup>&</sup>lt;sup>15</sup> The ADORE-findings were later on supported by the Final Report of the European High Level Group of Experts on Literacy, published in 2012 and containing, among others, age-specific recommendations for children, adolescents and adults. For adolescents, this report put on top of the agenda of its action plan the claim: "Make every teacher a teacher of literacy!" (HLG Final Report 2012, p. 92).

team in activities that will help them become more effective in what they do." (Strickland & Kamil, 2004, p. vii) On the dimension of time, this means that "successful professional development involves a long-term perspective" (EURYDICE et al., 2012, p. 87) and that "one-shot approaches" have almost no effect on changing classroom practice of teachers. (Garbe [Ed.] 2012, BaCuLit Handbook for Trainers, p. 51)

On the dimension of involvement, research also suggests that "high-quality professional development in teaching skills for reading literacy also entails a collective dimension across the school". Biancarosa and Snow go on to state: "Professional development in teaching reading must be inclusive (involving not only classroom teachers but also literacy coaches, learning resource personnel, librarians, and administrators). It should also be team-oriented, where school personnel create and indefinitely maintain a whole-staff approach to improving instruction and institutional structures that promote improved (adolescent) literacy" (Biancarosa & Snow, 2004). Such a perspective is related to the notion of a "professional learning community" (EURYDICE et al., 2012, p. 87). Scholars can also offer some findings on how successful professional development should be structured: professional development should involve teachers in learning activities that are similar to the ones they will use with their students in order to enhance their skills for research-oriented and reflexive teaching practices (OECD, 2005). Action research into one's practice should be a focus of study in initial teacher education programmes and in continuing professional development. (Stanovich & Stanovich, 2003) Generally, teachers need opportunities and tools to systematically reflect on their own practices as they move towards change.

All these valuable insights into the importance of continuing professional development would be worthless if teachers do not have the chance to participate in CPD activities. Across various OECD countries, "teachers' most commonly reported reasons for not participating in professional development activities are conflicts with work schedules and the absence of incentives for participation" (European Commission, 2013, p. 86.) This is an issue which can certainly be addressed by educational policies.

In the **country reports** we addressed the following questions regarding professional development of secondary teachers:

- Is there compulsory continuing professional development (in-service training) for teachers which focuses on literacy development?
- What is the take-up among teachers?
- Who delivers this training?
- How is its quality assured?

#### **Teacher education for adult literacy teachers**

The selection of teachers and their pre-service and in-service training should also be priorities for adult literacy policy-makers. In Europe and elsewhere, there is a backlog in the professionalisation of the infrastructure and human resource development of adult literacy provision (EU High Level Group, 2012, pp.60, 66, 73, 80, 83; UIL, 2010, p.13).

Practitioners who work directly with adults supporting them to enhance their literacy skills work under many different labels within and across countries. In English they may be called teachers or trainers or tutors, and other languages have a similar range of titles. Different kinds of professional may act as teachers for adults' literacy skills, depending on the social context (work, leisure, educational

institution, religious institution, etc.), and because of the inter-sectoral nature of adult education and learning. There are other distinct roles within the provision of adult literacy teaching and learning. As well as a teacher who designs and delivers learning in a classroom setting, there are also learning support assistants who support a particular learner one-to-one, and outreach workers who engage with communities and guide individuals in their learning.

Teaching adults is complex, and teaching adult literacy even more so; frequently, adult literacy teachers work with learners for whom traditional or simple methods of learning to read or write have not worked. Acquiring the level of knowledge and expertise required to support such adults takes time, and involves a combination of theoretical and practical knowledge. In order to ensure quality, there should be clarity about the expectations regarding the qualification of teachers and what is considered good quality adult literacy teacher training.

Multiple entry points for adults to become adult literacy teachers can be useful, due to the heterogeneity of the educational environment for adults, and to the fact that many practitioners come to adult literacy teaching as a second career. Funding mechanisms need to be in place so that adult literacy teachers can afford their own initial education and continuing professional development.

Literacy is an issue that cuts across all subjects. The use of reading and writing is important in all subjects in educational contexts. Thus, teachers in all content areas of adult education should be supported in identifying and teaching the literacy skills that are needed in their respective subject area.

## 3.2.6 Digital literacy as part of teacher education

Digital media are now the norm for everyday literacy practices – the rise and spread of digital technologies have significantly altered what it means to be literate in the 21st-century, with profoundly enabling (or disabling) implications for interpersonal, community and individual communication. The digital, interconnected and mobile character of media not only alters the ways of accessing knowledge and sense-making but also the forms of communication. Thus, diverse competences in literacy and media literacy are needed (Bearne, 2003), and the term "multi-literacy" is used to refer to the range of practices that characterise contemporary "literacy" (Cazden, Cope, Fairclough, & Gee, 1996).

Digital literacy is not just reading and writing online but includes specific abilities: Online reading includes being able to find information in the internet (identifying key words, search for phrases, scanning heterogeneous links), using navigation devices (i.e., assessing the relevance of verbal expressions, understanding the hierarchical structure of information), the accumulation of information across multiple sites, and critical evaluation of the source of information. Because the boundaries between production and reception have shifted, digital media offer new possibilities of participation and designing: by using tablets or smartphones everyone – even very young children – can produce multimodal documents combining written texts, visual elements, audio and video clips. Communication means conveying and understanding meaning, not only through spoken and written language, but also through other semiotic modes including images, sounds, body movements etc. (Flewitt, 2012; Hausendorf, Mondada, & Schmitt, 2012; Knoblauch, 2013).

E-learning today means **m-learning (mobile learning**), i.e. having access both to all kinds of means to express ideas and to inform oneself and to the internet throughout the learning process. So far m-learning mainly takes place in informal situations out of school (Pachler, 2007, p. 4): adolescents communicate with peers and/or access data via smartphones and tablets. On the one hand, this means that learning settings are no longer limited to the formal setting of classrooms. On the other hand,

until now (children and) adolescents act on their own, so that it is not always guaranteed that adolescents use media in a responsible and critical way. Usually schools and teachers would not be aware of adolescents' literal practices, their competences, interests and abilities or they would not accept them as literacy. Therefore, adolescents themselves often do not recognize their literal engagement as literacy practice. While using digital technology, they do not perceive themselves as readers and writers. Many adolescents seem to think that school literacy has nothing to do with them, their lives, their needs and concerns (Wiesner, 2014).

School has to close that gap instead of widening it even further (Bearne, 2003; Cazden et al., 1996). Even though curricula claim to teach literacy as multi-literacy, so far only a few efforts are to be observed or have been made in small projects. Teachers are still quite insecure about how to use digital technologies in classrooms. Often they think of digital media as tools they have to work with on top of the subjects instead of integrating digital media into teaching and learning processes (Wiesner & Schneider, 2014). Literacy at school should be a central point and part of the students' world, and not a separated senseless exercise:

The need is to move away from a monocultural and monomodal view of literacy. One way in which teachers, curriculum, and policy can respond to this task is to broaden the diversity of signs and cultural meanings that circulate in the classroom. Multimodal texts may be used by teachers in the classroom as the basis for critical engagement, redesign, or the explicit teaching of how modes construct meaning in specific genres. (Jewitt, 2008)

In the ELINET country reports we asked about whether digital literacy is an explicit part of teacher education.

# 3.2.7 Improving the quality of literacy teaching for children and adolescents: programmes, initiatives and examples

In our country reports, we asked for examples of good practice in the following domains:

- Improving the quality of preschools
- Providing more cognitively demanding literacy instruction in school
- Early identification of and support for children and adolescents with literacy difficulties (screenings/assessment tools for identifying literacy learners' needs)
- Teacher education and professional development.

In the *European Framework of Good Practice* we defined features of good practice in those domains as well as in some additional areas:

- Comprehensive literacy programmes (in schools)
- Programmes fostering digital literacy and multi-literacy skills of students and adult learners
- Literacy curricula for primary and secondary schools and adult learners.

# 3.3 Increasing participation, inclusion and equity

As international literacy surveys such as PIRLS, PISA and PIAAC demonstrate in all European countries there are, to a greater or lesser degree, gaps in achievement between different groups. Of particular concern are the social gap, the migrant gap and (especially among adolescents) the gender gap. To close or significantly reduce these gaps is one of the biggest literacy challenges in Europe. Pupils with sensory and cognitive impairments, often referred to as students with special educational needs are also at risk in terms of literacy achievement.

#### The socio-economic gap

Children and adolescents from disadvantaged families have lower mean performance in reading than students from more advantaged families. (Mullis et al. 2012, OECD, 2011). However, the degree to which family background relates to reading literacy performance varies from one country to another even in Europe (Sulkunen 2013, p. 532). Family background, whether measured as parents' educational level and/or occupation (Linnakylä et al. 2004, Mejding and Roe 2006) or measured as economic, social and cultural status (Fredriksson et al. 2012, Sulkunen and Nissen 2012), is one of the most important predictors of reading literacy performance. However, there is evidence that the economic status of the family is a less important predictor of reading performance than cultural capital and social capital (Jensen and Turmo 2003). This means that low appreciation of culture and reading at home – reflected in the number of cultural items and books – is a risk factor for low performance in reading, even if the family is a relatively wealthy one (Sulkunen and Nissen 2012). Most struggling readers grow up in surroundings where reading is of little or no importance at all for everyday media use (Pieper et al., 2004). These children and adolescents grow up in families with no or hardly any newspapers or magazines available, and frequently there is a predominance of audiovisual media and audiovisual use of digital media (e.g. video gaming). Thus, these children and adolescents do not see that reading is valued in their families and cultural surroundings, and they do not experience that reading or being read to can be a pleasurable activity. Against this background, school demands concerning literacy are often perceived as strange and threatening since they have little or nothing to do with the students' own learning pre- conditions and cultural practices.

#### The migrant gap

There is an unequal distribution of learning outcomes between native-born students and immigrant students: in most countries immigrant students have lower levels of performance in reading (Mullis et al. 2012a, OECD, 2011). 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 having a home language different from the language of instruction at school, which increases the risk of low performance in reading. According to PIRLS 2011 across the EU-countries there is a large and significant difference – 26 points – between those who always spoke the language of test at home and those who did so 'sometimes or never'. In PISA 2011 this gap is even higher: 54 score points is the European average. This is also evident in the PISA 2009 study for the four Nordic countries participating in the study (Fredriksson, U., Rasmusson, M., & Sundgren, M, 2012; Sulkunen & Nissen, 2012) and also in earlier PISA studies (Linnakylä, P., & Malin, A. 2007; Linnakylä, P., Malin, A., & Taube, K., 2004, 2006). 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 (e.g. Harju-Luukkainen, H. & Nissinen, K., 2011) which signals the importance of a good command of the language used at school.

#### The gender gap

Another alarming gap in reading literacy in many countries is the gender difference, which is more vital for adolescents than for children. In PIRLS 2011, girls outperformed boys in reading in nearly all the European countries (Mullis et al. 2012), and boys are frequently overrepresented among the low performers. While this difference is relatively small for primary school students (EU average 12 points) it is much larger in adolescents (EU average difference in PISA 2012 is 44 points). In PISA 2009 assessment, girls outperformed boys in reading in all the European countries (OECD 2010a, p. 382), and boys are frequently overrepresented among the low performers (Fredriksson, U., Rasmusson, M., & Sundgren, M, 2012; Linnakylä, P., Malin, A., & Taube, K., 2004, 2006). 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, not to gender as such (OECD 2010a, p. 199). Reading engagement (defined in PISA as enjoyment of reading, diversity of reading and time spent reading) in fact mediates more than 40 percent of the gender differences in reading (Chiu, M. M., & McBride-Chang, C., 2006). OECD has estimated that if boys had had the same average of reading for enjoyment in the PISA 2009 study as girls, the gender gap would have been reduced significantly, and in many countries it would have been reduced to less than half. In some countries it would have almost disappeared (OECD 2010a). Therefore also the gender gap is related to growing up in a family or in an environment that values reading and learning and considers reading as a meaningful activity.

The OECD's Survey of Adult Skills (PIAAC) found no significant differences between men and women among the EU-17 with an average of 17% of men and 16% of women scoring at or below Level 1. Most individual countries also follow this pattern. However, this is not repeated everywhere. For example, men outperformed women in literacy in the Netherlands, Germany and Flanders, while more men than women were found among the low performers in literacy in both Poland and Denmark.

Education level and parents' socio-economic status have a more profound association with literacy scores in PIAAC than gender. However, gender does appear to interact with these factors. On average, low-educated women from socio-economically disadvantaged backgrounds have nearly five times the odds of scoring at lower levels of proficiency in literacy, compared to women with at least upper secondary education. For men the odds are closer to four times. This pattern holds in about half of the countries and is particularly evident in Flanders, Italy, the Netherlands, and Spain.

PIAAC didn't just test people's skills in literacy; it also asked them how they used them at work and at home. In general, women engage less than men with reading and writing inside the workplace and more than men outside. These differences may not be about gender as much as the jobs that men and women have, with women more likely to work part-time for example.

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" or persons with "special needs". Groups at risk in their literacy acquisition are children from disadvantaged homes, students with migrant background or whose home language is not the language of instruction, male students from low SES/migrant families or students with "special educational needs" or learning disabilities. The focus is on preventing literacy difficulties among members of these groups.

The term "**special needs education**" is used with different meanings in different countries. In some countries it includes only children with traditional disabilities, while in others it includes a broad range of students with disabilities, learning difficulties and disadvantages. For defining groups at risk we refer to the differentiation of cross-national categories used by Deluca (2012):

"Disabilities": Students with disabilities or impairments viewed in medical terms as organic disorders attributable to organic pathologies (e.g. in relation to sensory, motor or neurological defects). The educational need is considered to arise primarily from problems attributable to these disabilities.

"**Disadvantages**": Students with disadvantages arising primarily from socio-economic, cultural, and/or linguistic factors. The educational need is to compensate for the disadvantages attributable to these factors.

Both groups have special educational needs defined by the additional public and/or private resources (personal, material or financial) provided to support their education compared with the resources generally available to students likely to have no particular difficulties with the regular curriculum. 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 country reports the following questions were addressed:

- What data are there concerning risk factors?
- Are there screenings/assessments to identify children at risk in their language development?
- Do children with "special needs"/"children at risk" get early support?
- Is there specialist support for children with delays in their language development?
- What support is available for pupils whose home language is not the language of the school?
- How many students drop out from secondary schools?
- What policies are there to prevent early school leaving and/or to support adolescents' engagement in secondary studies?

#### 3.3.1 Compensating socio-economic and cultural background factors

The **child's socioeconomic and cultural background** has a strong impact on literacy. Material poverty and educational level, particularly of the mother, are well-recognized main factors influencing literacy (World Bank 2005, Naudeau et al. 2011). Socio-economic background also influences biological risks to children, by determining early exposure to risk factors and increased susceptibility (Jednoróg et al. 2012). The primary language spoken at home also influences literacy development (Sylva et al. 2004).

In order to describe the socioeconomic and cultural factors that influence **emergent literacy**, several indicators were used which stem from international surveys, thus providing comparability across Europe (for more information concerning the concepts and indicators s. Appendix A).

The **Gini index** is the most commonly used measure of inequality, and represents the income distribution of a nation's residents. The Gini Index is associated with inequality in literacy outcomes.

**Child poverty** is a major determinant of child development, which consequently influences child literacy (World Bank 2005, Naudeau et al. 2011).

**Mother's education level**: Maternal education level is more strongly associated with child literacy than father's education (McClelland et al. 2003).

**Teenage mothers**: Children of teenage mothers are at risk of being exposed to a disadvantaged home literacy environment and are at greater risk of school failure (Burgess 2005).

**Single parent**: Having a single parent may put limits on literacy resources at home and on parental involvement (Carpentieri et al. 2011). Children who have divorced parents are at increased risk of special educational need.

**Migrant parents**: Migrant status has strong impacts on reading literacy (Carpentieri et al. 2011). This factor is strongly associated with the primary language indicator, although it includes many other aspects than just language. The child is faced with language and cultural differences between home and school, and this may affect or influence motivation (McClelland et al. 2003).

**Primary language spoken at home different from language used at school**: Children whose primary language(s) spoken at home do not include the language spoken at primary school and kindergarten are disadvantaged with respect to other children in literacy development. Children speaking two or more primary languages, irrespective of whether one of the two is the language spoken at school, are at initial disadvantage in acquiring emergent literacy skills, although there is plenty of evidence that later on the benefits on overall language development, and on other life skills, outweigh this initial disadvantage (Hornberg and Valtin 2011).

Addressing the socioeconomic and cultural background factors of early literacy includes programmes and initiatives against poverty, specialist support for children whose home language is not the language of school, specific programmes for teenage mothers or for single mothers or fathers, and policies to help the poorest parents, e.g. funds for free book distribution, breakfast clubs, etc.

## 3.3.2 Support for children with special needs

Early support for children with special needs is necessary. The EU High Level Group of Experts on Literacy suggested:

"Ensure that all young children have their hearing, eyesight and speech tested at the appropriate ages, and that problems are corrected as soon as possible. Implement a system of early screening for language and pre-literacy skills and for identifying and reaching out to those who risk lagging behind or being excluded." (High Level Group Report 2012, p. 10).

In 2010 the EU formally ratified the **UN Convention on the Rights of Persons with Disabilities**<sup>16</sup> which states in Article 24 – Education: "States Parties shall ensure an inclusive education system at all levels and lifelong learning directed to enabling persons with disabilities to participate effectively in a free society". In realizing this right, States Parties shall ensure that persons with disabilities can access an inclusive, quality and free primary education and secondary education on an equal basis with others in the communities in which they live and receive the support required, within the general education system, to facilitate their effective education. Effective individualized support measures are provided in environments that maximize academic and social development, consistent with the goal of full inclusion.

<sup>&</sup>lt;sup>16</sup> http://www.un.org/disabilities/convention/conventionfull.shtml.

While in some European member states an inclusive school system is already established, in other countries there are still special schools for students with disabilities.

#### 3.3.3 Promoting preschool attendance, especially among disadvantaged children

In recent years the focus of most EU-level action has been on increasing the quantity of childcare and pre-primary places to enable more parents, especially mothers, to join the labour market. At the 2002 Barcelona European Council, Member States agreed by 2010 to provide full-day places in formal childcare arrangements to at least 90% of children aged between three and compulsory school age. In 2011 the European Commission reinforced this approach by setting a new European benchmark for at least 95% of children between age 4 and the start of compulsory education to participate in ECEC by 2020.

In the country reports the following indicators are considered: the participation rates in ECEC and the average duration of preschool attendance. Children who start attending day care or preschool institutions early have less difficulty when entering primary school (World Bank 2005). Duration is another important indicator for better learning outcomes in the later stages of life. The duration of attendance is associated with greater academic improvement (Mullis et al. 2012). Also of interest is the question whether preschool education is free for all children. All children should be able to benefit from ECEC. No child should be excluded from preschool because parents cannot afford to send their children to preschool/kindergarten institutions if they have to pay. The potential benefits of high-quality ECEC are particularly significant for children from disadvantaged groups.

### 3.3.4 Provisions for preschool children with language problems

Literacy competence strongly builds on oral language proficiency, word knowledge, and syntactic knowledge. Measures must be taken by governments and institutions to ensure that children with poor language development (second-language speaking children and those from a low socio-cultural background, as well as others who experience difficulty in learning language) acquire adequate levels of oral language in kindergarten, preschool institutions and in school. It should be ensured that at age 4 at the latest all children are diagnosed in their oral language proficiency, and that there are obligatory courses for children falling behind in their acquisition of language competence. The aim should be that all children entering school can speak the language of the school so that they can profit from reading and writing instruction.

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

For the children of migrants, or children with minority languages learning the language of instruction is paramount so that they can reach their potential and progress to higher education and employment to the same degree as non-migrant children.

EU member states offer a wide variety of arrangements. According to the EUROPEAN COMMISSION, Directorate-General for Education and Culture (2015, p. 13)<sup>17</sup> the following factors contribute to raising the attainment of children whose home language is not the language of instruction:

- "Supplementary education (both formal and non-formal) in school and out of school which
  includes help with homework, language learning (including mother tongue learning), and
  mentoring during activities;
- Immersion in mainstream classrooms with support from specialists and with teachers who have the competences and experience to tailor teaching to children in the class without the same level of competency in the language of instruction;
- Increasing their parents' support and encouragement in their education, including their development of language competences;
- Developing their mother tongue competences.

Our related questions in the country reports are:

- What support is available for students whose home language is not the language of school?
- Are adolescents whose home language is not the language of school taught alongside native speakers? Is there a focus on supporting them to access the curriculum or on developing their language skills?

#### 3.3.6 Special support for adult second-language learners/migrants

There is an increasing need for many European countries to improve their support for the language and literacy needs of adult migrants. Migrants need to be able to understand and communicate in the official language or languages of the country in which they live. Special support needs to be given to those who do not yet have this ability so that they can participate fully in their new society. Such support should be developed within the framework of a national language policy that establishes the status and use of language(s) and the rights of the speakers of the languages in question, including those spoken by migrants.

In designing such provision it is important to bear in mind that the needs of bi-/multi-lingual learners are hugely varied. Adult migrants who already have literacy skills in their home language will have different needs from those who have few or no literacy skills in their home language. When the official language of a country is the second or third language of a learner, and the learner is still gaining command of it, second/foreign or bi-/multi-lingual language teaching and learning theory and experience gained from practice are important for policy-making and curricula development.

#### 3.3.7 Preventing early school leaving

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

<sup>&</sup>lt;sup>17</sup> EUROPEAN COMMISSION, Directorate-General for Education and Culture (2015) Language teaching and learning in multilingual classrooms http://ec.europa.eu/languages/library/studies/multilingual-classroom\_en.pdf).

#### 3.3.8 Addressing the gender and other achievement gaps among adolescents

Achievement gaps in literacy are very persistent. For instance there are only a handful of European countries that have managed to decrease the gender gap in reading literacy performance from 2000 to 2012 (OECD, 2014, p. 385). Additionally, these gaps mean that when we focus on **adolescent struggling readers** we are focusing on groups of students that are more likely from disadvantaged families than from advantaged ones, more likely boys than girls and more likely immigrant students than native ones. It is to be noted, however, that low-performing students are not a homogeneous group of students. Their difficulties in reading literacy may derive from a number of reasons.

On the level of the individual adolescent, boys and girls alike, whether they come from disadvantaged or advantaged families, native or immigrant ones, may have difficulties on very diverse level, some of them still struggling with basic reading skills (accuracy and fluency), others with reading comprehension and meta-cognitive skills (monitoring and adapting their reading and comprehension to the text complexity), others may struggle with critical evaluation of texts, with digital literacy and communication skills or may lack basic engagement in reading and a stable self-concept as readers (Garbe et al., 2010, p. 26). Their difficulties may also be any combination of these. Furthermore, adolescents with reading problems typically look back on school careers marked by repeated failure, and high levels of frustration. Understandably then, aversion to school, lack of motivation to learn and read, and little confidence in their own abilities resulting from these past failures constitute the biggest barriers on the path to a positive development. For this reason, the changing of the negative reading-related self-concept must take priority in any sustainable programme for the enhancement of adolescent struggling readers reading literacy (Garbe et al., 2010, p. 30).

It is then necessary to ask if there are effective literacy policies to support reading skills of adolescent struggling readers who represent the disadvantaged groups in terms of family background, gender and migrant status in the European countries. Additionally, in search for these literacy policies we must ask if they appreciate the various types of difficulties the low-performing students may have, i.e. if they respect and build on the adolescent's individual needs, and aim to strengthen their self-efficacy.

# 3.3.9 Increasing participation, inclusion and equity for children and adolescents: programmes, initiatives and examples.

Here we were asking about good practice in the following fields:

- Programmes against poverty
- Family literacy programmes for migrant parents
- Policies / programmes to prevent early school leaving
- Programmes for closing the gender gap, and others.

#### 3.3.10 Adults: issues of equity and inclusion

Adult literacy provision is often for vulnerable adults. Good provision is inclusive, eliminates barriers for disadvantaged or marginalised groups, and supports life-wide (extending across all domains of adult life, including family life, work and leisure) and lifelong learning within a sector-wide and inter-sectoral approach (see for example EU High Level Group, 2012, p.93; UIL, 2010, p.7). Within this adults should be offered the opportunity to continue their educational pathways throughout the life course (UIL 2013, p.35), with pathways on to other forms of education, academic or vocational. Participation is eased when adult literacy learning is embedded in everyday adult life, in workplaces, the community, the home and other arenas of family life (EU High Level Group, 2012, p.93; Schreuer and Buyssens,

2011, p.8). It is important that appropriate guidance on how to access such educational opportunities is available.

Where adult literacy provision exists, countries "tend to pay specific attention to groups where the lack of skills and qualifications may be of particular concern, namely the unemployed, young people, older workers, immigrants or ethnic minorities" (Eurydice, 2015, p.8). However, as that Eurydice report goes on, policy references to inclusion for these target groups are rarely accompanied by "definite objectives and targets to be reached".

The overall participation rates in formal and non-formal adult education and training differ substantially between countries. The European Adult Education Survey (Eurostat AES, 2012) showed that Scandinavian and some western European countries perform better than most OECD countries in terms of participation in adult education. Formal education has a strong influence. In all countries those with the highest levels of education participate more in formal and non-formal adult education.

"Participation in adult education and training is determined by several factors, in particular educational attainment, employment status, occupational category, age and skills: adults with low level or no qualifications, those in low-skilled occupations, the unemployed and economically inactive, older people and the least skilled are less likely to participate in lifelong learning. In other words, the adults most in need of education and training are those with the least access to lifelong learning opportunities" (EC 2015, p.8).

## 4 CONCLUSIONS

Considered attention and careful action is required by policy-makers across government and beyond, in order to formulate national and regional literacy policies that enable people to live full and meaningful lives and to contribute towards the enrichment of the communities in which we all live. Literacy education and learning is an issue across all sectors and requires the systematic promotion of mutually reinforcing policy actions across government departments and agencies, and among a wide range of policy actors.

"Europe and its Member States should position literacy not just at the heart of their educational strategies but at the heart of public policies more generally" (EU High Level Group 2012, p. 31).

Education policy-makers are centrally important in developing literacy policy. In order to ensure that policies and programmes attract learners and cater for their needs and possibilities, literacy education policy makers should ensure that learners themselves play a role in the design of literacy education policy and practice. This would allow for literacy education policy to be informed by an understanding of the demands of literacy placed on us all in engaging effectively with society.

Policy coherence in literacy can only be achieved with an understanding of the major impact of literacy on a wide range of policy areas, other than education, such as health and employment, among others. Indeed, as governments increasingly choose to engage with their citizens online, no government area can afford to be unaware of literacy as an issue of individual, regional, national and global importance. Policy makers in government departments and agencies should look beyond their own narrow areas of responsibility and actively seek ways to exploit the potential for positive impacts beyond their own policy sphere, by supporting the development of policies and programmes that seek to understand the literacy demands placed on European citizens and consider how to support them in meeting those demands. Such policy coherence can only be achieved when there is clarity about current policy: how it is framed, who the actors are and what policy levers they seek to use.

Often policy coherence is not achieved because the various stakeholders lack a shared understanding. Constant policy change (policy churn) works against coherence by requiring constant renegotiation and recalibration of policy. Constant change also inevitably reduces institutional memory meaning that new policy isn't necessarily informed by what has gone before. Effective cooperation between all stakeholders is key and for that to happen stakeholders need to be clear about their own responsibilities and what they stand to gain and, of course there needs to be trust between them. Trust is built through successful joint working and supports the development of increases in shared knowledge and understanding.

To realize the basic right of all Europeans to develop literacy, as declared by ELINET in the **European Declaration of the Right to Literacy**, policy makers across government, at European, national, regional and local levels, should ensure that there is support for all members of society to meet the literacy demands placed upon them, whether as children or subsequently as adults.

# **REFERENCES**

- Alverini, F. (2013). An exploration of the gap between highest and lowest ability readers across 20 countries. In *Educational Studies*, 39, 399–417.
- Barton, D., Armstrong, D., Hodge, R., Ivanic, R., Tusting, K. (2006) *Relating adults' lives and learning:* participation and engagement in different settings. NRDC: London
- Barnett, W.S., Shulman K., Shore R. (2004). Class Size: What's the best fit? In *Preschool Policy Matters*. Issue 9 / December 2004 NIEER. Retrieved from http://nieer.org/resources/policybriefs/9.pdf.
- Bearne, E. (2003). Rethinking literacy: communication, representation and text. In *Literacy* (formerly *Reading*), 37(3), p. 98–103.
- Bezemer, J., & Kress, G. (2008). Writing in Multimodal Texts: A Social Semiotic Account of Designs for Learning. In *Written Communication*, 25(2), 166–195.
- Biancarosa, G.; Snow, C. E. (2004): *Reading next. A vision for action and research in middle and high school literacy.* Washington, D.C.: Alliance for Excellent Education.
- Blomert, L. (2009). *Cognitive and Educational Profiling of Reading and Reading Support within the EU.* Final Report PROREAD project nr. 2006-2798, EU-SOCRATES Action 6.1.2 and 6.2.
- Blömeke, S., Hsieh, F.-J., Kaiser, G., & Schmidt, W. (Eds.) (2014). *International Perspectives on Teacher Knowledge, Beliefs and Opportunities to Learn*. Dordrecht: Springer.
- Bos, W., Hornberg, S., Arnold, K.-H., Faust, G., Fried, L., Lankes, E.-M., Schwippert, K. & Valtin, R. (2007) (Hrsg.). IGLU 2006. Lesekompetenzen von Grundschulkindern in Deutschland im internationalen Vergleich, Münster: Waxmann.
- Brooks, G. (2013). What Works for Children and Young People with Literacy Difficulties? The Effectiveness of Intervention Schemes. 4th edition. Bracknell: Dyslexia-SpLD Trust. Retrieved from http://www.interventionsforliteracy.org.uk/widgets\_GregBrooks/What\_works\_for\_children\_fourth\_e d.pdf.
- Brooks, G. and Burton, M. (2015). *ELINET analytic glossary of the initial teaching and learning of literacy*. Cologne: ELINET.
- Brooks, G., Hannon, P. and Bird, V. (2012). Family Literacy in England. In Wasik, B. & Van Horn, B (2012). *Handbook of Family Literacy*, 2nd edition. New York and London: Routledge.
- Burgess, S. (2005). The Preschool Home Literacy Environment Provided by Teenage Mothers. In *Early Child Development and Care*, Vol. 175, No. 3, 249–258.
- Büttner, G. & Hasselhorn, M. (2011). Learning disabilities: Debates on definition, causes, subtypes, and responses. International Journal of Disability, Development and Education, 5(1), 75-87.
- Bus, A.G., Van Ijzendoorn, M.H. and Pellegrini, A.D. (1995) Joint book reading makes for success in learning to read: a meta-analysis on inter-generational transmission of literacy. In *Review of Education*, Vol. 65, No. 1, 1-21.
- Bynner, J. and Parsons, S. (2006) New Light on Literacy and Numeracy: full report. NRDC: London.

- Carneiro, P. & Heckman, J.J. (2003). *Human Capital Policy*. Cambridge Ma: NBER Working Paper No. w9495.
- Carpentieri, J., Fairfax-Cholmely, K., Litster, J., Vorhaus, J. (2011). Family Literacy In Europe: Using Parental Support Initiatives To Enhance Early Literacy Development. London: NRDC, Institute of Education.
- Cattaneo, A., Cogoy, L., Macaluso, A., & Tamburlini, G. (2012). *Child Health in the European Union*. Luxembourg: European Commission.
- Cazden, C., Cope, B., Fairclough, N., & Gee, J. (1996). A pedagogy of multiliteracies. Designing social futures. In *Harvard Educational Review*, 66(1), 60–92. Retrieved from http://www.pwrfaculty.net/summer-seminar/files/2011/12/new-london-multiliteracies.pdf.
- Christenbury, L., Bomer, R., & Smagorinsky, P. (2009). *Handbook of adolescent literacy research*. New York: Guilford Press.
- Clay, M. (2000). Concepts about Print. What have Children Learned About the Way We Print Language. Exeter NH: Heinemann.
- Conley, M. W., Kerner, M., & Reynolds, J. M. (2005). Not a question of "should," but a question of "how": Integrating literacy knowledge and practice into secondary teacher preparation through tutoring in urban middle schools. In *Action in Teacher Education*, 27(2), 22–32.
- Cullinan, B.E. (2000) Independent Reading and School Achievement. In School Library Media Research, Vol. 3, 2-24.
- Deluca, M. (2012): Children with Disabilities, Learning Difficulties and Disadvantages (SENDDD) in EU/OECD countries in compulsory education: Statistics and Indicators. Retrieved from https://www.ucl.ac.uk/lc-ccr/seminars/resources/Deluca\_Futures\_seminar\_29\_Nov\_2012.pdf.
- Department for Business, Innovation & Skills (2012). *The 2011 Skills for Life Survey: A Survey of Literacy, Numeracy and ICT Levels in England* (BIS Research Paper No 81). London: Department for Business, Innovation & Skills.
- Downing, J. (1973). *Comparative Reading: Cross-national Studies of Behaviour and Processes in Reading and Writing.* London: Macmillan Publishers Limited.
- Downing, J. (1984). Task awareness in the development of reading skill. In J. Downing & R. Valtin (Eds.). In Downing, J. & Valtin, R. (Eds.). *Language awareness and learning to read (pp. 27-56)*. New York: Springer.
- Downing, J. & Valtin, R. (Eds.) (1984). *Language awareness and learning to read*. New York, Heidelberg, Berlin.
- Dreher, E. & Dreher, M. (1985). Entwicklungsaufgaben im Jugendalter: Bedeutsamkeit und Bewältigungskonzepte. In D. Liepmann & A. Sticksrud (Eds.), *Entwicklungsaufgaben und Bewältigungsprobleme in der Adoleszenz* (pp. 56–70). Göttingen: Hogrefe.
- Duke, N.K. & Pearson, P.D. (2002): *Effective Practices for Developing Reading Comprehension*. Retrieved from http://www.learner.org/workshops/teachreading35/pdf/Dev\_Reading\_Comprehension.pdf.
- Duncan, S. and Schwab, I. (2015). *Guiding principles for the use of terminology in adult literacy: a rationale*. Position paper 2 arising from ELINET Team 4 seminar on adult literacy terminology, UNESCO Institute for Lifelong Learning, Hamburg, January 2015.

- Duursma, E., Augustyn, M. and Zuckerman, B. (2008) Reading aloud to children: the evidence. In *Archives of Disease in Childhood*, Vol. 93, No. 7, 554-557.
- EACEA; Eurydice (2009). Early childhood education and care in Europe: Tackling social and cultural inequalities. Brussels: Eurydice.
- EACEA; Eurydice (2009). *National Testing of Pupils in Europe: Objectives, Organisation and Use of Results*. Brussels: Eurydice. Retrieved from http://eacea.ec.europa.eu/education/eurydice/documents/thematic\_reports/109EN.pdf.
- Ehri, L.C., Nunes, S.R., Stahl, S.A. and Willows, D.M. (2001) Systematic phonics instruction helps students learn to read: Evidence from the National Reading Panel's meta-analysis. In *Review of Educational Research*, Vol.71, No.3, 393-447.
- Espinosa, L. M. (2002). High Quality Preschool: Why We Need it and What it Looks Like. In *Preschool policy matters*. NIEER, Issue 1 / November 2002. Retrieved from http://nieer.org/resources/policybriefs/1.pdf.
- EU High Level Group of Experts on Literacy (2012a). *Final Report*, September 2012. Luxembourg: Publications Office of the European Union. Retrieved from http://ec.europa.eu/education/policy/school/doc/literacy-report\_en.pdf.
- EU High Level Group of Experts on Literacy (2012b). *Executive summary*, September 2012 Retrieved from http://ec.europa.eu/education/policy/school/doc/literacy-hlg-exec-sum\_en.pdf.
- European Commission (2011). Early Childhood Education and Care: Providing all our children with the best start for the world of tomorrow 2011. Retrieved from http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:52011DC0066.
- European Commission/EACEA/Eurydice (2012). *Key data on Education in Europe 2012*. Luxembourg: Publications Office of the European Union. Retrieved from http://eacea.ec.europa.eu/education/eurydice/documents/key\_data\_series/134EN.pdf.
- European Commission/EACEA/Eurydice (2013). *Key Data on Teachers and School Leaders in Europe.* 2013 Edition. Eurydice Report. Luxembourg: Publications Office of the European Union. Retrieved from http://eacea.ec.europa.eu/education/eurydice.
- European Commission/EACEA/Eurydice (2015). *Adult Education and Training in Europe: Widening Access to Learning Opportunities.* Eurydice Report. Luxembourg: Publications Office of the European Union.
- European Commission/EACEA/Eurydice/Eurostat (2014). *Key Data on Early Childhood Education and Care in Europe.* 2014 Edition. Eurydice and Eurostat Report. Luxembourg: Publications Office of the European Union. Retrieved from http://eacea.ec.europa.eu/education/eurydice/documents/key\_data\_series/166EN.pdf.
- European Commission: EACEA (Audiovisual and Culture Executive Agency (2014). *EURYPEDIA* (European Encyclopedia on National Education Systems). Retrieved from https://webgate.ec. europa.eu/fpfis/mwikis/eurydice/index.php/Romania:Teaching\_and\_Learning\_in\_Early\_Childhood\_ Education\_and\_Care.
- Eurostat (2012). *The Adult Education Survey: Main Results*. EU: Brussels. Retrieved from http://ec.europa.eu/eurostat/web/microdata/adult\_education\_survey.

- Eurostat (2012). *European Union Statistics on Income and Living Conditions (EU-SILC)*. Retrieved from http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&language=en&pcode=tessi190.
- Eurostat (2014). Key data on early childhood education and care in Europe 2014 edition. Eurydice and Eurostat Report. Luxembourg: Publication Office of the European Union.
- Eurydice (2011). *Teaching Reading in Europe, Contexts, Policies and Practices. Education, Audiovisual and Culture Executive Agency.* Retrieved from http://eacea.ec.europa.eu/education/eurydice/documents/thematic\_reports/130en.pdf.
- Eurydice (2015). *Adult Education and Training in Europe: Widening Access to Learning Opportunities*. Eurydice Report. Luxembourg: Publications Office of the European Union.
- Fredriksson, U., Rasmusson, M., & Sundgren, M. (2012). In N. Egelund (Ed.). *Northern Lights on PISA* 2009 focus on reading, 23–43. TemaNord 2012: 501. Nordic Council of Ministers.
- Garbe, C., Holle, K. & Salisch, M. v. (2006). Entwicklung und Curriculum: Grundlagen einer Sequenzierung von Lehr- und Lernzielen im Bereich des (literarischen) Lesens. In N. Groeben & B. Hurrelmann (Hrsg.). *Empirische Unterrichtsforschung in der Literatur- und Lesedidaktik. Ein Weiterbildungsprogramm* (engl. Manuskript), 116-154. Weinheim: Juventa.
- Garbe, C., Holle, K., & Weinhold, S. (2010). *ADORE: teaching struggling adolescent readers in European countries: Key elements of good practice* (English ed.). Frankfurt am Main, New York: Peter Lang.
- Garbe, C., Groß, M., Holle, K. & Weinhold, S. (2010). *Blick über den Zaun: Leseförderung in Europa. Ergebnisse und Einsichten aus dem EU-Projekt ADORE*. In Bayerisches Staatsministerium für Unterricht und Kultus / Staatsinstitut für Schulqualität und Bildungsforschung (Ed.): ProLesen. Auf dem Weg zur Leseschule. Leseförderung in den gesellschaftswissenschaftlichen Fächern. Aufsätze und Materialien aus dem KMK-Projekt "ProLesen", 142-156. Donauwörth: Auer.
- Garbe, C. (2012) (Ed.). Basic Curriculum for Teachers' In-Service Training in Content Area Literacy in Secondary Schools: Handbook for Trainers. Köln: University of Cologne (see: www.baculit.eu).
- Garbe, C. (2014). BaCuLit Ein europäisches Kerncurriculum zur Vermittlung fachspezifischer Lese- und Schreibkompetenzen. In R. Valtin, I. Tarelli (Eds.): Lesekompetenz nachhaltig stärken Evidenzbasierte Maßnahmen und Programme. DGLS-Beiträge Vol. 16, Berlin: DGLS, 247-275.
- Garbe, C. (2015): Building *Content Area Literacy*-Expertise among European Teachers of Secondary Schools. A Report about two European Comenius Projects. In V. Boszik (Ed.), Improving Literacy Skills Across Learning. CIDREE Yearbook 2015, Hungarian Institute for Educational Research and Development HIERD, Budapest, 154-176. (Free download under: http://www.cidree.org/fileadmin/files/pdf/publications/YB\_15\_Improving\_Literacy\_Skills\_Across\_Learning.pdf).
- Goodwin, K. (2012). *Use of Tablet Technology in the Classroom: NSW Curriculum and Learning Innovation Centre.* Retrieved from http://clic.det.nsw.edu.au/clic/documents/iPad\_Evaluation\_Sydney\_Region\_exec\_sum.pdf.
- Ginsburg K.R (2007). The Importance of Play in Promoting Healthy Child Development and Maintaining Strong Parent-Child Bonds. In *Official Journal of the American Academy of Pediatrics*, vol. 119, no. 1, 182 191.
- Graf, Werner (1995). Lesen und Biographie. Eine empirische Fallstudie zur Lektüre der Hitlerjugendgeneration. Tübingen, Basel: Francke.

- Graf, W. (2007). Lesegenese in Kindheit und Jugend: Einführung in die literarische Sozialisation. Baltmannsweiler: Schneider Hohengehren.
- Grotlüschen, A. & Riekmann, W. (2012). Funktionaler Analphabetismus in Deutschland. Ergebnisse der ersten leo. Level-One Studie. Münster, Berlin, New York: Waxmann.
- Grotlüschen, A., Mallows, D., Reder, S., and Sabatini, J. (2016), *Adults with Low Proficiency in Literacy or Numeracy*, OECD Education Working Papers, No. 131, OECD Publishing, Paris.
- Hack, M., Flannery, D., Schluchter, M., Cartar, L., Borawski, E., Klein, N. (2002). Outcomes in Young Adulthood for Very-Low-Birth-Weight Infants. In *Engl J Med.*, 346 (3), 149-57. Retrieved from http://www.ncbi.nl m.nih.gov/pubmed/11796848.
- Hausendorf, H., Mondada, L., & Schmitt, R. (2012). *Raum als interaktive Ressource. Studien zur deutschen Sprache*. Tübingen: Narr.
- Havighurst, R. J. (1953). *Human development and education* (1st ed.). New York: Longmans Green. Retrieved from http://worldcatlibraries.org/wcpa/oclc/223047.
- Hinchman, K. A., & Sheridan-Thomas, H. K. (Eds.). (2008). *Solving problems in the teaching of literacy. Best practices in adolescent literacy instruction*. New York, NY: Guilford Press.
- Hornberg, S. & Valtin, R. (2011) (Hrsg.). *Mehrsprachigkeit. Chance oder Hürde beim Schriftspracherwerb? Empirische Befunde und Beispiele guter Praxis*. Berlin: Deutsche Gesellschaft für Lesen und Schreiben.
- International Reading Association (2007). *Teaching reading well: A synthesis of the International Reading Association's research on teacher preparation for reading instruction.* Newark, DE: IRA.
- International Reading Association. (2012). Adolescent Literacy: A Position Statement of the International Reading Association. Retrieved from http://www.reading.org/Libraries/resources/ps1079\_adolescentliteracy\_rev2012.pdf.
- Jednoróg, K., Altarelli, I., Monzalvo, K., et al. (2012). The Influence of Socioeconomic Status on Children's Brain Structure. In *PLoSOne*, 7(8).
- Jewitt, C. (2008). Multimodality and Literacy in School Classrooms. In *Review of Research in Education*, 32(1), 241–267.
- Jonnaert, P., Ettayebi, M. and Defise, R. (2009). *Curriculum et compétences. Un cadre opérationnel.*Brussels: De Boek.
- Kail, R.V. & Cavanaugh, J.C. (2016) Human Development: A Life-Span View. Seventh edition, Boston, MA: Cengage Learning.
- Kloostermann, R., Notten, N., Tolsma J., Kraaykamp G. (2009). The Effects of Parental Reading Socialization and Early School Involvement on Children's Academic Performance: A Panel Study of Primary School Pupils in Netherland. In *European Sociological Review*, 27 (3), 291-306.
- Knoblauch, H. (2013). Grundbegriffe und Aufgaben des kommunikativen Konstruktivismus. In R. Keller, J. Reichertz, & H. Knoblauch (Eds.). *Kommunikativer Konstruktivismus*, 25–48. Wiesbaden: Springer Fachmedien Wiesbaden.
- Kress, Gunther R. (2010): Multimodality. *A social semiotic approach to contemporary communication*. London, New York: Routledge.

- Lafton, T. (2012). How Early Childhood Practitioners Build, Shape, and Construct Their Digital Practices: The Search for an Analytical Space. In *Nordic Journal of Digital Literacy*, 7(3), 172–185. Retrieved from http://www.idunn.no/file/pdf/56663190/how\_early\_childhood\_practitioners\_build\_shape\_and \_constru.pdf.
- Langenbucher, W. (2002). Leseförderung als Kultur- und Kommunikationstechnik. In Bonfadelli, H., Bucher, P. (eds.). *Lesen in der Mediengesellschaft. Stand und Perspektiven der Forschung.* Zürich: Pestalozzianum.
- Lankes, E.-M. & Carstensen, C. H. (2007). Der Leseunterricht aus der Sicht der Lehrkräfte. In W. Bos, S. Hornberg, K.-H. Arnold, G. Faust, L. Fried, E.-M. Lankes, K. Schwippert & R. Valtin (Hrsg.). IGLU 2006. Lesekompetenzen von Grundschulkindern in Deutschland im internationalen Vergleich, 161–193. Münster: Waxmann.
- Lankshear, C. and Knobel, M. (2008). *Digital iteracies: Concepts, Policies and Practices (New Literacies and Digital Epistemologies)*. Peter Lang: New York.
- Litster, J., Carpentieri, J. D. & Vorhaus, J. (2010) Study on European terminology in adult learning for a common language and common understanding and monitoring of the sector. NRDC: London.
- Linnakylä, P. & Roe, A. (2000). *Northern Lights on PISA. Unity and diversity in the Nordic countries in PISA 2000.* Oslo: University of Oslo.
- Linnakylä, P., Malin, A., & Taube, K. (2006). What lies behin low reading literacy performance? A comparative analysis of the Finnish and Swedish students. In J. Mejding & A. Roe (Eds.), *Northern lights on PISA 2003 A reflection from the Nordic countries*, 143–158. Copenhagen: Nordic Council of Ministers.
- McClelland, M. M. Kessenich, M., Morrison, F.J. (2003). Pathways to Early Literacy: the Complex Interplay of for Child, Family, and Socio-cultural Factors. In *Advances in Child Development and Behavior Department of Human Development and Family Sciences*, Vol. 131, 411-447.
- McCross-Yergia, T., & Krepps, L. (2010). Do teacher attitudes impact literacy strategy implementation in content area classrooms? In *Journal of Instructional Pedagogies*, (4), 1–18.
- Mejding, J., & Roe, A. (2006). *Northern Lights on PISA 2003 a reflection on the Nordic countries*. Nordic Council of Ministers.
- Mullis, I.V.S., Martin, M.O., Kennedy A.M., Foy, P. (2007). *Progress in International Reading Literacy Study*. PIRLS 2006 International Report, TIMMS & PIRLS International Study Center, International Association for the Evaluation of Educational Achievement (IEA).
- Mullis I.V.S., Martin, M.O., Kennedy A.M., Foy P., Drucker K.T. (2012). *Progress in International Reading Literacy Study*. PIRLS 2011 International Results in Reading, TIMMS & PIRLS International Study Center, International Association for the Evaluation of Educational Achievement (IEA).
- Mullis, I.V.S., Martin, M.O., Minnich, C.A., Drucker, K.T. & Ragan, M.A. (Eds.) (2012a). *PIRLS 2011*. *Encyclopedia: Education Policy and Curriculum in Reading* (Volumes 1 and 2), TIMSS & PIRLS International Study Center, Lynch School of Education, Boston College. Retrieved from http://timssandPIRLS.bc.edu/PIRLS2011/downloads/PIRLS2011\_Enc-v1.pdf.

- Myrberg, M., & Rosén, M. (2006). Reading achievement and social selection in independent schools in Sweden: Results from IEA PIRLS 2001. In *Scandinavian Journal of Educational Research*, 50(2), 185–205.
- Naudeau, S.; Kataoka, N.; Valerio, A.; Neuman, M. J.; Elder, Leslie, K. (2011). *Investing in Young Children: An Early Childhood Development Guide for Policy Dialogue and Project Preparation*. World Bank. World Bank. Retrieved from https://openknowledge.worldbank.org/handle/10986/2525.
- OECD (2005a). *Learning a Living. First Results of the Adult Literacy and Life Skills Survey.* Ottawa and Paris: OECD Publishing.
- OECD (2005b). *Teachers Matter: Attracting, Developing and Retaining Effective Teachers Final Report.*Paris: OECD Publishing. Retrieved from http://www.oecd.org/edu/school/attractingdevelopingand retainingeffectiveteachers-finalreportteachersmatter.htm.
- OECD (2009). PISA 2009 Assessment. Key Competencies in Reading, Mathematics and Science. Paris: OECD Publishing
- OECD (2011): *Education at a Glance. OECD Indicators*. Retrieved from http://www.oecd.org/education/skills-beyond-school/48631582.pdf.
- OECD (2012). Starting Strong III: A Quality Toolbox for Early Childhood Education and Care. Paris: OECD Publishing. Retrieved from http://dx.doi.org/10.1787/9789264123564-en.
- OECD (2012). Literacy, Numeracy and Problem-solving in Technology-Rich Environments. Framework for the OECD Survey of Adults Skills. Paris: OECD Publishing.
- OECD (2013). Teaching and Learning International Study (TALIS) Results: An International Perspective on Teaching and Learning. Paris: OECD Publishing. Retrieved from http://www.oecd.org/edu/school/talis.htm.
- OECD (2013b). Skills Outlook: First Results from the Survey of Adult Skills. Paris: OECD Publishing.
- OECD (2014). *OECD Family Database*. Paris: OECD Publishing. Retrieved from www.oecd.org/social/family/database.htm.
- OECD (2014). *Education at a Glance 2014: OECD Indicators*. OECD Publishing. Retrieved from http://dx.doi.org/10.1787/eag-2014-en.
- Pachler, N. (2007). *Mobile learning: Towards a research agenda. Occasional papers in work-based learning:* Vol. 1. London: WLE, Work-based Learning for Education Professionals.
- Philipp, M. (2014) Leseunterricht in der Grundschule Vom Ist-Zustand zum Soll-Zustand. In Valtin, R. & Tarelli, I. (Eds.). *Lesekompetenz nachhaltig stärken. Evidenzbasierte Maßnahmen und Programme*, 122 166. Berlin: Deutsche Gesellschaft für Lesen und Schreiben.
- Proposal for key principles of a Quality Framework on Early Childhood Education and Care —Report of the Working Group on Early Childhood Education and Care under the auspices of the European Commission. Retrieved from http://ec.europa.eu/education/policy/strategic-framework/archive/documents/ecec-quality-framework\_en.pdf.
- Reder, S. (2015). Digital Inclusion and Digital Literacy in the United States: A Portrait from PIAAC's Survey of Adult Skills. American Institutes for Research: Washington.

- Reutzel et al. (2008). Scaffolded silent reading: A complement to guided repeated oral reading that works. In *The Reading Teacher*, vol. 62, no. 3, 194-207.
- Risko, V.J., Roller, C., Cummins, C., Bean, R., Block, C. C., Anders, P., &Flood, J. (2008). A critical analysis of the research on reading teacher education. In *Reading Research Quarterly*, 43 (3), 252-288.
- Scheerer-Neumann, G. (2015). *Lese-Rechtschreib-Schwäche und Legasthenie*. Grundlagen, Diagnostik und Förderung, Stuttgaert: Kohlhammer.
- Schreuer, J.M. & Buyssens, E. (eds) (2011). *Manifesto. Voice of writing and reading learners in Europe Eur-Alpha network*.
- Stadermann, M., & Schulz-Zander, R. (2012). Dimensionen unterrichtlicher Interaktion bei der Verwendung digitaler Medien. In *Jahrbuch Medienpädagogik*, 9, 51–80. Retrieved from http://link.springer.com/chapter/10.1007%2F978-3-531-94219-3\_4.
- Stanovich, P. J., & Stanovich, K. E. (2003). *Using research and reason in education: How teachers can use scientifically based research to make curricular & instructional decisions.* Washington D.C.: Partnership for Reading (Project) National Institute for Literacy U.S. Dept. of Education; National Institute of Child Health and Human Development U.S. Dept. of Health and Human Services.
- Stanovich, K. E. (2005). The future of a mistake: Will discrepancy measurement continue to make the learning disabilities field a pseudoscience? *Learning Disability Quarterly, 28,* 103-106.
- Strickland, D., & Kamil, M. (Eds.). (2004). *Improving Reading Achievement through Professional Development*. Norwood, Massachusetts: Christopher-Gordon Publishers.
- Suggate, S. (2012). Watering the garden before a rainstorm. The case of early reading instruction. In Suggate, S. & Reese, E. (Eds.). *Contemporary Debates in Childhood Education and Development*. London: Routledge, 181-190.
- Sulkunen, S. (2013). Adolescent Literacy in Europe An Urgent Call for Action. In *European Journal of Education*, 48(4), 528–542.
- Sulkunen, S., & Nissinen, K. (2012). Heikot lukijat Suomessa. In S. Sulkunen & J. Välijäri (Eds.), *Kestääkö osaamisen pohja? PISA* 09, Vol. 12, 46–61. Publications of the Ministry of Education and Culture.
- Sylva, K., Melhuish, E., Sammons, P., Siraj-Blatchford, I., Taggart, B. (2004). *The Effective Provision of Pre-School Education (EPPE) Project: Final Report*. Retrieved from www.ioe.ac.uk/RB\_pre-school\_to\_end\_of\_KS1(1).
- Tafa, E., & Manolitsis, G. (2008). A longitudinal literacy profile of Greek precocious readers. *Reading Research Quarterly*, 43 (2), 165-185.
- Tarelli, I., Lankes, E.-M., Drossel, K. and Gegenfurtner, A. (2012). Lehr- und Lernbedingungen an Grundschulen im internationalen Vergleich. In W. Bos, I. Tarelli, A. Bremerich-Vos & K. Schwippert (Hrsg.). *IGLU 2011. Lesekompetenzen von Grundschulkindern in Deutschland im internationalen Vergleich*, 137- 174. Münster: Waxmann. Retrieved from http://www.waxmann.com/fileadmin/media/zusatztexte/2828Volltext.pdf.
- Tatto, M. T., Schwille, J., Senk, S., Ingvarson, L., Peck, R., & Rowley, G. (2008). *Teacher Education and Development Study in Mathematics (TEDS-M): Conceptual framework.* East Lansing, MI: Teacher Education and Development International Study Center, College of Education, Michigan State University. Retrieved from http://teds.educ.msu.edu/.

- Torgerson, C.J., Brooks, G. and Hall, J. (2006). A Systematic Review of the Research Literature on the Use of Phonics in the Teaching of Reading and Spelling. London: Department for Education and Skills Research Report 711. Retrieved from https://czone.eastsussex.gov.uk/sites/gtp/library/core/english/Documents/phonics/A%20Systematic%20Review%20of%20the%20Research%20Liter ature%20on%20the%20Use%20of%20Phonics%20in%20the%20Teaching%20of%20Reading%20&%20Spelling.pdf.
- UNESCO Institute for Lifelong Learning (UIL) (2013). *Global Report on Adult Learning and Education. Rethinking Literacy.* Hamburg: UIL.
- UNESCO Institute for Lifelong Learning (UIL) (2010). CONFINTEA VI: Belém Framework for Action: Harnessing the power and potential of adult learning and education for a viable future. Hamburg: UIL.
- Valtin, R. (1997). Strategies of spelling and reading of young children learning German orthography. In: Leong, C.K. & Joshi, M. (Ed.). *Cross-Language Studies of Learning to Read and Spell*, Series D: Behavioural and Social Sciences Vol. 87, 175 194. Dordrecht/Boston/London: Kluwer Academic Publishers.
- Valtin, R. (2000). Die Theorie der kognitiven Klarheit Das neue Verständnis von Lese-Rechtschreib-Schwierigkeiten. In B. Ganser (Ed.). *Lese-Rechtschreib-Schwierigkeiten Diagnose Förderung Materialien*, 16 42. Donauwörth: Auer Verlag.
- Valtin, R. (2012a): Dyslexia a useful concept? In: L. Pøhler (Ed.) Dysleksi en fælles nordisk udfordring. Landsforeningen af Læsepædagoger, København, p. 85 92.
- Valtin, R. (2012b). Increasing awareness of phonological awareness helpful or misleading? In S. Suggate & E. Reese (Eds.). *Contemporary debates in child development and education*, 227 -237. London/New York: Routledge.
- Valtin, R., Voss, A. & Bos, W. (2015). Zur Diagnose von isolierten und kombiniertgen Leseproblemen: Definitionen, Operationalisierungen und Vorkommenshäufigkeiten. Deutsch Didaktik, 8, 40-59.
- Wiesner, E. (2014). Diskursiv-narrative literale Identitäten von Jugendlichen: Eine gesprächsanalytische Untersuchung von Positionierungen (1. Aufl). Lesesozialisation und Medien. Weinheim, Bergstr: Beltz Juventa.
- Wiesner, E., & Schneider, H. (2014). Schulisch initiiertes Schreiben und Lesen auf der Internetplattform myMoment. Leseforum Schweiz. Literalität in Forschung und Praxis, (2). Retrieved from http://www.forumlecture.ch/fr/myUploadData/files/2014\_2\_Wiesner\_Schneider.pdf
- Wilson, N., Grishma, D., & Smetana, L. (2009). Investigating Content Area Teachers' Understanding of a Content Literacy Framework: A Yearlong Professional Development Initiative. In *Journal of Adolescent & Adult Literacy*, 52(8), 708–718.
- World Bank (2005). Investing in Children and Youth. World Bank.
- Yoon, K. S. (2007). Reviewing the evidence on how teacher professional development affects student achievement. Issues & answers: 2007, no. 033. Washington, DC: National Center for Educational Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Dept. of Education.

## **APPENDIX E**

## **Adult country report questions**

#### 1. Provision

- 1.1. What types of adult literacy provision are there? What do you consider to be adult literacy provision in your country?
- 1.2. How is adult literacy provision funded?
- 1.3. Is there a statutory entitlement to literacy provision up to a certain level?
- 1.4. What is the rate of participation in adult learning, workplace training, liberal adult education?
- 1.5. Are studies available on factors that inhibit or prevent participation in literacy education and in using literacy outside educational contexts? If yes, what are the factors?
- 1.6. What progression routes are there from adult basic education courses to VET/HE courses?
- 1.7. Does a right to advice and guidance regarding educational opportunities exist? If yes, who provides this advice?

#### 2. Quality monitoring

- 2.1. Is there an inspection service to monitor the quality of adult literacy providers (including classroom practice)?
- 2.2. Are there national quality standards for the quality of adult literacy providers?
- 2.3. Are there national benchmarks / standards for adult literacy performance? How are adults' progress in reading and writing assessed / monitored?
- 2.4. What accountability measures are in place for adult education institutions?

#### 3. Literacy curricula / reading instruction

- 3.1. Is there a national literacy curriculum for adults? How is this linked to school curricula?
- 3.2. What is the accepted methodology for the teaching of literacy to adults?
- 3.3. How do curricula and learning materials cater for diversity of learner groups and learning needs?
- 3.4. Is there a specific focus on literacy in VET provision for adults?

#### 4. Screenings / assessments/ support

- 4.1. How are adults with literacy needs identified?
- 4.2. How are adults' prior literacy knowledge and skills recognized and validated?
- 4.3. Are there any standard tests to assess literacy needs or learning progress in literacy programmes?
- 4.4. How are adults with dyslexia identified and supported?

#### 5. Special support for second-language learners / migrants

- 5.1. Is there provision for adult migrants whose home language is not the official language of the host country?
- 5.2. Who pays for this provision?
- 5.3. Does this provision employ specialist teachers?
- 5.4. Is there specialist provision for those who have poor literacy skills in their L1?
- 5.5. Is there a separate curriculum for this type of provision?

#### 6. Reading environments to stimulate reading motivation

- 6.1. Are there schemes to promote reading for pleasure among adults?
- 6.2. Is there systematic cooperation with civil society e.g. libraries, bookstores, literature institutions, theatres, media, newspapers, publishers etc. in reading promotion for adults?
- 6.3. Are there family literacy programmes with a focus on supporting adult literacy?

#### 7. Digital environments / use of technology in education

- 7.1. Is there a digital gap? How are adults supported in acquiring digital skills / digital literacy?
- 7.2. Which population groups are excluded from access to ICTs?
- 7.3. Are there any web-based programmes for adults to improve their literacy & numeracy skills?
- 7.4. What classroom resources (E-books, notebooks, internet, mobile phones...) are used to support the development of adults' literacy?

#### 8. Teachers

- 8.1. What are the professional roles within adult education?
- 8.2. What is the status / reputation of teachers and other professionals who work in adult education?
- 8.3. What are their working conditions?
- 8.4. How do salaries compare to the national average?
- 8.5. What are the statutory qualification requirements?
- 8.6. What are the entry requirements for ITE?

#### 9. Teacher education

- 9.1. What are the statutory qualification requirements for adult literacy teachers?
- 9.2. Are there specialist qualification routes for adult literacy teachers?
- 9.3. What are the entry requirements for Initial Teacher Education?
- 9.4. Who pays for training?
- 9.5. Is there a curriculum for initial teacher training?
- 9.6. Are there compulsory (or optional) language and literacy modules in all adult education ITE?
- 9.7. What is the length of the required training?
- 9.8. Is there a curriculum / quality standards? I
- 9.9. Is there continuous professional development (in-service training) for teachers which focuses on literacy development?
- 9.10. What is the take-up among teachers?
- 9.11. Who delivers this training?
- 9.12. How is it quality assured?

#### 10. Policy-making

- 10.1. Who is involved in policy-making for adult literacy education?
- 10.2. How is inter-sectoral and interministerial cooperation promoted and coordinated?
- 10.3. What financing mechanisms exist that facilitate inter-sectoral cooperation?
- 10.4. Which policies promote for the provision of broad and varied access to adult literacy education?
- 10.5. How are the motivation, interests and needs of adults taken into account in the policy-making processes?
- 10.6. Does government promote adult literacy in its lifelong learning policy?