

PISA

Latin America and the Caribbean

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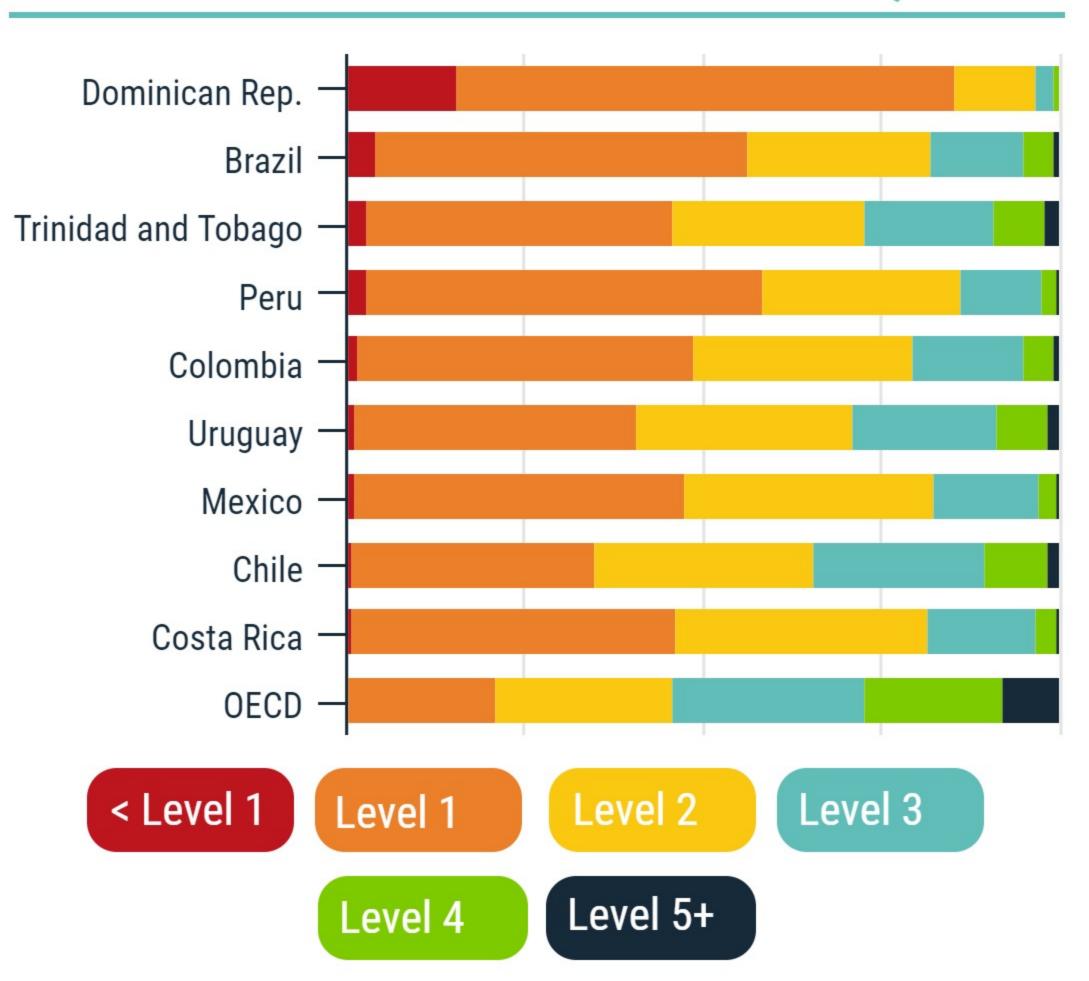
IN PISA 2015:
CHALLENGES AND
OPPORTUNITIES

Inequity by income level, geographic area, and institution type, school absenteeism, and the lack of educational materials and high-quality professional development for teachers are some of the factors that explain the poor academic performance of Dominican students.

The Dominican Republic ranked last among all Latin American countries

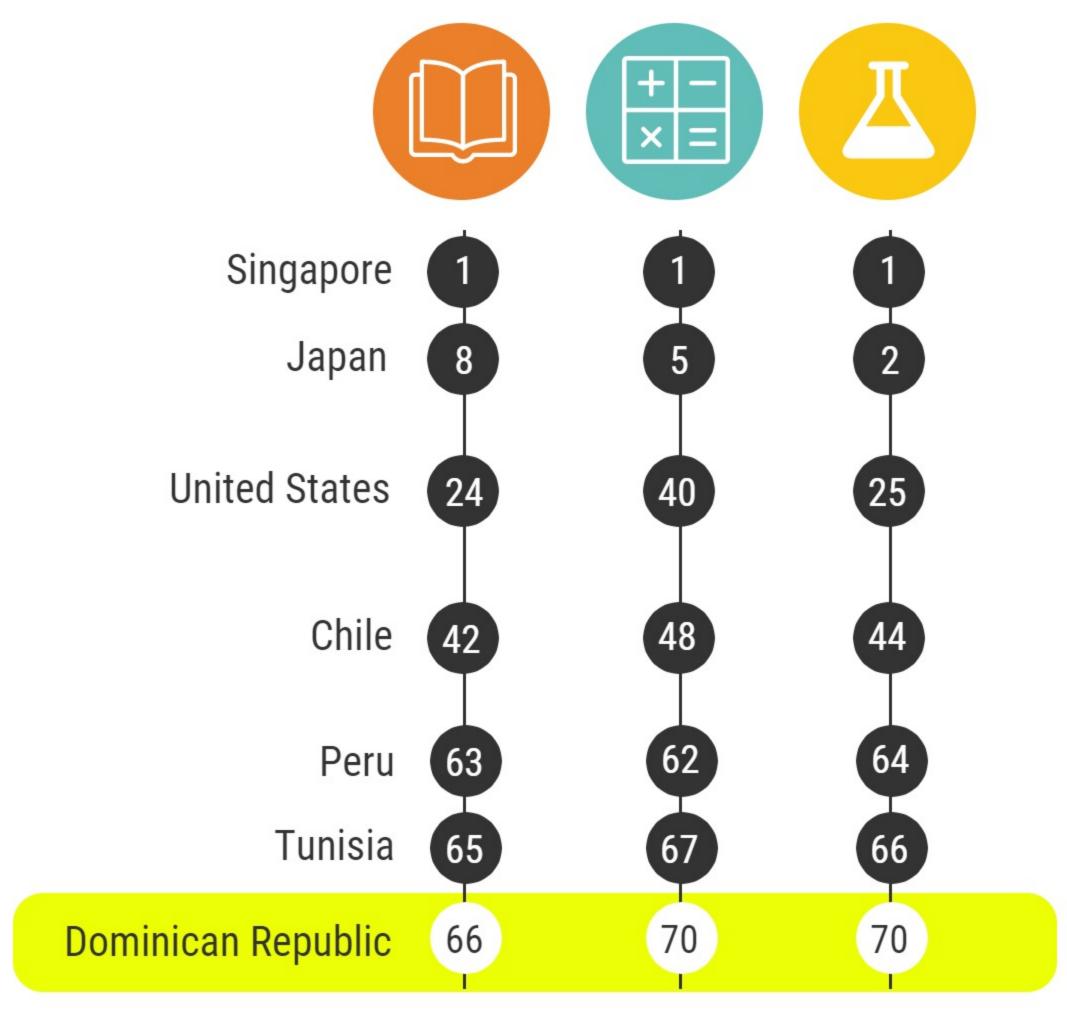
- In 2015, the Dominican Republic participated in the PISA assessment for the first time and ranked last among all participating countries in science and mathematics achievement and in the bottom 5 in reading performance.
- In science and mathematics, the average Dominican student performed five years of schooling (161 and 162 points, respectively) behind their counterparts in the OECD.
- In reading, the gap decreased to four and a half years of schooling (135 points).

PERCENTAGE OF STUDENTS BY ACHIEVEMENT LEVEL IN SCIENCE, 2015



Source: OECD (2016). PISA 2015, Vol. I, Table I.2.1a.

COUNTRY RANKINGS, 2015



Source: OECD (2016). PISA 2015, Vol. I, Figure I.1.1.

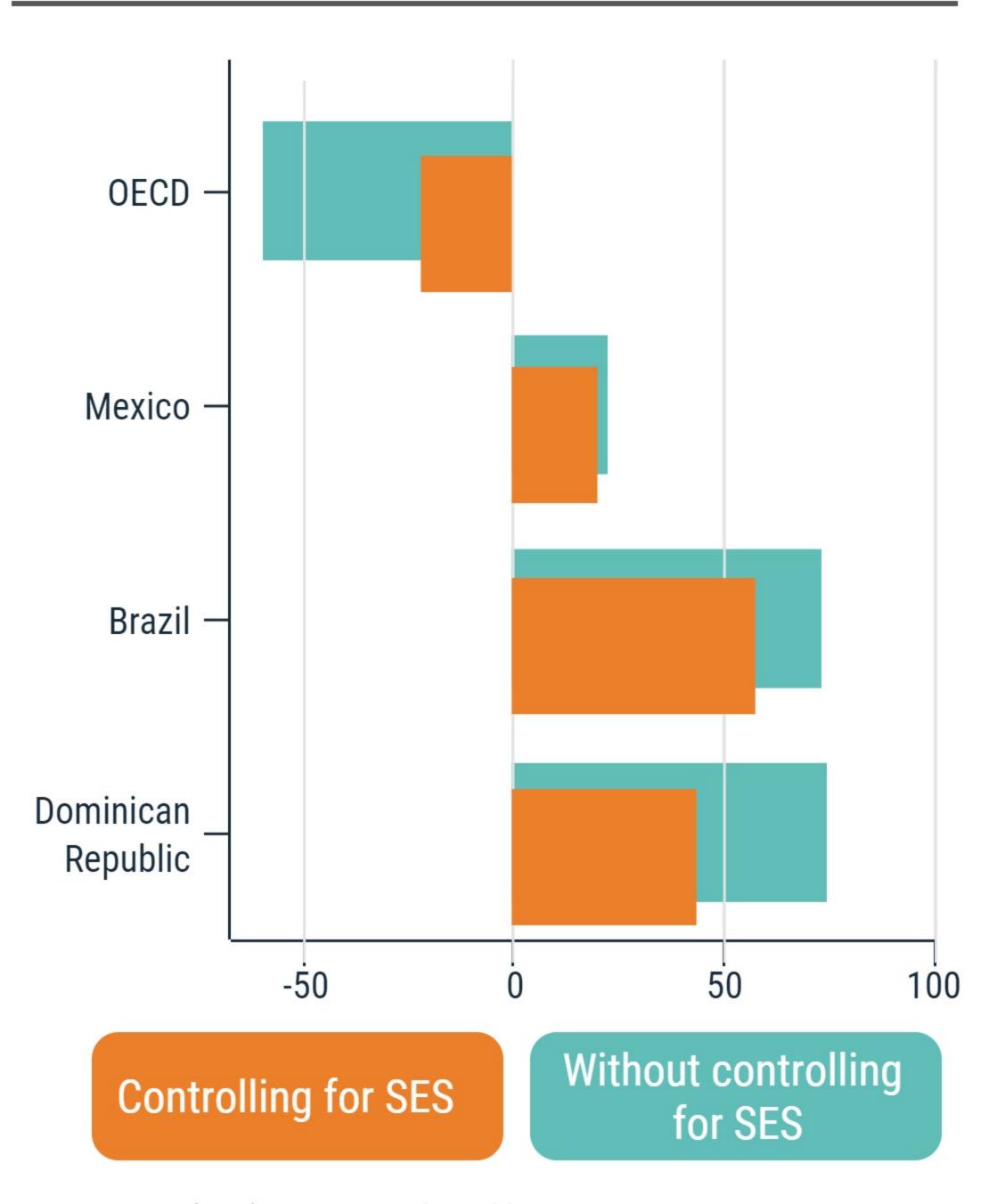
More than 80% of Dominican students performed poorly on the PISA assessment

- In Latin America and the Caribbean (LAC), only Peru (59%) and Brazil (57%) had more than half of their students perform at or below Level 1.
- In science and mathematics, not a single Dominican student reached the highest achievement level. In reading, fewer than 1 out of every 100 Dominican students reached such a high level of achievement.
- In the OECD, 8 out of every 100 students reached the highest achievement level in science and reading, while 11 out of every 100 students reached the highest achievement level in mathematics.

The poorest students in rural and public schools obtained the poorest results

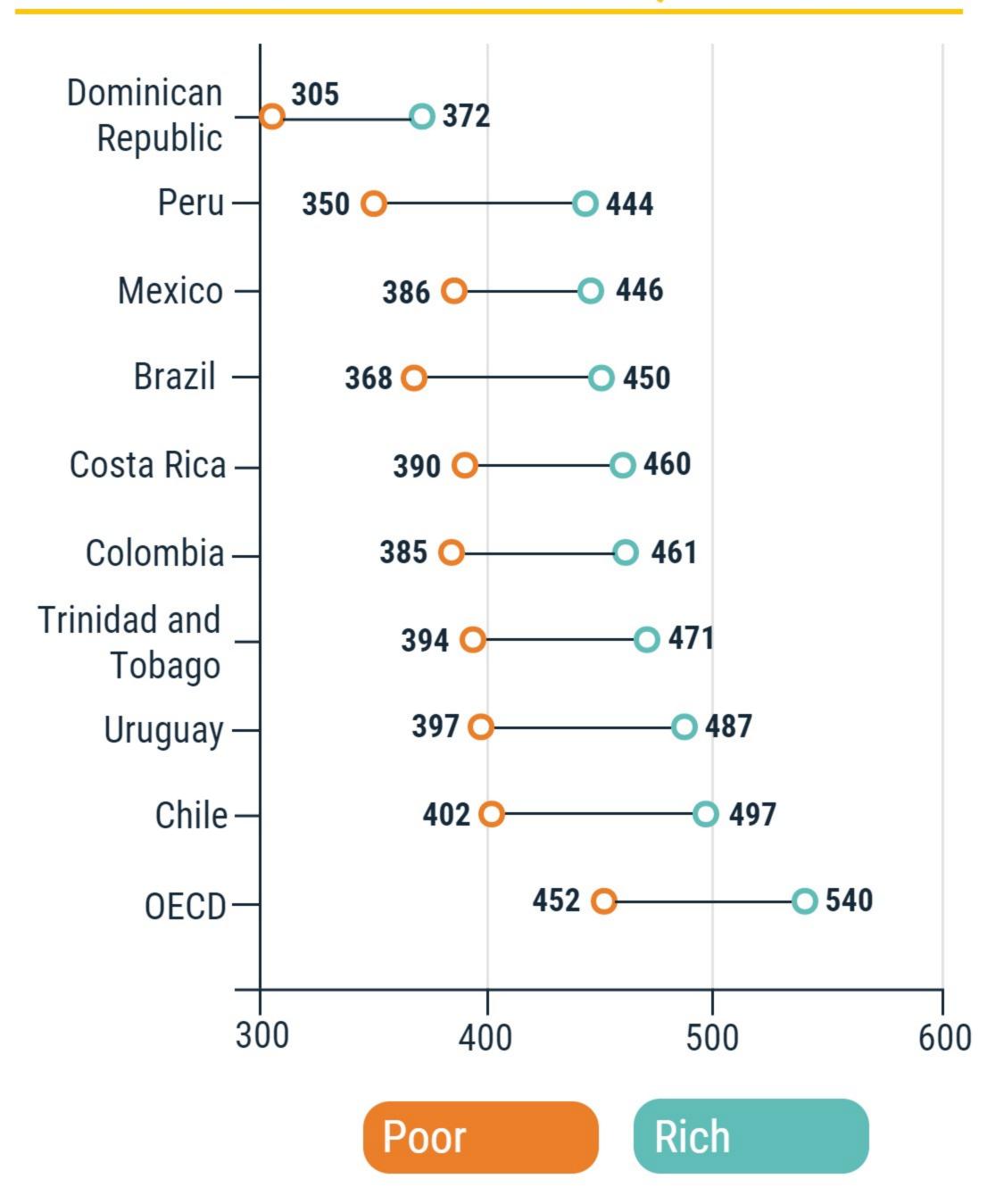
- The wealthiest Dominican students performed 67 points (more than 2 years of schooling) better than their poorest counterparts in science.
- The performance of the wealthiest Dominican students is 80 points (almost three years of schooling) below that of the poorest students in the average OECD country.
- Students in rural areas performed 114 and 195 points (four and more than six years of schooling, respectively) below urban students in LAC and OECD countries, respectively.
- Dominican students in public schools performed worse than their counterparts in private schools: the gap between these students reached 61 points (more than two years of schooling).

ADVANTAGE IN SCIENCE BY ATTENDANCE AT PRE-VOCATIONAL AND VOCATIONAL PROGRAMS, 2015



Source: OECD (2016). PISA 2015, Vol. II, Table II.5.17.

SCIENCE PERFORMANCE BY SOCIOECONOMIC STATUS, PISA 2015



Source: OECD (2016). PISA 2015, Vol. I, Table I.6.3a.

Students who attend pre-vocational or vocational programs perform better than other students

- Students enrolled in pre-vocational or vocational programs performed 75 points (more than two years of schooling) better than those who attended general education programs.
- This gap decreases to 44 points (fewer than two years of schooling) when one compares students and schools of similar socioeconomic status.
- The gap between students in pre-vocational/vocational schools and those in general schools is the largest among all participating countries in PISA 2015.
- In the OECD, students enrolled in prevocational/vocational schools perform 60 points lower than their counterparts in general schools.

NUMBER OF STUDENTS PER TEACHER, PISA 2015

| Dominican Republic | | 30:1 |
|------------------------|--|------|
| Mexico | | 29:1 |
| Brazil | | 29:1 |
| Colombia | | 29:1 |
| Chile | | 21:1 |
| Peru | | 19:1 |
| Costa Rica | | 17:1 |
| Uruguay | | 14:1 |
| Trinidad and Tobago | | 13:1 |
| LAC | | 21:1 |
| OECD | | 13:1 |
| | | |

Source: OECD (2016). PISA 2015, Vol. II, Table II.6.29.

The Dominican Republic is among the 10 countries with the highest rates of school absenteeism

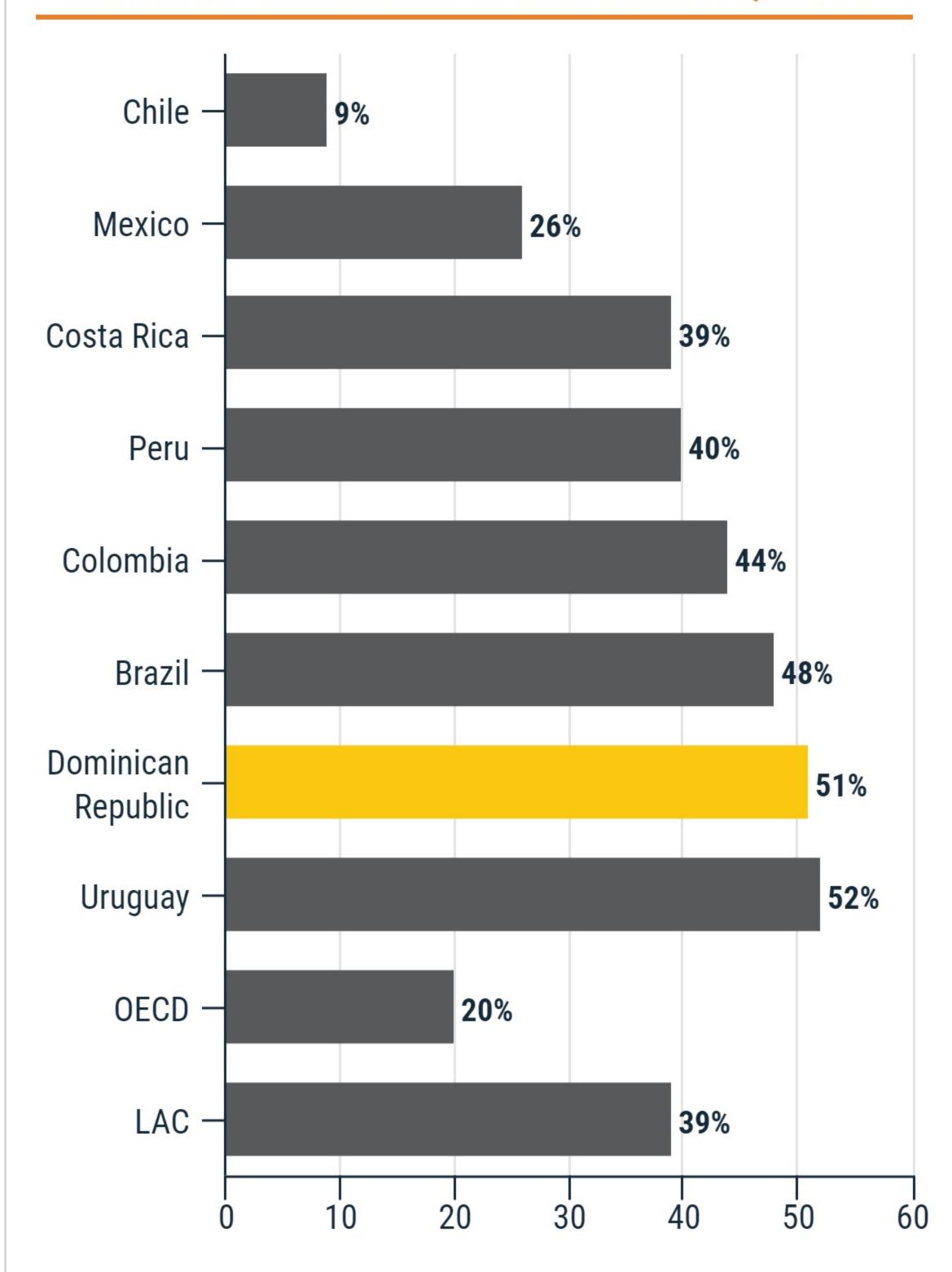
= 2 students

- Three of every 5 Dominican students reported missing at least one day of class in the 2 weeks prior to the test.
- In the average OECD country, only 1 out of every 5 students had missed at least one day of classes. In LAC countries, the rate of absenteeism never reached higher than 2 out of every 5 students.
- The rate of absenteeism among Dominican students is high in both poor and rich schools. The Dominican Republic is among the five countries with the highest rates of absenteeism when comparing both poor schools (52%) and rich schools (43%).
- In the average OECD country, the rate of school absenteeism is only 17% and 23% in rich and poor schools, respectively.

The student-teacher ratio in the Dominican Republic is the highest among all participating countries

- The Dominican Republic has the highest student-teacher ratio (30:1) among all of the countries that participated in PISA 2015.
- Among Latin American countries, the student-teacher ratio only totals 21:1, while among OECD countries it only reaches 13:1.
- In poor schools, the number increases to 35 students per teacher. In wealthy schools, the ratio declines to 22 students per teacher (a difference of 13 students).
- Additionally, the Dominican Republic has the largest class sizes in the region (36 students per class).
- The OECD has an average class size of 26 students, while the average in the LAC region is 33 students. Only Mexico (39) has larger class sizes than the Dominican Republic.

RATE OF SCHOOL ABSENTEEISM, 2015



Source: OECD (2016). PISA 2015, Vol. II, Tables II.6.32 y II.6.33.

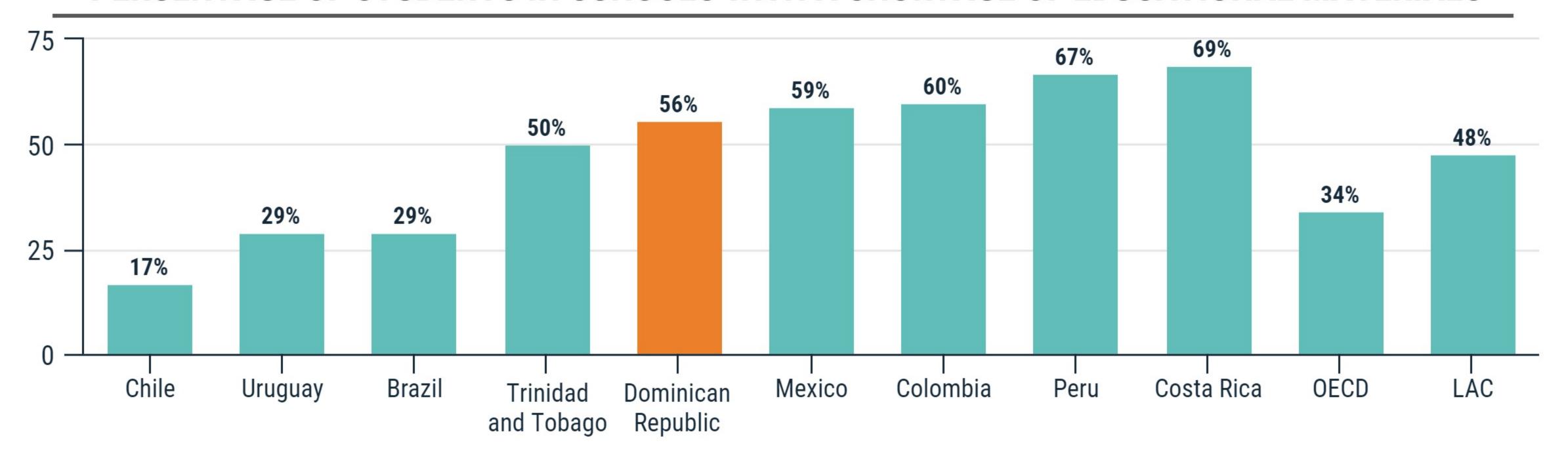
Dominican schools don't have sufficient or adequate educational materials

- The Dominican Republic is among the 15 countries with the most frequent reporting of a lack of and/or low quality educational materials (books, libraries, laboratory materials, etc.) as problems that impact learning.
- The survey of administrators reported that in the Dominican Republic, 6 out of every 10 students attended schools where a lack or low quality of educational materials negatively impacted teaching. In the average OECD country, such a situation was only present for 3 out of every 10 students.
- This problem is still worse when comparing schools by geographic location, type and socioeconomic status: poor, rural, and public schools suffer from the greatest material shortages.
- Lastly, students in schools where administrators reported the largest shortages of educational materials as problems that negatively affected teaching obtained lower scores in science (10 fewer points) than their counterparts.

Professional development of science teachers is widespread compared to the rest of the region

- PISA asked administrators about the percentage of teachers in their schools who attended teacher training programs in the three months prior to the test. PISA defines professional development as having attended at least one day of training.
- In the Dominican Republic, 5 out of every 10 science teachers (47%) have received professional development during their pedagogical career. That is the second highest proportion in the region, second only to Brazil (53%).
- There is no difference in teacher professional development between rich and poor schools in the Dominican Republic or in the average OECD country.
- Nevertheless, despite the fact that science teachers receive professional development, its low quality has impeded improvement in achievement levels among Dominican students.

PERCENTAGE OF STUDENTS IN SCHOOLS WITH A SHORTAGE OF EDUCATIONAL MATERIALS



Source: OECD (2016). PISA 2015, Vol. II, Table II.6.1.

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References: 1. OECD (2016). PISA 2015 Results: Excellence and Equity in Education (Volume I).; 2. OECD (2016). PISA 2015 Results: Policies and Practices for Successful Schools (Volume II).



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