

CHAPTER 2

PIRLS 2026 Contextual Framework

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Overview

In addition to measuring trends in students' achievement in reading comprehension, PIRLS collects information about the environments in which children learn to read. Decades of educational research, including five previous assessment cycles of PIRLS, provide evidence that various contextual factors are related to students' reading achievement both across and within countries. Broadly speaking, greater opportunities to learn and supportive environments at home and at school are often associated with higher reading achievement.

PIRLS contextual data are an important resource for research on improving reading education, and a wealth of this information accompanies PIRLS reading achievement results. Some information has been collected for many cycles of PIRLS because of ongoing relevance, and other information is added each cycle to address emerging areas of research and policy interest.

The PIRLS 2026 Contextual Framework describes the different types of contextual information to be collected in PIRLS 2026 and builds on the context questionnaire frameworks of previous PIRLS cycles. It begins with an overview of how these data are collected and a short summary of instrument development procedures. A brief discussion of analytic procedures employed to analyze select data from the PIRLS 2026 Context Questionnaires is also provided. The remainder of the framework describes five areas of influence on students' reading development: home contexts; school contexts; classroom contexts; student characteristics, attitudes, and behaviors; and national contexts. Relationships among these contexts are discussed, and specific topics within each context that are included in the PIRLS 2026 questionnaires are outlined.

Collecting Contextual Data in PIRLS 2026

PIRLS 2026 collects data from various participants in countries' education systems. These participants include students themselves, students' parents or caregivers, school principals, and reading teachers. Each of these respondents represents an area of influence on students' reading

development. Additionally, PIRLS 2026 obtains information about national education policies from countries' National Research Coordinators (NRCs). The majority of contextual information in PIRLS 2026 is collected through questionnaires completed by these different individuals. Each questionnaire administered as a part of PIRLS 2026 is described below.

- The Home Questionnaire, entitled the Early Learning Survey, is completed by the parents or primary caregivers of each student participating in PIRLS 2026. This questionnaire collects information about a student's home background, such as languages spoken in the home, parents' reading activities and attitudes toward reading, and parents' education and occupations.
- The School Questionnaire is completed by the principal of each sampled school participating in PIRLS 2026. This questionnaire collects information about school characteristics, including student demographics and the availability of different types of resources.
- The Teacher Questionnaire is completed by students' reading teachers. This questionnaire collects information about classroom factors related to reading instruction, such as instructional approaches and the availability and integration of technology. The questionnaire also asks about teacher characteristics, such as career satisfaction, education, and recent professional development activities.
- The Student Questionnaire is completed by all students participating in PIRLS 2026 following the reading assessment. The questionnaire collects information about students' home environment, as well as students' experiences in school and attitudes towards reading.
- The Curriculum Questionnaire is completed by the NRCs of countries participating in PIRLS 2026, in consultation with policymakers or curriculum experts as needed. The questionnaire collects information about the structure of the country's education system and reading curriculum.

In addition to the five questionnaires described above, PIRLS 2026 collects further qualitative information about national contexts for learning in the *PIRLS 2026 Encyclopedia*. Each PIRLS 2026 country contributes a chapter to the Encyclopedia that provides additional details about their education systems and reading curricula. This country-level information gives insight into the broader educational ecosystems in which PIRLS reading achievement and context questionnaire results should be interpreted.

The final piece of contextual data in PIRLS 2026 concerns students' feelings about the texts in the reading assessment. After completing assessment items related to a particular text, students are asked to indicate how much they liked the texts.

Developing Instruments to Collect Contextual Data in PIRLS 2026

As noted above, the majority of contextual data in PIRLS 2026 is collected via questionnaires. These questionnaires are developed through a collaborative and iterative process, using the previous PIRLS cycle's materials as a starting point. The TIMSS & PIRLS International Study Center works with the PIRLS 2026 Questionnaire Development Group (QDG) and National

Research Coordinators (NRCs) to revise the PIRLS 2021 questionnaires for PIRLS 2026. These revisions include adding questionnaire items to measure new topics and refining items to improve measurement of existing topics. Selection of new topics is largely driven by countries' interests, input from the QDG, and practical considerations for developing items that are relevant across a diverse set of countries. Questionnaire items are also deleted each cycle to accommodate new additions without a dramatic increase in response burden. The outline that guides countries' Encyclopedia chapters is also revised for each PIRLS cycle. Staff at the TIMSS & PIRLS International Study Center meet with QDG members three times throughout the PIRLS 2026 cycle to work on these revisions. NRCs also have the opportunity to review drafts of the questionnaires and Encyclopedia chapter outline at different stages in the assessment cycle.

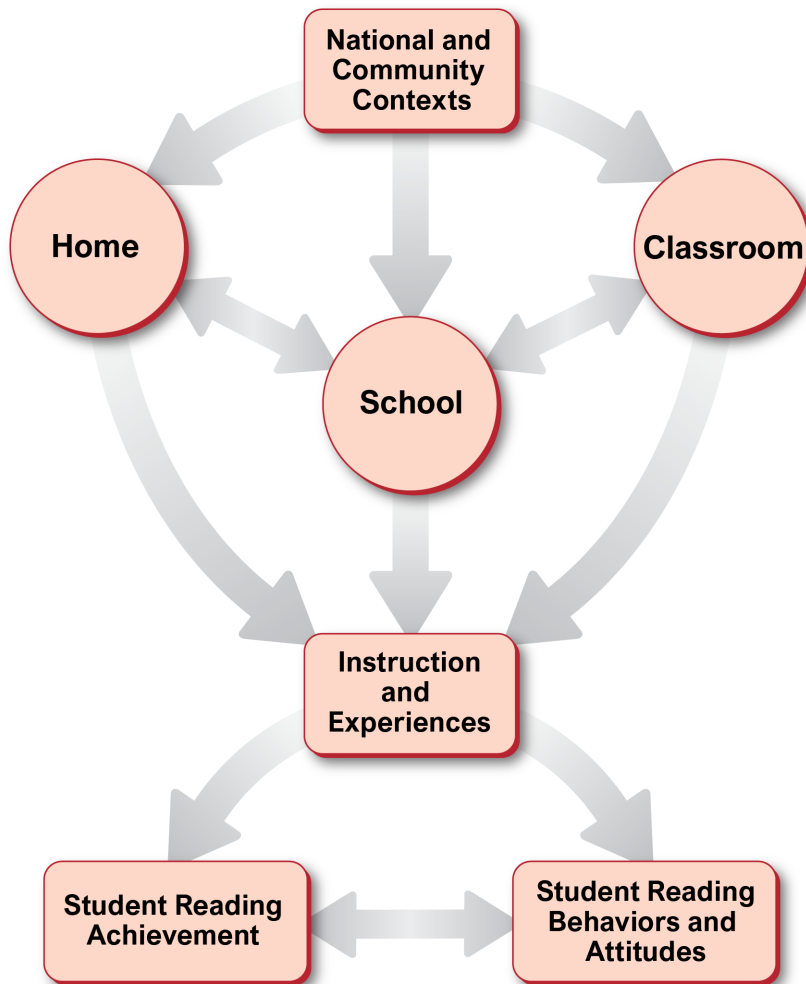
Analytic Procedures in the PIRLS 2026 Context Questionnaires

Some items in the PIRLS 2026 Home, School, Teacher, and Student Questionnaires are analyzed together using item response theory methods to develop background scales that measure specific constructs.^{1,2} These scales summarize select questionnaire data more reliably than the responses to individual questions and enhance the interpretability of different constructs' relationships with reading achievement. Improving the content and measurement properties of the context questionnaire scales is a priority in each assessment cycle. For PIRLS 2026, potential improvements include exploring the use of the generalized partial credit model³ for scale creation, as well as the exploration of new approaches for creating scale categories to classify respondents. Further details about context scale analysis procedures will be available in the *Methods and Procedures: PIRLS 2026 Technical Report*.

Contexts for Students' Reading Development

Similar to previous cycles, the PIRLS 2026 Contextual Framework captures five broad areas of influence on students' reading development. These are represented visually in Exhibit 1.

Exhibit 1: Contexts for Developing Children's Reading Literacy



Students' reading achievement, behaviors, and attitudes are a result of their instructional and personal experiences, which are in turn shaped through a complex interaction of the contexts at home, in school, in the community, and in society at large. Exhibit 1 depicts these interactions. The bottom layer of Exhibit 1 depicts the relationship between students' reading achievement and their reading attitudes and behaviors. These have a reciprocal relationship (indicated with the bidirectional arrow), meaning that they influence each other. In addition to exerting these influences on each other, students' reading achievement, behaviors, and attitudes are shaped by the instruction and experiences that students have at school. Moving further up Exhibit 1, there are three areas that have a direct influence on the students' instruction and school experiences: home, school, and classroom. These three contexts are also related to each other. The school context is central to students' instruction and experiences. It both shapes and is influenced by home and classroom contexts, as illustrated with the bidirectional arrows in Exhibit 1. Home and

classroom factors also exert a direction influence on instruction and student experiences. Finally, home, school, and classroom contexts are themselves influenced by the national and community contexts within which families live and schools function.

Broadly speaking, the components included in Exhibit 1 illustrate the areas represented in the PIRLS 2026 context questionnaires. Specific topics that are addressed within each area are detailed in the remainder of the PIRLS 2026 Contextual Framework.

Home Contexts

As shown in Exhibit 1, students' home contexts influence their learning experiences directly, as well as indirectly by contributing to school contexts. Items in the PIRLS 2026 questionnaires cover topics related to students' home learning environments, including their informal early learning experiences, socioeconomic resources, parental support for reading, and the language(s) spoken at home. PIRLS 2026 collects information about different aspects of students' home environments in the Home and Student Questionnaires, which is summarized in Exhibit 2.

Exhibit 2: Summary of Home Context Topics and Sub-Topics

Home Context Topics	Home Context Sub-Topics
Early Learning Experiences	Early Literacy Activities and Tasks
	Home Socioeconomic Status
Home Environment for Learning	Parents' Reading
	Information and Communication Technology (ICT) in the Home
	Language Spoken in the Home

Early Learning Experiences

Early Literacy Activities and Tasks

Research has shown that early childhood literacy activities are important for fostering school-age students' achievement in reading.^{4,5,6,7,8} Examples of these activities include parents reading books, telling stories, playing with alphabet toys, talking with their children, helping children write letters or words, and reading aloud signs and labels. Perhaps the most common and important early literacy activity involves adults and older children reading aloud to young children.^{9,10,11} By being read aloud to, children are exposed to oral language, which also is important for literacy acquisition.^{12,13,14} PIRLS 2026 collects information about students' early literacy experiences in the Home Questionnaire.

Home Environment for Learning

Home Socioeconomic Status

Measures of socioeconomic status are consistently related to students' achievement in educational research, with students from more advantaged backgrounds having better academic performance.^{15,16,17,18,19} Socioeconomic status is often indicated through proxy variables such as parental level of education, income, and occupational class. Although they have some limitations

in terms of cross-cultural comparability, these types of variables have been used as measures of socioeconomic status for many decades.²⁰ Specific to reading, home socioeconomic status can shape students' access to appropriate reading materials for their reading level.²¹ PIRLS 2026 collects information about home socioeconomic status and related resources for learning in the Home and Student Questionnaires.

Parents' Reading

Parents who like reading and read themselves can serve as role models for their children as readers. Parents are their children's first role models, and children learn by observing them.²² Because of this, parents' own reading behaviors and beliefs about reading can shape their child's reading habits and motivation to read, as well as promote reading achievement.^{23,24,25,26} As noted in Chapter 1, social interactions surrounding reading are important for developing reading literacy. Reading socialization can be more overt (e.g., reading together) or subtle (e.g., young children seeing adults reading or using texts in different ways learn to appreciate and use printed material), and this process can have long-term effects on students' academic performance.²⁷ Parental involvement in activities to develop their child's reading skills has a positive effect on their reading comprehension, motivation, and attitude toward reading. Specifically, parent-child reading contributes to psychological growth and students' language and literacy skills.^{28,29} Parents are typically more involved when their child is first learning to read, but the time parents spend reading with their children declines as children age.³⁰ PIRLS 2026 collects information about parents' attitudes toward reading, reading practices, and reading activities with their children in the Home Questionnaire.

Information and Communication Technology (ICT) in the Home

As with reading, parents play an important role in shaping how their children interact with digital devices and online environments. There are a variety of strategies that parents can employ to monitor their children's use of digital devices. Some research has shown that restricting the time children spend using digital devices is particularly prevalent.³¹ Beyond imposing restrictions, parents may also engage their children in conversations about topics such as safety and privacy or reliability of information on the internet. PIRLS 2026 collects information about parents' conversations about, and monitoring of, digital device use with their children in the Home Questionnaire.

Language Spoken in the Home

Depending upon a country's historical and cultural context, it may be common for some students to speak one language at home and another at school, especially among immigrant families. Some parents may prioritize multilingualism and make great efforts to ensure their child is exposed to more than one language in the home. Because learning to read is dependent on children's early language experiences, the language or languages spoken at home and how they are used are important factors in reading literacy development.³² If students are not fluent in the language of instruction, often there is an initial learning gap because students must learn the concepts and content of the curricula through a new language.^{33,34} High-quality research on academic literacy

practices and instruction is needed to support students from culturally and linguistically diverse backgrounds.³⁵ PIRLS 2026 collects information about the languages students speak at home in the Home and Student Questionnaires.

School Contexts

As the formal providers of instruction, schools play an essential role in students' educational experiences (shown in Exhibit 1). There are many ways in which schools can differ both across and within countries, including institutional characteristics such as school size, resources available to support instruction, and quality of learning environment. PIRLS 2026 collects a variety of information about school contexts from multiple sources, including the School, Teacher, and Home Questionnaires. This information is summarized in Exhibit 3.

Exhibit 3: Summary of School Context Topics and Sub-Topics

School Context Topics	School Context Sub-Topics
School Characteristics and Composition of Student Body	School Size and Geographic Location
	Socioeconomic Background of Student Body
	Language Spoken by Student Body
	Literacy Skills of Entering Student Body
School Resources	Resources and Supports for Reading Instruction
	School Library and Technology Resources
	Resources for Student Support
School Climate	School Safety
	School Emphasis on Academic Success
	Teacher Job Satisfaction and Challenges
	Parents' School Involvement
	Principals' Preparation and Experience

School Characteristics and Composition of Student Body

School Size and Geographic Location

Schools vary in size and are located in a variety of geographical areas (e.g., urban, suburban, and rural). These school characteristics and their implications vary both within and across countries participating in PIRLS. It is not possible to make internationally applicable generalizations about the impacts of school size or location on students' academic achievement; however, these variables still provide important information that characterizes students' school experiences. Smaller schools in rural areas may face particular challenges, such as lower budgets and difficulty recruiting highly qualified teachers; however, there is great diversity in resources among rural schools.^{36,37,38} Depending on the country, students attending schools in urban or suburban areas may have access to more learning environments outside of school (e.g., museums, libraries, and bookstores) than students attending schools in rural areas. PIRLS 2026 collects information about school size and geographic location in the School Questionnaire.

Socioeconomic Background of Student Body

Since the publication of the Coleman report in the United States,³⁹ there has been sustained interest in how the socioeconomic composition of schools is related to individual student achievement.^{40,41,42} There is evidence that students from disadvantaged backgrounds may have higher achievement if they attend schools where the majority of students are from advantaged backgrounds, which some research has attributed to peer effects.^{43,44,45} The impacts of socioeconomic composition of schools are not necessarily uniform across countries and may be themselves impacted by country-level factors, such as use of student tracking.⁴⁶ The mechanisms that promote socioeconomic segregation across schools (e.g., school choice policies⁴⁷) and contribute to its effects on schools are also likely to vary across countries (e.g., fundraising practices or access to highly qualified teachers).^{48,49} PIRLS 2026 collects information about socioeconomic composition of the student body in the School Questionnaire.

Language Spoken by Student Body

The PIRLS 2026 reading assessment is administered in students' primary language of instruction. Schools vary in their linguistic diversity, and schools where many students speak a language other than the primary language of instruction may need to have policies and resources that provide extra support for these students. PIRLS 2026 collects information about the percentage of students in the school who speak the primary language of instruction as their first language in the School Questionnaire.

Literacy Skills of Entering Student Body

Students who enter the primary grades well-equipped with basic literacy skills have a stronger foundation for formal reading instruction, and stronger early literacy skills can positively contribute to young children's reading skill development.^{50,51} Schools where a larger proportion of students begin primary education without these skills may need to expend additional resources to enable students to effectively engage with on-grade reading instruction. PIRLS 2026 collects information about the literacy skills of the entering student body in the School Questionnaire.

School Resources

Resources and Supports for Reading Instruction

Adequate facilities and sufficient instructional resources are both important for maintaining a favorable learning environment in schools.⁵² Although "adequacy" in terms of resources can be relative and perceptions of adequacy may vary across countries, the extent and quality of school resources have been shown to be critical for quality instruction.^{53,54,55,56} Instructional resources can be conceptualized generally or specific to reading instruction. Such resources can include well-maintained school facilities, qualified staff, and access to high-quality instructional materials. In addition to material resources, schools may provide additional supports for reading instruction, such as remedial or enrichment programs for reading, and support staff during reading lessons. PIRLS 2026 collects information about resources and supports for reading instruction in the School Questionnaire.

School Library and Technology Resources

School libraries can be an important resource for facilitating students' access to reading materials. Some research suggests that access to and use of school libraries may be particularly beneficial for students from lower socioeconomic backgrounds.⁵⁷ Libraries that contain a variety of materials of interest to students are more likely to be used and also more likely to be beneficial for promoting reading achievement.⁵⁸ In addition to books, it is important to acknowledge the rapidly changing landscape of information technology resources within schools, including the allowance or prohibition of students' personal mobile phones at school. Both within and across countries, there is likely to be variation in the technological resources available to students and the policies that regulate their use. PIRLS 2026 collects information about school libraries and technology resources in the School Questionnaire.

Resources for Student Support

Concerns about student well-being and mental health have increased in recent years, especially in light of the decreases in well-being observed following the onset of the COVID-19 pandemic and resulting shutdowns.⁵⁹ Because students spend so much time at school, schools are uniquely positioned to promote students' well-being, which has a reciprocal relationship with academic achievement (i.e., student well-being and academic achievement can influence each other).⁶⁰ School-based resources for promoting student well-being can include access to professionals collaborating with teachers, such as counselors or nurses.^{61,62} PIRLS 2026 collects information about school resources for student support in the School Questionnaire.

School Climate

School Safety

School safety is a major contributor to school climate, and different school community members may perceive its safety differently.⁶³ The sense of security that comes with a safe school environment is essential for effective learning.⁶⁴ Research shows that schools where rules are clear and enforced fairly tend to have atmospheres of greater discipline and safety.^{65,66} PIRLS 2026 collects information about school safety in the School and Teacher Questionnaires.

School Emphasis on Academic Success

Teaching, learning, and the organizational culture surrounding these processes are important contributors to school climate.⁶⁷ A school atmosphere of academic optimism and high expectations for academic excellence can contribute to school success.⁶⁸ Research has shown that there is a positive association between a school's emphasis on academic success and academic achievement.^{69,70} Academic emphasis, collective efficacy in promoting academic performance, and trust among school staff, parents, and students are all indicators of academic optimism in a school.^{71,72,73} PIRLS 2026 collects information about school emphasis on academic success in the School Questionnaire.

Teacher Job Satisfaction and Challenges

Fostering teacher job satisfaction is important for retaining qualified teachers in the classroom.⁷⁴ Teachers who remain in the classroom are often motivated by collaboration with colleagues, strong principal leadership, and meaningful relationships with students.^{75,76,77} In contrast, emotional exhaustion from work stress has been found to be negatively related to teacher job satisfaction and retention.⁷⁸ Research in recent decades has suggested that teacher well-being (and therefore, retention) is at risk due to factors such as increased demands on teachers from parents and administrators, lack of adequate supports, and politicization of the profession.⁷⁹ PIRLS 2026 collects information about teacher job satisfaction and challenges in the Teacher Questionnaire.

Parents' School Involvement

Good relationships between students' families and schools can contribute to students' learning. Parental involvement in their child's school can be conceptualized as a continuum, ranging from involvement in routine contact with the school to deeper engagement in their child's learning.⁸⁰ Engagement between parents and the school can also promote students' literacy achievement;⁸¹ however, the degree to which parents feel it is their role to frequently engage with their child's school is likely to vary across countries. PIRLS 2026 collects information about parents' engagement with and perception of their child's school in the Home Questionnaire.

Principals' Preparation and Experience

Principals serve as instructional leaders within schools and manage school staff, students, and the school environment. Research has shown that effective principal leadership can foster student achievement by creating an atmosphere of collective efficacy through a positive school climate and trust among teachers.^{82,83} Additionally, rapid principal turnover within a school can lead to decreases in student achievement.^{84,85} PIRLS 2026 collects information about principal preparation and experience in the School Questionnaire.

Classroom Contexts

Students are clustered into classrooms within the schools they attend. These classroom contexts contribute to students' reading achievement by shaping their learning experiences (see Exhibit 1). Important classroom-level factors include teacher characteristics, reading instructional practices, access to technology, and classroom climate. PIRLS 2026 collects information about these topics in the Teacher and Student Questionnaires. This information is summarized in Exhibit 4.

Exhibit 4: Summary of Classroom Context Topics and Sub-Topics

Classroom Context Topics	Classroom Context Sub-Topics
Teacher Qualifications	Teachers' Preparation
	Teachers' Years of Experience
	Teachers' Professional Development
Classroom Reading Instruction	Teachers Develop Students' Reading Comprehension Skills and Strategies
	Teachers Cultivate Motivation, Engagement, and Self-efficacy in Reading
	Organizing Students for Reading Instruction
	Classroom Libraries
Information Technology in the Classroom	Classroom Access to Digital Devices for Reading Instruction
	Instruction in Online Reading
Classroom Climate	Classroom Disruptions
	Factors Limiting Instruction

Teacher Qualifications

Teachers' Preparation

Quality teacher preparation is critical for effective teaching.⁸⁶ Teachers' subject-specific knowledge can positively impact student achievement in conjunction with their pedagogical skills; analysis conducted using PIRLS data showed a relationship between teachers' reading coursework and PIRLS reading achievement.^{87,88} PIRLS 2026 collects information about teacher preparation in the Teacher Questionnaire.

Teachers' Years of Experience

In addition to teacher education and training, teaching experience is important for teacher development. Gaining experience is especially important for early-career teachers, and they develop their skills in the classroom.^{89,90,91} Research has also found that more experienced teachers continue to develop pedagogical skills after five years of experience and that this development can positively affect student achievement.^{92,93} PIRLS 2026 collects information about teachers' years of experience in the Teacher Questionnaire.

Teachers' Professional Development

Research-based instruction in reading has been shown to provide significant benefits for student achievement,⁹⁴ so teacher professional development specifically related to reading instruction is an important component of ensuring teaching quality.⁹⁵ For example, professional development can improve teachers' skills in explicit instruction of reading comprehension strategies,⁹⁶ integration of reading comprehension into content instruction,⁹⁷ and incorporation of online reading into their classroom practices.⁹⁸ It is important to acknowledge that professional development opportunities vary in quality and that participation in professional development may not have a uniform influence on student achievement. PIRLS 2026 collects information about teacher participation in and needs for professional development in the Teacher Questionnaire.

Classroom Reading Instruction

Teachers Develop Students' Reading Comprehension Skills and Strategies

Reading comprehension involves basic skills of word decoding, vocabulary knowledge, and reading fluency,⁹⁹ as well as more complex skills such as understanding the plot or the line of reasoning, recognizing the text structure, locating information in the text, analyzing perspectives, and developing one's own understanding of the text.¹⁰⁰ Instruction that explicitly provides opportunities for students to develop these skills is most likely to be effective in developing high-level comprehension.¹⁰¹ To aid comprehension, it is important that teachers help students monitor their own comprehension when reading, connect new text with prior knowledge, and develop a deep understanding of the text through questions and discussions.¹⁰² Reading comprehension is an active process; therefore, what students are asked to do or produce after reading influences their understanding. Students who engage in a read-aloud approach have better outcomes on vocabulary, comprehension, and language outcomes.¹⁰³ Orally summarizing what they have read, producing a written response, enacting stories, or playing games using information from texts are some of the instructional strategies that support comprehension.^{104,105} Deep engagement with texts involves discerning and challenging the author's perspective and intentions, as well as understanding and questioning characters' motivations. Effective reading instruction encourages students to engage in these activities to develop deeper understanding.¹⁰⁶

How students are asked to use the information that they read may differ across different types of texts.¹⁰⁷ For example, when reading literary fiction, students may learn to distinguish the plot and understand motivations. In argumentative nonfiction texts, they may learn to discern the logic of the argument and challenge its premise or implications. PIRLS 2026 collects information about how teachers develop students' reading comprehension skills in the Teacher Questionnaire.

Teachers Cultivate Motivation, Engagement, and Self-efficacy in Reading

An important measure of teaching effectiveness is the degree to which students are engaged in class activities and learning.¹⁰⁸ Fostering student motivation in reading is fundamental, because students who are motivated to read more, especially at a young age, become better readers.¹⁰⁹ Student motivation and engagement can be facilitated by creating a supportive environment that fosters a sense of relatedness, competence, and autonomy.¹¹⁰ Instructional strategies that cultivate such an environment include giving students a choice of what to read, selecting culturally varied texts to match students' experiences, creating opportunities for them to see themselves as successful readers, encouraging small-group discussions, and cultivating the enjoyment of reading.¹¹¹ Innovative approaches such as blended reading, which incorporates student drama performances, increase students' motivation to read, providing opportunities for creativity, communication, and cooperation.¹¹² PIRLS 2026 collects information about how teachers motivate and engage students in the Teacher Questionnaire.

Organizing Students for Reading Instruction

Teachers may organize students in different ways to attempt to maximize the effectiveness of their reading instruction. Small-group instruction is generally viewed in literature as a crucial part of effective teaching that is conducive to improved student outcomes.^{113,114} Working with students

in small groups, teachers can focus on a specific skill or strategy, tailor instruction to students' varying needs, and ensure that all students are engaged.^{115,116,117} Homogeneous grouping by ability is another type of grouping thought to support students in learning at a pace that reflects their skills in the subject.¹¹⁸ However, research has found that grouping students according to the same reading ability in elementary school may benefit high-achieving students but have negative consequences for low-performing students.^{119,120} PIRLS 2026 collects information about student grouping during reading lessons in the Teacher Questionnaire.

Classroom Libraries

Students who have easy access to reading materials are more likely to read,¹²¹ and for this reason, some countries have moved to create classroom libraries that provide a wide variety of texts and text types, including digital resources, as well as a special place for independent reading. The presence of an organized and readily accessible classroom library encourages students to read, improves their attitudes toward reading, and can aid teachers in incorporating literature into instruction and fostering positive reading habits and attitudes.^{122,123} However, size of and access to classroom libraries can vary depending on the socioeconomic composition of the school, with students from disadvantaged backgrounds having access to fewer books than students from advantaged backgrounds.¹²⁴ In some countries, classroom libraries replace school libraries, especially in smaller schools, and in others, they complement school libraries. PIRLS 2026 collects information about classroom libraries in the Teacher Questionnaire.

Information Technology in the Classroom

Classroom Access to Digital Devices for Reading Instruction

Classroom access to computers for reading instruction likely has implications for students' online reading skills, as many online reading activities cannot be replicated with paper reading materials. Teachers may also choose to incorporate digital devices into other reading activities, depending upon the type of access available. PIRLS 2026 collects information about access to digital devices during reading lessons, as well as how those digital devices are used as part of instruction, in the Teacher Questionnaire.

Instruction in Online Reading

Reading literacy in the 21st century must include reading in online contexts as digital content increasingly forms a larger share of students' overall reading.¹²⁵ Research indicates that there are important differences in reading processes and comprehension outcomes depending on the reading mode.^{126,127,128} When reading online, students must use multimodal texts and interact with dynamic features of the online environment to navigate and locate information. Finding information online often means searching for and combining information across several sources. PIRLS 2026 collects information about instruction in online reading in the Teacher Questionnaire.

Classroom Climate

Classroom Disruptions

Classroom disruptions can be detrimental to student learning. Classroom management refers to noninstructional procedures that promote student learning and discourage disruptive behavior.¹²⁹ Although direct links between classroom management and student achievement are difficult to establish, some research suggests that effective classroom management has indirect, positive effects on student achievement.¹³⁰ PIRLS 2026 collects information about students' perceptions of classroom disruptions and management in the Student Questionnaire.

Factors Limiting Instruction

Teachers may encounter a variety of student-level factors that limit their instruction. These can be directly related to academic preparedness (such as a lack of prerequisite skills), well-being (such as lack of basic nutrition or frequent absences), or behavior in the classroom (such as distraction or disruption). These factors not only limit teachers' abilities to provide effective instruction but may also directly influence student achievement. For example, research has shown that students lacking basic nutrition tend to have lower academic achievement.^{131,132} Specific to reading, proficiency in different types of phonological processing play an important role in further developing reading skills.¹³³ Frequent absences limit students' opportunities to learn and participate in reading instruction. PIRLS 2026 collects information about factors potentially limiting reading instruction in the Teacher and Student Questionnaires.

Student Characteristics, Attitudes, and Behaviors

There are many student-level attributes that can contribute to reading achievement, including experiences at school and reading attitudes or behaviors (see Exhibit 1). PIRLS 2026 collects information about these areas in the Student Questionnaire, which is summarized in Exhibit 5.

Exhibit 5: Summary of Student Characteristics, Attitudes, and Behaviors and Sub-Topics

Student Characteristics, Attitudes, and Behaviors	Student Characteristics, Attitudes, and Behaviors Sub-Topics
Student Demographics	Age
	Gender
	Language Spoken at Home
	Citizenship
Student Experiences at School	School Belonging
	Bullying
	Feelings at School
	Engagement in Reading Lessons

Exhibit 5: Summary of Student Characteristics, Attitudes, and Behaviors and Sub-Topics (Continued)

Student Characteristics, Attitudes, and Behaviors	Student Characteristics, Attitudes, and Behaviors Sub-Topics
Student Reading Attitudes and Behaviors	Students Like Reading
	Students' Confidence in Reading
	Time Spent Reading
	Reading Purposes and Types of Texts Read Outside of School
Student Use of Information Technology	Reading Formats and Mediums
	Use of Digital Devices and the Internet

Student Demographics

Information about students' demographic characteristics allows for exploration of achievement gaps between different groups of students. Student gender is of particular interest when examining reading achievement. Over the last five cycles of PIRLS, the gender gap in reading achievement has favored girls over boys in the majority of participating countries, reflecting a pattern seen in research.^{134,135} Students at different ages may also perform differently on PIRLS depending on their academic history. In countries where students are admitted to primary school strictly on the basis of age, older students may be more skilled in reading comprehension compared to younger peers because of greater maturation. However, depending on retention policies, older students who have repeated a grade may struggle more with reading comprehension than students who have not done so. PIRLS 2026 collects information about student demographics in the Student Questionnaire.

Student Experiences at School

School Belonging

Students' sense of school belonging has been found to contribute to general well-being and academic achievement.^{136,137,138} Sense of school belonging is shaped by how students perceive themselves and their relationships with others (teachers, other students, etc.) within the school, as well as their relationship with the school community itself.¹³⁹ These social connections are an important component of student well-being at school.¹⁴⁰ PIRLS 2026 collects information about students' sense of school belonging in the Student Questionnaire.

Bullying

Bullying is a unique aspect of school safety because it involves repeated aggressive behavior intended to intimidate or harm students. Bullying can take a variety of forms, both mental and physical, and may occur in person or virtually. Online bullying through social media has become more prevalent as access to digital devices among children has increased.^{141,142,143} Experiencing bullying in person or online causes distress to victims and is associated with poorer academic achievement and mental health outcomes.^{144,145,146,147} It is important to acknowledge that students can be both victims and aggressors of bullying.¹⁴⁸ PIRLS 2026 collects information about students' experiences with bullying in the Student Questionnaire.

Feelings at School

In addition to the interpersonal relationships described above, students' experiences and well-being at school are also shaped by their affective feelings.¹⁴⁹ Subjective well-being refers to a student's own evaluation of feelings contributing to their well-being.¹⁵⁰ These feelings can be positive (e.g., joy, enthusiasm, and interest) or negative (e.g. sadness, anger, and anxiety).^{151,152} PIRLS 2026 collects information about students' feelings at school in the Student Questionnaire.

Engagement in Reading Lessons

Student engagement in classroom instruction is one of many ways of thinking about school engagement, and research suggests that students' experiences within the instructional environment contribute to their engagement.^{153,154,155} Instructional clarity is based on students' perceptions of teachers' instructional strategies.¹⁵⁶ Teachers with a high degree of instructional clarity provide straightforward explanations of content and effectively monitor student understanding, employing a variety of pedagogical techniques as required.^{157,158} Instructional clarity is also related to establishing a supportive classroom climate where teachers engage in practices such as providing helpful feedback and clearly addressing student questions.¹⁵⁹ All of these factors contribute to student engagement in the classroom. PIRLS 2026 collects information about student engagement in reading lessons in the Student Questionnaire.

Student Reading Attitudes and Behaviors

Students Like Reading

Students who are motivated to read and have a strong reading self-concept tend to have better reading comprehension,¹⁶⁰ and cultivating these attitudes also may support students in becoming lifelong readers. Student readers who are intrinsically motivated find reading interesting and enjoyable for its own sake. Intrinsic motivation is the “energizer of behavior,”¹⁶¹ and research has shown that intrinsic motivation (in this case, enjoyment of reading) is more closely related to reading achievement than extrinsic motivations such as praise and money.^{162,163} Students' attitudes toward reading improve with time spent on leisure reading, and liking reading is positively associated with reading achievement.^{164,165} The relationship between reading motivation and achievement is likely to be reciprocal; students who read more become better readers, and students who are better readers get more enjoyment from reading.^{166,167} PIRLS 2026 collects information about how much students like reading in the Student Questionnaire.

Students' Confidence in Reading

Research has shown that student confidence in reading is positively associated with reading achievement.^{168,169} Students tend to have distinct views of their own reading ability, and their self-appraisal is often based on their prior performance and how they see themselves compared with their peers.¹⁷⁰ Students who are confident in their ability may persevere in completing a school task because they believe they can be successful.¹⁷¹ PIRLS 2026 collects information about students' confidence in reading in the Student Questionnaire.

Time Spent Reading

The time that students spend reading is likely to be influenced by their attitudes toward reading, and both can work together to positively impact reading comprehension.¹⁷² Some research has found that time spent reading mediates the relationship between reading motivation and comprehension, although these findings are not consistent, and the relationship between students' reading attitudes, time spent reading, and reading achievement requires further investigation.¹⁷³ There are also additional factors that impact the amount of time students spend reading, such as the availability of library or home literacy resources.¹⁷⁴ PIRLS 2026 collects information about the time students spend reading in the Student Questionnaire.

Reading Purposes and Types of Text Read Outside of School

As described in the PIRLS 2026 Reading Assessment Framework, students can read for a variety of reasons, which fall under the two overarching purposes: literary experience and acquiring and using information. A variety of text types are encompassed in each of these purposes. For literary experience, students may read storybooks with pictures, chapter books, or other types of fiction. Students may find information in nonfiction books, online articles, or informational websites. PIRLS 2026 collects information about the types of texts students read outside of school in the Student Questionnaire.

Reading Formats and Mediums

Students read in many different formats, including on paper, computers or tablets, and mobile phones. Access to multimodal texts in comparison to print text alone can improve a student's ability to summarize information.¹⁷⁵ Some research suggests that reading on paper is associated with greater comprehension.^{176,177,178,179} In particular, reading paper-based text supports comprehension for longer texts.¹⁸⁰ This may be because reading on digital devices is more likely to promote short and fast engagement rather than deeper thinking.¹⁸¹ Despite this finding, some research has shown children prefer reading on digital devices.¹⁸² PIRLS 2026 collects information about the formats and media that students use for reading in the Student Questionnaire.

Student Use of Information Technology

Use of the Digital Devices and the Internet

Engagement with both information and other people online has become an increasingly prevalent phenomenon. Students may use the digital devices and the internet for a variety of purposes, including social communication, looking up information, or accessing schoolwork through a digital platform.¹⁸³ Some of these purposes can be directly related to schoolwork, while others are not. Many of these purposes involve reading in some form, and therefore, online activities may be related to students' reading comprehension skills. The PIRLS 2026 Student Questionnaire collects information about students' use of the internet at school and at home to better understand the frequency and nature of technology use in students' learning and personal activities.

National Contexts

As illustrated in Exhibit 1, students' families, classrooms, and schools are all situated within a broader national context. Country-level policies about the organization of the education system and reading curriculum are important contributors to students' school experiences and learning. All information about national contexts in PIRLS 2026 is collected through the Curriculum Questionnaire, the general contents of which are summarized in Exhibit 6. This information is also complemented by countries' chapters in the *PIRLS 2026 Encyclopedia*.

Exhibit 6: Summary of National Contexts and Sub-Topics

National Contexts Topics	National Contexts Sub-Topics
Organization of Education System	Number of Years in School
	Age of School Entry and Grade Retention
	Preprimary Education
	Language(s) of Instruction
	Teacher and Principal Preparation
Reading Curriculum	Curriculum Specifications
	Instructional Materials and Use of Digital Devices
	Areas of Emphasis in the Language/Reading Curriculum

Organization of Education System

Number of Years of School

Although only fourth-grade students participate in PIRLS 2026, the fourth grade is situated within a sequence of schooling that shapes the national contexts in which students learn. Countries vary not only in the number of years of schooling provided for students, but also in the number of those years that are compulsory.

Age of School Entry and Grade Retention

Policies about the age of entry into formal education (first year of primary school, ISCED Level 1) are important for understanding achievement differences, as well as the variation in fourth-grade students' ages.¹⁸⁴ Promotion and retention policies also impact when students enter particular grades. Grade retention is a controversial practice, and some research has shown that it has negative relationships with student well-being and achievement, particularly in the short term.^{185,186,187} However, the impact of grade retention varies based on other system-level factors that may vary across countries, such as tracking or other forms of student grouping.¹⁸⁸

System for Preprimary Education

Preprimary education can expose children to formal literacy activities before they begin primary school and has been an area of active investment for many countries in recent years. For example, the European Union legislated that member countries provide universal access to preprimary education.¹⁸⁹ Attendance in preprimary programs can have a positive effect on academic outcomes.¹⁹⁰ However, the effect of preprimary education on later academic and life

outcomes is dependent on the quality of the preprimary program.^{191,192,193} The structure and types of preprimary education programs available for students to attend vary across countries. For example, some countries have special preprimary programs available for students from disadvantaged backgrounds.

Language(s) of Instruction

Some countries have one commonly spoken language, while others are historically multilingual. Immigration can also increase language diversity. Different multilingual countries have different policies for educating their population and may have policies specifically related to language literacy. All policies related to language(s) of instruction are shaped by a country's historical and cultural context.

Teacher and Principal Preparation

Countries vary in their mandated or typical preparation routes for teachers and principals. Information about the preparation of teachers and principals whose students participate in PIRLS is collected in the School and Teacher Questionnaires; this is further contextualized with information about the most common preparation routes across countries.

Reading Curriculum

Curriculum Specifications

Countries' reading curricula define what students should be taught and provide expectations for students in terms of the knowledge, skills, and attitudes to be developed or acquired through their formal reading instruction. The level at which the reading curriculum is defined (e.g., national, state/provincial) varies across countries. Countries also differ in the components recommended or prescribed by the curriculum, such as teaching activities or assessments.

Instructional Materials and the Use of Digital Devices

Access to a wide variety of reading materials, as well as differentiation policies and practices for accelerated and struggling readers, are important components of the reading curriculum. Strategies for incorporating digital devices and online resources in the reading curriculum are also becoming more prevalent as the use of technology is increasingly emphasized in educational systems internationally.¹⁹⁴

Areas of Emphasis in the Reading/Language Curriculum

Countries' reading curricula vary in the degree to which they emphasize specific reading skills. The standards or benchmarks established for reading development are particularly important. A coherent progression of instruction and comprehension strategies for reading development can include a change in emphasis from decoding to comprehension strategies as students progress through the primary grades and develop their skills.

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