Media Contact:
Patricia Delaney
Director of Media Relations
Boston College
617-552-3352

PIRLS Project Contact:
Ina V.S. Mullis
Michael O. Martin
Co-Directors
TIMSS and PIRLS
International Study Center
617-552-1600

Significance of PIRLS

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Statement by

Dr. Alejandro Tiana

Chairperson, International Association for the Evaluation of Educational Achievement (IEA)

How Countries Can Profit from Participating in PIRLS

IEA has been conducting international studies aimed at evaluating educational achievement for more than forty years now. Over this long period, more than sixty countries have participated in those comparative surveys and have benefited from this relevant source of information about their education systems.

The main purpose of IEA has always been to provide policy makers and educational practitioners with information and indicators about their national education systems in an international perspective. This information has been related to basic school subjects (mathematics, language, science), but also to other relevant areas of educational activity (for instance, pre-primary policies and practices, ICT use in education or civic education). The aim has not only been providing indicators about such subjects and areas, but also to search for explanations of achievement. That is the reason why the studies were not simply based on tests, but also included different questionnaires for collecting data about school and classroom process variables, as well as teacher and student background variables.

The long history of IEA shows that participating countries do value the kind of information provided by international comparative surveys. IEA studies provide countries with different kinds of information that allow different uses in national contexts. PIRLS is an excellent example of the type of benefits countries may derive from participating in such studies.

The Relevance of PIRLS

Reading is a basic cultural tool, widely accepted as necessary for an active personal and social life. For example, the OECD has acknowledged such an importance, paying special attention to the assessment of reading literacy competencies at age 15.

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The relevance of PIRLS in such a context is that it does not focus on reading skills at the end of compulsory education, a good moment to know what is the human capital of a country, but at 4th grade, a good moment to know how our students are mastering such a skill and for making decisions for improving their achievement.

In fact, PIRLS, like most IEA studies, focuses on educational processes in order to give information to educational decision makers. Countries need to know how successful the process is by which students get reading skills and the crucial role primary education plays in that process.

This is the main reason for developing a study at 4th grade, a stage by which students should master the basic skills for reading. And this is the reason why thirty-five countries from all continents joined in the adventure.

Making Comparisons in an International Perspective

Participating in IEA studies gives countries relevant information about the state of their education systems in an international perspective. This can also be referred to as the "mirror" function of international studies.

a) A first group of data refers to several types of indicators of educational achievement. From PIRLS results, countries may know what their outcomes are in reading literacy - a learning objective which is central at primary school - at 4th grade. The presentation of data includes a distribution of student achievement in decreasing order and a table with multiple comparisons among countries. This information enables countries to assess their achievement in reading, including the dispersion inside the country and the significant differences with other countries. More than league tables, those exhibits should be read as presenting multiple data. For instance, Bulgaria scores slightly above Latvia, but with a wider dispersion, which indicates a more unequal distribution of results. And the USA may learn that its achievement is above the mean and basically similar to Italy, France, and the Russian Federation. Kuwait results are clearly below the average, and similar to those of Iran or Argentina.

   That same information is not only related to general achievement in reading literacy, but is also provided for literary or informational purposes. Even if differences are not really big, some cases may be underlined. For instance, the USA has relatively better achievement in reading for literary purposes, while Hong Kong achieves better in reading for informational purposes.

   Countries can also get information about percentages of students reaching some international benchmarks. For instance, 72% of English students scored above the median benchmark, compared to only 17% in Argentina and 14% in Colombia. Countries can also obtain information about gender differences in achievement, in this specific case that girls outperform boys in general and at different benchmarks.

   This whole set of indicators provides much more detailed information than just a gross measure of achievement. This is one of the most attractive features of PIRLS, because it allows countries to make detailed national analyses of achievement data and indicators.

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b) But achievement data are not the only types of results that countries can get from PIRLS. From the information obtained through questionnaires, they can learn how their educational conditions compare with other countries. For instance, German primary students have a less positive attitude toward reading than French pupils, but more positive than USA or Dutch students. It does mean that countries with a similar range of results may vary a lot in other different aspects.

   And the same applies to teaching practices and curriculum development. Countries may compare their own curriculum guidelines with others. For instance, curricula in Argentina, Morocco, New Zealand, and the USA put a strong emphasis on reading, while Germany, Lithuania or Slovenia do not give it the same importance. That comparison of international curriculum guidelines may help countries to revise their own, reflecting about contents, topics, and emphases.

From those multiples indicators, countries may obtain valuable information about their education systems from an international perspective. The number and variety of data provided do not lead to making simple, straightforward comparisons, but to taking into account the complexity of education practices and outcomes, detecting our own strong and weak points.

Searching for Explanations

Policy makers and educational practitioners want to understand the reasons behind the observed differences in achievement. Knowing the national situation from a wide perspective, including a number of data indicators, certainly is a first step, but it is not enough. Educational practitioners and policy makers need to know more about the reasons that explain those differences.

It is necessary to recognize that educational research has not developed to the point of providing policy makers and educators with definitive explanations of achievement. But studies like PIRLS do point to several factors affecting achievement more than others. For instance, one could think that instructional time, that is, time devoted to teaching reading, could explain those differences. But PIRLS data show us that there are some countries devoting significant time to teaching reading that are among the low- or mid-achievers (Argentina, Romania, Iran), while some others spending less time achieve significantly higher (USA or Lithuania). So, countries cannot expect to improve their achievement in reading only by spending more weekly hours in teaching it.

PIRLS results also showed the importance of factors like family involvement in reading practices. So, in every country, the number of children's books at home correlates with reading achievement and the same applies to parents' attitudes toward reading.

PIRLS results also address our attention to the importance of children being involved in early literacy activities before starting school. Children with such experiences, not necessarily implying formal teaching, generally achieved higher scores in reading.

These kinds of analyses, even if still preliminary, may help countries to identify how they are placed in relation to those factors related to outcomes. Policy makers and educational practitioners can then focus on the kinds of factors associated with higher expectations of achievement.

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Exploring Trends in Achievement

One of the main features of PIRLS consists in the possibility of exploring the trends in reading achievement over time. That approach has been already adopted by TIMSS, and now PIRLS follows the same way.

PIRLS has been conceived to allow that kind of trend analyses, in two senses:

a) It starts a cycle of studies, to be conducted every five years, giving countries the possibility of monitoring achievement and exploring the comparative characteristics of reading literacy at primary school. These analyses will help to develop new ways of monitoring education systems.

b) It connects with the Reading Literacy Study done by IEA in 1991, so allowing countries participating in both to know the progress made in a decade. Even if these comparisons are not yet published it will constitute a complement to the present report.

Of course, that kind of analysis should be interpreted by every single country participating in the study. The reasons for an improvement or decrease should be explored in depth at a national level, but the international perspectives helps again to identify strengths and weaknesses.

In general terms, it can be said that the results of these kinds of studies do not lead to easy answers to complex educational problems, but they contribute to informed decision making by educational authorities and practitioners. For taking the full advantage of participating in such studies, countries should combine those results with national assessments and other national in-depth studies. IEA experience shows that this is a way followed by a growing number of countries, and it proves the immense possibilities of comparative achievement studies.

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