CIMA

Latin America and the Caribbean

DID EDUCATION IMPROVE IN THE LAST DECADE?

By: Elena Arias Ortiz, Florencia Jaureguiberry y Valentina Martinez

The defining educational achievement of countries in the region over the course of the last decade has been to improve access. The current challenge: improving quality equitably.

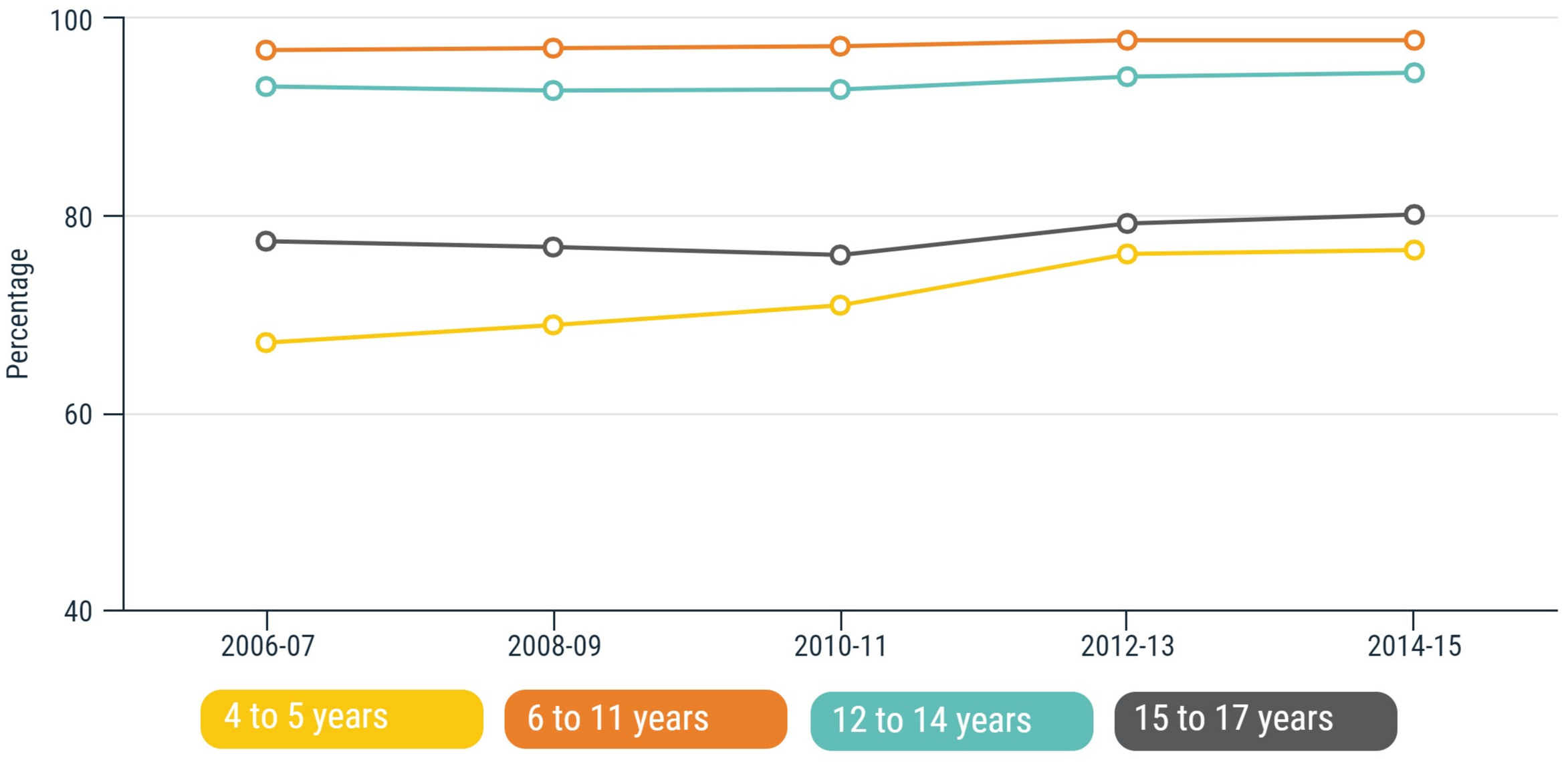
More boys and girls attend school at all grade levels

- For children ages six to 14, school access has become almost universal, with an attendance rate in 2015 of 98% for children ages six to 11 (primary) and 95% for children ages 12 to 14 (lower secondary).
- Chile and Uruguay have the highest primary school attendance rates in the region (100%).
- Countries like Guatemala and El Salvador still face an important challenge regarding improving access to primary school, with attendance rates of 92% and 96%, respectively.

Coverage must continue improving in pre-primary and secondary

- Expansion of coverage has been more modest for children ages four to five (pre-primary) and children ages 15 to 17 (upper secondary).
- In 2015, the attendance rate in Latin America and the Caribbean (LAC) hovered around 80% in pre-primary and upper secondary. Nevertheless, there remain substantial differences between countries: in Uruguay, the pre-primary attendance rate is 90%, whereas in Costa Rica and El Salvador, it is 54%.
- Chile (100%) and Brazil (98%) have the highest secondary school attendance rates in the region.

ATTENDANCE RATES, BY AGE GROUP



Source: CIMA (Centro de Información para la Mejora de los Aprendizajes), Education Division, Inter-American Development Bank, 2017.
Note: The LAC values are simple means calculated using only countries with available data in a given year.

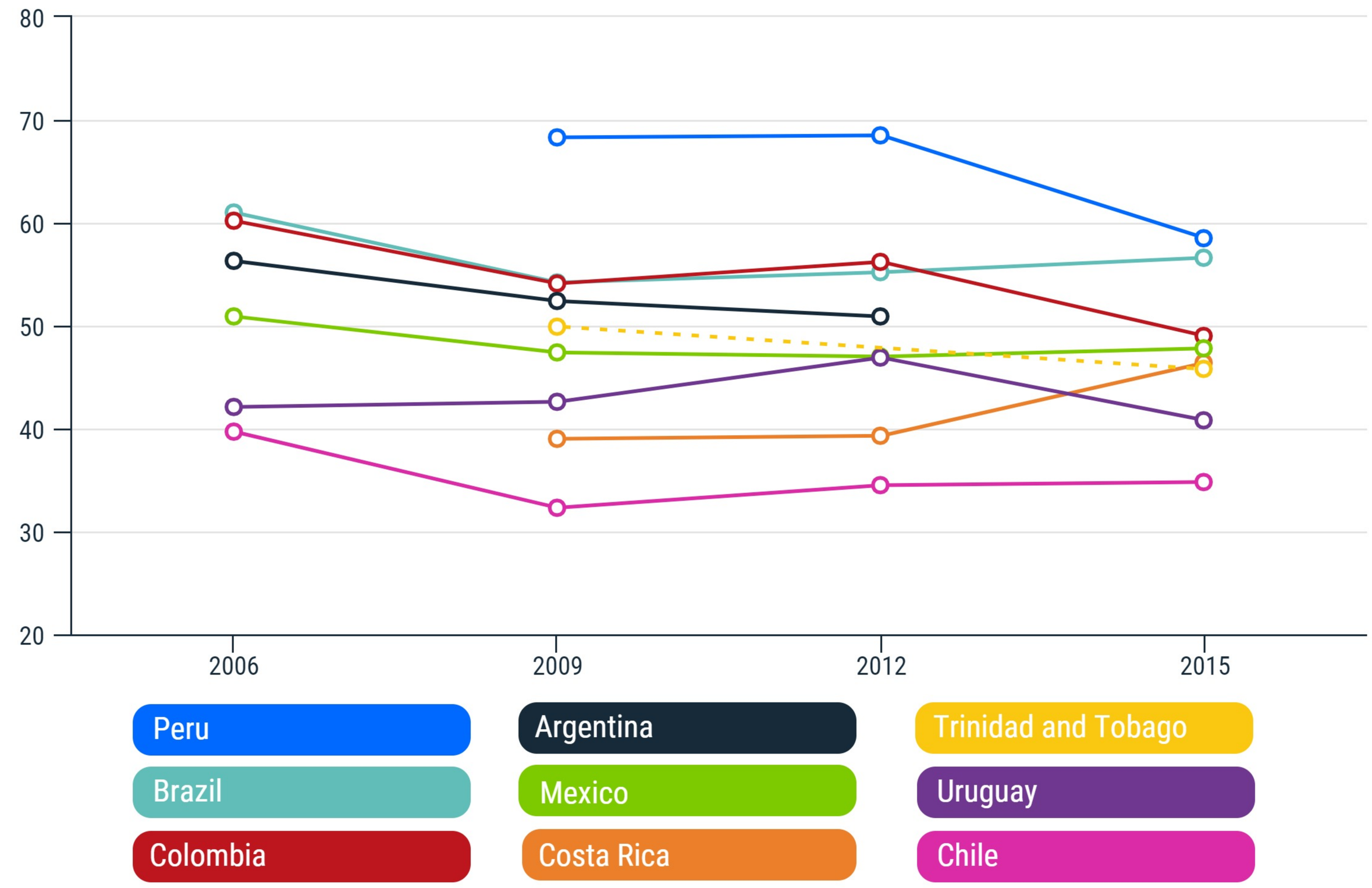
Learning outcomes are low

- The percentage of students in LAC without basic skills in science remained at 51% between 2005 and 2015. Similarly, the percentage of students without basic skills held steady at 62% in mathematics and fell from 50% to 46% in reading.
- In 2015, the Dominican Republic had the highest percentage of low-achieving students in science in the region (86%). Chile, which has the smallest percentage of low achievers in the region, still lags behind other countries that participate in PISA. In Chile, 35% of students qualified as low achievers in science, while in OECD countries, only 21% of students qualified as low-achieving.
- This low achievement level affects all countries. In 2015, on average, the percentage of high-achieving students in LAC was 0.6% (compared to the OECD average of 8%). In Trinidad and Tobago, which had the highest percentage of high achievers in the region, only 1.4% of students qualified as high-achieving.

Some countries are improving

- In PISA 2015, Peru and Colombia improved their results in science, mathematics, and reading. In addition, together with Trinidad and Tobago, they ranked among the top 10 participating countries in PISA with the greatest increases in science achievement.
- The difference in average science scores between socioeconomically advantaged and disadvantaged students has decreased. In Mexico, between 2006 and 2015, this gap decreased from 97 to 67 points. In this same period, the difference decreased by 20 points in Chile and Uruguay.
- The difference in results obtained by students living in urban areas and those living in rural areas has also shrunk. In Chile, the gap in science achievement fell from 101 points in 2006 to 41 points in 2015. This equals a shift from a difference of more than three years of schooling between urban and rural students to a difference of one and a half years of schooling.

LOW ACHIEVEMENT RATE IN SCIENCE, PISA 2006-2015

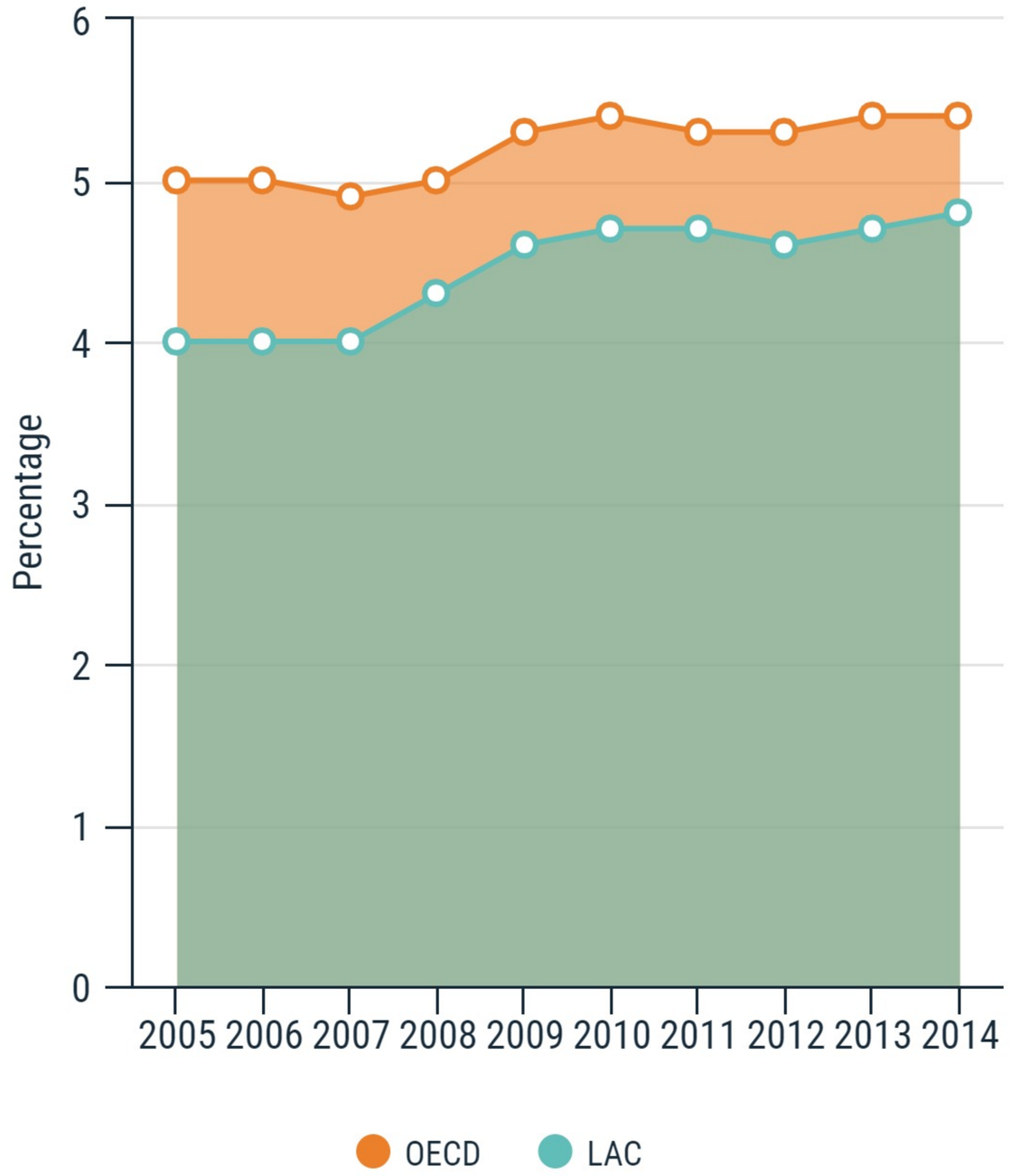


Source: CIMA, BID, 2017.
Note 1: The graph does not include countries that only participated in PISA once, like Panama in 2009 (65%) or the Dominican Republic in 2015 (86%).
Note 2: Trinidad and Tobago participated in 2009 and 2015 but not in 2012, which is why a dashed line is used as their trend line.
Note 3: Colombia is the only country in the region with a statistically significant decrease in the percentage of low-achieving students.

Countries in the region invest more in education each year, but they invest less than more developed countries

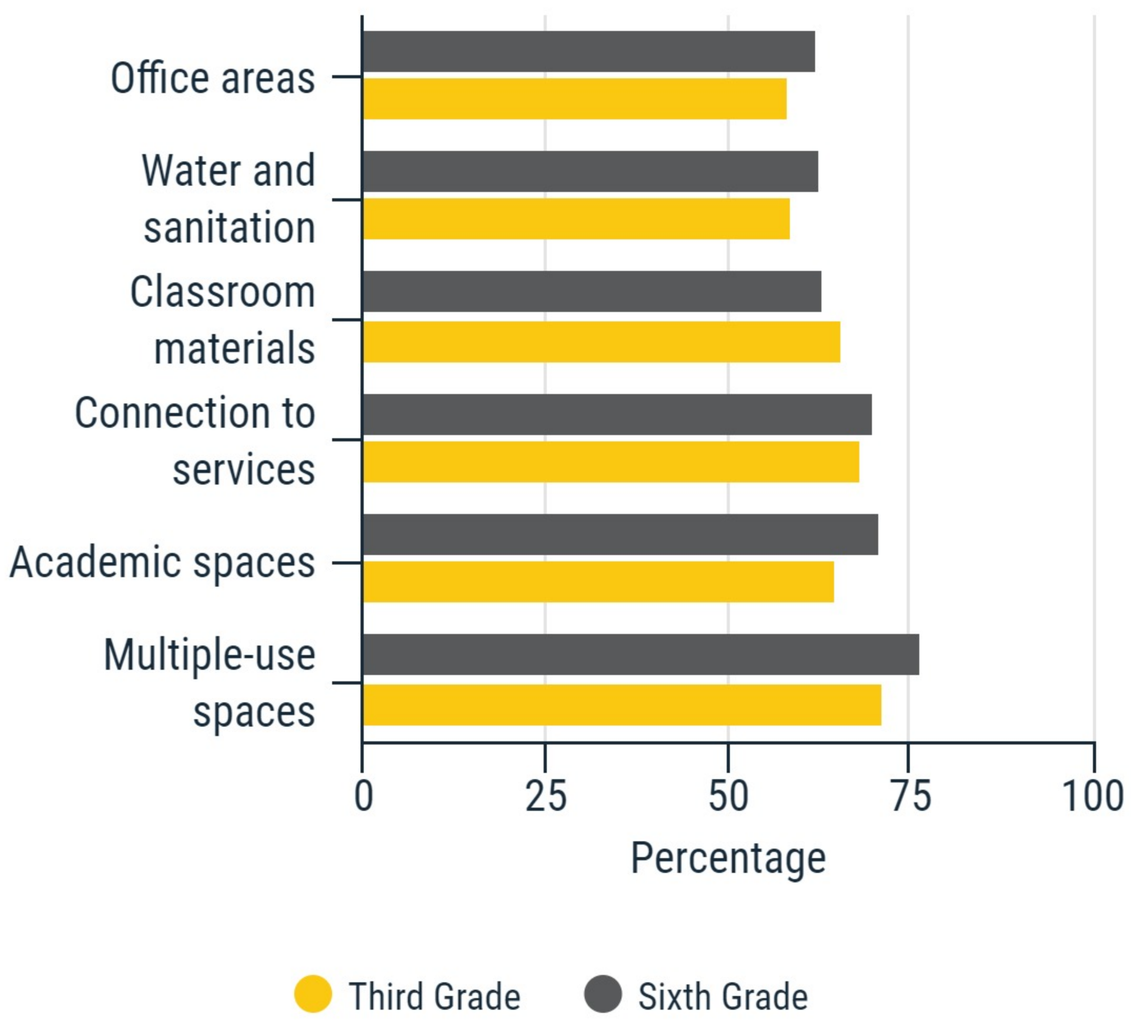
- Public investment as a percentage of GDP increased from 4.0% in 2005 to 4.8% in 2014. During this period, the countries that increased their investment the most were Costa Rica and Chile, with increases of 2.3 and 1.6 percentage points, respectively.
- During this same period, the average investment in OECD countries remained above that of LAC countries, reaching 5.4% in 2014.
- The regional average hides substantial disparities between countries: in 2014, Bolivia (7.3%) and Chile (6.9%) spent the most on education. That same year, Guatemala (2.9%) spent the least on education.
- Another indicator that measures education funding, public per-student expenditure on education (as a percentage of per-capita GDP), has also increased. Between 2005 and 2015, it increased from 11% to 15% in primary and from 12% to 15% in secondary.
- Despite the positive trend in expenditure, the region still lags behind the OECD average, where in 2015 public per-student expenditure as a percentage of per-capita GDP hovered around 21% in primary and 23% in secondary.

PUBLIC INVESTMENT IN EDUCATION, AS A PERCENTAGE OF GDP



Source: CIMA, BID, 2017.

% OF STUDENTS WHO ATTEND SCHOOLS WITH SUFFICIENT INFRASTRUCTURE, TERCE 2013



Source: Duarte, Jaureguiberry, and Racimo (2017). *Sufficiency, equity, and effectiveness of school infrastructure in Latin America according to TERCE*.

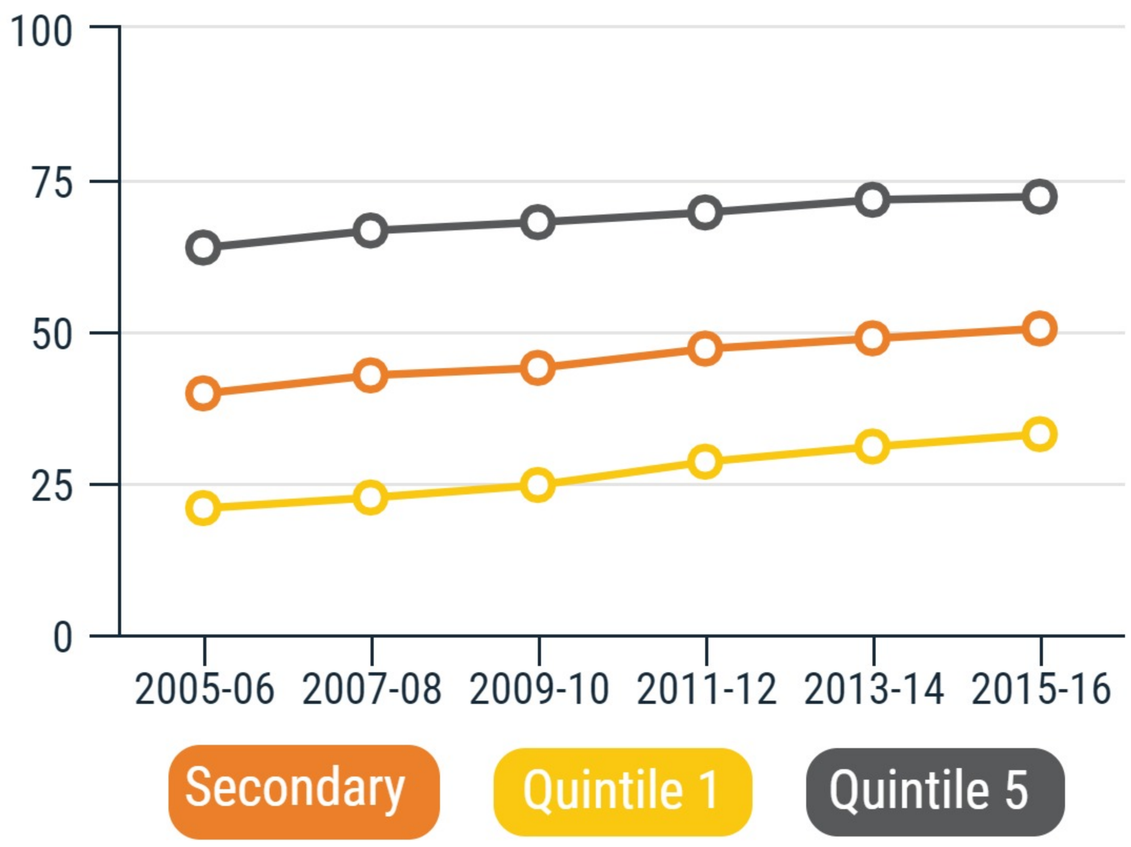
The majority of students have access to adequate infrastructure

- Access to infrastructure is similar among primary and secondary school students, though secondary school students have access to better resources than their counterparts in primary school.
- More than 70% of students in third and sixth grades in LAC have access to a sufficient number of multiple-use spaces (i.e., at least a gymnasium, auditorium, field, or sports court).
- Nevertheless, access to water and sanitation is unequal in the region: while eight of every 10 students in the wealthiest quartile attend schools with adequate water and sanitation, only three of every 10 students in the poorest quartile have such access.
- Gaps persist between countries regarding access to public services in education centers. In Honduras, 4% of primary school students in the lowest income quartile attend schools with electricity and telephone access, while 55% of students in the highest income quartile attend schools with such access. In Uruguay, Costa Rica, and Chile, this percentage is above 90% for both students in the lowest income quartile and those in the highest income quartile.

More students are finishing school, but differences between countries remain

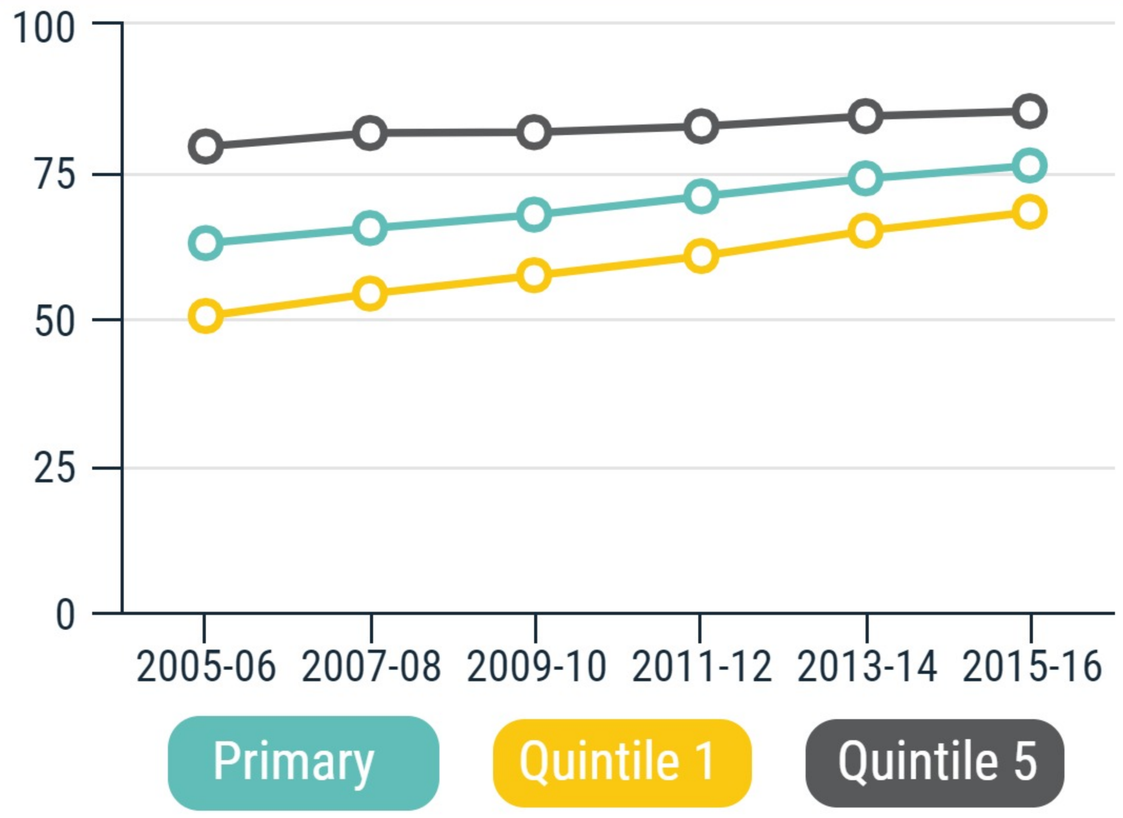
- School completion rates in LAC have improved at both the primary and secondary levels. Between 2005 and 2016, the average primary school completion rate rose from 63% to 76%, and in secondary it increased from 40% to 51%.
- Despite these improvements in completion rates, there remain differences within the region. Countries like Chile and Peru had secondary school completion rates of 80% in 2015, while Honduras and Guatemala only reached 28% and 17%, respectively. At the primary level, Chile and Ecuador had graduation rates of 94% and 88%, respectively, while Guatemala and El Salvador had graduation rates of only 56% and 52%, respectively.

SECONDARY SCHOOL COMPLETION RATE, BY SOCIOECONOMIC STATUS



Source: CIMA, BID, 2017.
Note: "Quintile 1" represents the lowest socioeconomic quintile; "Quintile 5" represents the highest socioeconomic quintile. 2. "Secondary" is defined as 12 years of school completed by the population between the ages of 18 and 20, except in Brazil, Colombia, Costa Rica, Nicaragua, Peru, Uruguay, and Venezuela (where it is defined as 11 years of school).

PRIMARY SCHOOL COMPLETION RATE, BY SOCIOECONOMIC STATUS



Source: CIMA, BID, 2017.
Note: "Quintile 1" represents the lowest socioeconomic quintile; "Quintile 5" represents the highest socioeconomic quintile. 2. Primary is defined as 6 years of school completed by the population between the ages of 12 and 14.

There remain socioeconomic and gender gaps

- In 2016, 7 out of every 10 of the wealthiest students (those with families in the highest income quintile) graduated from secondary school, while only 3 out of every 10 of the poorest students did the same.
- Girls have a greater chance of graduating than boys. At the primary level, the gap decreased by 0.6 percentage points; at the secondary level, it increased by 1.7 percentage points.
- In countries like Bolivia, Chile, and Venezuela, the difference due to socioeconomic status is small. In those cases, one can see graduation rates for the poorest students that are higher than the average rates in LAC, demonstrating that it is possible to work to reduce these gaps.

The Information Center for Improvement in Learning (CIMA, for its acronym in Spanish) of the Education Division of the Inter-American Development Bank seeks to promote the use of data and indicators in evidence-based decision-making when developing education policy, with the goal of providing a quality education for all. With this objective, CIMA publishes a series of briefs that analyze indicators that contribute to the improvement of education quality in the region.

Web: www.iadb.org/pisa | www.iadb.org/cima | Twitter: @BIDEducacion
Contact: education@iadb.org
References: UNESCO Institute of Statistics (2017). CIMA (2017).

Copyright © 2017 Inter-American Development Bank. This work is licensed under a Creative Commons IGO 3.0 Attribution-NonCommercial-NoDerivatives (CC-IGO BY-NC-ND 3.0 IGO) license (http://creativecommons.org/licenses/by-nc-nd/3.0/igo/legalcode) and may be reproduced with attribution to the IDB and for any non-commercial purpose. No derivative work is allowed.

Any dispute related to the use of the works of the IDB that cannot be settled shall be submitted to arbitration pursuant to the UNCITRAL rules. The use of the IDB's name for any purpose other than for attribution, and the use of the IDB's logo, shall be subject to a separate written license agreement between the IDB and the user and is not authorized as part of this CC-IGO license. Note that the link provided above includes additional terms and conditions of the license.

The opinions expressed in this publication are those of the authors and do not necessarily reflect the views of the Inter-American Development Bank, its Board of Directors, or the countries they represent.