

# Chapter 1

## Overview of IEA's PIRLS Assessment





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Reading literacy is one of the most important abilities students acquire as they progress through their early school years. It is the foundation for learning across all subjects, it can be used for recreation and for personal growth, and it equips young children with the ability to participate fully in their communities and the larger society.

Because developing reading proficiency is vital to every child's development, the International Association for the Evaluation of Educational Achievement—more widely known as IEA—conducts a regular assessment of children's reading literacy and the factors associated with its acquisition in countries around the world. IEA's Progress in International Reading Literacy Study, called PIRLS, focuses on the achievement of young children in their fourth year of schooling and the experiences they have at home and at school in learning to read.

Inaugurated in 2001, PIRLS is conducted every five years to measure progress in students' reading achievement as well as trends in the associated home and school contexts for learning to read. The number of countries participating in PIRLS has grown with each subsequent assessment cycle. Approximately 55 countries from all around the world are planning to participate in PIRLS 2011.

In 2011, the PIRLS five-year cycle comes into alignment with the four-year cycle of TIMSS (IEA's mathematics and science study).

Throughout the framework, various sources that have provided a research and scholarly basis for the framework are referenced. These references are only a sample of the volumes of literature and research that have informed the PIRLS framework, including considerable research by countries participating in PIRLS.

Therefore, at fourth grade, by participating in both IEA studies, countries can conduct one comprehensive assessment of the three core curriculum subjects—reading, mathematics, and science.

### *Extending PIRLS in 2011*

The fourth year of schooling was chosen as a focal point for PIRLS because it is an important transition point in children’s development as readers. Typically, at this point, students have learned how to read and are now reading to learn.

For a variety of reasons, however, there are countries where most children in the fourth grade are still developing fundamental reading skills. Thus, beginning in 2011, IEA has extended PIRLS to meet the needs of these countries by offering PIRLS at grade levels beyond fourth grade and by developing a less difficult reading assessment designed to be a stepping stone to PIRLS. Consistent with the purpose of extending PIRLS or bridging to PIRLS, the newly developed assessment has been named prePIRLS. The prePIRLS assessment follows the same conception of reading literacy as PIRLS outlined in this publication, but is intended to measure the reading comprehension skills of students who are still in the process of learning how to read.

### *PIRLS at the 5th or 6th Grades*

In some countries, students are more likely to have developed the reading comprehension competencies necessary for success on PIRLS by the fifth or sixth grade. IEA encourages participation in PIRLS 2011 at the fifth or sixth grade for these countries, because participation at a higher grade could provide valuable information about students’ strengths and weaknesses in reading, whereas participation at the fourth grade would provide little information except that the assessment was too difficult.

## *prePIRLS*

PIRLS 2011 has been extended to include prePIRLS—an assessment that reflects the same conception of reading as PIRLS, except it is less difficult and is designed to test basic reading skills that are a prerequisite for PIRLS. The reading passages are shorter, with easier vocabulary and syntax. Students’ ability to read and answer questions about these passages can provide valuable information about their strengths and weaknesses in reading comprehension. This new assessment offers an excellent basis for countries with relatively low levels of learning to systematically measure and improve children’s learning outcomes.

The availability of prePIRLS enables IEA to target the PIRLS assessment to each country’s situation to provide the best possible measurement. Depending on a country’s educational development and the students’ reading level, countries can participate in either or both PIRLS and prePIRLS to conduct the most effective assessment. The goal is to provide the best policy-relevant information about how to improve teaching and learning and help children become accomplished and self-sufficient readers.

## Monitoring Trends

From its inception, PIRLS was designed to measure trends in reading literacy achievement. It is conducted every five years, and previous PIRLS assessments took place in 2001 and 2006. The next assessment after the 2011 assessment is planned for 2016. Many of the countries participating in PIRLS 2011 also participated in the previous study cycles. These countries will have the opportunity to measure progress in reading achievement across three time points—2001, 2006, and 2011.

## PIRLS and TIMSS in 2011

2011 presents a unique opportunity for international assessment at the fourth grade, because the five-year cycle of PIRLS and the four-year cycle of TIMSS will be in alignment. 2011 is the fifth in the series of IEA's TIMSS (Trends in International Mathematics and Science Study) mathematics and science assessments that have been conducted at the fourth and eighth grades every four years since 1995.

Because IEA's PIRLS and TIMSS international assessments both will be conducted in 2011, countries have the opportunity to conduct a comprehensive assessment of reading, mathematics, and science at the fourth grade. This will enable countries to profile students' relative strengths in reading, mathematics, and science in an international context. The assessments will include an extensive array of contextual background information for improving teaching and learning in these three basic curriculum areas. Participation in PIRLS and TIMSS in 2011 will provide valuable policy-relevant information about curricula and instructional practices and the opportunity to examine in-depth information about effective school environments and instructional resources.

## A Definition of Reading Literacy

The *PIRLS 2011 Assessment Framework* and the instruments developed to assess the framework reflect IEA's commitment to be forward thinking and incorporate the latest approaches to measuring reading literacy. The PIRLS framework for assessing reading was initially developed for the first assessment in 2001, using IEA's 1991 Reading Literacy Study (Elley, 1992, 1994; Wolf, 1995) as the basis for the PIRLS definition of reading literacy and for establishing the aspects of reading literacy to be assessed. Since then, the PIRLS assessment framework has been updated for subsequent cycles of

the assessment (Campbell, Kelly, Mullis, Martin, & Sainsbury, 2001; Mullis, Kennedy, Martin, & Sainsbury, 2006).

PIRLS joins the terms reading and literacy to convey a broad notion of what the ability to read means—a notion that includes the ability to reflect on what is read and to use it as a tool for attaining individual and societal goals. The term “reading literacy” has been used by IEA since naming its 1991 Reading Literacy Study, and it remains the appropriate term for what is meant by “reading” and what PIRLS is assessing.

In developing a definition of reading literacy to serve as the basis for PIRLS, the Reading Development Group for 2001 looked to IEA’s 1991 study, in which reading literacy was defined as “the ability to understand and use those written language forms required by society and/or valued by the individual.” The Reading Development Group for 2001 elaborated on this definition for PIRLS so that it applies across ages yet makes explicit reference to aspects of the reading experience of young children. Beginning with PIRLS 2006, the definition was refined to highlight the widespread importance of reading in school and everyday life. The definition follows.

For PIRLS, reading literacy is defined as the ability to understand and use those written language forms required by society and/or valued by the individual. Young readers can construct meaning from a variety of texts. They read to learn, to participate in communities of readers in school and everyday life, and for enjoyment.

This view of reading reflects numerous theories of reading literacy as a constructive and interactive process (Alexander & Jetton, 2000; Anderson & Pearson, 1984; Chall, 1983; Ruddell & Unrau, 2004; Walter, 1999). Readers are regarded as actively constructing meaning and as knowing effective reading strategies and how to reflect on

reading (Afflerbach & Cho, 2009; Clay, 1991; Langer, 1995). They have positive attitudes toward reading and read for recreation. Readers can learn from a host of text types, acquiring knowledge of the world and of themselves. They can enjoy and gain information from the many multi-modal forms in which text is presented in today's society (Greaney & Neuman, 1990; Organization for Economic Cooperation and Development, 1999; Wagner, 1991). This includes traditional written forms such as books, magazines, documents, and newspapers. It also encompasses information and communication technologies, such as the Internet, email, and text messaging, as well as text integrated with various video and television media (Leu, Kinzer, Coiro, & Cammack, 2004).

Meaning is constructed through the interaction between reader and text in the context of a particular reading experience (Snow, 2002). Before, during, and after reading, the reader uses a repertoire of linguistic skills, cognitive and metacognitive strategies, and background knowledge (Baker & Beall, 2009; Pressley & Gaskins, 2006). The text contains certain language and structural elements and focuses on a particular topic. The context of the reading situation promotes engagement and motivation to read, and often places specific demands on the reader.

Discussing what they have read with different groups of individuals allows students to construct text meaning in a variety of contexts (Almasi & Garas-York, 2009; Guice, 1995). Social interactions about reading in one or more communities of readers can be instrumental in helping students gain an understanding and appreciation of texts (Galda & Beach, 2001; Kucer, 2005). Socially constructed environments in the classroom or school library can give students formal and informal opportunities to broaden their perspectives about texts and to see reading as a shared experience with their classmates (Guthrie, 1996). This can be extended to

communities outside of school as students talk with their families and friends about ideas and information acquired from reading.

## Overview of Aspects of Student's Reading Literacy

PIRLS focuses on three aspects of student's reading literacy:

- purposes for reading
- processes of comprehension
- reading behaviors and attitudes.

### *Reading Purposes and Processes*

Purposes for reading and processes of comprehension are the foundation for the PIRLS written assessment of reading comprehension. The PIRLS assessment focuses on the two overarching purposes for reading that account for most of the reading done by young students both in and out of school:

- reading for literary experience
- reading to acquire and use information.

Four types of comprehension processes are assessed in PIRLS:

- focus on and retrieve explicitly stated information
- make straightforward inferences
- interpret and integrate ideas and information
- examine and evaluate content, language, and textual elements.

The four processes are assessed within each purpose for reading. Figure 1 shows the reading purposes and processes assessed by PIRLS and the percentages of the test devoted to each for PIRLS and prePIRLS. Both the PIRLS and prePIRLS assessments devote half of the test to each of the purposes for reading. However, because prePIRLS is

Figure 1 Percentages of the PIRLS and prePIRLS Reading Assessments Devoted to Reading Purposes and Processes

PIRLS		prePIRLS	
Purposes for Reading		Purposes for Reading	
• Literary Experience	50%	• Literary Experience	50%
• Acquire and Use Information	50%	• Acquire and Use Information	50%
Processes of Comprehension		Processes of Comprehension	
• Focus on and Retrieve Explicitly Stated Information	20%	• Focus on and Retrieve Explicitly Stated Information	50%
• Make Straightforward Inferences	30%	• Make Straightforward Inferences	25%
• Interpret and Integrate Ideas and Information	30%	• Interpret and Integrate Ideas and Information	25%
• Examine and Evaluate Content, Language, and Textual Elements	20%	• Examine and Evaluate Content, Language, and Textual Elements	25%

designed for students earlier in the process of learning to read, a larger percentage of items (50 percent of the assessment) is devoted to measuring the ability to focus on and retrieve explicitly stated information—the essential foundation of reading comprehension.

The PIRLS reading purposes and the processes for comprehension are described in Chapter 2. Sample reading passages and questions from the PIRLS 2006 assessment are presented in Appendix B, and a sample reading passage and questions that exemplify the prePIRLS assessment are presented in Appendix C.

### *Reading Literacy Behaviors and Attitudes*

Reading literacy involves not only the ability to construct meaning from a variety of texts, but also behaviors and attitudes that support lifelong reading. Such behaviors and attitude contribute to the full realization of the individual’s potential within a literate society.

A substantial proportion of the questionnaire given to students will address students' attitudes towards reading and their reading habits. Chapter 3 describes the behaviors and attitudes assessed by PIRLS as well as the full range of home and school contexts for learning to read that are addressed by the PIRLS questionnaires.

### A Look to the Future—PIRLS Web-based Reading Initiative

As new and affordable technologies are being developed, the range of information available on the Internet is expanding. In many countries, children are accessing web-based information before beginning primary school. By the fourth grade, many students prefer using Internet and other electronic information resources to traditional paper-based information resources. In recognition of the prevalence and growth of web-based reading, countries are beginning to formalize the role of web-based reading within their school curricula and standards. PIRLS, too, has responded to the place of web-based reading in children's lives and the development of policies that support student learning with information and communication technologies. In coordination with the development of the PIRLS 2011 assessment, PIRLS launched a web-based reading initiative to explore the possibilities of broadening the representation of informational reading to include web-based texts in future cycles of PIRLS.

### Summary of the Assessment Design

The assessment design and specifications are discussed in detail in Chapter 4. The reading purposes and comprehension processes will be assessed using test booklets based on a rotated booklet design. The PIRLS booklets will contain five literary and five informational passages, and the prePIRLS booklets will contain three literary and three informational passages. The passages will be distributed across the test booklets, with each booklet comprised of two passages.

Each passage will be accompanied by approximately 12 questions, with about half multiple-choice and half constructed-response item format. In addition, questionnaires will be given to students' parents, teachers, and school principals to gather information about students' home and school experience in developing reading literacy. Countries will complete questionnaires about their education systems and reading curricula.