

REGION IMPROVE?





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Although several countries in the region improved their results, they must all accelerate their rate of improvement to achieve higher performance levels.

ANNUAL INCREASE IN AVERAGE SCORES, PISA 2000-2015



Countries in the region demonstrate highly disparate rates of improvement

- PISA results have been comparable in science since 2006, in reading since 2000, and in mathematics since 2003.
- O Colombia and Peru show annual improvements in the three subjects.
- The remaining countries show improvements, but they are not consistent across the subjects. Trinidad and Tobago improved in science and reading, while Mexico and Brazil only improved in mathematics, and Chile only improved in reading.
- Uruguay did not improve in any of the three subjects.
- Costa Rica deteriorated in reading, falling at an annual rate of 3.1 points.

The region has a high improvement rate compared to other participating countries

- O Peru is among the top six countries with the highest improvement rate in the three subjects, increasing by 4.6, 3.5 and 5.1 points each year in science, mathematics and reading respectively.
- O Colombia stands out due to its high rate of improvement in reading and science among the participating countries, Chile in reading and Trinidad and Tobago in science.
- Ο Other countries with high improvement rates in the three subjects are Albania, Georgia, Moldova and Qatar.
- On average, performance within OECD countries has not 0 changed significantly in science.

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- According to the results in science, some countries in the region are on the way to achieving the same level of performance as the OECD average (493 points).
- Peru is two decades away from achieving the OECD average, while Colombia and Trinidad and Tobago are three decades away.
- Although Chile is the country closest to the OECD average, at its current rate of improvement it will not be able to catch up with the OECD.
- If Brazil, Costa Rica, Mexico and Uruguay maintain their current rates of improvement, they will also be unable to reach the OECD average.
- However, this is an achievable objective for several countries outside of the region. Albania, which has a similar level of per capita income to Peru, is one decade away from reaching the OECD average.

YEARS REQUIRED TO REACH THE OECD AVERAGE AT CURRENT RATES OF IMPROVEMENT IN SCIENCE, PISA 2015



If Brazil, Chile, Costa Rica, Mexico and Uruguay do not accelerate their current rate of improvement in science, they will not be able to reach the average OECD performance level.

ANNUAL RATE OF IMPROVEMENT BY PERFORMANCE PERCENTILE, 2006-2015



The students that are furthest behind are those that have the highest rate of improvement

- Peru shows improvements among the students that are furthest behind (bottom 10th percentile), while those with the best performance (upper 10th percentile) did not show any improvements. Similar changes are observed in Trinidad and Tobago.
- In Colombia, improvements are seen among all students, but it should be noted that the students who are furthest behind have higher rates of improvement.
- O For the remaining countries (not included in the graphs), there is no consistent trend in terms of improvements between the different performance deciles. In Uruguay, for example, only students with the lowest levels of performance (bottom 10th percentile) show improvements. In Mexico, the students with the lowest levels of performance (bottom 10th percentile) and low performance (bottom 25th percentile) have improved.
- In Chile and Brazil, there were no significant changes in any groups of students.
- The students with the lowest levels of performance tend to be the most socioeconomically disadvantaged. Therefore, improvement in performance for these students is noteworthy, as it will enable these countries

Source: OECD, PISA 2015, Vol I, Table I.2.4a

AVERAGE SCORE IN SCIENCE, PISA 2006 - 2015



With some exceptions, the region did not show major advances in science

- Colombia and Peru achieved clear improvements in their science scores, increasing by 28 and 27 points respectively, equivalent to almost one year of schooling. These countries are among the 5 countries that most improved their science scores.
- Trinidad and Tobago improved by 14 points, equivalent to half a year of schooling.
- Uruguay achieved a clear improvement between 2012 and 2015, increasing by 20 points and reverting a downward trend.
- The remaining countries in the region did not show significant improvements.

In mathematics, only half of the countries showed improvements

- Colombia and Peru show a clear upward trend, increasing by 20 and 21 points respectively, which is equivalent to more than half a year of schooling.
- Brazil has improved over the long term, although its score fell in 2015.
- Mexico has also improved over the long term, although it has lost ground in the last two editions of PISA.
- The remaining countries in the region did not show significant changes.



AVERAGE SCORE IN MATHEMATICS, PISA 2003 – 2015

Source: OECD, PISA 2015, Vol I, Table I.5.4a.

The majority of countries in the region improved in reading

- Since the year 2000, Peru has been the country that has most improved its score in reading, increasing by 70 points, which is equivalent to more than 2 years of schooling.
- Chile and Colombia have improved by 49 and 40 points respectively since the first time they participated in PISA, which is equivalent to more than a year and a half of schooling.
- Trinidad and Tobago demonstrated a slight improvement since the first time it participated in PISA in 2009.
- Since the first time that Costa Rica participated in the test in 2009, it has deteriorated by 15 points, equivalent to half a year of schooling.
- Compared to the results from 2012, Uruguay, Chile and Colombia have achieved significant improvements.

In the short term (2012-2015) significant changes in performance have been observed in all countries

- In only three years, Peru, Uruguay and Colombia improved their performance in science by between 17 and 24 points, equivalent to more than half a year of schooling.
- In mathematics, Peru and Colombia improved their performance by 18 and 13 points respectively, while Brazil deteriorated by 11 points.
- In reading, Uruguay improved by 25 points, Colombia by 22 points and Chile by 17 points.
- With the exception of Brazil, no other country's performance deteriorated significantly.
- The remaining countries did not show any significant changes in any of the subjects.



AVERAGE SCORE IN READING, PISA 2000 – 2015

Source: OECD, PISA 2015, Vol I, Table I.4.4a.

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References: OECD (2016). PISA 2015 Results Excellence and Equity in Education (Volume I).



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