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LITERACY IN GERMANY

COUNTRY REPORT

CHILDREN, ADOLESCENTS AND ADULTS

March 2016

This working document reflects the point of view of literacy professionals assembled in this network. It is still a work in progress since we continue to gather and update information on literacy in Romania up to the year 2015. The contents of this publication may be reproduced in part, except for commercial purposes, provided the extract is preceded by a reference to "ELINET", followed by the date of publication of the document.

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I INTRODUCTION

This report on the state of literacy in Germany is one of a series produced in 2015 and 2016 by ELINET, the European Literacy Policy Network. ELINET was founded in February 2014 and has 78 partner organisations in 28 European countries¹. ELINET aims to improve literacy policies in its member countries in order to reduce the number of children, young people and adults with low literacy skills. One major tool to achieve this aim is to produce a set of reliable, up-to-date and comprehensive reports on the state of literacy in each country where ELINET has one or more partners, and to provide guidance towards improving literacy policies in those countries. The reports are based (wherever possible) on available, internationally comparable performance data, as well as reliable national data provided (and translated) by our partners.

ELINET continues the work of the European Union High Level Group of Experts on Literacy (HLG) which was established by the European Commission in January 2011 and reported in September 2012². All country reports produced by ELINET use a common theoretical framework which is described here: "ELINET Country Reports – Frame of Reference"³.

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

- Creating a literate environment
- Improving the quality of teaching
- Increasing participation, inclusion (and equity⁴).

Within its two-year funding period ELINET has completed Literacy Country Reports for all 30 ELINET member countries. In most cases we published separate **Long Reports** for specific age groups (Children / Adolescents and Adults), in some cases comprehensive reports covering all age groups. Additionally, for all 30 countries, we published **Short Reports** covering all age groups, containing the summary of performance data and policy messages of the Long Reports. These reports are accompanied by a collection of good practice examples which cover all age groups and policy areas as well. These examples refer to the **European Framework of Good Practice in Raising Literacy Levels**; both are to be found in the section "Good Practice"⁵.

¹ For more information about the network and its activities see: www.eli-net.eu.

² In the following, the final report of the EU High Level Group of Experts on Literacy is referenced as "HLG report". This report can be downloaded under the following link: http://ec.europa.eu/education/policy/school/doc/literacy-report_en.pdf.

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

⁴ "Equity" was added by ELINET.

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

EXECUTIVE SUMMARY

Literacy Performance Data

Germany participated in the IEA's PIRLS studies (4th graders reading comprehension) in 2001, 2006 and 2011, in OECD's PISA studies (15 year-olds' reading literacy) since 2000, and in PIAAC (adults' reading literacy) in 2012. Thus it is possible to describe the changes over time in average reading proficiency, according to different characteristics of the readers, and to compare reading proficiency levels of different age groups.

Germany performed significantly above the EU average in PIRLS 2011 (541 vs 535 EU-average) and above the average in PISA 2012 (508 vs 489 EU average). While the performance in PIRLS remained about the same in 2000 and 2011, a significant increase (+ 24 score points) - the equivalent of about half a year of schooling - was observed in PISA between 2000 and 2012.

A limited proportion of pupils (about 15% in both studies) can be considered as low performing readers. This is less than the average across EU countries. These students can read simple texts, retrieve explicit information, or make straightforward inferences, but they are not able to deal with longer or more complex texts, and are unable to interpret beyond what is explicitly stated in the text. The proportion of top-performing readers is 10% in PIRLS (vs 9% in the EU) and 9% in PISA (vs 7% in the EU), just a little more than in EU countries on average.

The proportion of low-performing readers slightly increased in PIRLS between 2000 and 2011 and decreased quite drastically in PISA between 2000 and 2012 (from 22.6% to 14.5%). This might look at first sight quite contradictory, but the increase observed for 15 year-olds is possibly linked to some changes related to the characteristics of students sampled in PISA. Indeed, the proportion of students who has repeated a grade in the PISA sample in 2012 has decreased, while the proportion of students attending an academic track (Gymnasium) has increased. The combination of these two changes is likely to have a strong positive impact on the proportion of low achievers. Attending a more advanced grade or programme means having benefited from more opportunities to learn reading and potentially lead to better reading skills.

The gap according to the pupils' socioeconomic background is somewhat lower than the EU average in PIRLS (63 vs 76 on average). In PISA, it is higher than the EU average (105 vs 89 on average). However, the indices of socioeconomic background are not the same in PIRLS and PISA, so the comparison should be taken with caution. The higher socioeconomic gap among 15 year-olds is potentially linked with the structure of the German education system, in which tracking starts earlier than in most of the countries, after grade 4 or 6. Early tracking is known to increase inequity.

In PISA 2009, the gap between native students and students with a migrant background was higher than in EU countries on average (56 vs 38 EU-average). Similarly, in PIRLS the mean score difference between those who always spoke the language of the test at home, and those who sometimes or never did so was slightly higher than in EU countries (32 vs 26). In PISA, this gap was very close to the EU average (58 vs 54).

In Germany, the gender gap (in favour of girls) is lower in PIRLS (8 vs 12 on average) and in PISA (40 vs 44 on average) than the corresponding EU average differences. The gender difference in Germany was lower in PIRLS 2011 (8 points) than in PIRLS 2001 (13 points). In PISA, the increase in reading

performance observed between 2000 and 2012 was stronger among girls (+ 28 score points) than among boys (+ 18 score points), resulting in an increase of the gender gap. However, it should not be a source of major concern, as the performance of boys has increased in absolute terms.

In conclusion, Germany has increased its performance in reading over time, mainly among 15 year-olds. Germany performs better than EU countries on average, and has a proportion of low-performing readers lower than (in PISA, with a drastic decrease between 2000 and 2012) or similar to (in PIRLS) the EU countries on average. The spread of achievement (gap between low and top performing readers) is smaller in Germany than in EU on average at both levels. Among adolescents, the gap according to socioeconomic status, migration or language spoken at home tends to be somewhat higher in Germany than in the EU on average. Germany is a little more efficient and a little less equitable than EU countries on average.

As far as adults are concerned, Germany performed at the same level as the EU in PIAAC (270 vs 271). It should be remembered that only 17 EU countries took part in PIAAC in 2012, so the comparison with other age groups should be made with caution. The spread of achievement – namely the gap between top and bottom performers - is somewhat wider in Germany than the EU-17-average (122 vs 117 on average). The proportion of adults performing at or below level 1 in Germany is 17.8%, slightly more than the EU-17 average (16.4%).

Females perform somewhat worse than men (267 vs 271) and the gender gap in favour of males was somewhat higher in Germany (5 score points) than in EU on average (2 score points) which is coherent with what is observed in younger generations (the female advantage in PIRLS and PISA being smaller than in the EU countries on average). The gap according to parents' level of education is somewhat higher than in the EU countries on average (53 vs 41), reflecting the same trend as in PIRLS and PISA. The same is observed for the gap according to the language spoken at home: the gap between native and non-native speakers is larger than the EU-17-average (36 vs 28).

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

CREATING A LITERATE ENVIRONMENT

Pre-Primary Years

Providing a supportive home environment: Compared to the European average, Germany has favourable scores as PIRLS data show: Most parents have positive attitudes to reading; however 15 percent of students have parents who do not like reading. The availability of children's books in the home is high; yet 7% of students in Germany had 10 or fewer books at home, and these students did less well on PIRLS overall reading literacy (by 93 score points), compared with students who had 200 or more books.

Parents engage often or at least sometimes in literacy related activities with their children. Since reading to the child is a predictor of future literacy achievement, it is a matter of concern that there are differences concerning social class and migrant factors. While in higher social classes 85 percent of the parents read daily to their child, in families with low sociocultural background this is only the case in 56 percent. In the latter group about 10 percent of the children are never read to or less than once a week. There was also a difference related to migration background: 92 percent of native parents read books to children often, compared to 80 percent of migrant parents.

More family literacy programs needed: There is a need for programs to raise awareness of all parents that literacy is a key to learning and life chances, and that the basis for good literacy achievement is laid in early childhood.

Primary Children and Adolescents

Providing a literate environment in school: According to PIRLS 2011 **nearly 20%** of 4th graders in Germany were in classrooms without a library.

Supporting reading motivation, especially among boys and adolescents: In Germany there is a remarkable decrease in reading motivation from 4th grade (cf. PIRLS 2011) to age 15 (cf. PISA 2009). In PIRLS 2011 about 11 percent of pupils in Germany reported that they never or very seldom read for pleasure outside school, however, these figures show a considerable gender difference (16% male and 6% female pupils; cf. Bos, Bremerich-Voss, Tarelli & Valtin 2012, p. 130). According to PISA 2009, however, 41 percent of 15-year-olds report not to read for pleasure outside of school, among those 55 percent of the boys and 27.5 percent of the girls.

As we know from the PISA and other studies, there is a high correlation between reading for pleasure and reading performance. Therefore, schools, libraries, families and communities should do more in order to support reading motivation, reading habits and a stable self-concept as a reader among adolescents, especially boys and students from disadvantaged families (low SES, migrant background). Many local and regional initiatives exist already, but there is a lack of coordination and evaluation.

Strengthening the role of public libraries in reading promotion: There are no national library regulations in Germany. It is the decision of town councils whether a city runs and equips public

libraries. This policy has two consequences: Libraries are often among the first institutions to experience budget cuts by communities that are struggling financially. There is no systematic cooperation between the different agents in the field of reading promotion on local, regional and national level.

Offering digital literacy learning opportunities at school: A literate environment can also be created by incorporating digital devices into the school environment. The OECD study "Students on Line" (OECD, 2011) suggests that German students have to rely more on private resources than school support to acquire digital literacy. In a number of factors Germany performs well below OECD average. 83.2% of the student population report that they spend no time at all on computers during German lessons – the lessons most likely to be dedicated to literacy acquisition on computers (OECD average: 74,0%) (OECD 2011, 321).

Adults

Fostering literacy provision for adults: Despite the high level of need, as identified in PIAAC and the National Level One Survey LEO (Grotlüschen et al 2011) there is no statutory right to **literacy provision** in Germany and only a very small proportion of adults with low literacy skills currently access literacy provision in Germany.

In 2011 the German Federal Ministry of Education and Research (BMBF) initiated a National Strategy for Literacy and Basic Skills, which includes workplace literacy elements. The Länder and municipalities are responsible for the creation of an infrastructure and the implementation of promising project results.

The Federal Ministry (BMBF) funds a nationwide awareness-raising campaign "Reading and Writing – My Key to the World" on TV as well as regional events to promote adult literacy education. The National Strategy has strengthened the voice of literacy advocates and lobby groups and there are now networks and round table activities with stakeholders in municipalities and Länder in order to strengthen the field of adult literacy.

IMPROVING THE QUALITY OF TEACHING

Pre-Primary Years

Providing free or affordable high quality preschool education for all children/investing more money in Early Childhood Education and Care (ECEC): Germany is at the lower end among European countries for the total public expenditure per child on pre-primary education, the ratio of children to teachers, and the percentage of males among preschool teachers.

Raising the professional qualification level of staff in ECEC ("Erzieher"/"Erzieherin"): Compared with most other European countries teachers in kindergarten (*Erzieher* and *Erzieherinnen*) have a lower level of qualification regarding the minimum required level to become a qualified teacher (post-secondary non-tertiary level, ISCED 4) and the academic degree (which is a bachelor's degree in most countries). In some Länder there are initiatives to improve the quality of staff, and to attract more persons, especially migrant persons and males. These activities should be coordinated and evaluated.

Improving early language and literacy screening and training: All Länder have developed programmes and initiatives for fostering the language development and language level assessment. However these measures are not coordinated. Regular screening of 4-year-olds for language competence and obligatory courses for children who lack adequate competence should be introduced. It should be ensured that at age 4 all children are diagnosed in their oral language proficiency, and that there are obligatory courses for children falling behind in their acquisition of language competence. The aim should be that all children entering school can speak the language of the school so that they can profit from reading instruction.

Introducing comprehensive literacy curricula in pre-primary schools: 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. Not all Länder provide a comprehensive literacy curriculum in pre-primary schools.

Primary Children and Adolescents

Ensuring adequate time for language and literacy instruction in primary and secondary schools: According to PIRLS 2011 teachers in Germany report allocating less time to the teaching of reading across the curriculum and in reading classes (110 hours) than on average across EU countries (147 hours).

Improving the quality of literacy instruction: Analyses of teachers' reports in PIRLS indicate that for reading instruction in Germany there is a need for differentiation to bear witness to the different needs of heterogeneous groups and a need for more cognitively demanding instruction.

Although reading comprehension skills such as recognising plot sequence and character traits, describing the overall message or theme of a text, and comparing information across texts are mentioned in curriculum documents in Germany, data provided by teachers in PIRLS 2011 suggest that students are not required to use higher-level text comprehension strategies as frequently as on average across EU countries. Literacy instruction in primary and secondary schools should become more cognitively demanding, more individualised and targeted at using higher-level strategies. One crucial prerequisite for achieving those goals is adequate preparation of teachers.

Building a stronger focus on literacy into curricula: There is a need to mainstream reading/writing literacy across the curriculum and to offer content area literacy instruction in all school subjects throughout secondary education, whether academic or vocational. The new generation of competence-based curricula have partially integrated literacy skills across subjects, but often literacy dimensions are not described in literacy-specific terms. It would be worthwhile to sharpen the literacy focus to help teachers of all subjects to become literacy teachers.

Extending systematic assessment of literacy skills: There is a need to establish minimal standards of literacy achievement (benchmarks) for each grade (in Germany only benchmarks for grades 4, 10 and 12 are established), and to administer regular tests based on these standards, to allow for identification of struggling readers/writers. Literacy assessment is mostly done by cross-state examinations in 3rd and 8th grades (VERA 3 and VERA 8). To gain a more complete picture of literacy levels in the classroom, regular literacy assessments should be implemented at each grade level. Since in Germany teachers' assessment of students' performance is oriented on the performance distribution of the class, age-specific standards might be useful in offering more valid criteria of judgment. However, the main goal of those assessments should be to identify struggling readers and learners in order to systematically support them, allocating attention and resources accordingly, targeting low performing schools - in need of additional funding and resources - as well as low performing students within schools. Assessments therefore need to be closely linked with support programmes and adequate qualifications of teachers and specialists.

Strengthening remedial support for struggling literacy learners: As PIRLS 2011 demonstrates not all children in need of remedial support in reading receive such support when they need it. Just one-quarter of students in grade 4 in Germany are in classes in which a specialised professional is available to work with children with reading problems.

Struggling readers need targeted individualised support. Individualised instruction works best when it is provided by teachers with specialist training in recognising and overcoming literacy problems, acting as resource person for all primary teachers. According to PIRLS 2011 just one-quarter of students in Grade 4 in Germany are in classes in which a specialised professional is available to work with children with reading problems.

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

Students who do not reach a minimal standard of literacy should have a legal right to individual support. Schools should provide *support systems* (additional instruction time, additional experts like reading experts, psychologists, speech therapists) for students falling behind in reading.

Improving the quality of pre-service and in-service teacher training: 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. About 17 percent of teachers of German language had no academic study in this subject – with great variations in these numbers, ranging from zero percent in Thuringia to 34 percent in Hamburg. In general, primary teachers in Germany reported that reading instruction receives less emphasis during initial teacher education, compared with the EU-24 average (PIRLS 2011).

Not all teachers who are or should be involved in teaching reading and writing skills in primary or secondary schools have a solid training in literacy. In the steering documents about standards for initial teacher education from the German *Kultusministerkonferenz* (2004, 2008) literacy as a concept

does not play a role. Only limited aspects of literacy are mentioned in the section on mother tongue education. Literacy expertise should become a clear standard for teacher education in all grades and subjects, not only for primary teachers, but also for secondary teachers.

The aim of having high quality teachers requires selective teacher recruitment policies (cf. OECD recommendations, 2005). Those do not exist in Germany.

Improving the quality and quantity (participation rates) of continuing professional development

(CPD): Although teachers in Germany are expected to participate in continuous professional education as a professional duty, the participation rates are still wanting. According to PIRLS 2011 25% of students in Germany were taught by teachers who had allocated no time to professional development in reading in the last two years.

Professional development (in-service teacher training) in Germany needs common quality standards as to the qualification of trainers and the quality of the programmes on offer, which might be guaranteed by accreditation procedures. The format of CPD should be changed from "one-shot-approaches" to mid- and long-term approaches which have a sustainable effect on improving the classroom practice of teachers. CPD should closely connect theory to practice and systematically integrate practical application of the newly-learned content and methods into the teachers' regular classrooms. Literacy promotion and literacy instruction across the curriculum should be a systematic part of CPD, addressing teachers of all grades and all subjects.

Adults

Monitoring the quality of adult literacy providers: Although the field of literacy and basic education has developed in Germany since the 1980s, there are clear delineations of responsibility between the Federal ("Bund") and state governments ("Länder") which mean that there is no regulation to provide courses on a nationwide level that would ensure continuity. As a result, the course offerings, general conditions and infrastructure in the respective Länder are different and there is no national inspection service to monitor the quality of adult literacy providers. (Advice and guidance also varies from region to region and is mostly dependent on special projects.) This said, there have been a number of measures since the 1970s to improve the quality and professionalisation in adult education, with the Länder setting quality standards as a condition of funding.

Developing curricula for adult literacy: There is no national curriculum for adult literacy, but the German Adult Education Association has been developing a *framework curriculum* to support teachers and trainers and offer guidelines and materials. Teaching usually focuses on the empowerment of learners, with learner-centred approaches, focusing on daily life situations and learning counselling.

Adult literacy provision in Germany has a strong focus on addressing literacy needs in the workplace. Since 2012 there has been a specific BMBF-Programme, "Workplace orientated Literacy and Adult Basic Education". It is also in the workplace that diagnostic tools to measure literacy competencies have also been developed.

Improving the qualification and status of teachers of adult literacy: Teachers of adult literacy are not bound by statutory qualification requirements, although there are a number of specialist qualifications available, including a post-graduate Masters programme (University of Education, Weingarten) in Adult Literacy Development and Basic Education, and a number of single qualifications offered by the *Länder Associations of Adult Education Colleges* [Landesverbände der Volkshochschulen],

The Federal Literacy Association [Bundesverband Alphabetisierung und Grundbildung e.V.] and adult education colleges. Funding is available to pay for some teacher education courses.

However, the status and salary of adult literacy professionals remains lower than that of other educators in Germany. Furthermore, most people (74%) working in continuing education do so on a self-employed, hourly-paid basis. There are no continuous professional development opportunities that focus on adult literacy development.

INCREASING PARTICIPATION, INCLUSION AND EQUITY

Pre-Primary Years

Compensating socio-economic and cultural background factors: Germany has a high percentage of pupils which have a migration background (28%). About 19 percent sometimes speak another language than German at home. In migrant families with children in the age group 0 – 8, Turkish (32%) or Turkish and German (42%) are more often the language of communication than German (26%). According to the AIDA-study 68 percent of the migrant parents reported that they communicate with their children (age 0 to 6) mainly in German, 12 percent mainly in another language and 21 in both languages. The higher the social class the more German is spoken (Cinar et al. 2013, p. 83).

Increasing pre-school attendance of disadvantaged children: The participation rate at age 4 and age 5 is about 96 percent. However there is a difference in enrolment rate between children aged 3 to 5 with and without migration background: 85 vs. 97 percent, with great differences between the Länder. The length of kindergarten attendance has a positive effect on reading. Children who attended 3 years and more had a higher reading score at grade 4 (551) than children who attended between 1 and 3 years (540). Again migrant factors are important: Only 68 percent of children with one parent or both parents born outside the country had visited the kindergarten for 3 years and more. For children with parents born in Germany the corresponding figure is 78 percent.

While in half of the European countries the entire period of Early Childhood Education and Care (ECEC) is free, in Germany parents in most of the Länder have to contribute financially to public and private kindergartens. Only some Länder provide one year or even a longer time of free pre-primary education. There is a need to provide free or affordable high-quality preschool education for all children.

Primary Children and Adolescents

Supporting groups at risk: Germany is one of seven OECD-member states that, according to PISA 2000 - 2012, had significantly improved in reading competences during the first decade of the 21st century. This progress was attained mainly by raising the performance of the poor readers. In particular, students with migrant backgrounds improved considerably: in 2009 they achieved 26 points more than in PISA 2000, twice as many as the whole German cohort (+ 13 points). Nevertheless, the gap between native speakers and second language learners is still large: the difference of 44 points is equivalent to more than one year of schooling. Another problem remains persistent: Boys are over-represented in the lowest proficiency levels (24% boys versus 12.6% girls, PISA 2009).

The *Bildungsbericht 2014* (National Education Report) states: Up to 30 percent of children and adolescents belong to the disadvantaged group that is affected by at least one risk factor: parents who

are unemployed, at risk of poverty or with a low level of education. Migrant children have a greater risk to be affected by these factors. This disadvantaged group is at risk in their literacy achievement and needs attention and support. All PISA results (2000, 2003, 2006, 2009, 2012) gave clear evidence that the "poor achievers" in general shared three characteristics: low SES, migrant background and male gender. All Länder should ensure that there are programmes to support all children and young people with migrant backgrounds and without adequate competences in the German language in their language and literacy development.

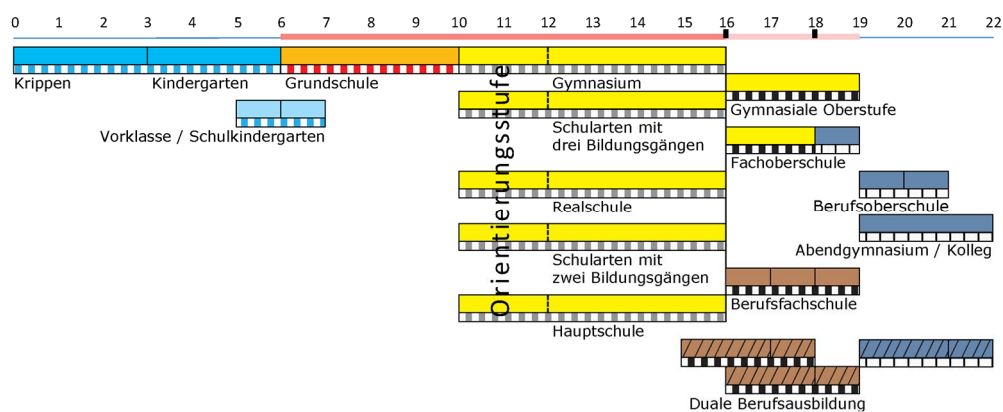
Adults

Supporting language courses and orientation courses are available for learners with German language needs. Immigrants can access free courses in "German for Professional Purposes" from the Federal Office for Migration and Refugees (BAMF), but integration courses usually require some financial contribution from learners who are not in receipt of welfare benefits. Teaching on integration courses is by specialist teachers accredited by the BAMF.

GENERAL INFORMATION ON THE GERMAN EDUCATION SYSTEM

Germany is a federal republic consisting of 16 federal states (Länder), which have sole legislative and administrative power over educational policy within their geographical area. This federal structure has led to differences in school structure, regulation of curricula, professional requirements and teacher education. There are also significant differences between the Länder in the achievement of reading as the additional surveys to PIRLS 2001 and 2006, and PISA 2000, 2003 and 2006 demonstrate. The last cycles of PIRLS and PISA do not permit comparisons across the federal Länder anymore. This report tries to gather general information about reading achievement (results from the international surveys PIRLS, PISA and PIACC), relevant background information and literacy policy areas. In practice, a separate report for each of the Länder would be required to capture the true state of literacy in each one.

Figure 1: Structure of the German School System⁶



Compared with educational systems in other European countries, the German school system has some specific features: Traditionally German children under three years are looked after in *Kinderkrippen* and children from the age of three to six attend kindergarten, until the beginning of primary school. Pre-primary education, usually offered by a *kindergarten*, is neither part of the compulsory school system nor directly linked to it, and attendance is voluntary. Local public youth welfare services ("Deutsche Kinder- und Jugendhilfe") are responsible for providing places at *kindergarten*, but these can also be run by private organisations⁷.

The duration of the primary school is rather short (4 years, 6 years only in Berlin and Brandenburg), and the school system is a selective one, with high rates of grade retention. After primary school, students are assigned to follow one of up to three different tracks of secondary schooling according to their "abilities" (but in fact often according to the social background of their families), leading to different certification and, hence, different opportunities for further education and access to the job market. In theory, it is possible to change between the tracks after certain milestones. However, in practice, the system is not very flexible. Some Länder have introduced comprehensive schools

⁶ See Structure of European education systems, http://eacea.ec.europa.eu/education/eurydice/facts_and_figures_en.php#diagram.

⁷ See <https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Germany>.

(Gesamtschulen) but it is unclear at this time to what extent, if any, they contribute to reducing the achievement gap. Most schools are **half-day schools**, i.e., regular classes take place mornings and lunch is not served in school. Only about one-third of all students attend "all-day-schools" which offer afternoon lessons on at least at 3 days a week⁸.

The PISA 2000 results, demonstrating a relatively low average reading achievement in Germany together with a high correlation between social background and attainment, caused a so-called "PISA shock" in Germany. As a consequence, major educational reforms have been launched, for instance the introduction of **educational monitoring**, the development of educational standards ("*Bildungsstandards*"), and the application of standards-based tests for evaluation. Other reforms refer to **changes in the school structure** (some Länder have discontinued selecting pupils at the end of primary school in three school types and adopted a two-type model (secondary schools and Gymnasium), and efforts to have more "**Ganztagsschulen**" (all-day-schools). There is a consensus between the Federation (Bund) and the Länder that greater efforts must be made to develop the German education system in the years ahead. The Qualification Initiative for Germany, *Aufstieg durch Bildung* ("Getting ahead through education") includes a catalogue of objectives and measures, some of which are also related to literacy policy areas, as outlined below.

Germany has an education system where the majority of students with disabilities attend segregated special-needs schools. Most of these students are diagnosed as "learning" and "language disabled" and it seems reasonable to assume that they also suffer from poor literacy skills. In 2009 Germany signed the UN Convention on the Rights of Persons with Disabilities which requires 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" (art. 24). The realisation of this right is a challenge for the educational system. In 2013 4.8% of students attended special schools, only 25% of students with special needs visited mainstream schools, with great variation between the Länder (Klemm 2013).

⁸ See <http://www.kmk.org/presse-und-aktuelles/meldung/2413300-schuelerinnen-und-schueler-nahmen-in-deutschland-im-schuljahr-201213-am-ganztagsunterricht.html>.

II CHILDREN AND ADOLESCENTS

1 Literacy Performance Data for Children and Adolescents

1.1 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 organised by the Association for the Evaluation of Educational Achievement (IEA). The survey was administered in 35 countries in 2001, 45 education systems in 2006, and 50 in 2011. PIRLS assesses different purposes for reading (literary and informational) and different reading processes (retrieve explicit information, make inferences, interpret and integrate ideas and information, examine and evaluate content, language, and textual elements). Both multiple choice and open-ended questions are used.

Combining newly developed reading assessment passages and questions for 2011 with a selection of secure assessment passages and questions from 2001 and 2006, 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).

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

In 2011, students in Germany achieved a mean score of 541 on the PIRLS overall reading scale. This was significantly higher than the EU-24 average of 535. Just six EU countries achieved significantly higher mean scores than Germany (Finland, N. Ireland, Denmark, Croatia, Ireland and England) (Table 1). The performance of students in Germany was relatively stronger when reading for literary purposes than for informational purposes, and when engaging in basic comprehension processes (Retrieve & Infer) compared with more higher-level processes (Interpret, Integrate & Evaluate) (Appendix Tables A2-A5).

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

Overall Reading – Mean Score	
Germany	541
EU-24	535

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

Performance in Germany on the PIRLS overall scale in 2011 is just two points higher than in 2001. While performance improved significantly by 9 score points between 2001 and 2006, it fell back significantly by 7 points between 2006 and 2011 (Table 2).

Table 2: Trends in Performance 2001-2011 (Overall Scale) – Germany and EU-24 Average

	2001	2006	Change (2006- 2001)	2006	2011	Change (2011- 2006)	2001	2011	Change (2011- 2001)
Germany	539	548	9	548	541	-7	539	541	2
EU	534	534	0	534	535	1	534	535	1

Significant differences in **bold**.

In Germany, 15% of students performed at or below the Low benchmark on overall reading. This is lower than the EU average of 20% (Table 3). Though Germany is behind countries such as Finland (8%), the Netherlands (10%) and Croatia (10%) in terms of the proportion of students performing at or below the Low benchmark, Germany's standing relative to most EU countries on this indicator is strong (see Appendix C, Table A6). In Germany, 10% of students achieve at the Advanced benchmark. This is about the same as the EU average, but behind countries such as Northern Ireland (19%), England (18%) and Finland (18%).

Table 3: Performance by Overall PIRLS Reading Benchmarks 2011 - Percentages of Pupils in Germany and on Average across the EU-24

	Below 400	400-475 Low	475-550 Intermediate	550-625 High	Above 625 Advanced
Germany	2	13	39	37	10
EU Avg.	5	15	36	35	9

Significant differences are shown in **bold**.

The standard deviation for overall reading in Germany is 66. This is lower than the corresponding EU-24 average of 71, indicating a somewhat narrower range of achievement in Germany (Table 4). Only the Netherlands (54) and Croatia (60) have standard deviations that are substantially lower than Germany's. In Germany, the difference between the 90th and 10th percentiles is 168. This is also below the corresponding EU-24 average of 181, again indicating a relatively narrow range of achievement in Germany.

Table 4: Spread of Achievement – Standard Deviation, 10th, 90th Percentiles, and Difference between 90th and 10th Percentiles on Overall Reading – Germany and EU-24 Average

	Standard Deviation	10 th Percentile	90 th Percentile	90 th -10 th
Germany	66	455	623	168
EU-24	71	440	621	181

Significant differences in **bold**

Also the spread in achievement between the 10th and the 90th percentile in Germany (168 points) is below the EU-24 average. This points to a relatively equitable system at primary level. However, the score of students in Germany at the 90th percentile (623) is not significantly different from the corresponding EU average of 621. This may suggest that higher-performing students in Germany are underperforming.

1.1.2 Gaps in reading

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

Parent's educational achievement

In Germany, students whose parents have completed a university degree achieved a mean score on the PIRLS overall reading scale of 63 points, which is below the EU-24 average of 76, indicating a weaker association between parental educational achievement and PIRLS reading performance in Germany (Table 5).

Table 5: Percentages of Parents Whose Highest Level of Education was Lower Secondary, and Percentages who Finished University or Higher– Germany and EU-24 Average

Level of Education	Lower Secondary or Below		University or Higher		Difference (Univ or Higher – Lower Sec)
	%	Mean	%	Mean	
Germany	36	522	28	585	63
EU-24	18	495	30	571	76

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

Primary language spoken at home different from language used at school

In Germany, 80% of pupils reported that they always spoke the language of the PIRLS test at home, while 20% reported that they did so sometimes or never. There is a large and significant difference – 32 points – between those who always spoke the language of test at home and those who did so 'sometimes or never'. This exceeds the corresponding EU-24 average difference (26) by 6 points (Figure 1).

Gender

In 2011, the gender difference in Germany on the PIRLS 2011 overall reading scale was 8 score points in favour of girls (Table 6; Figure 2). This is lower than the EU average difference of 12 points.

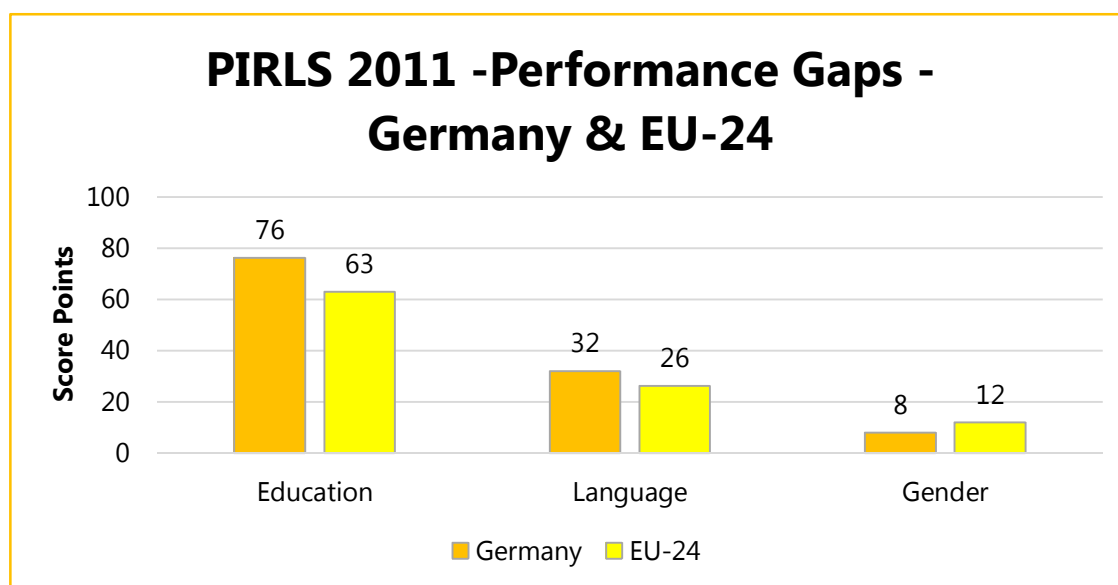
The gender difference in Germany in 2011 is about the same as it was in 2006, but is marginally lower than it was in 2001.

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

	Germany			EU		
	Girls	Boys	Girls-Boys	Girls	Boys	Girls-Boys
2011	545	537	8	541	529	12
2006	551	544	7	541	528	13
2001	546	533	13	542	525	17

Significant differences in **bold**.

Figure 2: Performance Gaps according to PIRLS



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

Attitudes to Reading

In Germany, the difference in mean reading scores between students in the top and bottom quartiles of the Like Reading scale (56 points) is about the same size as the corresponding EU-24 average of 52 (Table 7).

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

Like Reading	Top Quartile	Bottom Quartile	Difference (Q4-Q1)
Germany	573	517	56
EU-24	563	511	52

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

A similar pattern was apparent on the Confidence in Reading Scale where students in Germany who achieved scores on the top quarter of the scale had a mean score on the overall reading scale that was 72 points higher than that of students in the bottom quarter (Table 8). This is lower than the corresponding EU-24 average of 80, indicating a somewhat weaker relationship between confidence in reading and performance in Germany than on average across EU-24 countries.

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

Like Reading	Top Quartile	Bottom Quartile	Difference (Q4-Q1)
Germany	576	504	72
EU-24	570	490	80

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

In Germany, more girls (64%) than boys (38%) were deemed to like reading (i.e., they scored at the highest level on the composite like reading index). The difference (25%) was about the same as the EU-24 average difference (26%) (Appendix C, Table D5). More girls than boys also achieved the highest level on the composite indices of confidence in reading and motivation to read (Appendix C, Tables D6-D7).

1.1.3 National literacy surveys at primary level

For primary school students not only data from PIRLS are available but also from national assessment studies which began in 2011 and will be carried out every five years. In the first National Assessment Study carried out by the IQB (Institute for Educational Quality Improvement) in 2011 (Stanat et al. 2012), reading, listening and orthography were measured related to 5 competence levels. The percentage of students at or below competence level 1 - defined as minimal standard - were 12.4% in reading, 12.6% in orthography and 7.4% in listening, with great variation between the Länder. These numbers cannot be compared to PIRLS results because different scaling was used.

Likewise as in PIRLS in this assessment study achievement gaps were observed: The gender gap was 24 points in reading in favour of girls and 16 points in mathematics favouring boys. In listening no significant gender differences were observed (Stanat et al., 2012, p. 294). The achievement gap of students with different social backgrounds (EGP-classes) was 81 in reading and 86 in listening. Furthermore there were achievement gaps in reading (54 points) and listening (71 points) between children with and without a migration background. A regression analysis revealed that the migrant gap in reading mainly goes back to differences in social status, educational level of the parents and the frequency with which German was used as the family language.

1.2 Adolescents

The performance data are derived from the OECD PISA study.

The Programme for International Student Assessment (PISA) led by OECD⁹ **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 on and evaluate texts – and use a variety of texts – continuous (prose) and non-continuous (texts including graphs, tables, maps...). About half of the questions are multiple-choice, the other half open-ended (short or constructed answers). Results are reported on scales defining different levels of proficiency ranging from 1 (low performing) to 6 (high performing). Level 2 is considered as the level all 15 year-olds should reach, and will enable them to participate effectively to society. Since 2015, PISA has been administered on computers only in most participating countries.

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

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

Germany performed 19 score points above the EU-average in PISA 2012 - an equivalent to a half-year of schooling (Table 9). The performances in reading of German students have improved significantly between 2000 and 2012 (Table 10).

Table 9: Reading performance in PISA 2012

	Mean	S.E.
Germany	508	(2,8)
EU-27	489	(0,6)

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

⁹ See: <http://www.pisa.OECD.org>.

Table 10: Trends in reading performance - PISA 2000-2012

	2000		2009		2012		Change 2000–2009		Change 2009–2012		Change 2000– 2012	
	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
Germany	484	(2,5)	497	(2,7)	508	(2,8)	13	(6.1)	10	(4.7)	24	(7.0)
EU-27	489*	(0,7)	486**	(0,6)	489***	(0,6)	-3*	(5,0)	5**	(2.7)	3*	(6.0)

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

In Germany, the spread of achievement is somewhat smaller than in the EU countries on average (Table 11).

Table 11: Spread of achievement. Difference between 10th and 90th percentiles on the reading scale, all students and by gender – PISA 2012

	Difference 90th–10th for all students		Difference 90th–10th for girls		Difference 90th–10th for boys	
	Score diff.	S.E.	Score diff.	S.E.	Score diff.	S.E.
Germany	237	(5,3)	221	(5,7)	240	(5,9)
EU-27	251	(1,3)	230	(1,2)	259	(1,6)

Significant within country/EU differences in **bold**.

Germany's performance above EU-average is more due to the fact that there are more top-performing readers and less to the fact that there are fewer low-performing readers. The strength of Germany is that the education system is able to equip a higher proportion of 15 year-olds (+5.2 %) than on average across the EU-27 with the skills and competencies in reading considered as necessary to function in today's societies. On the other hand, the proportion of top-performing readers exceeds the EU-27 average by a non-significant 2%.

Table 12: Percentage of low-performing (below level 2) and high-performing (levels 5 and 6) students - PISA 2012

	Below level 2		Levels 5 and 6	
	%	S.E.	%	S.E.
Germany	14.5	(0.9)	8.9	(0.7)
EU-27	19.7	(0.2)	7.0	(0.1)

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

Between 2000 and 2012, the proportion of low-performing readers has decreased quite drastically in Germany: among girls an 8.7% decrease is observed, while among boys it is 6.5% (Table 13). This tendency cannot be attributed at first sight to changes in demographics: in Germany the proportion of non-native students as well as of students not speaking the language of the test at home has somewhat increased between 2000 and 2012. However, the countries of origin of migrant students have been changing. The proportion of students who has repeated a grade has decreased, while the proportion of students attending an academic track (Gymnasium) has increased. The combination of these three changes widely explains the decrease of the proportion of low achievers.

Table 13: Trends in the proportion of low-performers (below level 2) in reading, all students, and by gender – PISA 2000-2012

	Proportion of students below level 2 in reading					
	All students		Girls		Boys	
	%	S.E.	%	S.E.	%	S.E.
2000	22.6	(1.0)	18.2	(1.4)	26.6	(1,2)
2009	18.5	(1.1)	12.7	(1.1)	24.0	(1,5)
2012	14.5	(0.9)	8.7	(0.9)	20.1	(1,1)

Significant differences between assessment cycles in **bold**.

1.2.2 Gaps in reading performance

Socio-economic status

In Germany, the gap in reading performance according to the students' socioeconomic background is somewhat higher than in the EU-countries on average (Table 14). Germany is more performant but also less equitable than the EU-average.

Table 14: Difference in reading performance between bottom and top national quarters of the PISA index of economic, social and cultural status – PISA 2009

	Difference between bottom and top national quarters of the PISA index of economic, social and cultural status	
	Score difference	S.E.
Germany	101	(5.2)
EU-26	93	(1.1)

Migration

In Germany, the percentage of students with an immigrant background is 18% (2000: 15% (Table 15)). The gap between native students and those with an immigrant background is 56 score points, which is equivalent to almost one year of schooling. The gap between native students and those with an immigrant background is somewhat higher in Germany than in EU countries on average.

Table 15: Percentage of students and reading performance by immigrant status – PISA 2009

	Native students				Students with an immigrant background (first- or second-generation)				Difference in reading performance between native and students with an immigrant background	
	Percent- age of students	S.E.	Performance on the reading scale		Percent- age of students	S.E.	Performance on the reading scale		Score dif.	S.E.
			Mean	S.E.			Mean	S.E.		
Germany	82.4	(1.0)	511	(2.6)	17.6	(1.0)	455	(4.7)	56	(4.8)
EU-26	91.7	(0.02)	490	(0.4)	8.3	(0.02)	452	(6.4)	38.5	(6.4)

Language spoken at home

In Germany, the gap between students speaking the test language at home and those who do not (10% of the students, i.e. more than in 2000 – 8%) is quite substantial (58 score points) but close to the EU-average (Table 16). It is equivalent to one and a half year of schooling.

Table 16: Percentage of students and reading performance by language spoken at home – PISA 2012

	Speak test language at home				Speak another language at home				Difference in reading according to language spoken at home	
	Percent- age of students	S.E.	Performance on the reading scale		Percent- age of students	S.E.	Performance on the reading scale		Score dif.	S.E.
			Mean	S.E.			Mean	S.E.		
Germany	89.5	(0.8)	510	(2.5)	10.5	(0.8)	452	(6.4)	58	(6.4)
EU-27	86.7	(0.02)	494	(0.4)	13.3	(0.02)	441	(5.4)	54	(5.4)

Gender

The gender difference in reading performance in Germany is similar to EU countries on average (Table 17).

Table 17: Mean reading performance by gender and gender differences – PISA 2009

	Boys		Girls		Difference (B – G)	
	Mean	S.E.	Mean	S.E.	Score diff.	S.E.
Germany	478	(3.6)	518	(2.9)	-40	(3.9)
EU-26	463	(0.5)	506	(0.4)	-44	(0.5)

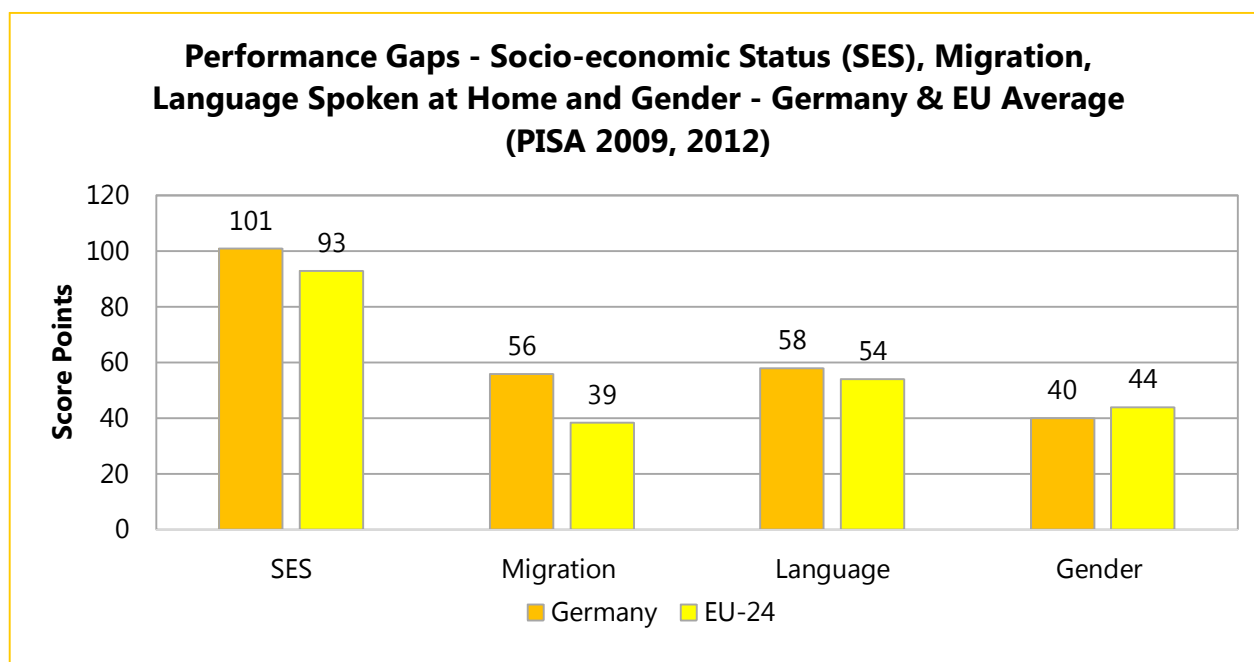
The average increase in reading performance observed between 2000 and 2012 is stronger among girls (+ 28 score points) than among boys (+ 18 score points). The trend is different in EU countries on average: between 2000 and 2012 the girls' performance increased by 5 score points while the boys' decreased by the same value (Table 18).

Table 18: Trends in reading performance by gender – PISA 2000-2012

	GERMANY				EU-27			
	Girls		Boys		Girls		Boys	
	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
2000	502	(3,9)	468	(3,2)	506*	(0,8)	473*	(0,9)
2009	518	(2,9)	478	(3,6)	507**	(0,7)	464**	(0,8)
2012	530	(3,1)	486	(2,9)	511***	(0,6)	468***	(0,8)

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

Figure 3: Performance Gaps according to PISA



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

Engagement and metacognition

In Germany, there is a gap of 105 score points – which is equivalent to more than two years and a half of schooling – between the students reporting being highly engaged in reading (top quarter), and those reporting being poorly engaged (bottom quarter) in that activity. Not surprisingly, students who report being engaged in reading perform better in the PISA test. The difference between the most and the least engaged readers in Germany is close to EU-average.

Table 19: Mean reading scores between students poorly engaged and highly engaged in reading – PISA 2009

	Low quarter		Top quarter		Difference
	Mean	S.E.	Mean	S.E.	
Germany	456	(3,8)	562	(3,1)	105
EU-26	444	(0.8)	543	(0.8)	99

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

	Low quarter		Top quarter		Difference
	Mean	S.E.	Mean	S.E.	
Germany	445	(3,6)	556	(2,8)	111
EU-26	433	(0.8)	531	(0.8)	98

In Germany, there is a gap of 111 score points –equivalent to almost three years of schooling– between the students who know which strategies are the most efficient to understand and remember a text, and those who have a limited knowledge of these metacognitive activities. On average in the EU, the gap is somewhat lower (98 score points). This remarkable difference reflects the close relationship between reading proficiency and awareness of efficient reading.

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

	Low quarter		Top quarter		Difference (Top-Botton)
	Mean	S.E.	Mean	S.E.	
Germany	446	(3,5)	555	(2,7)	109
EU-26	440	(0.8)	530	(0.7)	90

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

2 Policy Areas

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

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

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

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

2.1 Creating a literate environment for children and adolescents

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

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

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

Schools play an important role in offering a literate environment for students. Schools may foster reading motivation and reading for pleasure by establishing school and classroom libraries, offering a wide variety of books and other reading material in different genres, providing sheltered and comfortable spaces for individual reading activities (like reading clubs), and not forcing children into having to express and exchange their individual (intimate) reading experiences. However, schools do not have sole responsibility. A broad range of actors may shape literacy motivation, from parents and peers to libraries. Parents may provide role models and influence children’s attitudes towards literacy practices. Also, libraries have a vital role if they offer free books, especially for families who cannot afford to buy books. Regional or national campaigns may inspire children and their parents to engage in reading activities. (Cf. ELINET Country Reports, Frame of Reference, pp. 29ff.)

Adolescence is a crucial phase in life where young people develop long-term *identities and self-concepts* which include media preferences and practices (*media identity*). In this perspective, it is of great importance that families, schools and communities offer young people rich opportunities to

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

2.1.1 Providing a literate environment at home

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

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

Parental attitudes to reading

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

- Like: 37.0% (European average 35.3 %)
- Somewhat like: 48.0% (European average 52.6 %)
- Do not like: 15.0% (European average 17.9 %)

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

Compared to the European average, equal numbers of pupils in Germany have parents with positive attitudes towards reading; however 15 percent of students have parents who do not like reading. The importance of parental attitudes to reading is shown by the fact that in Germany there are great differences in reading performance at grade 4 between children whose parents like to read (average achievement 570) and those who do not (average achievement 518)

Home Educational Resources

In Germany, pupils whose parents reported having few educational resources at home achieved a mean score that was some 79 points lower than the mean score of pupils with ‘many’ resources at home. This is similar to the average difference across the EU-24 (Table 22). This indicates that students in Germany who have few educational resources at home are at risk of low achievement in reading to the same extent as their counterparts across EU-24 countries.

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

Level of Home Resources	Few Resources		Many Resources		Difference (Many - Few)
	%	Mean	%	Mean	
Germany	25	511	25	590	79
EU-24	25	495	25	573	79

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

Number of children's books in the home

The PIRLS 2011 database provides the figures below about the number of children's books in the home. Compared to the European average (for an overview of European countries see table B2 in Appendix B) the availability of children's books in the home is higher in Germany. However, seven percent of pupils in Germany reported having 10 or fewer books at home. This is below the EU average of 11% (Table 23, Table E.1 in Appendix C). The mean score of pupils in Germany with 10 or fewer books was some 93 points lower than that of pupils with more than 200 books. The difference is marginally greater than the EU-24 average difference of 82.

Table 23: Mean Overall Reading Scores of Pupil with 0-10 books at Home, and those with More than 200 Books – Germany and EU-24 Average

Books in the Home	None or Few Books (0-10)		More than 200 Books		Mean Score Difference (More than 200 – None or few)
	Percent of Students	Mean Reading Score	Percent of Students	Mean Reading Score	
Germany	7	481	18	574	93
EU-24	11	482	12	563	82

Early Literacy Activity Scale

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

The data for Germany are composite score for all these activities below (for an overview of European countries see table B3 in Appendix C):

- Often: 38.0% (European average 40.7%)
- Sometimes: 61.0% (European average 57.4)
- Never or almost never: 1.0% (European average 1.9%).

The Early Literacy Activity Scale correlates with later reading performance in grade 4. The average reading score in Grade 4 of pupils who often engaged in these activities with their parents before the beginning of primary school was 555, as compared with 543 for pupils who sometimes engaged in

these activities. 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 a composite score, it is of interest to look at single items. If only the category "often" is considered, the percentage of pupils in Germany whose parents engaged in literacy-related activities with them before the beginning of primary school is comparatively higher compared with the European average:

- read books to them often: 70.4% (European average 58.4 %)
- told stories to them often: 53.0% (European average 51. 5%)
- sang songs to them often: 53.4% (European average 50.6%)
- played games involving shapes (toys and puzzles) with them often: 75.9% (European average 63.5%).

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

The numbers referring to reading books to children are supported by the national studies "Vorlesestudie" carried out by the German Stiftung Lesen annually since 2007 (Ehmig 2014). 30 % of the parents did not read to their children more often than once in a week, 41% read several times per week to their children. These studies also showed the benefits of reading to the child for reading motivation and reading pleasure of children, as well as benefits for the whole family by strengthening emotional relations. Also an analysis of PISA data revealed advantages of reading to children: Children who were read to when very young are better readers at age 15, the advantage was especially high in Germany with a reading difference of around 20 score points (OECD 2012,p.19).

In the study "Aufwachsen in Deutschland: Alltagswelten" (AID:A) a difference was found between families of different social class. While in higher social classes 85 percent of the parents read daily to their child, in families with a low sociocultural background this is only the case for 56 percent. In the latter group about 10 percent of the children are never read to or are read to less often than once a week. There was also a difference related to migration background: 92 percent of native parents often read books to children compared to 80 percent of migrant parents (Cinar 2013, p. 88).

Challenges: Since reading to the child is a predictor of future literacy achievement it is a matter of concern that there are differences between parents concerning social class and migrant factors. There is a need for programmes **to raise awareness of all parents** that literacy is a key to learning and life chances and that the basis for good literacy achievement is laid in early childhood. In particular there is a need for more family literacy programmes with **a focus on supporting migrant parents and carers** in understanding and fostering the literacy development of their children.

2.1.2 Providing a literate environment in school

Challenges/Need for Action: In Germany there is a remarkable decrease in reading motivation from 4th grade (cf. PIRLS 2011) to age 15 (cf. PISA 2009). In PIRLS 2011 about **11 percent** of pupils in Germany reported that they never or very seldom read for pleasure outside school, however, these figures show a considerable gender difference (16% male and 6% female pupils; cf. Bos, Bremerich-Voss, Tarelli & Valtin 2012, p. 130). According to PISA 2009, however, **41 percent** of 15-year-olds report not to read for pleasure outside of school, among those 55 percent of the boys and 27.5 percent of the girls.

As we know from the PISA and other studies, there is a high correlation between reading for pleasure and reading performance. Therefore, schools, libraries, families and communities should do more in order to support reading motivation, reading habits and a stable self-concept as a reader among adolescents, especially boys and students from disadvantaged families (low SES, migrant background).

Resources teachers use for teaching reading

Since the type of reading materials teachers use in literacy instruction may influence the motivation of students, it is of interest to have a closer look at this matter. PIRLS 2011 provides some data. Just under one-quarter of students in Germany (24%) are taught by teachers who use a variety of children's books as a basis for reading instruction, compared with an EU average of 29%, 38% in Ireland and 83% in England. Sixty-two percent of pupils in Grade 4 in Germany are taught by teachers who use textbooks as the basis of reading instruction, compared with an EU average of 70%. Six percent of students in Germany are taught by teachers who report that computer software is used as a basis of reading instruction – about the same as the EU-24 average (5%), but lower than in Austria (9%) and the Netherlands (10%), while 52% of students in Germany use computer software as a supplement, compared with 47% on average across EU countries, 60% in Finland and 71% in Denmark (Mullis et al. 2012a, exh. 8.12, p. 236, EU averages obtained from Table H1 in Appendix C).

Availability and use of classroom library

Based on data provided by their teachers, PIRLS shows that 82% of pupils in Germany were in classrooms which had a classroom library. This is more than the corresponding EU-24 average of 73% but lower than in the Netherlands (86%) and Ireland (98%); furthermore, for about 20% of student there is no classroom library available. Just over one-third (34%) of students in Germany had access to more than 50 books in their class libraries, compared to an EU-24 average of 29%. Fewer students in Germany (24%) had access to at least three magazines in their class library than on average across EU countries (28%). Sixty-six percent of students in Germany could spend class time in the library/reading corner at least weekly – about the same proportion as on average across EU countries (61%). Across all classrooms (including those with no library), 54% of students in Germany had teachers who reported that they brought them to a library other than the class library at least monthly, fewer than on average across EU-24 countries (65%) (Mullis et al. 2012a, exh. 8.13, p.240; EU averages from PIRLS 2011 database, s. Table H2 in Appendix C).

Challenges: According to PIRLS 2011, nearly 20% of students in Grade 4 in Germany were in classrooms with no classroom library. The situation concerning school libraries is also problematic.

The German Library Federation (Deutscher Bibliotheksverband) declared Germany a “disaster zone” especially in terms of school libraries. Only 15.3% of all German schools can rely on a school library with information resources and a repertoire of engaging literature. The Bibliotheksportal gives the following reasons for this gloomy state:

There are no clear legal and financial commitments between the Federal Republic of Germany, the Länder and the municipalities. There is no clearly defined organisation between these three structures¹⁰.

¹⁰ <http://www.bibliotheksportal.de/themen/bibliothek-und-bildung/bibliothek-und-schule/schulbibliotheken.html>, 01.04.2015.

2.1.3 Providing a digital environment

Digital environment of primary students

A literate environment can also be created by incorporating digital devices into the school environment. According to teacher reports in PIRLS 2011, 73% of students in Germany have a computer available for reading lessons, compared to the EU-average of 45%.

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

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

- to look up information: 54% (EU-24 average = 39%)
- to read stories or other texts: 42% (EU-24 = 32%)
- to write stories or other texts: 37% (EU-24 = 33%)
- to develop reading skills and strategies with instructional software: 45% (EU-24 = 27%).

Hence, for each indicator, computer use is greater in Germany than on average across the EU-24, though it might be noted that the EU-24 averages are quite low (Mullis et al. 2012a, exh. 8.14, p. 242). In Denmark 76% of students look up information at least monthly, and 78% do so in the Netherlands, while 83% and 68% respectively in these countries write stories or other texts with the same frequency.

Digital environment of secondary students

The OECD study “Students On Line” (OECD, 2011) suggests that German students aged 15-16 have to rely more on private resources than school support to acquire digital literacy. In a number of factors Germany performs well below OECD average. 83.2% of the student population report that they spend no time at all on computers during German lessons – the lessons most likely to be dedicated to literacy acquisition (OECD average: 74,0%) (OECD, p. 321). In comparison to the OECD average and especially in comparison to the well-equipped Nordic countries, the ICT coverage in German schools still has room for improvement: while 5 students share a computer in Norway, 11 students do so in Germany (Möbius, 2014, p. 337). Only 14.3% of German students report using laptops at school: in Denmark, this number is almost 5 times as high (73.2%) (OECD, p. 323).

The Survey of Schools (SoS) Country Profile states that the students’ use of ICT receives more attention than the teachers’ (SoS Country Profile 2012, p. 4). OECD data suggests that infrequent use of digital media in the classroom is also due to the teachers’ dispositions and abilities. In the Teaching and Learning International Study (TALIS) ICT skills for teaching and new technologies in the work place rank second in a table of self-reported professional development needs of teachers (TALIS 2014, p. 109).

According to SoS, students at secondary level use computers, projectors or beamers, DVDs, videos, TV or cameras. They are supposed to use ICT in all subjects in class and for complementary activities. There are no central recommendations on the use of ICT in student assessment (SoS Country Profile 2012, p. 4).

Challenges: The OECD study “Students on Line” (OECD, 2011) suggests that German students have to rely more on private resources than school support to acquire digital literacy. (... to be completed...)

2.1.4 The role of public libraries in reading promotion

Public libraries are an important agent in reading promotion. Although there are no explicit national guidelines for German libraries, many libraries draw on international guidelines, e.g. by the International Federation of Library Associations (IFLA). For example:

- Roles and tasks for public libraries: the Public Library Manifesto¹¹
- Guidelines for Library Services for Young Adults¹²
- The UNESCO manifesto for school libraries¹³

It is the decision of town councils whether a city runs and equips public libraries.

The national umbrella organisation **„Deutscher Bibliotheksverband“** identifies on their website "Library Gateway" adolescents as a "special" target group because of their developmental tasks: Adolescents "are sometimes exhausting and demanding. They experience enormous school pressure but they do not want to be perceived solely as students. It is a great challenge for libraries to convince adolescents to make use of libraries on their own accord."¹⁴

This mission statement underpins the view expressed by a library expert interviewed by ELINET who states that German libraries tailor their programmes mostly to the needs of primary and upper secondary students preparing for their essays (Facharbeit). Reasons for this narrow focus could be – according to the expert – that programmes targeted at non-cognitive variables such as reading engagement in primary and secondary schools are difficult to standardise and are, therefore, rarely evaluated. Another reason could be that upper secondary students have clearly identified needs with regard to what they are looking for in a library, e.g. research techniques. Consequently, libraries mostly focus on programmes to engage children whom they perceive to be a much more rewarding target group. The committee "Children's and Youth libraries" of the Deutscher Bibliotheksverbands runs a blog to envision concepts for adolescent library use in the 21st century¹⁵.

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

There are agreements to cooperate between the Deutscher Bibliotheksverband and most federal ministries of education¹⁶. However, these documents only recommend cooperation, they do not require it. Furthermore, due to their nature as steering documents, these agreements remain very general in tone and content.

¹¹ See <http://www.ifla.org/DE/publications/node/8768>, 30.03.2015.

¹² See <http://www.ifla.org/files/assets/libraries-for-children-and-ya/publications/ya-guidelines2-de.pdf>.

¹³ See <http://archive.ifla.org/VII/s11/pubs/mani-g.htm>.

¹⁴ See <http://www.bibliotheksportal.de/themen/bibliothekskunden/jugendliche.html>, translation by ELINET.

¹⁵ See <https://jugendbibliothek21.wordpress.com/>.

¹⁶ For example: http://www.bibliotheksverband.de/fileadmin/user_upload/Landesverbaende/Bayern/Kooperationsvereinbarung_Bibliothek_und_Schule_Bayern.pdf, 30.03.2015.

Challenges/Need for Action: There are no national library regulations in Germany. It is the decision of town councils whether a city runs and equips public libraries. This policy has two consequences: Libraries are often among the first institutions to experience budget cuts by communities that are struggling financially. There is no systematic cooperation between the different agents in the field of reading promotion on local, regional and national level.

Libraries mostly focus on programmes to engage children whom they perceive to be a much more rewarding target group.

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

Family literacy programs

The programme „Lesestart – Drei Meilensteine für das Lesen“: This is the biggest initiative for reading promotion in Germany, sponsored by the Federal Ministry of Education and Research (from 2011 to 2017) and carried out by Stiftung Lesen. Parents and children, over a period of six years, receive three bookstart sets and age-specific recommendations how best to support the language and literacy development of their child. Lesestart reaches more than 2 million children in 3 age cohorts¹⁷. The programme has been accompanied by a scientific evaluation aimed at optimising its implementation and measuring effects on the target groups (parents and children). Annual reports have been delivered to the ministry but not yet been published¹⁸.

Family literacy programmes for migrant parents are reported under “Participation, Inclusion and Equity”

Programmes for introducing parents and children to libraries and bookshops

There are many projects, mainly initiated by public libraries and carried out by librarians or with the help of volunteers, to coax preschool children and their parents into libraries.

One example is „Pippilothek??? Eine Bibliothek wirkt Wunder“, initiated by Deutscher Bibliotheksverband e.V. in cooperation with with Stiftung Digitale Chancen and supported by the Federal Ministry of Education and Research within the framework of „Kultur macht stark. Bündnisse für Bildung.“ Children, aged 3-5, are invited with their parents into a library where they read the picture book „Pippilothek??? Eine Bibliothek wirkt Wunder“. The publisher offers a free download for the introduction to this book (“Bilderbuchkino”, picture book cinema)¹⁹. In addition “Ting-pens” which “read” words and pictures are used²⁰.

Initiatives to foster reading engagement among children and adolescents

Germany’s federal structure is mirrored in the diversity of players engaged in regional reading promotion. There are only few players active on a national level (most of which are also engaged in ELINET).

¹⁷ See <http://www.lesestart.de>.

¹⁸ See <http://www.lesestart.de/ueber-lesestart/begleitforschung/>.

¹⁹ See <https://oebib.wordpress.com/2012/05/22/leseforderung-bilderbuchkino-pippilothek-fur-alle-frei-erhaltich/>.

²⁰ For more information, visit: https://foerderung.buendnisse-fuer-bildung.de/anlagen/massnahmebeschreibung/41/DBV08_Broschuere_4.Ausschr_rz.pdf.

The Eurydice report acknowledges that efforts to promote reading can be fragmented in federal states. It notes that Germany seeks to overcome this problem by implementing a joint venture involving federal and state governments that involved the creation of a portal ("Reading in Germany"/*Lesen in Deutschland*) which supports the promotion of reading outside of school. The portal, which is administered by the German Institute for International Education Research (DIPF), bundles information on reading promotion initiatives and offers a comprehensive overview of projects in reading promotion by each federal Land²¹.

The **German Society for Reading and Writing** (Deutsche Gesellschaft für Lesen und Schreiben, DGLS), founded in 1968, is a non-profit organization that regularly organizes conferences and publishes books on topics of reading promotion. In 2002 DGLS declared "Ten rights of children to read and write" and provided analyses to show how well (or poorly) these rights are realised²² (Valtin 2005).

The **German Reading Foundation** (*Stiftung Lesen*)²³ partners with other organisations in fields like childcare institutions, schools, libraries and the media and support literacy projects.) Under the patronage of Germany's president Joachim Gauck, the foundation sees itself as an "advocate for reading and media competency in Germany to ensure that every child and adult in Germany develops crucial reading and media skills" (<http://www.stiftunglesen.de/meta/englisch/>, 30.03.2015). Engaging celebrity "reading ambassadors" and 150,000 volunteer readers, the foundation runs numerous regional and national programmes for reading engagement that are either publically funded or privately sponsored, depending on the project. A programme especially dedicated to struggling children and adolescent readers are the reading clubs ("Leseklubs")²⁴ offered on an extra-curricular basis. The reading clubs want to invite students to discover reading as and for pleasure which is why the reading clubs offer a homely atmosphere in combination with engaging activities. This project is sponsored by the Federal Ministry of Education and Research.

Bundesverband Leseförderung: This umbrella organisation of different players in the field of reading promotion aims to support and to develop professional reading promotion in Germany. The association is active in ensuring the quality of teaching reading, writing, literature and media for children and adolescents. It also provides an open space for discussion and further improvement²⁵. One associated project is "**Abenteuer Buch**" aiming at developing innovative and inspiring concepts to incite the love of reading and to foster digital literacy, e.g. "youngdigitalnews" or "Buchtrailer"²⁶.

"Kicking and Reading" (Kicken und Lesen): Renowned German football teams such as 1. FC Cologne or VfB Stuttgart work closely together with this project designed to spark reading motivation in boys in 5th-8th grade, especially low achievers and migrant students. The idea is to combine the two activities of playing football and reading books that are interesting for boys to unlock reading motivation. So far the project is primarily based in Baden-Württemberg and in Cologne²⁷.

In a similar way the organisation "**LitCam**" offers the project "**Football meets culture**" targeted at disadvantaged children. In this project, football is used as an incentive to spark interest in education

²¹ See <http://www.lesen-in-deutschland.de/html/index.php>.

²² See <http://www.dgls.de/die-dgls/zehn-rechte-der-kinder.html>.

²³ See <http://www.stiftunglesen.de/>.

²⁴ See <http://www.leseklubs.de/>.

²⁵ See <http://www.bundesverband-lesefoerderung.de/>.

²⁶ See <http://www.abenteuerbuch.com>.

²⁷ See <http://www.bwstiftung.de/bildung/programme/jugend-und-berufliche-bildung/kicken-lesen/> and <http://www.kickenundlesenkoeln.de/>.

and culture, also in matters of literacy. Striving for educational equality, LitCam is a non-profit organisation founded in 2006 in a joint effort by the Frankfurt Book Fair, the UNESCO Institute for Lifelong Learning and the Bundesverband Alphabetisierung und Grundbildung.

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

Schools in Germany – mainly primary schools – have already developed many projects to 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 corners or clubs), and not forcing children into having to express and exchange their individual (intimate) reading experiences.

Numerous examples for fostering reading motivation are presented in the internet portals²⁸

It is difficult to make a general statement about the range of attractive (diverse and gender-sensitive) reading materials in and outside of schools. However, there are several initiatives to raise awareness to the importance of offering age- and gender-appropriate reading materials to engage children and adolescents in reading for pleasure. An important tool is giving stakeholders for reading promotion recommendations and book tips for suitable material.

For instance, the Committee for Juvenile Literature of GEW (Arbeitsgemeinschaft Jugendliteratur und Medien der GEW, shortly AJuM), reviews the literature and media for children and adolescents with a pedagogical critical eye. The work done by more than 500 teachers in the past years resulted in a database of 20,000 reviews. The organisation is simultaneously involved in counselling children, youth, and teachers and in offering advanced training courses (<http://www.ajum.de/index.php>).

The **website “Boys and Books”** gives those engaged in reading promotion in- and outside schools recommendations targeted at male readers. The database of book reviews is searchable by age-group and by genre²⁹. Furthermore, the website gives insight into state-of-the-art research on gender and reading and it features an overview of library initiatives aimed at boys, e.g. the project “Super: Mann liest vor” by the Stadtbibliothek Frankfurt. However, there is no data available whether these book recommendations find their way into the selection processes of literature at school level.

Public Libraries

The internet portal www.lesen-in-deutschland.de (Reading in Germany) provides information about dozens of programs and initiatives concerning libraries.

Some Länder build strategic and effective partnerships between libraries and the education sector. North Rhine-Westphalia, for example, strives to establish regional “education networks” and libraries are one of the most prominent players (so-called education partners) to foster lifelong and lifewide learning³⁰.

Fostering digital literacy in and outside schools

From 2013-2017, the Federal Ministry for Research and Innovation funds a project on **“Reading and digital media”**, jointly coordinated by Deutscher Bibliotheksverband and the Foundation Digital

²⁸ See <http://bildungsserver.berlin-brandenburg.de/1126.html> and <http://wir-foerdern-lesen.de/>.

²⁹ See <http://boysandbooks.de/home.html>.

³⁰ See <http://www.bibliothek.schulministerium.nrw.de/Bildungspartner/Bildungspartnerinitiativen/Bibliothek-und-Schule/>.

Opportunities (Stiftung Digitale Chancen)³¹. Also the German Reading Foundation conceptualises in its position paper digital media as literacy technologies that require and promote reading and writing.³²

However, there is much more research and investigation needed on how digital media can enhance reading engagement and how they can be incorporated in adolescent reading promotion programmes.

2.2 Improving the quality of teaching

To improve the quality of teaching, important aspects need to be considered:

- The quality of preschool
- coherent literacy curricula
- high-quality reading instruction,
- early identification of and support for struggling literacy learners
- highly-qualified teachers (cf. Frame of Reference for ELINET Country Reports).

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

2.2.1 Quality of preschool

While early childhood education has long been neglected as a public issue, nowadays early childhood education and care (ECEC) has been recognized as important for "better child well-being and learning outcomes as a foundation for lifelong learning; more equitable child outcomes and reduction of poverty; increased intergenerational social mobility; more female labour market participation; increased fertility rates; and better social and economic development for the society at large" (OECD 2012 *Starting Strong III*, p. 9). In Germany and in all the other European countries, pre-primary education is an important part of political reflection and action.

The EU High Level Group of Experts on Literacy stated:

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

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

³¹ See http://www.lesen-und-digitale-medien.de/de_DE/das-projekt-lesen-macht-stark.

³² See <http://www.stiftunglesen.de/download.php?type=documentpdf&id=1429>, 30.03.2015.

Annual expenditure on pre-primary education

According to Eurostat (2014, Figure D3), the total public expenditure per child in pre-primary education as a percentage of GDP in Germany is 0.46%. Germany belongs to the lower third of the distribution. The range is from 0.04% in Turkey and 0.1% in Ireland to 1.01% in Denmark (for an overview of European countries see table D1 in Appendix B). The 4th Report on Poverty and Wealth (Bundesministerium für Arbeit und Soziales 2013) states: "the amount of money Germany spends on early-years care and education for children under six years of age... remains far below average in comparison with other countries. In countries like Denmark and Sweden the proportion is three times higher".

Ratio of children to teachers in pre-primary school

According to European Commission/EACEA/Eurydice/Eurostat (2014), the student/teacher ratio in pre-primary schools for children at the age of four in Germany is 12.7. The range is from 5.8 in Hungary to 23.1 in Turkey. For the other European countries OECD (2014, p.324) provides information about the student/teacher ratio in pre-primary schools (for an overview of European countries see table D2 in Appendix B).

Percentage of males among preschool teachers

According to Pordata (2014), 2.9% of the pre-primary teachers in Germany are males. The range is from 0.2% in Bulgaria and Hungary to 17.7% in France (for an overview of European countries see table D3 in Appendix B). It can be assumed that a higher level of qualification (together with better payment) will attract more males to become kindergarten educators.

Preschool teachers' qualifications

Compared with most other European countries teachers in kindergarten (*Erzieher* and *Erzieherinnen*) have a lower minimum required level of educational attainment to become a qualified teacher (post-secondary non-tertiary level, ISCED 4) or an academic degree (which is a Bachelor's degree in most countries). Only 3.2 percent of kindergarten teachers have a university degree (Bundesministerium für Arbeit und Soziales 2013, p. 141). Only 2.9% of the pre-primary teachers in Germany are males. It can be assumed that a higher level of qualification (together with better payment) will attract more males to become kindergarten educators.

Continuing Professional Development is a professional duty and a prerequisite for career development. In most European countries, CPD is generally considered a professional duty for staff (Eurostat 2014, pp. 104–105). There are no empirical data for Germany about participation rates.

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

Preschool language and literacy curriculum

The design of the kindergarten curriculum is an important aspect of quality, therefore it is included in this section and not in the next section “Literacy curricula in schools”, also taking into consideration that young children have other learning needs than school children. 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 Germany subjects and weekly teaching hours are not laid down for the sector of early childhood education and care, and there are no curricula such as those in schools. The Länder have laid down objectives and areas of education in education plans which are implemented in agreement with the maintaining bodies of the day-care centres for children. The following areas and activities are designed to encourage the development of children from the age of three years until they enter school in the *Kindergarten*: development of the child’s physical, mental, emotional and social abilities. According to the joint framework of the Länder for early education in day-care centres for children (*Gemeinsamer Rahmen der Länder für die frühe Bildung in Kindertageseinrichtungen*), educational areas are:

- language, writing, communication
- personal and social development, development of values and religious education
- mathematics, natural sciences, (information) technology
- fine arts/working with different media
- body, movement, health
- nature and cultural environments

The early educational and school education concepts in each case are to be agreed at local level between the non-public youth welfare services and the *Grundschulen* (primary schools)³³.

Improving early language and literacy screening and training in ECEC (Early education and Care)

All Länder have developed programmes and initiatives for fostering the language development and language level assessment. However these measures are not coordinated. Regular screening of 4-year-olds for language competence and obligatory courses for children who lack adequate competence should be introduced. It should be ensured that at age 4 at the latest all children are diagnosed in their oral language proficiency, and that there are obligatory courses for children falling behind in their acquisition of language competence. The aim should be that all children entering school can speak the language of the school so that they can profit from reading instruction.

Fostering the development of emergent literacy skills through playful activities is an important function of pre-school institutions, providing a basis for formal literacy instruction in primary school. We consider the following to be key components: oral language development, including vocabulary learning and grammar, familiarisation with the language of books (e.g. through hearing stories read and told), being engaged and motivated in literacy-related activities, experiencing a literacy-rich environment, developing concepts of print, and language awareness (for more information see the frame text of country reports). For Germany, it is difficult to answer these questions because all 16 Länder have developed differing steering documents as guidelines for kindergartens and it was not possible to analyse all of them (for a first overview on the national levels see Eurydice: Teaching

³³ See https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Germany:Teaching_and_Learning_in_Programmes_for_Children_over_2-3_years.

Reading in Europe, 2011; European Commission/ EACEA/ Eurydice/ Eurostat, 2014. Key Data on Early Childhood Education and Care in Europe. 2014 Edition). It seems that most kindergarten teachers try to provide a literacy environment where children learn and engage in the communicative functions of reading and writing with the aim of developing curiosity and motivation to learn to read and write in school. 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.

2.2.2 Literacy curricula in schools

Curricula provide a normative framework for teachers and a guideline for their teaching aims, methods, materials and activities. However one should keep in mind that there is a difference between the intended curriculum, as outlined in official documents, and the implemented curriculum – what actually happens in the schools.

Literacy curricula in schools in Germany have been heavily influenced by the "**Bildungsstandards**". The publication of the first PISA study in 2000 led to a so-called "PISA shock" in the German education landscape. In immediate reaction to the worrying results of the 2000 study, the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic (Kultusministerkonferenz or KMK) decided to implement new steps in quality monitoring. The KMK commissioned an expertise "Zur Entwicklung nationaler Bildungsstandards. Eine Expertise" (Klieme et al. 2003), and since 2003, the ministers of education have introduced educational standards (**Bildungsstandards**) describing the subject-specific competencies that students should have acquired up to certain educational milestones. The Kultusministerkonferenz decided to describe the average level of competence (Regelstandards) in contrast to minimal standards that should be obtained by the completion of certain grades:

- Primary School (4th grade): Bildungsstandards published in 2004 for German and mathematics
- Lower Secondary Education (Hauptschule, 9th grade): Bildungsstandards published in 2004 for German, mathematics and the first foreign language studied continuously (English or French)
- General Certificate for Secondary Education (Mittlerer Schulabschluss, 10th grade): Bildungsstandards published in 2003/2004 for German, mathematics, the first foreign language studied continuously (English or French) and the sciences (biology, chemistry, physics)
- General qualification for tertiary education (Abitur, 12th grade): Bildungsstandards published in 2012 for German, mathematics and the first foreign language continuously studied (English or French).

The Bildungsstandards are phrased very broadly and specified both by a set of prescribed methods, techniques as well as examples for exercises and tasks. All 16 Länder implement these standards by establishing core curricula. The standards, which are binding, specify the curricular elements for core subjects, such as German, that are to be achieved by students after a defined number of school years. The Ministry for Education and Cultural Affairs in each of the Länder establishes its own curricula for specific courses, subjects and grade levels (Tarelli, Bos and Bremerich-Vos 2012, p. 258). Furthermore, the Bildungsstandards are supposed to be the reference point in school development and in initial and continuous teacher training.

Primary schools curricula

Reading is taught in Germany as part of the national language curriculum that also includes writing and other communication skills (Mullis et al. 2012b, Vol. 1, p 256, 258). Throughout primary education, German (comprising instruction in reading, spelling, writing, and literature) is considered a main subject and reading is embedded in the teaching of the German language.

According to PIRLS 2011 Encyclopedia, there is major emphasis on reading for pleasure in the language/reading curriculum in Germany. Germany is among a group of 9 countries participating in PIRLS 2011 which reported major emphasis on reading for pleasure in the curricula. Four of the EU-24 countries in PIRLS 2011 reported that reading for pleasure was given little or no emphasis and 11 countries that it had some emphasis (Mullis et al. 2012b, Vol.1, exhibit 9, p. 36). Germany is among countries where reading for pleasure is seen as being very important.

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

Explicit instruction of grapheme-phoneme correspondences: Linking sounds to letters, naming and sounding the letters of the alphabet and using knowledge of letters, sounds and words when writing are taught during primary education in Germany (European Commission/EACEA/Eurydice 2011, Figure 1.2, p. 56). Reading instruction is usually divided into two stages. In the first stage, children learn the alphabetic principle – that words are composed of letters that correspond to sounds. At the end of the second stage, students should be able to fluently read age-appropriate texts. Mostly, teachers in Germany use basic readers ("Fibeln") for reading instruction, embracing both analytic and synthetic approaches. Words are broken down into syllables and phonemes, the phonemes are attached to letters, and the letters are rejoined into words.

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

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

While most of these comprehension strategies receive a major emphasis in intended language curricula in Germany (according to the PIRLS 2011 Encyclopedia (Mullis et al., 2012b, Vol. 1, Exhibit 8, pp. 34-35), there is nevertheless, as teachers' self reports reveal, a big discrepancy between the intended curriculum and *what is going on in literacy instruction*).

Literacy curricula in secondary schools

Is literacy an essential part of school curricula (incl. vocational training) across grades?

The strongest **emphasis on literacy** can be found in the **Bildungsstandards for German**. For instance, in the Bildungsstandards for German for the General Certificate of Secondary Education (**Mittlerer Schulabschluss**, obtained after grade 10), reading and writing comprise 2 of the 4 competence areas in total: Examining language and language usage, speaking and listening, writing, reading – dealing with texts and media.

As a general aim for reading, these Bildungsstandards identify the following competences:

"Students have the foundational competence to understand texts, which enhances reading engagement and fosters reading for pleasure and helps to develop empathy.

Students can work independently on extracting information from texts, combining this extracted information and connecting it to previous knowledge. In order to do so, they develop various reading techniques and use reading strategies in a purposeful way. Students have foundational knowledge about texts, their contents, structures and historical dimensions, they can reflect upon texts, evaluate them and deal with their aesthetic dimension according to specific criteria. Students have orientational knowledge of language and literature. They use different media to search and critically evaluate information." (Bildungsstandards für den Mittleren Schulabschluss, p. 9, translation by ELINET)

This description of the competence area reflects the **cognitive perspective on reading** as also chosen in the PISA studies. This cognitive perspective is even more prominent in the more elaborated enumeration of competencies (Bildungsstandards für den Mittleren Schulabschluss, p. 13-14):

- Having mastery of different reading techniques:
- This competence is targeted at foundational reading competencies.
- Knowing and using reading strategies
- This competence includes semantic knowledge, knowledge of text types, using strategies to structure texts and to recognize the structure of texts
- Using and understanding both factual and fictional texts
- This competence is solely focused on cognitive operations, e.g. distinguishing between literary genres, extracting information, discerning central messages of literary texts, analysing content and style of literary texts, understanding discontinuous texts, evaluating texts, creative production of own texts
- Using and understanding different media

This competence aims at "media literacy": distinguishing between information and entertainment, knowing the specific nature of different media, recognising intentions of media producers, using different search strategies, using media to prepare presentations.

Even though literacy instruction is mainly in the domain of mother-tongue teachers, aspects of literacy are also addressed in the 10th grade Bildungsstandards for mathematics and the sciences (biology, chemistry, physics). It is highlighted in all of the above, that it is crucial to be able to communicate about the issues at hand, e.g. to understand and to use correct terminology. Furthermore, the Bildungsstandards see the subject of biology, for instance, as a factor contributing to foster literacy,

especially subject-specific reading and communication competence (Bildungsstandards für den Mittleren Schulabschluss Biologie, p. 11³⁴).

Comparing (Secondary) Core Curricula of two Federal States (Länder) in Germany

Due to Germany's federal structure, it is difficult to make general statements of the status of literacy in the German curriculum. The educational policies of different Länder are shaped by different political traditions, e.g. the curriculum of **North Rhine-Westphalia** (acronym: NRW) – a long standing constituency of the social democratic party – shows a different spirit than the one of Bavaria that has been under continuous rule of the conservative party. Furthermore, there are also differences between the 5 Länder formerly belonging to the GDR and the 11 Länder formerly belonging to the Bonn republic.

To attempt to give a somewhat representative image of the federal policy for secondary education in Germany, the following section compares the curricula of the federal states North Rhine-Westphalia (NRW)³⁵ and Bavaria³⁶ for the subjects of German, Mathematics and Biology at a secondary level at the school type "Realschule" leading to the General Certificate of Secondary Education (Mittlerer Schulabschluss). The curriculum example from NRW is a so-called core curriculum explicitly designed to specify the Bildungsstandards as described above for each subject. The data from Bavaria is drawn from so-called "subject profiles" (Fachprofile) that describe the role and the ambition of the specific subject. All three NRW and Bavarian curricula (German, Maths and Biology) also take literacy aspects into account, although the term as such is not used.

In the NRW curriculum for the German language, namely in the description of the goals of the German lesson, the development of reading competence is mentioned, as well as facilitating knowledge, and strategies for text analysis and understanding (NRW Curr. German, p. 11). The Bavarian curriculum for the same subject focuses mostly on literacy-related aspects ranging from oral to written exercises, specific text forms and appropriate vocabulary, making connections between the mother tongue and the second or foreign language(s), as well as digital literacy, where the whole writing process should be acquired.

The NRW curriculum for Maths divides the necessary competences into process-related and content-related competences. Argumentation and communication are listed under process-related competences and their description encompasses learning the specific terminology, allowing the students to formulate the new concepts in their own words for a deeper understanding, linking new concepts to the already known ones, argumentation and comparison of solution processes and

³⁴ See http://www.kmk.org/fileadmin/veroeffentlichungen_beschluesse/2004/2004_12_16-Bildungsstandards-Biologie.pdf.

³⁵ NRW core curricula

for German (2004): http://www.schulentwicklung.nrw.de/lehrplaene/upload/lehrplaene_download/realschule/rs_deutsch.pdf;

Mathematics (2004): http://www.schulentwicklung.nrw.de/lehrplaene/upload/lehrplaene_download/realschule/rs_mathematik.pdf;

Biology (2011): http://www.schulentwicklung.nrw.de/lehrplaene/upload/klp_SI/RS/Biologie/RS_Biologie_Endfassung.pdf.

³⁶ Bavaria curricula

for German (2013): <https://www.isb.bayern.de/download/8643/d.pdf>;

Mathematics (2013): https://www.isb.bayern.de/download/9019/m_neu.pdf;

Biology (2013): <https://www.isb.bayern.de/download/8582/b.pdf>.

problem formulation (NRW Curr. Math, p. 12-13). The Maths curriculum in Bavaria is similar to the one in NRW in terms of the embedded literacy-related competences like rational argumentation, recognising, defining, formulating, explaining and analysing the requirements and verifying statements (Bav. Curr. Math, p. 56). The curriculum makes a difference between competences needed in Algebra and in Geometry; for the latter, in addition to text and symbol understanding, students need to acquire also competences related to understanding and accurately describing visual forms (e.g. graphs, diagrams etc.).

In the NRW curriculum for biology, the competences that could be labelled under “literacy” are grouped under “processes” or “competence areas” (as opposed to “topics” or “content areas”). The mentioned processes are dealing with expert knowledge, knowledge acquisition, communication and evaluation. The competences described here range from understanding new terminology and concepts to critical reflection of the given information and to appropriate oral and written usage of the specific vocabulary (NRW Curr. Biology, p. 14-15). The Bavarian curriculum for biology does not list literacy-related competences as a special category, but dedicates a special section to the cross-curricular importance of the subject (relating the acquired knowledge to other subjects as well) and the central role played by the German language in formulating hypotheses, describing the results of experiments and presenting the general results. In addition to that, knowledge of English language is mentioned as a facilitator for understanding concepts derived from English (Bav. Curr. Biol., p. 65-66).

Conclusion: Although not all NRW and Bavarian curricula for all disciplines could be analysed for answering this question, from the comparison of the curriculum for German, Maths and Biology in these two federal states it could be noticed that communication skills are not only present in the language teaching, but also in Maths and Biology. However, literacy concepts are not explicitly mentioned or elaborated in the framework of “content area literacy” which would certainly be helpful to support teachers’ self-concepts as being teachers of literacy.

Do the curricula allow enough time to teach and train basic literacy skills in the different subjects? Are the content area curricula “slim” enough to provide time for work on literacy?

On a general basis, German curricula struggle with quite extensive prescriptions with regard to what should be taught, and how it should be taught. The Bildungsstandards making the paradigm shift towards competences tried to lessen mandatory regulations in favour of describing what students are supposed to be able to do. Nevertheless, German curricula could not necessarily be described as “slim” enough to provide time for literacy teaching. The literacy-related aspects are presented in the analysed NRW and Bavarian curricula under the description of competences, which implies that these should be trained during the class. But a precise answer cannot be given, as the curricula do not state how much time should be invested in developing each listed competence.

Challenges/need for action: Building a stronger focus on literacy into curricula: There is a need to mainstream reading/writing literacy across the curriculum and to offer content area literacy instruction in all school subjects throughout secondary education, whether academic or vocational.

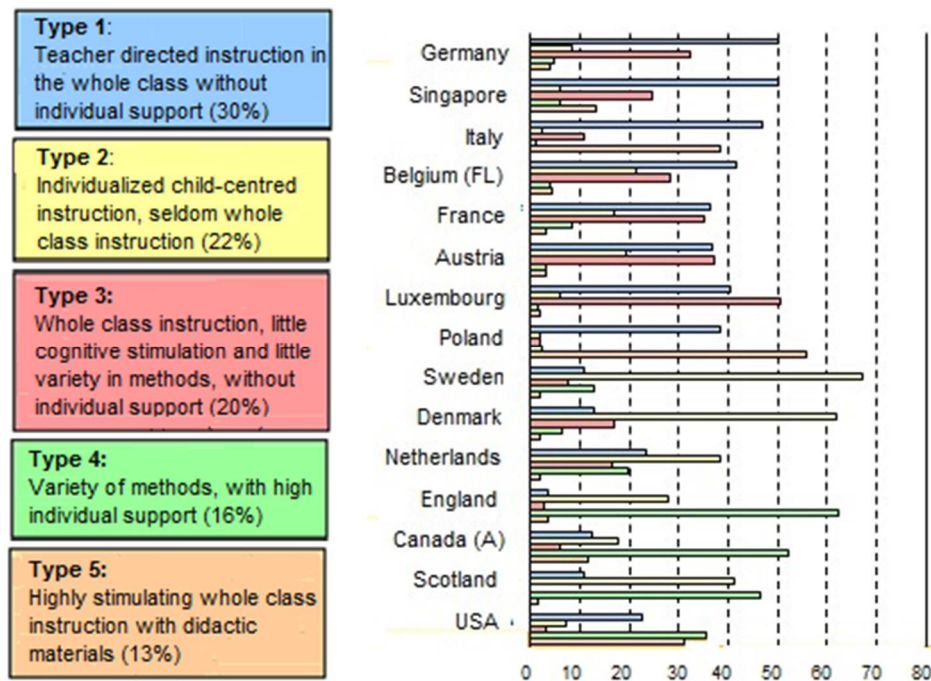
2.2.3 Reading instruction

While most literacy researchers have clear concepts about effective literacy instruction, we do not know much about what is actually going on in classrooms in Germany or other European countries. In order to describe the practice of reading instruction we would need extensive observational studies. However, there are only rare observational studies (Philipp 2014). There is a noteworthy shortage of

data on actual reading instruction in school. Only PIRLS offer some data for primary schools, albeit based on self-reports by teachers (PIRLS) which might not be valid and may be biased by social desirability.

Using the PIRLS 2006 data for a latent class analysis Lankes and Carstensen (2007) identified in Germany mainly two types of instruction in fourth grade: teacher-directed instruction in the whole class without individual support and whole-class instruction with little cognitive stimulation and little variety in methods, without individual support. Ex-cathedra teaching while supplying the same material for the whole class was the instructional format used most often in Germany.

Figure 4: Distribution of types of Reading Instruction (PIRLS 2006 data)



Source: Adapted from Lankes & Carstensen 2007

In PIRLS 2011 principals and teachers provided some information on language and reading instruction. Concerning the **instructional time spent on language and reading**, the following results are of interest. The allocation of time to teaching the German language in primary schools in Germany (245 hours) is about the same as the average across EU countries (241 hours) (Mullis et al., 2012, Exhibit 6, p. 38). The average number of hours allocated to teaching reading each year in Germany (60 hours) is marginally less than the average across EU countries (68), though the EU average is itself low relative to, for example, the United States and New Zealand (both 131 hours). Teachers in Germany report allocating less time to teaching reading across the curriculum and in reading classes (110 hours) than on average across EU countries (147 hours) (Mullis et al. 2012a, Exhibit 8.4. p. 214. EU averages from PIRLS 2011 database). In Germany spelling abilities are highly valued – and seem to get too much instructional attention compared to the teaching of reading and writing. In PIRLS 2001 teachers reported that they allocated about 165 minutes a week for spelling instruction – compared with 236 minutes for reading instruction (Valtin et al. 2003, p. 242).

Challenges: Primary school teachers in Germany report allocating less time to teaching reading across the curriculum and in reading classes (110 hours) than on average across EU countries (147 hours). They should allocate more time to teaching reading across the curriculum and in reading classes and give reading instruction a higher priority compared to spelling instruction.

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

In PIRLS teachers were asked which activities they use to develop students' reading comprehension skills. These are the figures based on the report of reading teachers in PIRLS 2011:

Percent of students whose teachers ask them to do the following daily or almost daily:

- Compare texts read with experiences: 19% (EU avg. = 35%)
- Compare what they have read with materials in other texts: 10% (EU avg. = 22%)
- Identify main ideas of what they had read: 45% (EU avg. = 55%)
- Explain their support or understanding of what has been read: 49% (EU avg. = 62%)
- Make predictions about what will happen next in the text: 10% (EU avg. = 22%)
- Make generalisations and draw inferences: 19% (EU avg. = 36%)
- Describe the style and structure of the text: 4% (EU avg. = 23%)
- Determine the author's perspective and intention: 5% (EU avg. = 21%)
- Locate information within the text: 67% (EU avg. = 66%)

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

Higher-level strategies tended to be taught less frequently in Germany than on average across the EU-24. Although reading comprehension skills such as recognising plot sequence and character traits, describing the overall message or theme of a text, and comparing information across texts feature strongly in curriculum documents in Germany, data provided by teachers in PIRLS 2011 suggest that students are not required to use such strategies as frequently as on average across EU countries

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

On an instruction to engage students scale, the mean score for German was 8.7 (equivalent to using engagement strategies in about half of lessons), compared to an EU-24 average of 9.8 (equivalent to using strategies in every or almost every lesson). More detailed information is seen in table 8.12.

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

- 36% of students in Germany 'agree a lot' that they like what they read about in school. This is below the corresponding EU-24 average of 46%.
- Just 42% of students in Germany 'agree a lot' that their teacher gives them interesting things to read, compared with 48% on average across EU countries.

Students in Germany had a mean score of 9.7 on a scale measuring overall student engagement in reading lessons. The average across EU countries is 9.9. A score above 10.5 can be interpreted as indicating that students are 'engaged', while a score of between 7.4 and 10.5 indicates that students are 'somewhat engaged'. Hence, students in Germany, and on average across the EU-24 are 'somewhat engaged' in their reading lessons, with room for improvement.

It is well documented in research studies that explicit teaching of comprehension strategies may improve reading comprehension among readers with different levels of ability. While there are no data available for secondary schools, some PISA data also suggest that there is a need for explicit instruction of reading strategies: As reported above, in Germany, there is a gap of 111 score points – equivalent to almost three years of schooling– between the students who know which strategies are the most efficient to understand and remember a text, and those who have a limited knowledge of these metacognitive activities. This remarkable difference reflects the close relationship between reading proficiency and awareness of efficient reading.

Challenges: Reading instruction in Germany needs differentiation which effectively addresses the different needs of heterogeneous groups. Data provided by teachers in PIRLS 2011 suggest that students are not required to use higher-level text comprehension strategies as frequently as on average across EU countries. Literacy instruction in primary and secondary schools should become more cognitively demanding, more individualised and targeted at using higher-level strategies. It is well documented in research studies that explicit teaching of comprehension strategies may improve reading comprehension among readers with different levels of ability. One crucial prerequisite for achieving those goals is adequate preparation of teachers.

Digital literacy part of the curriculum for primary and secondary schools

According to the Survey of Schools, in Germany (SoS Country Profile 2012, p.4) there are national strategies about Information and Communication Technology (ICT) in schools (e-learning, media/digital literacy) and central steering documents for all ICT learning objectives, including knowledge of computer hardware and electronics, using mobile devices, developing programming skills and using social media.

Furthermore, there are nationwide efforts to implement media education on all levels. Its pioneer is the movement "No Education Without Media" (Keine Bildung ohne Medien) driven by the most important players in media education in Germany. Its "Manifesto on Media Education" issued in March 2009 was signed by over 1300 institutions and individuals³⁷.

According to the European Media Literacy Education Study (Emedus), media literacy (ML) is included in several educational laws at national and state level. The states should follow the national laws phrased by the Standing Conference of the ministers of culture and education (KMK) but they are allowed to

³⁷ See <http://www.keine-bildung-ohne-medien.de/pages/medienpaed-manifest/>.

implement ML according to the local requirements. Media education may be both an interdisciplinary, cross-curricular topic and a separate subject. There are guidelines for learning the knowledge of hardware, programming, use of mobile devices and social media (EMEDUS p. 4).

In its declaration “Media Education in Schools” (Medienbildung in der Schule, 2012), the KMK phrased five key dimensions in terms of turning media education into a mandatory part of school education and train teachers and future teachers accordingly:

- promoting the quality of teaching and learning through media
- the opportunities for social and cultural participation and involvement
- shaping the identity and personality of young people
- developing attitudes and value systems, and aesthetic discernment
- the necessary protection from the negative impacts of media and media use³⁸.

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

2.2.4 Early identification of and support for struggling literacy learners

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

Standards as basis of assessment of reading difficulties

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

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

In Germany benchmarks for grade 4, 10 and 12 have been established.

These benchmarks allow targeting of low performing schools – those in need of additional funding and resources - as well as low performing students within schools.

³⁸ See http://www.kmk.org/fileadmin/doc/Dokumentation/Bildungswesen_en_pdfs/reforms.pdf, p. 294.

The country-wide comparative assessments such as VERA 8 define five different competence levels in terms of reading (see below). Those standards are similar to the PISA competence levels.

- 1) Maximal standard (V): The students can extract scattered information in very complex and extensive texts. They can link the pieces of information and re-use them in different contexts. They can recognize and explain the judgements and evaluations implicit in the texts.
- 2) Average standard plus (IV): The students can extract hidden information in longer texts, they can link these pieces of information and they can opt for one of several different opinions and explain their decision. They can attribute characteristics to a character if they are not explicitly mentioned in the text.
- 3) Average standard (III): The students can recognise the structure, the topic and the narrative perspective of longer text by choosing between different options. Furthermore, they can deduce the meaning of less common vocabulary according to the context.
- 4) Minimal standard (II): The students can link information that is scattered across several paragraphs. Based to this information, they can make deductions. They can deduce the reasons for certain behaviour of central characters.
- 5) Below minimal standard (I): The students can extract single pieces of information from short texts and they can link them to common knowledge. They can recognise the main topic of the text and they can distinguish between important and marginal pieces of information³⁹.

Screening for reading competence to identify struggling readers

In Germany, the identification of children with reading difficulties is considered to be the responsibility of the school (Mullis et al., 2012b). As of 2011, there were no mandatory comprehensive screening tests in use to identify children with reading difficulties, with identification mainly based on teacher observations. Students with severe reading and/or spelling difficulties may be referred to a school psychologist for testing in reading, spelling and intelligence, and medical specialists may be consulted (Mullis et al. 2012b, Vol.1, p. 262).

Since 2007, comparative tests are administered in 3rd and 8th grade in Germany (VERA-3 and VERA-8) to monitor students' achievement in reading and other basic competences. VERA is the acronym for "VERgleichs-Arbeiten" (comparison tests). The test items are based on the educational standards for primary schools and secondary level I, These annual country-wide comparative assessments per grade (Vergleichsarbeiten) were introduced to evaluate whether students have actually acquired the desired proficiency levels as described in the national educational standards (Bildungsstandards). All 3rd and 8th graders are tested every year either in Mathematics or German. At the end of grade 3 and 8 they are assessed whether they already reach the competence levels aimed at the end of grade 4 or grade 9. When German is assessed, reading skills are a necessary part of the test that in grade 8 comprises both factual and fictional, continuous and discontinuous texts⁴⁰.

It is in the responsibility of the single schools, however, to determine whether the test results are used for the diagnosis of poor readers and writers. Some Länder publish the results of VERA, in others only the schools and the teachers get feedback about the result.

³⁹ See <https://www.eltern.isq-bb.de/Kompetenzstufen.kompetenzstufen0.0.html>, translation by ELINET.

⁴⁰ See <https://www.iqb.hu-berlin.de/vera>.

Monitoring primary students' progress in reading

In Germany, the evaluation given of students' performance in a particular class is based on all of the work the student has done in that class – specifically, written, oral, and practical work and tests. From grade 2 on students receive marks based on direct observations of students' participation in class, and results from written class tests. Written exercises and informal classroom tests are carried out at regular intervals throughout the school year and are designed to measure the standards laid out in the curricula (Mullis et al. 2012b, Vol.1, p. 265, 266). In general, the marks students receive for their written exercises and in their report cards (twice a year) are oriented on the performance distribution of the class. It is criticised that marks are not informative enough to give individual feedback and to describe students' progress and it has been shown that they are biased by social class and gender (Valtin, Schmude et al. 2002).

In PIRLS 2011, teachers were asked how much emphasis they placed on specified assessment tools to monitor students' progress in reading. Table 24 shows that 83% students in Germany, and 84% on average across the EU-24 placed a major emphasis on evaluation of student work to monitor their progress in reading. However, fewer students in Germany were taught by teachers who placed a major emphasis on use of class tests or national or regional achievement tests, compared with the corresponding EU-24 averages. Indeed, just 5% of students in Germany were taught by teachers who placed a major emphasis on use of national or regional achievement tests, and 56% were taught by teachers who placed little or no emphasis on use of such tests.

Table 24: Percentages of Students with Teachers Reported Placing Varying Levels of Emphasis on the Use of Specified Tools to Monitor Students' Progress in Reading – Germany and EU-24 Average

	Germany			EU-24		
	Major Emphasis	Some Emphasis	Little/No Emphasis	Major Emphasis	Some Emphasis	Little/No Emphasis
Evaluation of student's ongoing work	83	15	1	84	16	1
Classroom tests (e.g., teacher-based tests)	41	55	4	51	45	5
National or regional achievement tests	5	39	56	25	52	24

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

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

Extending systematic assessment of literacy skills: There is a need to establish minimal standards of literacy achievement (benchmarks) for each grade (in Germany only benchmarks for grades 4, 10 and 12 are established), and to administer regular tests based on these standards, to allow for identification of struggling readers/writers. Literacy assessment is mostly done by cross-state examinations in 3rd and 8th grades (VERA 3 and VERA 8). To gain a more complete picture of literacy levels in the classroom, regular literacy assessments should be implemented at each grade level.

Using formative assessment as an integral part of teaching literacy: Ongoing assessment to diagnose as early as possible learning difficulties and to respond with focused instruction tailored to

the individual needs is an important measure to prevent literacy difficulties. Also in higher classes formative assessments should be part of teaching (content area) literacy in order to evaluate students' performance levels, to identify individual needs and to shape teaching accordingly.

Establishing strong links between diagnostics (assessment) and support: The main goal of literacy assessments should be to identify struggling readers and learners in order to systematically support them, allocating attention and resources accordingly, targeting low performing schools - in need of additional funding and resources - as well as low performing students within schools. Assessments therefore need to be closely linked with support programmes delivered by adequately qualified teachers and specialists.

Supporting struggling literacy learners

In Germany all Länder provide guidelines as to which students with reading difficulties should be supported within their classes (Mullis et al., 2012b). This includes the adaptation of teaching methods and workload to the needs and capacities of these students (internal differentiation). In order to provide individual assistance to students with difficulties in reading and spelling, individualised remedial programs or plans may be developed by the teacher in cooperation with other teachers and the student's family. Support measures can also include small group and individual teaching (external differentiation).

In 2010 the KMK proposed a targeted support strategy for poorer-performing pupils (*Förderstrategie für leistungsschwächere Schülerinnen und Schüler*) including prevention, intervention and compensation measures. The aim of this strategy was to significantly reduce the number of pupils not achieving a minimum competence development level by the end of their course of education⁴¹.

For poor-performing students the following measures are proposed: individual support, individual diagnosis and documentation of the learning outcomes, additional learning time, additional counseling teachers (KMK, 2013: 287-288).

All Länder have special regulations for the diagnosis and remediation of children with specific reading and spelling difficulties. For example, in North-Rhine Westphalia, assistive measures can be provided for children who fail to meet the basic goals of reading and writing instruction in Grades 1 and 2, while students in higher primary grades, who do not meet requirements over a period of three months, may be provided with additional support. However not all schools have enough resources to provide remedial teaching for children with reading and writing difficulties.

Number of struggling readers receiving remedial instruction

PIRLS offers some data concerning issues of remedial instruction in primary schools. One question was whether all pupils receive remedial instruction when needed. There is some evidence that not all children in need of remedial support in reading receive such support when they need it. In PIRLS 2011, teachers in Germany estimated that 23% of students were in need of remedial instruction in reading, while it was estimated that just 11% received remedial instruction when they needed it (ELINET PIRLS 2011 Appendix, Table K1). However, as noted earlier, 15% of students in Germany scored at or below the Low PIRLS benchmark.

⁴¹ See http://www.kmk.org/fileadmin/veroeffentlichungen_beschluesse/2010/2010_03_04-Foerderstrategie-Leistungsschwaechere.pdf.

Further analysis of the German PIRLS 2006 data (Valtin, Homburg et al. 2010) as well as the national comparison study (Stanat et al. 2011) demonstrate that more than 25% of the students who did not reach the minimal standard in reading did not receive systematic language training, neither in the classroom nor in additional courses.

Kinds of support offered

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

In Germany, pupils with temporary learning difficulties (e.g. slow learners, reading or writing difficulties) should be supported by a combination of measures of differentiation within the structure of the general support system (European Agency for Special Needs and Inclusive Education, 2012). Support is given in the form of individual assistance measures so that pupils are able to achieve a high level of integration at school, participate in the society and live adequately independent lives. (KMK, 2013: 237).

Classroom teachers in Germany are primarily responsible for teaching the initial stages of reading. Special teachers are available in some schools for remedial education, teaching groups of children with difficulties in reading and spelling (Mullis et al., 2012b, p. 261). PIRLS 2011 provides information about additional staff and availability of support persons for reading. Based on teacher responses to a series of questions in PIRLS 2011, 3% of students in Germany are in classes where there is always access to specialised professionals to work with students who have reading difficulties, while 22% are in classes where there is access sometimes (Table 25). The corresponding EU-24 averages are 25% and 42% respectively, indicating a relative shortage of professional support persons in Germany compared to the EU-24 on average. Access to teacher aides is lower in Germany (3% always have access) than on average across the EU-24 (13%). Access to volunteers to work with children with reading difficulties is broadly similar in Germany and on average across EU-24 countries.

Table 25: Percentages of Students in Classrooms with Access to Additional Personnel to Work with Children with Reading Difficulties, Germany and EU-24 Average

Access to...	Germany			EU Average		
	Always	Sometimes	Never	Always	Sometimes	Never
Specialised professional	3	22	75	25	42	33
Teacher aide	3	32	66	13	34	53
Adult/parent volunteer	3	25	72	3	18	80

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

Based on responses provided by teachers in PIRLS 2011, 32% of students in Germany are in classes where the teacher arranges for students falling behind in reading to work with a specialised professional (e.g., a reading specialist or a speech therapist) (Table 26). This is well below the EU-24

average of 55%, confirming the relative disadvantage under which schools and teachers in Germany work.

A similar percentage of teachers in Germany (32%) as on average across EU-24 countries (37%) say that they wait for students who are falling behind in reading to mature. Seventy-eight percent of students in Germany and 90% of students across the EU-24 countries are in classes where the teacher spends more time working with students who are falling behind in reading

Table 26: Percentages of Students in Classrooms Where Teachers Engage in Specified Activities to Support Students Who Begin to Fall Behind in Reading, Germany and EU Average

	Germany (Yes)	EU Average (Yes)
I have students work with a specialised professional	32	55
I wait to see if performance improves with maturation	32	37
I spend more time working on reading individually with the student	78	90
I ask the parents to help the students with reading	100	97

Support for struggling readers – a legal right?

In two of the 16 states of Germany (Bavaria, Mecklenburg-Vorpommern) a differentiation is made between poor readers and spellers with an intelligence quotient below the mean and those with at least average intelligence. The latter group is labelled dyslexics. **Dyslexia** is regarded as incurable illness. Children diagnosed by a medical doctor as dyslexic are *entitled* to receive remedial education; they do not get marks in reading and spelling and may get a recommendation for the “Gymnasium” (in the selective German school system it is important to receive good grades in order to get the permission to attend an academic school, the Gymnasium, after grade 4). Other children with reading and spelling difficulties may profit also from these privileges but they *do not have an entitlement*. This Bavarian medical concept of dyslexia has been criticised (e.g. Valtin 2012).

Challenges: Strengthening remedial support

Whether remedial training takes place or remedial courses are offered is dependent on the school’s resources, and very often when classes have to be cancelled, remedial courses are the first. There is evidence that not all children in need of remedial support in literacy receive it. Students who do not reach a minimal standard of literacy level should have a legal right to individual support.

Struggling readers need targeted individualised support. Individualised instruction works best when it is provided by teachers with specialist training in recognising and overcoming literacy problems, acting as a resource person for all primary teachers. According to PIRLS 2011 just one-quarter of students in Grade 4 in Germany are in classes in which a specialised professional is available to work with children with reading problems.

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

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

It is difficult to provide an overview about teacher training in Germany because the Länder have different types of school and different types of teachers⁴². Only framework data can be provided.

Entry requirements for Initial Teacher Education

The diploma certifying the completion of upper secondary education and qualifying for tertiary education (Abitur) is the only selection method in place decided at the level of the federal education authority. All other decisions concerning admission lies in the hands of the respective Länder and single universities (European Commission/EACEA/Eurydice, 2013. Key Data on Teachers and School Leaders in Europe). Entry requirements therefore vary from Land to Land and from university to university. Depending on the popularity of the subject, many universities select their students according to a minimum grade average obtained in the Abitur (Numerus Clausus). In Germany, it is subject to debate whether to introduce aptitude tests for aspiring teachers before they enrol in the first phase of their initial teacher training. A number of universities (e.g. Universität des Saarlands, Universität Kiel) are in the process of developing these tests which serve mainly as recommended tools for self-assessments, offered on the platform "career counselling for teachers" (<http://nrw.cct-germany.de/>).

Concerning **literacy and language skills**, most universities do not require an exam in language skills (European Commission/EACEA/Eurydice, 2011. Teaching Reading in Europe: Contexts, Policies and Practices) except for future teachers of foreign languages.

Selection methods for admission to initial teacher education

There are no specific selection methods. This contrasts with the situation in about one-third of European countries where teachers are required to demonstrate satisfactory performance on a specific aptitude test or in an interview in which they are asked about their motivations for becoming teachers.

Challenges: The aim of having high quality teachers requires selective teacher recruitment policies (cf. OECD recommendations, 2005). Those do not exist in Germany.

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

A master's degree is required of primary teachers (Eurydice, 2013, Figure A2.a, p. 26), and the length is given as five years. PIRLS offers more detailed information.

Table 27 shows the proportions of Grade 4 students taught by teachers with varying qualifications in PIRLS 2011. The data suggest that the requirement for persons entering teaching to complete a Master's degree is a recent one, as just 1% of students in PIRLS 2011 were taught by teachers with this level of formal education.

⁴² See <http://www.monitor-lehrerbildung.de/web/>.

Table 27: Percentages of Students Taught by Teachers with Varying Education Qualifications

Highest Qualification	Completed University Post-grad Degree	Completed Bachelor's Degree or Equivalent	Completed Post Secondary Education but not a Degree	No Further than Upper Secondary
Germany	1	83	9	7
EU-24	27	53	14	6

Source: PIRLS 2011 Database (see Mullis et al., 2011, Exhibit 7.1, p. 188, and Appendix C, Table J1).

The second part of teacher training is the "Referendariat". The minimum time allotted to in-school placements during ITE for primary teachers in Germany is 80 hours. There is considerable variation in Europe: For prospective primary teachers, this time ranges from 40 hours in Latvia to 900 hours in Austria (European Commission/EACEA/Eurydice, 2011, Fig. 2.6, p. 102).

Length of required training of secondary teachers

In most Länder teacher education has been adapted to the Bachelor – Master – Structure stating that for teachers of all levels a Master's degree is compulsory in order to enter the second phase of practical training ("Referendariat"). Lower secondary teachers usually obtain their required level of credit points in four and a half years of study, while the upper secondary teachers usually require five years of study to obtain their master's degree⁴³.

To enrol for the second part of their initial teacher training, students require their masters and a certain number of internships asserting their aptitude for the teaching profession. The second part of study (Referendariat) is a more practical traineeship in schools. The duration varies between 12 months in Saxony over 18 months in North Rhine-Westphalia to 24 months in Bavaria.

The role of literacy expertise in Initial Teacher Training

With the document "Standards für die Lehrerbildung" (2004), the Kultusministerkonferenz has issued a very broad competence framework, consisting of fairly general statements (European Commission/EACEA/Eurydice, 2013. *Key Data on Teachers and School Leaders in Europe*). These standards are specified further in a document agreed on by all Länder on the content of teacher training ("Ländergemeinsame inhaltliche Anforderungen für die Fachwissenschaft und Fachdidaktiken in der Lehrerbildung", 2008). Therefore, initial teacher education is standardised to a certain extent.

However, literacy as a concept in all its multiple facets – from "emergent literacy" and "acquisition of literacy" to "content area literacy" – does not play a role in these documents.

Limited aspects of literacy are only mentioned in the section on mother tongue education, e.g. language acquisition and development, knowledge of research on reading and writing (p. 25). Furthermore, the curricula for initial teacher education vary widely, even within the Länder. In recent years, many universities have offered modules on reading research, reading socialisation and reading skills. The concept of "content area literacy" or "disciplinary literacy" ("fachspezifische Lese- und Schreibförderung") has only been acknowledged by some experts (and a recent expertise, BISS, see

⁴³ See <http://www.schulministerium.nrw.de/docs/LehrkraftNRW/Lehramtsstudium/Reform-der-Lehrerausbildung/Reform/index.html>; <http://phil-fak.uni-koeln.de/5129.html?&L=1>.

below) so far, but has not yet been implemented in literacy curricula and only marginally in teacher training or classroom practice⁴⁴.

Only a few empirical data are available. In the national comparison study of Stanat et al. (2011) in primary schools about 17 percent of teachers of German language reported that they had no academic study in this subject – with great variations in these numbers, ranging from zero percent in Thuringia to 34 percent in Hamburg.

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. These topics should therefore be addressed in teacher training. In PIRLS 2011, primary teachers were asked to indicate the level of emphasis given to a number of topics deemed relevant to teaching literacy in their pre-service teacher education. The data in table 8.15 suggest that, compared with the EU-24 average, there is **less emphasis on teaching reading pedagogy in initial teacher education in Germany** (39% of students are taught by teachers who identify it as an area of emphasis), compared with the EU-24 average (59%). This may arise because pre-service teachers study German language rather than reading. According to PIRLS 2011, 14% of students in Germany are taught by teachers who report that remedial reading was an area of emphasis in their pre-service teacher education. The corresponding EU-24 average is 22%. According to an analysis of guidelines for ITE institutions, assessing pupils' reading skills is a topic in Initial Teacher Training in Germany (European Commission/EACEA/Eurydice 2011, Fig. 2.5, p. 99). As noted in Table 8.15 below, however, teachers of 8% of students in Germany in PIRLS 2011 reported assessment methods in reading as an area of major emphasis in initial teacher education, compared with an EU-24 average of 27%.

Table 28: Percentages of Students Taught by Teachers who Reported each of Several Topics to be Areas of Emphasis during Initial Teacher Education

Topic	Test Language*	Reading Pedagogy	Reading Theory	Remedial Reading	Assessment Methods in Reading
Germany	56	39	18	14	8
EU-24	74	59	30	22	27

*German Language in the case of Germany; Source: PIRLS 2011 Database (see Mullis et al., 2011, Exhibit 7.2, p. 190 and Appendix C, Table J2 – J3).

Challenges/need for action: Initial teacher education needs a compulsory focus on developing literacy expertise among future primary and secondary teachers!

Not all teachers who are involved in teaching reading and writing skills in primary or secondary schools have a solid training in literacy. Only limited aspects of literacy are mentioned in the curricula on mother tongue education. **Literacy expertise should become a clear standard for teacher education in all grades and subjects, not only for primary teachers, but also for secondary**

⁴⁴ See http://www.kmk.org/fileadmin/veroeffentlichungen_beschluesse/2004/2004_12_16-Standards-Lehrerbildung.pdf and http://www.kmk.org/fileadmin/veroeffentlichungen_beschluesse/2008/2008_10_16-Fachprofile-Lehrerbildung.pdf.

teachers. It should be ensured that initial training covers topics as the teaching of reading, tackling reading difficulties, assessing pupils' reading skills, and supporting those with persistent difficulties.

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

"Make every teacher a teacher of literacy": It is of crucial importance to make **secondary teachers of all subjects** (languages, maths, sciences, history, arts etc.) aware of their task to embed instruction of content-related literacy skills into their subject classes; therefore **content area literacy** should become a compulsory part of ITE and CPD for all secondary teachers.

Continuing Professional Development (CPD)

The participation in professional development is a duty for teachers in Germany. Given the autonomy of the federal states in designing their own educational policy based on the national recommendations, the criteria for organising and ensuring the quality of CPD programmes vary significantly, as well as the number and types of institutions offering such courses. As the KMK only offers recommendations to be implemented in the legislation of the single Länder, "nationwide initiatives are not easy to implement", according to teacher trainer Dorothee Gaile's final report about CPD in Germany written for the EU-project "ISIT - Implementation Strategies for Innovations in Teachers' Professional Development"⁴⁵ (Gaile 2015, p. 4).

Time frame and quality standards of CPD

There are several forms of CPD courses, each with a specific duration (e.g. seminars, study groups, conferences, study trips, colloquia, distance learning courses etc.).

Regular training usually takes place in the afternoon or during the evening (e.g. courses offered on a regional level). There are also full-day courses that vary between half a day to several days (applicable also to regional programmes). Although research has shown higher effectivity of ongoing, long-term CPD courses (Biancarosa and Snow 2006, p. 20), the portfolio of classes available is increasingly dominated by one or two day classes⁴⁶.

Given the diverse organisations and institutions offering CPD programmes in Germany (Ministries, universities, public institutions⁴⁷, teacher training centres, churches, non-public bodies⁴⁸ etc.), there are **no official quality standards** set for the programmes on the current educational market. The institutes for quality development responsible for accreditations judge not only the programme and its content, but also the quality of the trainers⁴⁹.

Furthermore, it is difficult to find a common line in Germany on a national level in terms of CPD standards, because each federal state carries the responsibility for setting the tone for such programmes. In each state, the Ministry of Education and Cultural Affairs acts as the highest school

⁴⁵ See http://www.alinet.eu/index.php?option=com_content&view=article&id=125&Itemid=206.

⁴⁶ For North Rhine-Westphalia see <http://www.suche.lehrerfortbildung.schulministerium.nrw.de>; for Bavaria see <http://alp.dillingen.de/lehrgaenge/suche/index.html>.

⁴⁷ E. g. the Mercator Institute, the German Reading Foundation (Stiftung Lesen), private companies.

⁴⁸ E. g. foreign cultural institutions and associations that mediate between school and industry.

⁴⁹ See http://www.gew-nrw.de/fileadmin/download/Schule/Schulpolitik/Expertise_BP.pdf Expertise on the development of teacher professional learning and school counselling.

supervisory authority and is, in most cases, also the teachers' employer, the reason why it is also responsible for in-service training (Eurypedia, 2011. Continuing Professional Development for Teachers Working in Early Childhood and School Education)⁵⁰.

Participation in CPD in Germany

"The duty of teachers to follow CPD is expressly laid down in **all** Länder by law or ordinance" (Gaile, 2015, p. 4). According to school legislations in Germany, CPD is, therefore, considered as every teacher's obligation (SchulG §57, Abs. 3) and as a key-element in meeting and maintaining the required professional standards. However, this "legislative framework leaves room for a range of specifications varying across Länder, across regions and across individual schools" (Gaile, 2015, p. 4). Some federal states promote a minimum number of credit points per year for various CPD forms, either face-to-face or online⁵¹

Professional development courses are supposed to take place during teaching hours from 08.00-16.30. However, whether teachers actually have the opportunity to attend CPD courses during class hours depends on the permission of their headmaster or headmistress.

Regular attendance at CPD does not trigger salary increases, but it might contribute to changing the taught subject, obtaining a higher position (e.g. headmaster/headmistress) or another type of promotion. In terms of financial support for CPD, professional development courses in Germany are either free of charge or involve low costs as a measure for encouraging teachers' attendance. No official sanctions for not participating in CPD (e.g. salary cuts) are known.

Time spent on professional development related to literacy

Concerning the participation rate of primary school teachers in literacy-related professional development, two sources are available: In PIRLS 2011 teachers were asked how much time they had spent on reading professional development in the past two years before the study. The data for Germany and for the EU-24 average are given in table 8.16. The table shows that 4% of students in Germany were taught by teachers who had allocated 16 hours or more to professional development, compared to 18% on average across the EU-24. On the other hand, 25% of students in Germany (compared to 29% on average across the EU-24) were taught by teachers who had allocated no time to professional development in reading and the average reading score of their students was slightly lower (534) than with teachers who had spent more time on professional development (543, s. Table J4 in Appendix C)

⁵⁰ See <http://www.lehrerinnenfortbildung.de/cms/index.php/arbeitsgruppen/musterreferenzrahmen-lfb>.

⁵¹ See http://www.gew-bildungsmacher.de/fileadmin/freie_files/Schullexikon/Fortbildung.pdf and Allgemeine Dienstordnung für Lehrerinnen und Lehrer, Schulleiterinnen und Schulleiter an öffentlichen Schulen §11, Abs. 3; available at <https://www.schulministerium.nrw.de/docs/Recht/Dienstrecht/Grundlegend/ADO.pdf>.

Table 29: Percentages of Students with Teachers Allocating Varying Amounts of Time to Professional Development Related to Reading in the Last Two Years – Germany and EU-24 Average

	More than 35 hours	16-35 hours	6-15 hours	Less than 6 hours	None
Germany	1	3	28	43	25
EU-24	9	9	25	28	29

Source: PISA 2011 database (see Mullis et al., 2012a, Exhibit 7.4, page 196 and Table J4 in Appendix C).

In Germany, fewer students were taught by teachers who read children's books at least weekly as part of their professional development (8%), compared with the corresponding EU-24 average (23%), while more students in Germany were taught by teachers who read children's books once or twice a year or less often (50%) compared with the EU-24 average (32%) (see Table J4 in Appendix C).

In the national assessment study 2011 (Stanat et al. 2012) about 80% of the primary school teachers reported to have participated in at least one course in the last two years, 40% reported having attended five or more courses. About two thirds of the teachers attended courses in teaching methodology and teaching methods, however it is unclear to what extent these courses relate to literacy. Two thirds of the teachers themselves expressed a need for professional development in the areas supporting struggling learners and integrating children with special needs. Comparing the supply and the demand of courses in professional development, there seems to be a shortage of courses related to the support of struggling learners and remedial instruction in reading (10% of teachers attended a course in remedial reading, however 36% expressed a need for professional development in this domain).

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

Although teachers in Germany are expected to participate in continuous professional education as a professional duty, the **participation rates** are still low. Considering the low number of teachers who allocate considerable time to professional development related to reading/literacy issues, CPD in those basic competencies should be made obligatory.

Professional development (in-service teacher training) in Germany needs **common quality standards** as to the qualification of trainers and the quality of programmes on offer, which might be guaranteed by accreditation procedures. The format of CPD should be changed from "one-shot-approaches" to **middle- and long-term approaches** which have a sustainable effect on improving classroom practice of teachers. CPD should closely connect theory to practice and systematically integrate practical application of the newly-learned content and methods into the teachers' regular classrooms. Literacy promotion and literacy instruction across the curriculum should be a systematic part of CPD addressing teachers of all grades and all subjects.

Digital literacy part of initial teacher education

Information concerning ICT in initial teacher education in Germany could not easily be found. The report "Assessment Schemes for Teachers' ICT Competence – a Policy Analysis" (May 2005) explains that in a lot of cases information about initial teacher training could not be given, as such courses are

mostly run by universities or teacher training institutes and ICT is integrated into the teaching curriculum to a different extent. This is the case for Germany (ICT and Initial Teacher Education: national policies, 2011).

The "Key Data on Information and Communication Technologies in Schools in Europe" study (2004) further explains that in Germany, the education in the teaching of ICT is one of the core curriculum options. Consequently, the concerned institutions of teacher education are obliged to offer the subject, but it is left to the trainees to decide whether or not to include it in their overall course of education. This applies to the initial education of primary and secondary school teachers (p. 44) (ICT and Initial Teacher Education: national policies, 2011).

Challenges: Fostering digital literacy skills of teachers and students needs a stronger emphasis in Germany!

The available data for Germany suggest that there are national recommendations for digital literacy, but no required training (ICT and Initial Teacher Education: national policies, 2011).

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

Improving the quality of staff in kindergartens

There are several initiatives to improve the quality of staff, and to attract more persons, especially migrant persons and males. Here are some examples:

In May 2011 the JFMK (Jugend- und Familienminister-Konferenz) approved state recognition of Bachelor's degrees in the field of day-care for children and recommends as a standard national job title "*Staatlich anerkannter Kindheitspädagoge/Staatlich anerkannte Kindheitspädagogin*" (state-recognised childhood educator). The conference recommended that greater efforts be made to get more persons with this degree working in kindergarten.

In 2010 the Standing Conference and the JFMK adopted a common orientation framework "Education and Upbringing in Childhood" (*Bildung und Erziehung in der Kindheit*) to develop the education, training and continuing training of child-care workers⁵².

„Weiterbildungsinitiative Frühpädagogische Fachkräfte (WIFF)“ is an initiative to raise the quality of ECEC institutions and the professional expertise of the staff⁵³

The Federal Ministry for Family Affairs, Senior Citizens, Women and Youth has introduced measures to significantly raise the share of men working as skilled personnel in day-care centres for children (providing a study "Männliche Fachkräfte in Kindertagesstätten" "More men in kindergarten")⁵⁴.

The initiative „Profis für die Kita“ had the aim to attract more males and more persons with a migration background to work in ECEC and in other day care institutions (for more information see Bundesarbeitsgemeinschaft der Freien Wohlfahrtspflege e. V. 2014).

Whether all these initiatives led to the desired outcomes has yet to be confirmed.

⁵² For more information see http://www.kmk.org/fileadmin/doc/Dokumentation/Bildungswesen_en_pdfs/reforms.pdf.

⁵³ See <http://www.weiterbildungsinitiative.de/ueber-wiff/ziele/beirat/>.

⁵⁴ See <http://www.bmfsfj.de/BMFSFJ/gleichstellung,did=166702.html>.

Implementing emergent literacy curricula in all Länder

One example is the "Thüringer Bildungsplan für Kinder bis 10 Jahre" (The educational plan for children up to the age of 10 in Thuringia)⁵⁵. It includes all the components of an emergent literacy curriculum which we consider relevant, and provides a detailed description of language and literacy activities children should be engaged in:

- Oral language development and vocabulary learning and grammar with a focus on role play
- Familiarisation of children with the language of books (e.g. reading and telling stories)
- Engaging and motivating children in literacy-related activities: investigating print in the environment, motivating children to "write" and try out different materials, "reading" picture books, preparing picture books, using writing in communicative contexts, exploring different materials for painting, drawing, scribbling or "writing"
- Providing a literacy-rich environment,
- Concepts of print (children explore symbols, signs and pictograms develop the awareness that print carries meaning. –
- Language awareness (through language games by using rhymes, comparing words of different length, paying attention to sounds ("I spy with my little eye something beginning with... [initial sound]").

Providing more cognitively demanding literacy instruction in school

In terms of literacy initiatives, Germany can be divided into the pre- and post-PISA era. If before the publication of the first PISA results it was considered that literacy development fell under the responsibility of the primary education, the post-PISA era is characterised by a high focus on reading competence. In October 2002, the Standing Conference of the German Ministers of Culture (KMK) listed 7 central fields of action, among which was the systematic improvement of reading competence, support for disadvantaged students and improvement of teacher expertise, especially in terms of diagnosis and methodology (KMK 2001: Definition of seven primary areas of action in response to PISA). In 2005, the BMBF issued a survey of the most relevant literacy programmes in the federal states of Germany and on the complex structures of fostering reading competence (Artelt et al. 2007). Furthermore, the KMK commissioned the expertise "Bildung durch Sprache und Schrift" (BISS, 2012). Even though there is no national comprehensive approach to fostering reading competence, there is a list of initiatives that deserve to be highlighted:

Pro-Lesen Project (2008-2010)

This is the only literacy initiative with a national scope. From 2008-2010, ProLesen was funded by the Standing Conference of the German Ministers of Culture (KMK) and coordinated by the Ministry of Education and Culture in Bavaria as a reaction to the PISA results in 2000 and to other international tests. Working with about 140 project schools in all 16 Länder, ProLesen focused mainly on promoting reading as a cross-curricular competence both in primary and in secondary schools. The project specifically targeted so-called risk-groups supporting children with lower socio-economic, educational and/ or migration backgrounds, especially boys. Furthermore, the project aimed at making a contribution to school development by supporting schools in developing school profiles as "reading schools". The results of the project were organised in 10 modules and were partly made available to teachers and schools on the German "Education Server" (Bildungsserver) (ProLesen Abschlussbericht, S.

⁵⁵ See http://www.thueringen.de/imperia/md/content/tmbwk/kindergarten/bildungsplan/th_bp_2011.pdf.

2-3). A scientific evaluation of the project was carried out by a team around Prof. Dr. Christine Garbe and Dr. Karl Holle. Their (unpublished) report suggested that measures such as the national programme ProLesen (2008-2010) would be more sustainable if they could profit from long-term support, systematic professional development for teachers and a comprehensive implementation⁵⁶.

Niemanden zurücklassen – Lesen macht stark (No one left behind – reading empowers)

“Lesen macht stark” is a prominent example for a programme run by one federal state (Schleswig-Holstein) since 2006. Implemented from fifth to tenth grade at the weakest performing 210 secondary schools in the federal state, the intervention was based on additional individual reading support underpinned by a school-wide reading development strategy and teacher training in early identification of reading difficulties across subjects. Each student received a folder with materials allowing an individualised development of reading competence tailored to the students’ needs, teachers could draw on materials with thematic texts and qualify as literacy coaches (train the trainer-approach) whereas the school was granted additional teaching time for reading literacy. An evaluation of the programme showed that the project helped many low-achieving schools to catch up, but some schools would have needed even more effort to improve (Institut für Qualitätsentwicklung an Schulen Schleswig-Holstein, 2010). The project gave birth to two other programmes, namely „Maths empowers – primary school“ („Mathe macht stark – Grundschule“, began in the school year 2013/ 2014) and “Reading empowers – primary school”(„Lesen macht stark – Grundschule“ began also in the school year 2013/ 2014). (<http://nzi.lernnetz.de/index.php/projektinformationen-151.html>).

Internet Portals

Two internet portals provide materials for teaching reading strategies: “**wir-foerdern-lesen.de**” offers a comprehensive program for two age groups (grade 1 – 3 and older struggling readers and grade 2 – 7) for the training of important reading strategies. Included are assignments for partner exercises, e.g. reciprocal teaching, which have proven effective for teaching strategies⁵⁷.

The federal institute for school and media Berlin-Brandenburg (Das Landesinstitut für Schule und Medien Berlin-Brandenburg, **LISUM**) is, since its beginnings in 2007, the only pedagogical institute in Germany that reunites two federal states as a reference instance for class, school and staff development, as well as for media education. The LISUM project is also renowned for the “Education server” (Bildungsserver), a free-of-charge platform for information, communication and cooperation among educational institutions⁵⁸. It provides a variety of tools for reading instruction and reading promotion within schools including a comprehensive “**Lesecurriculum**”.

Also helpful is the programme **Leselotse** (Reading Guide) which supports children between 6 and 10 years to understand different types of texts (e.g. from scientific texts to journalistic ones). The planned three stages (pre-reading, reading and post-reading) help children activate their prior knowledge and link newly acquired information to it. All materials are freely available on the LISUM website. For secondary students a similar programme (“**Lesenavigator**”) has been developed by the same institution (LISUM) and is available for free as well⁵⁹.

⁵⁶ See <http://www.leseforum.bayern.de/index.asp?MNav=6>.

⁵⁷ For more information, see <http://wir-foerdern-lesen.de/>.

⁵⁸ See http://www.lisum.berlin-brandenburg.de/sixcms/detail.php?template=lisumbb_start_d.

⁵⁹ See <http://bildungsserver.berlin-brandenburg.de/lesenavigator.html>.

As mentioned already, the publication of the first PISA results triggered a significant move towards literacy teaching in Germany being considered an important educational task that should be extended from the primary level to the secondary one. In 2011 a political initiative from federal and state authorities has been launched for creating an expertise that describes how language and reading support, as well as language diagnosis, could be systematically implemented in Germany (Bund-Länder-Initiative zur Sprachförderung, Sprachdiagnostik und Leseförderung). In 2012, the expertise „education through language and literacy“ (Bildung durch Sprache und Schrift, BISS), commissioned by this initiative, was published. This research report is only one building block of the project. The other is the implementation of this expertise in a development programme aimed at analysing and implementing the proposed federal initiatives on reading language support, as well as language diagnostics for children and youth. The coordination lies with Prof. Dr. Michael Becker-Mrotzek from the University of Cologne. The collaboration between kindergarten and school institutions has led to the development of a set of measures for language education and diagnostics, grouped in modules for the elementary, primary and secondary levels. The programme supports the professional development of the involved educators and teachers and makes available materials for diagnostic and support methods as “tools” for the pedagogical practice that also allow communication and exchange of ideas among the participants (e.g. forums)⁶⁰. Up to now the proposed tools for diagnosis are exclusively standardised tests (which are expensive and therefore frequently not affordable for schools) –some of them developed by members of the BISS consortium. Informal tests which could be freely accessed via the internet are not considered.

The BISS contents are organised in modules representative for each school level. The fourth module, “Language education in the context of school subjects” (“Sprachliche Bildung in fachlichen Kontexten”, module S4) addresses the topic of content area literacy (CAL) directly. It stresses the importance of cross-curricular reading and writing support and transfer of acquired knowledge in the German class to the other subjects (e.g. in terms of type of texts and genres)⁶¹.

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

Observation or assessment tools for children entering 1st grade and onwards are recommended to be administered in all Länder. Though there are commercial tests which can be acquired, there are also freely available tools. One example:

Brandenburg`s ILeA 1 (Individuelle Lernstandsanalysen, individual learning assessment).

ILeA 2 to 6 provide formative assessments throughout primary school (which in Brandenburg comprises 6 school years). These tools together with all necessary materials – also suggestions for training in reading and spelling – are freely available on the internet⁶². They 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.

The Hamburg Language Support Programme (Hamburger Sprachförderkonzept)

Since 2005, the Land Hamburg gave literacy promotion centre-stage by implementing a systematic and long-term concept that combines different proven measures for fostering language and literacy

⁶⁰ See <http://www.biss-sprachbildung.de/biss.html?seite=48>.

⁶¹ See <http://www.biss-sprachbildung.de/biss.html?seite=41>.

⁶² See <http://bildungsserver.berlin-brandenburg.de/ilea.html>.

skills (Sprachförderkonzept). The programme spans all age groups from pre-primary to lower secondary school and is targeted at the worst 10% of low achievers. Based on systematic monitoring and empirical evaluation, the programme is renowned for its literacy diagnostics. Every school year (from grade 1-8), all pupils are tested on their speech, reading and spelling achievement with standardised tests. Pupils with low scores get additional support from specially trained language/literacy teachers, based on an individual remediation plan, normally in small groups in the afternoon, until their achievement improves. Schools with a large number of low achievers get additional financial support. Schools are obliged to develop a concept for remediation and are evaluated every year. The evaluation report for this programme shows that the number of low achievers has been reduced in recent years. The overall approach is powerful in giving support to those who need it, providing more money for schools who face challenges, training teachers to be 'language teachers', testing for language, reading and spelling, evaluating the progress of the children, and reporting on the effectiveness of the approach. However, the standardised and social norm-oriented tests used in Hamburg should be substituted by criterion- referenced tests permitting the assessment of different competence levels⁶³.

Pre-service and in-service teacher training

The European Comenius project **BaCuLit** (Basic Curriculum for Teachers' In-service Training in Content Area Literacy in Secondary Schools, 2011-2012) qualifies as the first European programme to offer a minimum standard in this area (D. Gaile, ISIT Report Germany, 2015, p. 5). BaCuLit dedicates its six modules (about 40 hours) of **professional development for secondary teachers of all subjects** to literacy-related topics such as text structure and text diversity (module 2), vocabulary instruction (module 3), teaching cognitive and metacognitive reading strategies (module 4) and formative assessment for content literacy and learning (module 5). Modules 1 and 6 focus on principles for classroom instruction which systematically embed literacy in subject classes. (Garbe, BaCuLit Handbook for Trainers, Cologne 2012, pp. 82-238)⁶⁴.

As part of its follow-up project, **ISIT** ("Implementation Strategies for Innovations in Teachers' Professional Development", 2013-2014), 16 trainers in Germany were trained to become BaCuLit qualifies trainers across almost all of Germany (ISIT Report for Germany, Annex⁶⁵).

Whole-staff approaches in literacy-related professional development for teachers

The whole-staff approach forms the basis for in-school CPD training (Schulinterne Lehrerfortbildung, acronym: SCHILF) that often encompasses all members of the staff. These in-school training sessions are often focussed on important topics of pedagogical school development, but they can also be on content-related topics such as literacy if it is part of the school's profile⁶⁶.

⁶³ See (<http://www.hamburg.de/contentblob/4025938/data/pdf-hamburger-sprachfoerderkonzept.pdf>).

⁶⁴ See also www.baculit.eu.

⁶⁵ See www.isit-project.eu.

⁶⁶ See <http://www.bezreg-arnsberg.nrw.de/themen/l/lehrerfortbildung/grundlagenerlass.pdf>.

2.3 Increasing participation, inclusion and equity

The High Level Group of Experts on Literacy drew attention to persistent gaps in literacy, namely the gender gap, the socio-economic gap, and the migrant gap (HLG Final report 2012, pp. 46–50). These gaps derive from the reading literacy studies that repeatedly show unequal distribution of results among groups of children and adolescents (PIRLS, PISA).

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

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

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

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

In the section below we address the following issues:

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

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

2.3.1 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-recognised main factors influencing literacy (World Bank 2005, Naudeau et al. 2011). Socio-economic background also influences biological risks to children, by determining early exposure to risk factors and increased susceptibility (Jednoróg et al. 2012). The primary language spoken at home also influences literacy development (Sylva et al. 2004).

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

Gini index

The Gini index is the most commonly used measure of inequality, and represents the income distribution of a nation’s residents with values between 0% (maximum equality) and 100% (maximum inequality). In the European countries participating in ELINET the range is from 22.6% in Norway to 35% in Spain (for an overview of European countries see table A1 in Appendix B). With 28.3% Germany is in a group in the middle of the distribution.

Child poverty

An indicator of child poverty is the percentage of children living in a household in which disposable income, when adjusted for family size and composition, is less than 50% of the national median income (UNICEF Innocenti Research Centre 2012). The range is from 4.7% in Iceland to 25.5% in Romania (for an overview of European countries see table A2 in Appendix B). Germany shows a low percentage of 8.5 percent.

At risk-of-poverty are persons living in a household with less than 60 percent of disposable income. According to the German Government’s 4th Report on Poverty and Wealth 48 percent of children are at-risk-of-poverty when the head of the household is unemployed, 33 percent if it is a single-parent family and about 18 percent if they have migrant parents (Bundesministerium für Arbeit und Soziales 2013, p. 115).

Mother’s education level

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

No schooling: 0.4% (0.6%)
 ISCED 1: primary education: 2.3% (5.3%)
 ISCED 2: Lower secondary education: 41.6% (16.7 %)
 ISCED 3: Upper secondary education: 11.7% (36.1%)
 ISCED 4: Post-secondary non-tertiary education: 0% (7.1 %)
 ISCED 5B: Tertiary education (first stage) with occupation orientation: 24.9% (9.5%)
 ISCED 5A: Tertiary education (first stage) with academic orientation 6.9% (13.9%)
 BEYOND: 11.8% (10.1%)
 Not applicable: 0.5% (0.9%).

Teenage mothers

According to UNICEF (2001) the percentage of teenage mothers is 13.1% for Germany. The range for the European countries participating in ELINET is from 5.5% in Switzerland to 30.8% in United Kingdom (for an overview of European countries see Table A4 in Appendix B).

Single parent

According to Eurostat (2012, Figure A 7), in Germany the percentage of children living mainly with a single parent is 12.5%. The range for the European countries participating in ELINET is from 1.4% in Croatia to 30% in Denmark (for an overview of European countries see table A5 in Appendix B).

Migrant parents

About 28 % of the pupils in Germany have a migration background. According to PIRLS 2011 (Bos et al. 2012), the parents of 16% of children were both born outside the country, and one parent of 12 % was born outside the country.

Primary language spoken at home different from language used at school

In Germany, 80% of pupils reported that they always spoke the language of the PIRLS test at home, while 20% reported that they did so sometimes or never. There is a large and significant difference – 32 points – between those who always spoke the language of test at home and those who did so ‘sometimes or never’. This exceeds the corresponding EU-24 average difference (26) by 6 points.

Challenges: Germany has a high percentage of pupils which have a migration background (28%). In migrant families with children in the age group 0 – 8, Turkish (32%) or Turkish and German (42%) are more often the language of communication than German (26%).

The *Bildungsbericht 2014* (National Education Report) states: Up to 30 percent of children and adolescents belong to the disadvantaged group that is affected by at least one risk factor: parents who are unemployed, at risk of poverty or with a low level of education. Migrant children have a greater risk to be affected by these factors. This disadvantaged group is at risk in their literacy achievement and needs attention and support. All PISA results (2000, 2003, 2006, 2009, 2012) gave clear evidence that the “poor achievers” in general shared three characteristics: low SES, migrant background and male gender. All Länder should ensure that there are programmes to support these groups of children and adolescents.

2.3.2 Support for children with special needs

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

Very low birth weight and severe prematurity

According to PERISTAT (2010, Figure 7.11, p.149) the percentage of live births with a birth weight under 2500 grams in Germany was 5.9%. The range is from 3.0% in Iceland to 8.8% in Cyprus (for an overview of European countries see table E1 in Appendix B). According to the same source (PERISTAT 2010, Figure 7.14, p.155) the percentage of live births with a gestational age <32 weeks is 1.3% in Germany (with a range from 0.7% in Iceland to 1.4% in Hungary). The percentage of live births with a gestational age between 32 and 36 weeks was 7.1% (with a range from 4.5% in Lithuania to 7.5% in Hungary (for an overview of European countries see table E2 in Appendix B).

Cognitive or sensory disabilities

In Germany, to achieve political correctness, the terms disability and impairment are no longer in use. The term now is ‘special educational needs’ (Sonderpädagogischer Förderbedarf). Klemm (2013) on the basis of statistics of the KMK reports 6.4 percent of pupils in Germany with special educational needs. Special educational needs are classified with regard to students' special educational requirements into the following categories (percentage of children in parentheses): learning (2.6%), cognitive development (1.0%), emotional and social development (0.9%), speech (0.7%), physical development (0.4%), hearing and vision (0.3%), chronic illness (0.1%), and multiple or others (0.3%).

Between the Länder there is a great variety in numbers of children with special educational needs: ranging from 4.9 percent in Rhineland-Pfalz and in Niedersachsen (Lower Saxony) up to 10.9 percent in Mecklenburg-Vorpommern. These differences indicate that there are different diagnostic criteria in use (Klemm 2013). The majority of these children visit special schools, the others visit mainstream schools. There are some studies proving that these children have better learning results in mainstream schools (e.g. Kocaj et al. 2014).

2.3.3 Promoting preschool attendance, especially among disadvantaged children

The benefits of attending preschool institutions have been proven in many studies. The duration of attendance is associated with greater academic improvement (Mullis et al. 2012b).

According to European Commission/EACEA/Eurydice/Eurostat (2014, Figure C1 p.62), the enrolment rate at age 4 is 96.4%. Germany does exceed the European benchmark for at least 95% of children between age 4 and the start of compulsory education participating in ECEC (for an overview of European countries see table C1 in Appendix B). The OECD Family Database (2014) offers more differentiated figures of participation rates at age 3, 4 and 5. According to 2010 statistical data, the participation rate is 96.9% for 5-year-olds, 96.5% for 4-year-olds, and 88% for 3-year-olds (OECD 2014) (for an overview of European countries see table C2 in Appendix B). A matter of concern is the difference in the enrolment rate between children aged 3 to 5 with and without migration background: 85 vs. 97 percent, with great differences between the Länder (Bundesministerium für Arbeit und Soziales 2013, p. XIV and Tabelle B II.2.1, p. 80). According to PIRLS there are also differences

concerning the length of preschool attendance: 68 percent of children with one parent or both parents born outside the country had visited the kindergarten for 3 years and more. For children with parents born in Germany the corresponding figure is 78 percent (Bos et al. 2012, p. 197). These results should be a matter of concern because there is a positive relationship between the length of preschool education attendance in Germany and the average reading score in grade 4, as PIRLS 2011 data show (Mullis et al. 2012a, Exhibit 4.7, p. 128. These are the figures:

- 3 years and more: 74% (average reading score 551)
- Between 1 and 3 years: 23% (average reading score 540)
- 1 year or less: 1% (average reading score no data)
- Did not attend: 1% (average reading score no data)

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

No child should be excluded from preschool because parents cannot afford to send their children to preschool/kindergarten institutions if they have to pay. While in half of the European countries the entire period of ECEC is free, in most of the German Länder parents have to contribute financially to public and private kindergartens. Only some Länder (e.g. Hamburg, Hessen, Niedersachsen and Nordrhein-Westfalen) provide one year of free pre-primary education, while Berlin and Rheinland-Pfalz provide more years for free (Grgic & Lotte 2012).

Challenges: The potential benefits of high-quality ECEC are particularly significant for children from disadvantaged groups. A matter of concern is the difference in participation rates and the length of kindergarten attendance between children with and without a migration background. Länder should strive to offer free and high-quality preschool education – as they offer free studies at the university.

2.3.4 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. The Standing Conference of Ministers of Education and Cultural Affairs suggested in 2001 (among other measures): *Measures for the improvement of language proficiency in pre-schools: further development of educational concepts for pre-school lessons with particular attention to language development; language level assessment*. Since this time all Länder have made considerable efforts to achieve this aim. In some Länder there are screenings and systematic assessments of children in order to identify language development problems.

The different *Measures for the improvement of language proficiency in pre-schools*, realised by the Länder, are not coordinated and have resulted in a patchwork of different activities and outcomes (cf. Table C5-1A of the Bildungsbericht 2014). The Länder have developed different diagnostic procedures for language status observations and assessment (tests or screenings) in early childhood education and established language promotion measures in various organisational forms (integrative and additive, obligatory or facultative language training). There are different concepts of language development as well as different concepts for the training of kindergarten teachers (for an overview see Lisker 2011, Redder et al. 2011, Neugebauer & Becker-Mrotzek 2013). Experts criticise the lack of validity and of comparability of the language screening tests (leading to differing numbers of children

in need of language training between 12-43 %), the lack of consistency between the language diagnostic results and the language training procedures. The careful evaluations of different language training programs that have been carried out in some Länder did not show any advantage of the experimental groups compared with groups of children from traditional kindergartens (Lisker 2011).

Challenges:

There is an urgent need to coordinate these *Measures for the improvement of language proficiency in pre-schools* and to develop national standards for diagnostic tools and concepts of language training based on linguistic, cognitive, developmental and didactic theories (Ehlich, Lütke & Valtin 2012; Neugebauer & Becker-Mrotzeck 2013). Needed also are valid language tests which assess all relevant language components: phonic, semantic, syntactic, pragmatic and literal qualifications (Lisker 2011; Ehlich, Lütke & Valtin 2012), remedial training that diagnoses the individual needs of children, and development and evaluation of comprehensive language development programs.

In all Länder it should be ensured that, at age 4 at the latest, all children are diagnosed on their oral language proficiency, and that there are obligatory courses for children lacking language competence. The aim should be that all children entering school can speak the language of the school so that they can profit from reading instruction.

2.3.5 Support for students whose home language is not the language of school

Germany is one of seven OECD-member states that, according to PISA 2000 - 2012, had significantly improved in reading competences during the first decade of the 21st century. This progress was attained mainly by raising the performance of the poor readers. In particular, students with migrant backgrounds improved considerably: in 2009 they achieved 26 points more than in PISA 2000, twice as much as the whole German cohort (+ 13 points). Nevertheless, the gap between native speakers and second language learners is still large: the difference of 44 points is equivalent to more than one year of schooling.

To integrate children and young people with migrant backgrounds, various support programmes are run by the schools to help the children and young people learn German and obtain German school qualifications. Measures to promote the educational success of children and young people with migrant backgrounds include specially assigned teachers for German as a second language and the recruitment of teachers from migrant families.

Programmes to help children and young people with migrant backgrounds integrate into German schools are also organised. They slightly vary in each state, but here are some examples:

- preparatory classes for children and young people with migrant backgrounds without a knowledge of German (*Vorbereitungskurse, Vorkurse Deutsch* or *Deutschförderkurse*)
- special classes which combine instruction in the core subjects with intensive study of the German language (*Sprachlernklassen, Deutschförderklassen* or *Übergangsklassen*)
- bilingual classes (held in the native language and German)
- intensive courses in German as a foreign language
- special support lessons outside school hours for children and young people with migrant backgrounds who are already taught in integrated classes with German children and need to improve their German skills
- greater cooperation between home and school (KMK, 2013: 245)

Challenges: Support for migrant children: There is a considerable migrant gap in reading achievement as PIRLS and PISA data show. All Länder should ensure that there are intensive programmes to support all children and young people with migrant backgrounds and without adequate competence in the German language in their language and literacy development. Länder vary in their provisions and have different offers.

2.3.6 Preventing early school leaving

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

In Germany, compulsory schooling covers the age span between 6 and 16 covering the complete upper secondary level (Sekundarstufe I = lower secondary). General education qualifications marking the end of compulsory education can be obtained after grades 9 or 10. After the age of 15 or 16, adolescents are obliged to undertake at least part-time training for 2 or 3 years (Sekundarstufe II or vocational training) (EACEA, 2012).

If we consider the indicator of students (ISCED 1-6) aged 15-24 years as a percentage of the corresponding age population, we find that in Germany 66.5% of 15-24 year olds (average EU-27 value: 65.9%) were in some form of education in 2011. The percentage of 18-year olds in education was 90.1% in 2011, which situated Germany well above the EU-27 average (80.7%). According to Eurostat, in Germany, the rate of early school leavers was 9.9 % in 2013, which is two percentage points below the 11.9% EU-28 average. The 2013 ESL rate is the lowest ever recorded in the country (2012: 10.6%; 2010: 11.9%). Germany aims to stabilise its ESL rate under 10% by 2020 (European Commission, 2013). During the period 2000-2009, a ten-percentage point increase occurred in the proportion of students in general education as opposed to vocational education in Germany (EACEA, 2012).

In 2008, Chancellor Angela Merkel initiated an education summit (Bildungsgipfel) to transform Germany into a so-called "Bildungsrepublik" (republic of education). This summit agreed on certain milestones to be achieved by 2015. One of the most important milestones was to reduce the number of early school leavers with no qualification at all (ohne Hauptschulabschluss) by half (from 8% to 4%). As an evaluation commissioned by the Deutscher Gewerkschaftsbund, a German trade union confederation and conducted by Prof Dr Klaus Klemm reports⁶⁷, this target is far from being reached (5.7%) (DGB Expertise, p. 7).

2.3.7 Addressing the gender gap among adolescents

While the performance of the poor readers – according to PISA 2000 - 2012, - had significantly improved during the first decade of the 21st century, one problem remains persistent: Boys are over-represented in the lowest proficiency levels (24% boys versus 12.6% girls, PISA 2009). As PISA data show, the **gender gap** among 15-year-old girls and boys is equivalent to one year of schooling. As this gap is mainly caused by the decline of reading motivation and reading activities between primary and

⁶⁷ See <http://www.dgb.de/themen/++co++1849054a-9655-11e4-843b-52540023ef1a>.

secondary school, schools together with families, libraries and communities should support boys' literacy development in this critical phase.

Challenges: Fostering reading literacy and engagement for reading of disadvantaged boys: programmes specifically aiming at supporting boys' reading engagement are needed.

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

Compensating socio-economic and cultural background factors

The "Vierte Armuts- und Reichtumsbericht" (Bundesministerium für Arbeit und Soziales 2013) provides an overview about programmes and initiatives against poverty as well as several programmes for single mothers and fathers.

The Federal Ministry of Labour and Social Affairs (2015) offers an "education package" (Bildungspaket). It promises children from low-income families: "They now have a right to education and social participation. As of now they can take part in sports, music and cultural activities as well as go on school trips and have lunch with fellow pupils in day care and after-school care centres and in schools. They will receive the educational materials they need and the necessary learning support if they are at risk of having to repeat a year"⁶⁸

Family literacy programmes for migrant parents

The Standing Conference of Ministers of Education and Cultural Affairs in 2001 also suggested to increase the number of programmes available for language development, particularly for immigrant children and their parents. Examples are:

Hamburg FLY:

From 2004 to 2009 the model programme 'Förderung von Kindern und Jugendlichen mit Migrationshintergrund - FÖRMIG' (= supporting children and youth with a migrant background) was carried out in 10 Länder. Parts of this were Family Literacy Programmes like FLY⁶⁹ (Rabkin 2012).

The 'Hamburg Family Project' (FLY) focuses on enhancing literacy in immigrant families and promoting these families' integration into the broader community. Targeted at migrant parents in disadvantaged districts of Hamburg, the programme aims to give mothers in particular the skills and confidence they need to engage in literacy activities with their children, including helping them with their schoolwork⁷⁰

District mothers

In Berlin the 'district mothers' ('Stadtteilmütter') are immigrants themselves and go into immigrant families not only to support literacy but also to give information about fostering the language development of the child and about essential services such as health systems, social welfare, and the school system in order to make them more accessible and less intimidating. In the years 2007 to 2014

⁶⁸ See Internet page of the BAMS, <http://www.bmas.de/DE/Service/Publikationen/a857be-educational-package-brochure.html>.

⁶⁹ For more information, see <http://li.hamburg.de/family-literacy/>.

⁷⁰ See <http://li.hamburg.de/contentblob/3861090/data/download-family-literacy-good-practice-%E2%80%93-beispiele-aus-elf-hamburger-fly-schulen.pdf>

about 360 migrant women mainly from Turkish and Arab background were trained in Berlin-Neukölln and more than 8,000 families were visited⁷¹.

Promoting preschool attendance, especially among disadvantaged children

Programmes to encourage universal preschool attendance especially for migrant children should be extended. Examples: In some Länder local authorities (e.g. Baden-Württemberg) or trained migrant mothers (e.g. Berlin) visit families with new-born children (welcome-programme) and inform the parents about pre-primary institutions in their district, motivating them to bring their child in kindergartens (Starting strong III. A qualitative Toolbox for Early Childhood Education and Care, OECD 2012, p. 328).

Policies are to prevent early school leaving

Some examples of policies to prevent early school leaving and/or support for adolescents' engagement in secondary studies are:

- The new structure of the school education system in Berlin, introducing an integrated secondary school (ISS) expected to provide more individualised support and learning, heterogeneous learning groups, all-day schools and work-based learning. It combines elements of academically oriented learning with vocational training and offers a range of vocational qualifications, as well as the possibility of completing the secondary school leaving examination (Abitur) as offered in the Gymnasium (European Commission, 2013).
- The initiative 'Educational chains leading to vocational qualifications' (Anschluss und Abschluss – Bildungsketten bis zum Ausbildungsabschluss), launched in 2010, aims at avoiding school dropouts and achieving efficient transitions to dual training as well as its completion, especially for young people in need of particular support. Guidance and support start two years prior to the end of full-time compulsory schooling and last for up to two years after leaving school, or until the end of the first year of vocational training (European Commission/EACEA/Eurydice, 2013).
- Berlin, as well as other German federal states, has introduced 'productive learning' (Produktives Lernen) as a measure to reduce the number of early school leavers. Productive Learning offers an individualised curriculum combining school-based academic education and practical work experience (European Commission, 2013).

Initiatives of **volunteers to support struggling readers or pupils from disadvantaged homes** in their literacy development should be honoured.

In Berlin, about **2,000 Lesepaten**, adult volunteers, regularly go to schools with pupils from low socio-economic backgrounds and read to and with children to cultivate the joy of reading (Volkholz 2011).

⁷¹ See <https://www.berlin.de/ba-neukoelln/politik-und-verwaltung/quartiers-management/artikel.113683.php> (accessed July 8, 2015).

III ADULTS

3 Performance in literacy

This section of the report draws on data from PIAAC the OECD's Survey of Adult Skills, to describe the reading performance of adults in Germany. Our focus is on low achievers, those who scored on the lower levels of the survey: Level 1 (scores from 176 points to fewer than 226 points) and below Level 1 (scores below 176 points).

At Level 1, adults can read relatively short digital or print continuous, non-continuous, or mixed texts to locate a single piece of information, which is identical to or synonymous with the information given in the question or directive. These texts contain little competing information. Adults performing at this level can complete simple forms, understand basic vocabulary, determine the meaning of sentences, and read continuous texts with a degree of fluency.

Below Level 1, individuals can read brief texts on familiar topics and locate a single piece of specific information identical in form to information in the question or directive. They are not required to understand the structure of sentences or paragraphs and only basic vocabulary knowledge is required.

The results are compared to the average of the 17 EU countries which took part in PIAAC.

3.1 Average Performance in Literacy

Germany performs slightly, but significantly worse than the EU-17 average of 271, scoring an average of 270.

Table 30: Average Literacy Performance

	Average	Standard Error
Germany	270	0.9
EU-17	271	-

Significant differences between the country and EU-17 in **bold**.

The lowest 10 percent of German participants perform significantly worse than the lowest 10 percent of the EU-17 average. On the other side, the best 10 percent of German participants perform slightly but not significantly better than the best of the EU-17 average. Accordingly, the gap between top and bottom performers is 122 points in Germany, wider than the EU-17 average of 117.

Table 31 presents the spread of literacy achievement of adults in Germany and EU-17 countries.

Table 31: Spread of Literacy Achievement

	10 th Percentile	Standard Error	90 th Percentile	Standard Error	Gap 10 th - 90 th
Germany	206	2.03	328	1.46	122
EU-17	210	0.49	327	0.33	117

Significant differences between the country and EU-17 in **bold**.

3.2 Gaps - Low Literate Population

3.2.1 Language

Migration has no causal relation with literacy in PIAAC. What is significant however is the oral language competence of the migrant. As part of the survey participants were asked if their native language is the same as the test language. 41% of Germans with a different native language scored at or below Level 1 compared to only 15% whose native language was the same as the test language. The comparable figures for the EU-17 average are 34% and 14%.

Table 32: Test language and Native Language at Level 1 or below

	Test language not same as native language	Std. Error	Test language same as native language	Std. Error
Germany	41 %	2.84	15 %	0.77
EU-17	34 %	0.79	14 %	0.17

Significant differences between the country and EU-17 in **bold**.

3.2.2 Age

The percentage of Germans scoring at or below Level 1 increases with age: from 13% among the age group 24 and below to 24% among those aged 55 plus. The overall impression of these data shows that in Germany, age seems to matter a bit less than in other countries. In the age group of young adults (24y or less) the share of Level 1 or below performers is lowest (13%).

Table 33: Age at Level 1 or below

Age	Germany	Std. Error	EU-17	Std. Error
24 or less	13 %	1.46	12 %	0.33
25-34	14 %	1.38	12 %	0.32
35-44	15%	1.32	14 %	0.32
45-54	21 %	1.48	18 %	0.36
55 plus	24 %	2.17	25 %	0.41

Significant differences between the country and EU-17 in **bold**.

3.2.3 Gender

In the EU-17 average there are no significant differences between men and women, but in Germany there are. 17% of men and 19% of women scored at or below Level 1. The comparable figures for the EU-17 average are nearly 17% of men and 16% of women.

Table 34: Gender at Level 1 or below

	Male	Std. Error	Female	Std. Error
Germany	17 %	1.04	19 %	1.11
EU-17	17 %	0.23	16 %	0.22

Significant differences between the country and EU-17 in **bold**.

3.2.4 Family

In Germany 17% of those living with spouse or partner scored at or below Level 1 compared to 18% of those living alone. The comparable figures for the EU-17 average are 16% and 15%.

Table 35: Living with spouse or partner among those who scored at Level 1 or below

Living with spouse or partner		Percent	Std. Error
Germany	Yes	17 %	0.93
	No	18 %	1.51
EU-17	Yes	16 %	0.21
	No	15 %	0.31

Significant differences between the country and EU-17 in **bold**

3.2.5 Employment

15% of the employed in Germany perform at or below Level 1, as do 28% of the unemployed, and 27% who are out of the labour force. The international comparison reveals that in Germany unemployed participants and those out of the labour force are less literate than the EU-17 average (28% vs. 22% - 27% vs. 24%).

Table 36: Employment at Level 1 or below

	Employed	Std. Error	Unemployed	Std. Error	Out of the labour force	Std. Error
Germany	15 %	0.79	28 %	3.73	27 %	1.82
EU-17	13 %	0.19	22 %	0.80	24 %	0.36

Significant differences between the country and EU-17 in **bold**

3.3 Skills Use

Participants in the Survey of Adult Skills were asked about their writing and reading at home, and at work, if employed. In the table below a higher score shows more frequent use.

Table 37: Literacy Skills Used At Home and At Work

	Writing Skills				Reading Skills			
	at Home		at Work		at Home		at Work	
	Index of Use	Std. Error	Index of Use	Std. Error	Index of Use	Std. Error	Index of Use	Std. Error
Germany	2.15	0.01	2.05	0.02	2.28	0.02	2.09	0.02
EU-17	1.99	0.00	1.95	0.00	2.02	0.00	1.97	0.00

Significant differences between the country and EU-17 in **bold**

With regard to their use of *reading skills at home* adults in Germany perform significantly better than EU-17 average. They also differ significantly and positively from the EU-17 average for use of *reading skills at work*. Use of *writing skills at home* and *at work* also differ significantly and positively from the

corresponding EU-17 average, demonstrating that adults in Germany use their literacy skills more often than on average across EU-17 countries, especially their *reading skills at home*.

3.4 Literacy Gaps

3.4.1 Parental Education

Table 38 presents the spread of literacy achievement by adults reporting their parents' highest education level. Parental level of education is a significant factor in Germany as in the rest of the EU countries that took part in PIAAC.

In Germany there is a significant difference of 32 points between those reporting that neither parent attained upper secondary and those reporting that at least one parent attained secondary education (236 vs. 268). Furthermore, those reporting that at least one parent completed tertiary level education perform significantly better than those whose parents attained secondary (289 vs. 268). The gap between those reporting lower parental education and those reporting higher parental education (53) is much wider than the EU-17 gap (41).

These results suggest that the higher the parental level of education the better the literacy performance.

Table 38: Literacy Proficiency by Parents' Education

	Lower Secondary or Below	Std. Error	At least one parent secondary/ post-secondary	Std. Error	At least one parent Tertiary	Std. Error	Gap
Germany	236	2.87	268	1.20	289	1.36	53
EU-17	253	0.38	277	0.32	294	0.44	41

Significant differences between the country and EU-17 in **bold**

3.4.2 Books at Home

Table 39 shows the spread of achievement of adults by reported number of books at home (a common measure of cultural capital). In Germany, 58% of adults report having fewer than 100 books at home. On average these achieve 256 points in PIAAC, 34 points worse than the German adults reporting that they have more than 100 books at home (256 vs. 290). This gap is wider than the EU-17 average (34 vs. 31). Distribution on average across the EU-17 countries is similar. However, those Germans with fewer than 100 books perform significantly worse than the comparable EU-17 group (256 vs. 259).

Table 39: Books at Home

	Average score of those with fewer than 100 books	Percent of Population	Std. Error	Average score of those with more than 100 books	Percent of Population	Std. Error	Gap
Germany	256	58	1.05	290	42	1.20	34
EU-17	259	60	0.25	290	40	0.28	31

Significant differences between the country and EU-17 in **bold**

3.4.3 Language

In Germany, there are 3 percent points more adults reporting that the test language is not their native language than on average across EU-17 countries. These adults, who don't speak German as their native language, achieve significantly fewer points in the PIAAC test than those who report that their native language is the same as the test language (238 vs. 274).

Table 40 shows the spread of literacy achievement referring to the test language and adults' native language.

Table 40: Native Language

Language of the Test and Native Language							Gap
Same			Not Same				
	Mean	Std. Error	%	Mean	Std. Error	%	
Germany	274	0.96	88	238	2.28	12	36
EU-17	274	0.19	91	246	0.91	9	28

Significant differences between the country and EU-17 in **bold**.

The distribution in Germany of native-speaking and non-native-speaking participants is similar to the EU-17 average. Those German participants whose native language is the *same* as the test language perform on the same score as does the EU-17 average (274). Those whose native language is *not the same* scored *significantly worse* than the average across EU-17 countries (238 vs. 246). Accordingly, the German gap between the native and non-native speakers is 36 points, much larger than the comparable EU-17 average (28 points).

3.5 Participation in Adult Education - Low Literate Population

In Germany the rate of participation in formal or non-formal adult education by adults at Level 1 or below is the same as on average across the OECD-Countries (31%).

Table 41: Participation Rates in Formal and Non-Formal Adult Education on Level 1 or below

	Participation Rate	Standard Error
Germany	31 %	2.1
OECD-Average*	31 %	0.5

*For technical reasons we report the OECD average here.

The non-formal education index incorporates participation in seminars and workshops, private lessons and open or e-learning formats. Table 42 shows the percentage of low literate and high literate adults participating in all four types of non-formal education.

Table 42: Percentages of Low and High Literate Adults Participating in Non-Formal Education and Training

	Open or distance education		Seminars or workshops		Private lessons		On the job training	
	Level 1 or Below	Level 4/5	Level 1 or Below	Level 4/5	Level 1 or Below	Level 4/5	Level 1 or Below	Level 4/5
Germany	-	11 %	9 %	40 %	7 %	16 %	17 %	48 %
OECD-Average*	6 %	16 %	9 %	37 %	8 %	17 %	17 %	42 %

*see above

Adults in Germany performing at Level 1 or below are less likely to participate in all four types of non-formal education than those performing at level 4/5. For seminars or workshops and private lessons the pattern is similar to the EU-17 average. In open or distance education German adults participate less often than average in EU-17 countries.

4 Literacy Policy

4.1 Provision

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

The area of adult basic education has been an educational focus in Germany since the 1970s. As simple workplace practices began to be replaced by new technologies, and unemployment increased rapidly, the problems caused by low literacy skills among the adult population became more apparent. In order to not lose out in the employment market, many people were faced with having to deal with their problems in reading and writing. This led to the creation of the first literacy courses at various educational institutions, as well as educational initiatives.

In Germany, instead of "literacy provision", the term "Learning reading and writing" is used, with 1-4 used to refer to different levels from beginner to advanced.

Standard course offerings now also include "Numeracy", "Writing on the PC", or "Internet Competence". With respect to the subject of communication, there are courses like "Making Myself Understood – Asserting Myself", "Listening – Speaking – Reading" or "Dealing with Officials with Confidence". "English in the Area of Basic Education" has also established itself. Additional courses along more creative lines include open reading and writing workshops, writing days and creative writing, or yoga and writing. Educational holidays as well as summer courses and also writing days or writing weekends – some with childcare – have been offered at some institutions for several years. In addition to the relevant topics, creative writing has become especially important (see Tröster, 2011).

4.1.2 How is adult literacy provision funded?

Although the field of literacy and basic education has been developing continuously since the 1980s, there is no nationwide regulation to provide courses. Based on the federal structure in the Federal Republic of Germany, the areas of responsibility of the federal and state governments are clearly delineated. The Federal Ministry of Education and Research is only able to fund innovative research projects in the area of basic education and literacy. This has happened repeatedly from the beginning of the literacy work to the present, but there is no substitute available for the appropriate general conditions. The federal states and municipalities are responsible for the creation of an infrastructure and the implementation of promising project results. This means that the course offerings, general conditions and infrastructure in the respective states are different (Tröster, 2005).

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

No, there is no statutory entitlement to literacy provision for adults.

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

Statistics on participation in Germany are based on data gathered by Adult Education Centres (Volkshochschul-Statistik). In 2013 the rate of participation in the area "Basic education/school-leaving-qualification" was 30.652.⁷²

4.1.5 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?

The "Studie zum Umfeld funktionaler Analphabetinnen und Analphabeten" (Study of the Environment of Functionally Illiterate Adults) started in May 2013 (ends April 2016) and is connected to the leo.-Level-One Study, which states 7.5 million functionally illiterate adults in Germany aged between 18 and 64 years. This study focuses on the support environment and networks that those with low literacy skills need. It seeks to understand whether those who know adults with poor literacy can act as multipliers⁷³ and build bridges to further education. The study is run by the University of Hamburg and includes qualitative and quantitative strands. First results show that although functionally illiterate people get different kinds of support in various degrees from their environment, they very seldom transfer to the adult education system⁷⁴.

Alpha-Panel is the short name of "Verbleibsstudie zur biographischen Entwicklung ehemaliger Teilnehmer/-innen an Alphabetisierungskursen – Interdependenzen von Schriftsprachkompetenz und Aspekten der Lebensbewältigung" (Study of former participants in literacy courses - interdependencies of written language competencies and coping with life) and was run by the Adult Education Association DVV in cooperation with the Universities of Berlin, Chemnitz, Frankfurt a.M., Hamburg and Hannover and the following results were published in 2010:

In the area of the adult education centres (VHS) there are about 8500-9000 literacy learners (first language) in every term. There are no results from the adult education system in general.

- These population numbers are a snapshot only and not indicative of longer trends.
- The majority of learners were the same persons, registered in every term.
- One third of the participants are new ones.
- The literacy courses of the Adult Education centres can reach only about 11,500 participants a year.
- This number of participants has stayed constant for the last 15 years. No growth can be found and the real number of participants is small compared to the estimated total number of functionally illiterate adults.
- The participants of the courses offered by the Adult Education Centres seem to be a special part of the total number of all the persons concerned. Specific statements about the structure, competences, background of education, etc. could not be made. Further results were expected from the leo. - Level-One Study.

⁷² Huntemann, H. & Reichart, E. (2014). Volkshochschul-Statistik. 52. Folge, Arbeitsjahr 2014, p. 30) <http://www.die-bonn.de/id/31096> (accessed April 10, 2015).

⁷³ Multipliers are people who know adults with low literacy who can support their learning. They may, for example, be a colleague, a good friend, or a family member, but also social worker, or volunteers.

⁷⁴ Universität Hamburg. Das mitwissende Umfeld funktionaler Analphabetinnen und Analphabeten. <http://blogs.epb.uni-hamburg.de/umfeldstudie/> (accessed November 24, 2014); Alfabund. Umfeldstudie – Studie zum mitwissenden Umfeld funktionaler Analphabetinnen und Analphabeten <http://www.alfabund.de/1865.php> (accessed April 10, 2015).

The study Sapfa "Sensibilisierung von Arbeitnehmern für das Problem des funktionalen Analphabetismus in Unternehmen" (Awareness raising among Employees of literacy problems in companies) is run by the Stiftung Lesen (Foundation Reading) and researches the vocational environment, especially the industries of hotel and catering; construction; cleaning; transport; manufacturing; storage; gardening; retail, caretakers. In essence, the research is a qualitative exploration of the climate of the enterprises in relation to the problem of literacy and their handling of employees with poor literacy.

Findings from this study show that, contrary to what is often assumed, the literacy problem is not in general a taboo. Functional illiteracy causes additional strain and related costs. The limits of workplace literacy should be worked out and used as a capability. Access, forms and strategies of addressing affected people should be developed in specific ways.

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

In Germany we do have "second-chance education". Basic skills learning measures can be a start for further trainings or courses which lead e.g. to a school leaving certificate.

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

In Germany a right to advice and guidance regarding educational opportunities does not exist. Guidance and advice for further education is required and it is an actual political issue. It is one of eight focal points of development in the "Strategy for Lifelong Learning in Germany" ("Strategie für Lebenslanges Lernen in der Bundesrepublik Deutschland") (BLK (2004). Strategie für Lebenslanges Lernen in der Bundesrepublik Deutschland. In: Materialien zur Bildungsplanung und zur Forschungsförderung, Heft 115, Bund-Länder-Kommission für Bildungsplanung und Forschungsförderung, Bonn) and it is one requirement of the Circle of Innovation for further education (BMBF) (Innovationskreis Weiterbildung) but in reality, there is a gap in advice and guidance regarding educational opportunities and there is no right, in none of the Rights of Further Education of the Bundesländer. Providing this advice differs from region to region and mostly it depends on special projects, for example "Lernende Region" or "Lernen vor Ort" and it is always difficult to finance. In the area of vocational education (it underlies the legislation of the state and not the Länder) the Arbeitsagentur is dominating in advice and guidance⁷⁵.

4.2 Quality monitoring

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

There is no inspection service to monitor the quality of adult literacy providers in Germany.

⁷⁵ Gnahn, D. (2012). Umsetzungsbarrieren und Umsetzungswege – Weiterbildungsberatung zwischen Wertschätzung und Unterfinanzierung. In: Gewerkschaft Erziehung und Wissenschaft (GEW), Österreichischer Gewerkschaftsbund (ÖGB), Związek Nauczycielstwa Polskiego (ZNP) (eds.). Umsetzungsstrategien für Weiterbildungsberatung. http://www.forum-beratung.de/cms/upload/Vorhaben_dritter/Guidance_Dialogue_Umsetzungsstrategien_Weiterbildungsberatung_Handreichung_3.pdf (accessed April 10, 2015).

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

Quality assurance and development of the provisions of all kinds of adult education establishments are issues that have grown in importance over many years. From 1976 on, when the law to protect the quality of distance learning was signed, until today, a continuous and steady development of the essence and concept of quality in the field of Adult Education has taken place. The concept of quality was also caught up in the wave of professionalisation in the 1970s and 1980s. Increased efforts were made towards improvement of quality on all educational levels (macro-, meso-, and micro-didactic).

Quality standards are set e.g. by statutory rules in the continuing education laws of the Länder. These laws include quality standards as presumptions for any financial support.

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

There are no national benchmarks or standards for adult literacy performance. The progress of adults in reading and writing is monitored individually by teachers on literacy courses.

4.2.4 What accountability measures are in place for adult education institutions?

The quality standards set in the rules/laws of the Länder – the federal states - recommend some financial support, but there are no general or nationwide accountability measures. It differs from Länder to Länder, because of the federalism nature of the education system in Germany.

4.3 Literacy curricula/reading instruction

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

There is no national literacy curriculum for adults in Germany, but in 2012 the German Adult Education Association (Deutscher Volkshochschulverband-DVV) started to develop a "Rahmencurriculum" (framework curriculum) and the part for reading and writing was presented in October 2014. Based on the "Alpha-Levels" the curriculum is meant to support the trainers/teachers. The Alpha-Levels were also basic for the leo.- Level One Study, which was the first to calculate the real number of functionally illiterate people in Germany. Therefore they are well known, have authority and they are suitable as a basic principle for the curriculum.

The materials for the teachers/trainers include: an introduction in the basics of German orthography, a summary of the rules of German orthography, a frame curriculum with a description of competence levels and a guideline for lessons including four levels of basic language competences according to the Alpha-Level⁷⁶.

⁷⁶ DVV (2014). DVV-Rahmencurriculum Schreiben . http://www.grundbildung.de/fileadmin/redaktion/pdf/Unterricht/Schreiben/Rahmencurriculum/Rahmencurriculum_Schreiben_komplett.pdf (accessed April 10, 2015).

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

There is no accepted methodology for teaching of literacy to adults in general but there are – due to experiences in the field since 1980 – certain agreements. The main principles are empowerment of learners, learner centred approaches, focusing on daily life situations and learning counselling.

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

There are specific learning conditions in order to support the diversity of learner groups and learning needs e.g. small groups (up to eight learners), learning counselling, and individual support. Learning materials are diverse in order to meet different learning needs.

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

From 2007 -2012 the Federal Ministry of Education and Research (BMBF) funded the programme "Research and Development for Literacy and Adult Basic Education", a core area of which focused on workplace literacy. Since 2012 there has been a specific BMBF-Programme "Workplace orientated Literacy and Adult Basic Education" (duration 2012-2015). Since 2007 there have been projects and programmes of workplace literacy⁷⁷.

4.4 Screenings/assessments/ support

4.4.1 How are adults with literacy needs identified?

There are several approaches and attempts for identifying adults with literacy needs – see e.g. the studies mentioned under 4.1.5.

Furthermore there are multipliers in public bodies, authorities or social services who are able to approach potential learners. In addition, friends, colleagues, neighbours or family members who are aware of the needs are important in order to inform and advise about literacy courses.

4.4.2 How are adults' prior literacy knowledge and skills recognised and validated?

There is no special tool to recognise and validate adults' literacy knowledge and skills. But data on knowledge and skills can be gathered by the ProfilPASS, an instrument to recognise key competences in addition to professional skills based on self-reflection and self-evaluation. This tool is often used by people in vocational or private situations of transition or change. It helps to describe their position and to frame goals. This ProfilPASS is accompanied by special training and advice and guidance⁷⁸.

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

The project lea.-Literalitätsentwicklung von Arbeitskräften (development of literacy in the workforce) was funded by the BMBF and completed in 2010. A workplace oriented diagnostic instrument for adult literacy was developed. The project considers young people, looking for profession/vocation, educationally disadvantaged adults, people who need support in special needs education, diagnostic

⁷⁷ For further information: www.alphabund.de/.

⁷⁸ Bosche, B. & Seusing B. (2014). Der ProfilPASS in Unternehmen. Ein Leitfaden für die Praxis. <http://www.die-bonn.de/doks/2014-kompetenz-01.pdf> (accessed April 10, 2015).

and analysis of competences (in vocational areas), self-, peer- and e-assessment. They developed items and exercises based on the alpha-levels to measure competences (Universität Hamburg & Universität Bremen. Die lea.- Diagnostik. <http://blogs.epb.uni-hamburg.de/lea/die-lea-diagnostik/> (accessed April, 10, 2015)).

4.4.4 How are adults with dyslexia identified and supported?

There are no systematic measures to identify and support adults with dyslexia. For those looking for support and guidance there is for example a federal association, the "Bundesverband Legasthenie und Dyskalkulie e. V."⁷⁹.

4.5 Special support for second-language learners/migrants

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

The integration course consists of a language course and an orientation course. The language course comprises a total of 600 lessons on the general integration course, and up to 900 lessons on special courses⁸⁰.

The language course covers important aspects of everyday life, e.g.

- shopping/trade/consumption
- housing
- health and hygiene/human body
- work and career
- continuing and further education
- educating and raising children
- leisure time and social interaction
- media and media use.

The orientation course takes 60 hours to complete. The orientation course includes content such as:

- the German legal system, history and culture
- rights and obligations in Germany
- ways of co-existing in society
- important values in German society, e.g. freedom of worship, tolerance and equal rights.

Special types of course: People learn best when grouped with others who are in the same situation. This is also true for integration courses. This is why special integration courses are also available in addition to the General Integration Course.

- Integration course including literacy skills
- Integration course for women
- Integration course for parents

⁷⁹ See <http://www.bvl-legasthenie.de/> (accessed April, 10, 2015).

⁸⁰ See Zimmer (2013); Herre, P. (2013). *Inclusive education and intercultural opening*. *LLine*. Issue 3/2013. <http://www.lline.fi/en/article/policy/1332013/inclusive-education-and-intercultural-opening> (accessed April 10, 2015).

- Integration course for young adults
- Catch-up course
- Intensive course (BAMF; see Zimmer, 2013)

"German for professional purposes: The ESF-BAMF programme: As part of its ESF-BAMF programme, the Federal Office for Migration and Refugees (BAMF) offers courses in "German for professional purposes" free of charge to people with an immigrant background. The courses combine **German lessons, professional qualifications** and the option of finding out more about a trade or profession through **work placements**." (BAMF)

4.5.2 Who pays for this provision?

"The participants must pay €1,20 for every lesson of the integration course (Contribution to costs). The remainder of the cost is covered by the Federal Office for Migration and Refugees. If the participants receive unemployment benefit II (*Arbeitslosengeld II*) or social assistance (*Sozialhilfe*), they can apply for exemption from the costs." (BAMF)

4.5.3 Does this provision employ specialist teachers?

Only teachers who have been specially trained may teach on integration courses. They are accredited by the Federal Office for Migration and Refugees.

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

Special types of courses: Integration course including literacy skills

"As part of ESF-BAMF programme, the Federal Office for Migration and Refugees (BAMF) offers courses in 'German for professional purposes' free of charge to people with an immigrant background. The courses combine **German lessons, professional qualifications** and the option of finding out more about a trade or profession through **work placements**."⁸¹

4.5.5 Is there a separate curriculum for this type of provision?

"On a literacy course...

- attendees learn during the 960 lessons that they too can successfully learn to read and write (if they fulfil certain conditions, a further 300 lessons are also available).
- learning takes place in small groups. This means that the teacher has more time for each attendee.
- the participants learn what helps them to learn, as well as learning how to help themselves and each other to make progress.
- the attendees find out more about themselves and discover that they can also play an active role in society.
- attendees learn how to use a textbook so that they can attend other German courses later or can continue to learn alone." (BAMF; see further Zimmer, V. (2013)⁸².

⁸¹ BAMF (Bundesministerium für Migration und Flüchtlinge) (Federal Office for Migration and Refugees) (2013). Integration courses – what are they? <http://www.bamf.de/EN/Willkommen/DeutschLernen/Integrationskurse/integrationskurse-node.html> (accessed April 10, 2015).

⁸² Anspruch und Wirklichkeit von Integrationskursen im Lichte erwachsenenpädagogischer Forschung [Expectations and reality of integration courses in light of adult education research]. <http://d-nb.info/1031390162/34> (accessed April 10, 2015).

4.6 Reading environments to stimulate reading motivation

4.6.1 Are there schemes to promote reading for pleasure among adults?

Reading promotion for adults usually addresses people with low literacy. But there are schemes that promote reading for pleasure for adults similar to the schemes that promote reading for pleasure for children and adolescents. Bookshops, libraries and local cultural institutions host a lot of events like reading and literature festivals. However these events tend to attract those who already enjoy reading.

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

Local events like Münchner Bücherschau⁸³, Poetenfest (Erlangen)⁸⁴, Blätterrauschen (Nürnberg)⁸⁵, LesArt (Fürth)⁸⁶ or even Leipzig liest (Leipziger Buchmesse) are often hosted by local reading networks. These networks consist of public libraries, cultural institutions, bookshops and publishing houses. Events like #bookupDE incorporate social media as an important part of addressing people and reporting about the event.⁸⁷

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

“Vorlesen in Familien” is an early literacy and social programme of the Phantastische Bibliothek Wetzlar. Trained volunteer reading helpers visit families (most of them with a migrant background or on social welfare) in their home, reading to and with them. They counsel parents and help children with special educational needs. Parents with low literacy are attracted by the picture books with less text.⁸⁸

The Stiftung Lesen (Reading Foundation) starts with “Lesestart” another campaign in the area of family literacy (this is the German adaption of the UK’s “Bookstart” programme). Parents get support to improve their children’s reading for pleasure. In a lot of projects and events they can get training in how to read to their children and they get useful information about quality criteria of children’s books.⁸⁹

4.7 Digital environments/use of technology in education

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

Nearly ten years ago the first attempts were made in Germany to establish New Technologies in the context of Adult Basic Education (Literacy, Numeracy and German as second language). Digital skills are connected with literacy and numeracy and together they are necessary to cope with everyday life.

Over the past decade a number of projects and developments have implemented new technologies in adult literacy delivery, but in Germany there is no comprehensive, unified and general learning-offer to

⁸³ <http://www.muenchner-buecherschau.de> (accessed April 10, 2015).

⁸⁴ <http://www.poetenfest-erlangen.de> (accessed November 24, 2014).

⁸⁵ <http://www.kulturkellerei.de/kulturkellerei/programm.htm> (accessed November 24, 2014).

⁸⁶ <http://www.fuerth.de/Home/Leben-in-Fuerth/kultur/LESEN/LESEN-2014.aspx> (accessed November 24, 2014).

⁸⁷ Bücherkinder. Leben – Lesen – Lachen. Kunterbuntes Leben zwischen Buchdeckeln und Familie, available at <http://lesenlebenlachen.de/2014/07/was-ist-eigentlich-ein-bookup> (accessed April 10, 2015).

⁸⁸ Phantastische Bibliothek Wetzlar. Vorlesen in Familien. <http://www.phantastik.eu/bildung/vorlesen-in-familien> (accessed April 10, 2015).

⁸⁹ Stiftung Lesen. Lesestart. Die Meilensteinen für das Lesen. <http://www.lesestart.de> (accessed April 10, 2015).

train media competences, except the learning portal of the German Adult Education Association (DVV) "Ich-will-lernen.de" (I-want-to-learn).

The use of new media and/or the internet depends on the initiative and resources of the local adult education centres and so there are often digital gaps, because the digital equipment as well as the teachers' qualification and competences in e-learning delivery are missing.

Adult learners can improve their digital skills in combination with literacy/numeracy competences by using a learning portal, learning games, special learning software in various learning arrangements, most recommended is the use of blended learning.⁹⁰

4.7.2 Which population groups are excluded from access to ICTs?

To date, specific research on exclusion from access to ICTs has not taken place in Germany. Statistical surveys like Eurostat report that in 2011 80% of the German population had internet access. This number is slowly increasing; in 2013 it was nearly 84% (Eurostat, 2011; 2013).

Although teachers and trainers often attest that ICT is of most appeal to young people, the real experience in the projects shows that older people are also very interested in training and increasing media literacy.

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

There is one web-based programme in adult literacy delivery in Germany, the learning portal "Ich-will-lernen.de" [I-want-to-learn] run by the German Adult Education Association (DVV). It was launched at the end of 2004. There are various applications of this platform, it can be used to support face-to-face-learning lessons as blended learning, but it can also be used individually and anonymously. The development and expansion of this e-learning-portal has gone further, and today it includes numeracy delivery and financial literacy delivery. It provides free learning materials to increase the users' literacy skills and basic education and offers exercises to promote the learners' employability and ability to obtain a school leaving certificate. In August 2013 the new portal "Ich-will-Deutsch-lernen.de" [I want to learn German] was launched to support the learning of German as second language (Kellershohn, R. & Wilhelm, R. (2006). Neue Wege mit Neuen Medien gehen: Das Projekt PORTAL ZWEITE CHANCE ONLINE. In F. Knabe (ed.), Bewährte und neue Medien in der Alphabetisierung und Grundbildung e.V (1st ed., p. 82–87). Barcelona et al: Klett).

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

Some of the bigger adult education centres have special computer-rooms and are well equipped with new technologies and internet access. But there are also a lot of smaller institutions, which have not got the necessary resources.

The Adult Education Centre of Braunschweig, for example, has established portable learning arrangements to address and focus on target groups of learners who would not enrol on traditional courses in the adult education centres. Using new technology in literacy can build bridges to learners,

⁹⁰ See Tröster, M. (ed.) (2005). Neue Medien bewegen die Grundbildung: Lernprogramme - Konzepte - Erfahrungen. Bonn: Deutsches Institut für Erwachsenenbildung, available at http://www.die-bonn.de/espid/dokumente/doc-2005/troester05_01.pdf (accessed April 10, 2015).

who are traditionally harder to reach because they do not join either literacy delivery or traditional computer courses. Working with new technology is fun and the learning success is motivating, so this can be the first step to more education and increased social participation and inclusion. They have been successful in offering PC-Learning for young mothers at the primary school their children visit. Most of them are educationally disadvantaged and they could train their computer competences as well as literacy and numeracy (Hock 2011, (Schneider/ Schuster 2011).

The use of mobile devices in learning is becoming more important, because nearly 96% of the world's population is using mobile phones. So mobile phones and other mobile devices affect and change the daily life communication. It is necessary to make use of the learners' media competences and to train them for their literacy learning and language learning. One project using mobile devices is in progress: "DAZ – Alphabetisierung" [German as second language delivery in combination with literacy]. Mobile devices offer a lot of advantages like maximal flexibility, addressing various channels of perception and as an authentic communication tool. They are multifunctional, variously usable ("all in one") and easy to handle. If the financial resources of the learning centres do not allow the necessary equipment, it is possible to offer a "bring-your-own-device", a very cost effective alternative for the institution (Feick/ Nestler 2014).

4.8 Teachers

4.8.1 What are the professional roles within adult education?

There are different roles, and different competences are needed. Professionals in the field of adult education have to organise/manage, to facilitate, to teach and to counsel.

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

In comparison to school teachers, the profession of adult educators is not very well recognised.

4.8.2 What are their working conditions?

See 4.8.4.

4.8.3 How do salaries compare to the national average?

The net income of employees is 1,680 Euro per month on average. In comparison to that professionals in adult education earn less: 1,320 Euro (Martin/Langemeyer 2014).

In evaluating the income of personnel in continuing education, it must be taken into account that 74% are self-employed. A mere 14 % are employees subject to social insurance contributions, 10% are volunteers and 3% are in different forms of employment including civil servants.⁹¹ Based on this structure, most studies dealing with teachers' wages in continuing education cover the income of freelancers. An overview of incomes in the field of education and continuing education (which is not representative) is given by the mediafon database.⁹² Mediafon is a trade union advice centre for self-employed workers. The last analysis summarises 186 single fees from 2010 and 100 fees from 2011. As in previous years, most fees (64%) are not higher than 20 Euros per unit (45 minutes). Only 19.6% of the fees were higher than 25 Euros per unit.

⁹¹ WSF 2005, p. 14; available at http://www.bmbf.de/pubRD/berufliche_und_soziale_lage_von_lehrenden_in_weiterbildungseinrichtungen.pdf.

⁹² For further information, see www.mediafon.de.

It is important to mention that the freelancers are not paid for preparing lessons, and have to pay their own insurances, absence due to illness and holiday. Therefore, many freelancers in the continuing education sector are in a very precarious financial situation. In the last few years, this has been a subject of debate in Germany with calls for a minimum wage for the further education sector.

4.8.4 What are the statutory qualification requirements?

There are no statutory qualification requirements.

4.8.5 What are the entry requirements for ITE?

There is no ITE as such.

4.9 Teacher education

4.9.1 What are the statutory qualification requirements for adult literacy teachers?

There are no statutory qualification requirements for adult literacy teachers.

4.9.2 Are there specialist qualification routes for adult literacy teachers?

There are several initiatives and options for adult literacy teachers.

The “Master of Arts in Adult Literacy Development and Basic Education”, offered by the University of Education Weingarten, is the first academic-based qualification (further education) in adult literacy and basic skills in Germany. It contains part-time studies (4 semesters) including attendance-based lessons and individual learning.

The admission requirements for this course are:

- A first degree in teaching or a degree in pedagogy, psychology, sociology or social pedagogy/social work (with a minimum of 240 ECTS).
- Relevant working experience in the area of adult literacy development and basic education or related areas (with a minimum duration of one year)

Modules are offered in the following five competence areas: basics in adult literacy development and basic education; adult education; professional and diagnostic competences; competences of guidance, and networking and scientific work. The course incurs fees of 1,000 € per semester.

Modules “Basic Qualification Adult Literacy/ProGrundbildung (Basic Education)”

- Module 1: Approaches in literacy and basic skills
- Module 2: Supporting literacy development
- Module 3: Heterogeneous groups
- Module 4: Guiding and supporting learning processes
- Module 5: Digital media [new, optional module]
- Module 6: Supporting numeracy development and economic basic education [new, optional module]
- (Peer consulting and reflection of practice) [no longer offered]
- (Thesis and colloquium) [no longer compulsory]

In addition, there are single qualifications mainly offered by the Länder Associations of Adult Education Colleges [Landesverbände der Volkshochschulen], The Federal Literacy Association [Bundesverband Alphabetisierung und Grundbildung e.V.] and adult education colleges.

4.9.3 What are the entry requirements for Initial Teacher Education?

See 4.8.6.

4.9.4 Who pays for training?

There are different ways of funding:

The government finances different projects to enhance the professionalism of educators/facilitators in adult literacy education and in basic skills.

The Länder Associations of Adult Education Colleges [Landesverbände der Volkshochschulen] pay (partially) for trainings.

Organisations of adult education pay (partially) for trainings.

Teachers pay for their training partially or in total.

4.9.5 Is there a curriculum for initial teacher training?

There are no national curricula.

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

There are optional modules.

4.9.7 What is the length of the required training?

There is no required training.

4.9.8 Is there a curriculum/quality standards?

There are no curriculum or quality standards.

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

There is no continuous professional development.

4.9.10 What is the take-up among teachers?

N/A.

4.9.11 Who delivers this training?

N/A.

4.9.12 How is quality assured?

N/A.

4.10 Policy-making

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

Based on the federal structure in the Federal Republic of Germany, the areas of responsibility of the federal and state governments are clearly delineated. The Federal Ministry of Education and Research is only able to fund innovative research projects in the area of basic education and literacy. This has happened repeatedly from the beginning of the literacy work to the present, but there is no substitute available for the appropriate general conditions. The states and municipalities are responsible for the creation of an infrastructure and the implementation of promising project results (see 1.1.)

In Germany we do have a “National Strategy for Literacy and Basic Skills” initiated by the Federal Ministry of Education and Research (BMBF) and the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in 2011. The federal government and the federal states are supported by stakeholders and relevant players in the field. This strategy includes elements of workplace literacy.⁹³ The initiative is very successful because the federal states are very engaged.⁹⁴

From 2007 -2012 the Federal Ministry of Education and Research (BMBF) funded the programme “Research and Development for Literacy and Adult Basic Education” and a core area was about workplace literacy. Since 2012 there is a specific BMBF Programme “Workplace orientated Literacy and Adult Basic Education” (duration 2012-2015). Since 2007 there have been projects and programmes of workplace literacy.⁹⁵

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

See 4.10.1.

4.10.3 What financing mechanisms exist that facilitate inter-sectoral cooperation?

See 4.10.1.

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

The Federal Ministry of Education and Research funds a nationwide awareness raising campaign “Reading and Writing – My Key to the World” on TV and billposting as well as regional events in order to promote adult literacy education.

4.10.5 How are the motivation, interests and needs of adults taken into account in the policy-making processes?

Literacy learners are lobbying for themselves and they become more visible and powerful in public. There are e.g. campaigns, events and literacy ambassadors in order to promote literacy.

⁹³ Bundesministerium für Bildung und Forschung (BMBF) (2012). Vereinbarung über eine gemeinsame nationale Strategie für Alphabetisierung und Grundbildung Erwachsener in Deutschland 2012 – 2016, available at http://www.bmbf.de/pubRD/NEU_strategiepapier_nationale_alphabetisierung.pdf (accessed April 10, 2015).

⁹⁴ Kultusministerkonferenz. Berichterstattung der Länder über die im Rahmen der Nationalen Strategie zur Alphabetisierung und Grundbildung Erwachsener in Deutschland 2012 – 2016 ergriffenen Maßnahmen, available at [http://www.kmk.org/fileadmin/pdf/Bildung/AllgWeiterbildung/ Nationale_Strategie_Alphabetisierung-Bericht_2012.pdf](http://www.kmk.org/fileadmin/pdf/Bildung/AllgWeiterbildung/Nationale_Strategie_Alphabetisierung-Bericht_2012.pdf) (accessed April 10, 2015).

⁹⁵ For further information, see www.alphabund.de/.

As a result of the national strategy (see 4.10.1) there are networks and round table activities with stakeholders in the federal states as well as in cities and regions in order to strengthen the field of literacy.

4.10.6 Does government promote adult literacy in its lifelong learning policy?

The government promotes and funds adult literacy programmes as already described, as part of its lifelong learning policy.

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