

la Ciencia y la Cultura

TERCE Study by UNESCO:

# Student performance improves in Latin America, but inequality and other factors continue to affect learning

- The second delivery of results from this study on learning achievements indicates that progress
  has been made in almost all of the participating countries, but most students continue to show
  low performance levels in language (reading and writing), mathematics and natural sciences.
- The study includes the effect of factors related to learning, such as socioeconomic level and family support, prior attendance in preschool education, belonging to an indigenous group, teaching practices and various forms of violence, among other circumstances studied that largely affect children's learning in the region.

Santiago, Chile, Thursday 30 July, 2015. The second round of results of the Third Regional Comparative and Explanatory Study (TERCE), coordinated by the UNESCO Regional Bureau of Education for Latin America and the Caribbean, shared information regarding the level of learning achievements of students in the region and a new report on the factors associated with this process. The study establishes the progress made and the challenges that remain as the region tries to overcome an educational crisis, which particularly affects the most vulnerable populations in Latin America.

The results come from an extensive representative sample that included more than 134,000 third and sixth grade children from Argentina, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Ecuador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru and Uruguay, as well as the Mexican state of Nuevo León. The students took tests in 2013 on language (reading and writing), mathematics and natural sciences.

The **TERCE** study analyses the knowledge and skills of students **based on their specific curricula** and **ranks their performance based on the learning objectives of each country**. This perspective can motivate school systems to improve internally rather than to compete with other countries.

According to Jorge Sequeira, director of the UNESCO Regional Bureau of Education for Latin America and the Caribbean (OREALC/UNESCO Santiago) "the region has made significant advances in terms of literacy and the coverage of its educational systems, but there are still many important challenges to address in terms of quality and equity. The TERCE assessment invites us to delve further into its preliminary findings and suggest possible interventions, in terms of educational practices and policy, which can make the necessary improvements."

#### Learning achievements

The TERCE results show evidence of an improvement in the learning achievement regional average score in all grades and areas evaluated, although most students continue to show low performance levels (I and II), and there are very few that score in the upper level (IV). This indicates a challenge that the countries of the region must address: to attain a level of student learning that will give the students a greater mastery of knowledge and advanced skills in mathematics, language arts and natural sciences.

On each of the tests, the countries were divided into three groups based on performance: those whose average is statistically equivalent to the regional average, those whose score is significantly higher and those whose score is significantly lower than the regional average. Within this framework, the countries that score above the regional average on all evaluated tests are **Chile**, Costa Rica and Mexico. They are followed by Argentina, Uruguay and the Mexican state of Nuevo León, who scored in the same group on most of the tests. (See the <u>distribution of countries according to their subject scores, grades and comparison to the regional average</u>. PDF in Spanish.)

**Atilio Pizarro, the general coordinator of the TERCE study,** explains this group classification: "The objective of these categories is not to compare the countries or determine who is winning the race, but rather to be able to identify progress and the reasons behind the relative success or decline of a country and the factors, policies, pedagogical programmes and practices that could explain these reasons."

In relation to the scores attained, the students' performance in reading comprehension tends to be higher than in mathematics and natural sciences. Some countries show differences among genders: girls tend to have higher scores in reading comprehension and boys in science and mathematics. (More in the Results Executive Report: Learning Achievements. PDF in Spanish.)

## Factors associated with learning achievements

One thing that differentiates TERCE from other international studies is the analysis of factors associated with learning achievements. The objective is to understand under which circumstances learning occurs. This analysis is conducted using information collected from surveys given to different educational system stakeholders in the participating countries. This information provides an important input for decision-makers and the general public in order to promote educational development and well-being in the countries of the region.

TERCE examines three general variables of associated factors: the characteristics of the students and their families; the characteristics of the teachers, pedagogical practices and classroom resources; and the characteristics of the schools that relate to learning achievement.

The report on associated factors shows that learning achievement is positively related to the socioeconomic level of the families, parental support, the encouragement of reading and prior participation in preschool. Circumstances that appear to be associated with lower academic achievement are student absenteeism and belonging to an indigenous group, when compared with student populations with higher school attendance and that do not belong to an indigenous group.

At the classroom level, the associated factors that positively affect learning results include teacher attendance and punctuality; the availability of notebooks and books; the school environment and good teaching practices. At the same time, the analysis of schools shows that, in general, school systems are not very socioeconomically inclusive, violence has a negative impact on learning achievements and that school resources and infrastructure are positively associated with learning achievements. (More details in the <a href="Executive Report on Associated Factors">Executive Report on Associated Factors</a>. PDF In Spanish.)

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#### For more information

### What is TERCE?

TERCE is the most important large-scale study on learning achievement in the region. It includes 15 participating countries (Argentina, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Ecuador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru and Uruguay) in addition to the state of Nuevo Leon (Mexico).

The study evaluates student performance in third and sixth grade in mathematics, language arts (reading and writing) and natural sciences (in the case of sixth grade.) Its main objective is to provide information for the regional debate on the quality of education and to inform decision-making on educational public policy. The study uses tests to measure learning achievements and questionnaires to understand the context and circumstances through which learning occurs. (More details in **Initial background information: About TERCE** –PDF in Spanish- and on the **TERCE website.**)

#### First release of TERCE results

These results were released in December 2014 and compared students' performance between the second study SERCE (2006) and the third study TERCE. The analysis showed positive development in the educational systems of the countries that participated in both studies.

(More on the first release of results.)