Individual, Home, and Community Factors Discussion
Leader’s Notes

Home Literacy Environment
PIRLS questioned parents about their child’s preschool literacy activities, about their own reading, and about literacy resources in the home. Students were also questioned about their reading activities at home and school. Results are reported with the student as the unit of measurement. Parents selected responses to statements which, when averaged, provided the basis for placing students in high, medium, and low categories regarding early literacy activities and parent’s attitude toward reading.

Slide 1 – PIRLS Findings

- In every country, there was a positive relationship between reading achievement and parents who engaged preschool children in literacy activities by reading books, telling stories, singing songs, playing with alphabet toys, and playing word games. On average, parents reported engagement, with 52% of students in the high category of the index, across all countries. On average, students enjoyed a 20-point advantage in reading performance over their peers from one category to the next. Countries with the highest average reading achievement were not necessarily those with the highest percentages of students in the high category of the Index of Early Home Literacy Activities (Sweden, the highest performing country, had just 41%; and The Netherlands, the next highest, had 55%).
- How often preschool children are read to (with 51% students having been read to often) is highly correlated to high reading performance. Between students who sometimes (medium level) read books with their parents and those who did so often (high level), there is a reading achievement difference of more than 30 points on average across countries.
- Reading achievement was highest among students whose parents read for 6-10 hours (520 score points) or for more than 10 hours per week (524 score points), lower among those whose parents read for 1-5 hours (505 points), and lowest among those whose parents read for less than one hour per week (478 points).
Slide 2 — PIRLS findings
- Parents generally indicated very favorable attitudes toward reading—53% at the high level of the index, 42% at medium, and just 5% at the low level. On average, internationally, students at the high level of the index had higher average reading achievement (524 points) than students at the medium (492 points) or low level (482 points).
- Students from homes with more than 100 children's books had an average score of 552 points, whereas those from homes with 10 books or less had an average of just 466 score points— a difference of 86 points.
- Students who spoke the language of assessment or another national language at home most of the time—majority-language students—performed better than students who routinely conversed with their parents and siblings in another language—minority-language students.

Slide 3 — PISA findings
- Immigration status was likewise correlated with achievement. Students born abroad or who had foreign-born parents showed lower achievement than other students even after accounting for their other characteristics.
- Internationally there is a positive relation between reading achievement and cultural communications at home. Cultural communications are measured by the frequency of parents and children engaging in discussions about political or social issues, books, films or television programs, or listening to music together.
- Students in homes with possessions related to classical culture—classic literature, books of poetry, and works of art—average 68 points above students in homes without cultural possessions in reading performance.

Slides 4–5 — Establishing context

Slide 6 — Planning action
*Based on responses, the plan of action may need to include further investigations or recommendations related to home literacy environment and activities.*

*For example, research may be needed to examine variations in preschool literacy activity, home ownership of books, and parental modeling of good reading habits. It may also be necessary to establish or support a public awareness campaign to promote reading and reading to children and to increase literacy resources in the home, especially for at-risk groups.*

*Another challenge may involve planning for minority language students and their assessments.*
Socioeconomic Status and Occupation

PIRLS collected parent occupation data in broad categories. PISA converts occupational information into a socioeconomic index that permits comparisons among schools that serve children from varying socioeconomic backgrounds.

Slide 7 — PISA findings

- Socioeconomic index of parental occupation correlated strongly with achievement, accounting for 11% of the variance in literacy achievement. Note, however, that 15-year-olds whose parents have the lowest occupational status but who are highly engaged in reading achieve better reading scores than students whose parents have high or medium occupational status but who are poorly engaged in reading.
- Reading scores for students in OECD countries whose mothers have not completed upper secondary school are 45 points lower, on average, than students whose mothers did complete upper secondary education. In some countries, students with less educated mothers do well in international comparisons, which suggests that other educational and societal factors can compensate for deficiencies in parent education and may reduce barriers to educational mobility.
- Average reading achievement was considerably higher—40 scale-score points—for students in schools with few students from disadvantaged homes.
- Student engagement influences achievement more than SES or parental occupation. This is often referred to as “school context effect.”

Slide 8 & 9 — Establishing context

Slide 10 — Planning action

Based on responses, the plan of action may need to include further investigations or recommendations related to equity and equality. Learning environments can be enhanced by the variety in students’ backgrounds and interests, but schools must provide a diverse student body with appropriate and equitable opportunities.

For example, the plan may specify ways to mitigate any SES disadvantages in school, including the explicit or implicit expectations of individual pupils according to their socioeconomic status or parental wealth. National and local governments should be aware of the impact of the socioeconomic status of the whole school upon individual students. Teachers should seek to manage the culture and ethos of the learning environment. Teachers should also be aware of, consider, and respect the possession of cultural items and literacy practices in the home (rather than parental occupation and socio-economic status), and seek to avoid discontinuity between home and school so far as possible.
The plan might also consider schools’ potential to influence cultural items and literacy practices in the home through libraries, loan schemes, family literacy programmers, etc. Schools, school districts, government and other relevant organizations could develop culturally relevant programs to reduce inequality of opportunity and cultural bias.

An action plan might seek action by local and central governments to develop culturally appropriate, reliable and valid measures of value added by schools, as an alternative to the risks of absolute comparisons of doubtful reliability and validity.

National and local governments could continuously monitor the distribution and relative equality of reading achievement in the light of student socioeconomic status.

Governments could also develop and evaluate pilot implementations of policies and practices relevant to their cultural contexts that are designed to reduce inequity in reading achievement according to socioeconomic status.
Gender, Reading Engagement, Motivation, and Underachievement

Slide 11
Both PISA and PIRLS examined gender differences. PIRLS collected information about students’ reading attitudes, self-concept, and out-of-school activities. PISA developed reader profiles based on students’ reports about kinds of materials 15-year-olds reported reading.

- Within all countries, students’ self-reported attitudes toward reading were quite positive, and students with the most positive attitudes had the highest reading achievement. About half the students, on average, agreed with each of five statements about enjoying reading and appreciating books. More girls than boys had positive attitudes in all countries. (PIRLS)
- On average, 63 percent of fourth-grade students self-reported reading stories or novels at least once a week. More girls (70%) than boys (55%) so reported. However, comparable percentages of girls (62%) and boys (59%) read weekly for information. (PIRLS)
- Females read more fiction than males, who read more newspapers, comics, e-mail messages, and web pages. (PISA) On average, internationally, more than two-thirds of the girls (70%) and more than half of the boys (55%) read stories or novels. (PIRLS)
- Also, the reading proficiency gap between those reading comics and those reading fiction is not huge. Daily engagement in reading magazines, newspapers and comics seems, at least in some cultural contexts, to be a fruitful way of becoming a proficient reader. (PISA)
- Advantage in favor of girls was more pronounced in the narrative domain than in the nonfiction domain. At the fourth-grade level, the use of fiction was much more widespread than nonfiction as the source material for teaching reading.

Slide 12 — PISA findings
- Students’ positive attitudes to reading vary widely between countries. Some countries with above average reading performance show comparatively low interest in reading. By comparing high interest to low interest students within countries, high interest in reading was more consistently correlated with higher reading achievement.
- In virtually every country, there is a close association between engagement in reading and performance — exceeding 100 points or a proficiency level in many countries.
- At the individual student level, the majority of the least capable students were males of low socioeconomic status.

Slides 13–15 — Establishing context
Slide 16 — Planning action

Based on responses, the plan of action may need to include further investigations or recommendations related to gender, engagement, and motivation.

For example, the plan may focus on boys and address engagement and how to make reading materials that boys enjoy accessible. The plan may recommend creating time and space in schools for boys to use literacy in ways that accomplish goals that are meaningful to them. Such interventions may also need to factor in age, determining interventions that would be more appropriate for 15 year olds than 10-year olds.

The action plan might also consider how reading engagement in a wide range of reading activities might be increased for all students, how it might be sustained over time and contexts beyond school, and/or how it might be increased for at risk students.

The action plan could focus attention on the dangers of student socioeconomic status conditioning teacher expectations of pupils. Reading engagement should not be ignored in establishing expectations, particularly since teachers have more potential control over this factor. Schools could consider the definitions, models, and expectations of literacy and methods of reading instruction embedded in school and teacher culture. These need to ensure that implicit cultural or gender biases are not present and should afford equal opportunities to wide forms of reading engagement. In particular, female teachers should be aware that they might tend to convey their own values and attitudes, as well as their reading preferences, to students, sometimes with adverse effects.

Finally, the action plan may focus on improving attitudes to reading and students’ self-concepts as readers.