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Latin America and the Caribbean

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BARBADOS: DOES THE EDUCATION SYSTEM PREPARE YOUNG PEOPLE FOR THE XXI CENTURY?

In Barbados, investment in education is one of the highest in the region and there is almost universal access to basic education. However, learning outcomes are still unequal, and while many young people complete secondary school, they do not obtain the credentials required to succeed in the labor market.

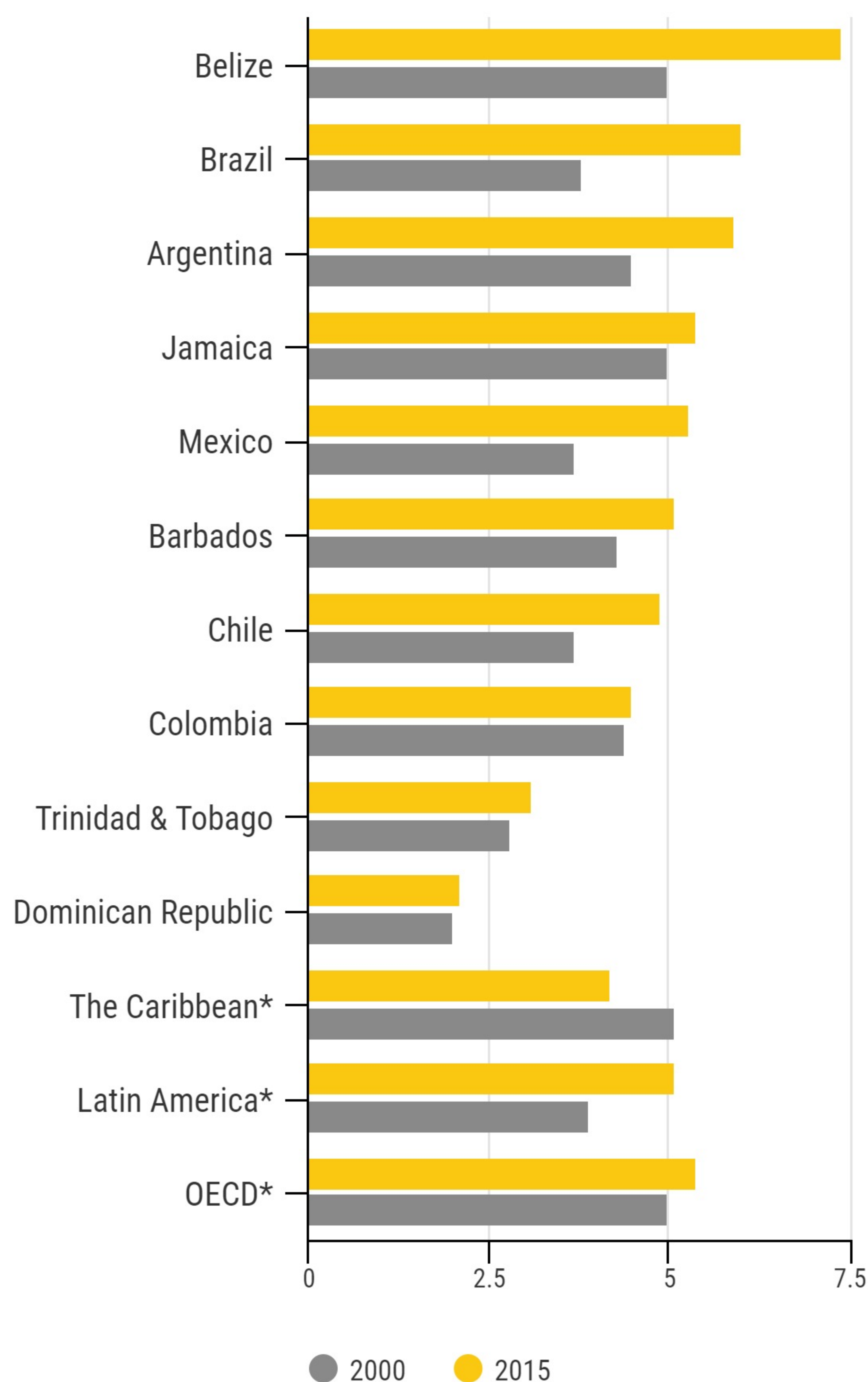
Barbados is one of the countries that invests the most in education

- After Jamaica, Barbados is the Caribbean country that invests the most in education. In 2015, the country invest 5.1% of its GDP in education.
- In 2000, Barbados' increase in education investment (1 percentage point) was the highest among Caribbean countries and fourth largest among Latin American and Caribbean (LAC) countries. Measured by percentage of GDP, only Belize (2 p.p.), Mexico (2 p.p.), and Chile (1 p.p.) increased their investment more than Barbados.
- Expenditure on education as a percentage of total spending in 2015 was 14%, 4 p.p. less than Jamaica; the country with the highest percentage.
- Of the total expenditure on education, 30% of the resources go to primary education, 40% to secondary education, 31% to tertiary education.

Almost all young boys and girls in Barbados attend basic education

- In 2015, 91% of children attended primary education and 99% attended secondary education.
- Compared with 2005, attendance to primary education increased 2 p.p. and attendance to secondary education increased 7 p.p.
- Barbados has the highest proportion of students attending secondary school in LAC, followed by Chile (88%), Argentina (88%), and Brazil (82%).
- In 2015, 83% of children received preschool education, 5 p.p. more than during 2005.
- Increases in access to preschool and primary education have been accompanied by a gender parity in attendance. In 2015, 82% of girls and 80% of boys attended preschool. Similarly, 91% of girls and 90% of boys received primary education.

PUBLIC EXPENDITURE ON EDUCATION AS A PERCENT OF GDP, 2000 - 2015



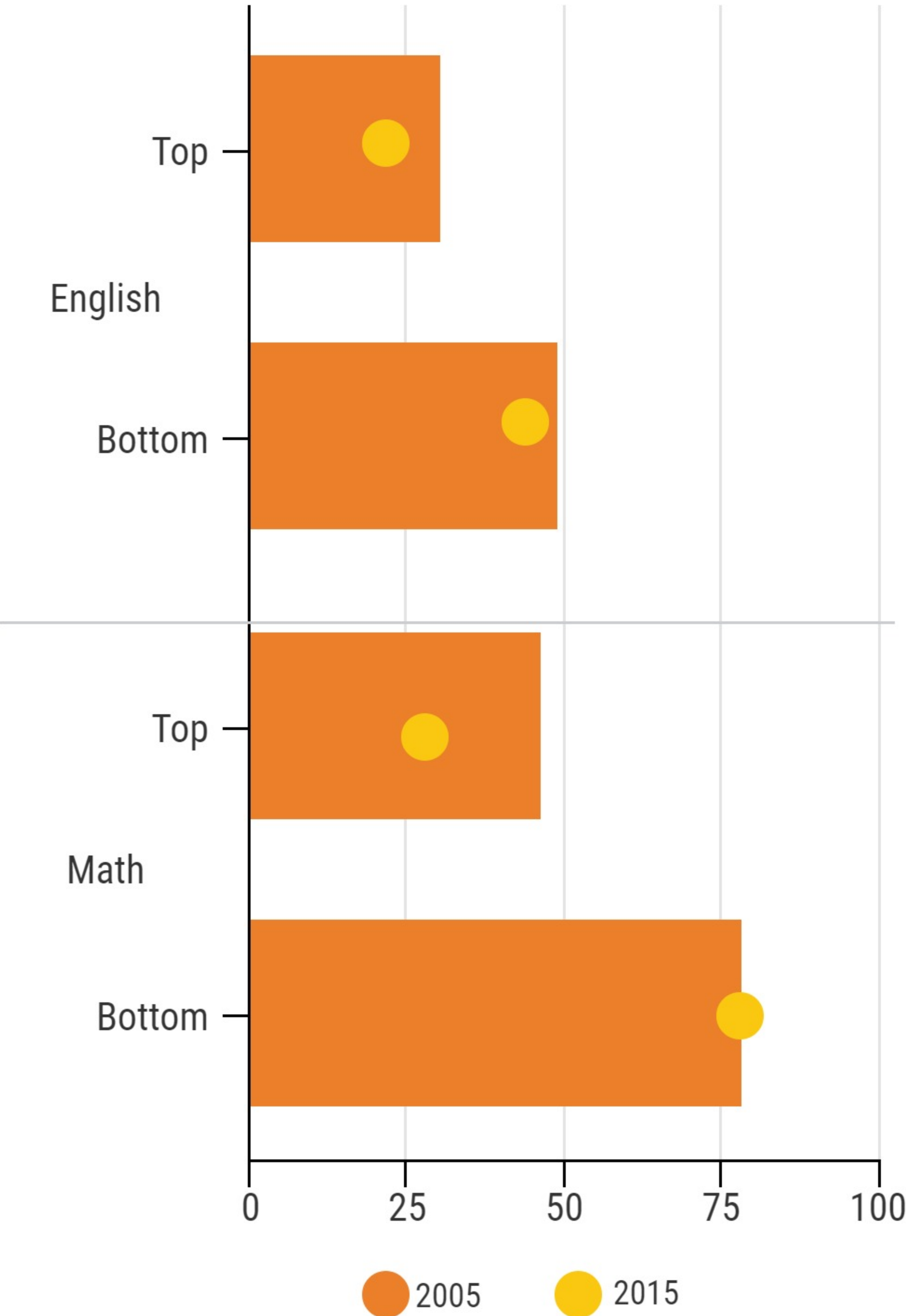
Source: UNESCO, circa 2000 - 2015, CIMA 2017

Note: The Caribbean average includes Barbados, Guyana, Jamaica, and Trinidad & Tobago. The Latin America average includes Argentina, Belize, Brazil, Chile, Colombia, Dominican Republic, and Mexico.

While academic performance is poor, Barbados students perform better than their regional peers

- In 2015, 31% of the students who took the Caribbean Secondary Education Certificate (CSEC) failed to pass math, 29% did not pass English, and 37% failed sciences.
- The percentage of students who are low achievers (with level IV, V, and VI based on CSEC performance categories) in Barbados is lower than in other countries of the Caribbean in math and English in 2015 (17 and 11 p.p. less, respectively).
- In the same year, the percentage of low achievers in science was 31%. This corresponds to 11 p.p. more than the average of the Caribbean countries that applied the CSEC test (26%).
- Although the percentage of low achievers is not negligible, it has dropped 13 p.p. in math (from 44% in 2005) and 2 p.p. in English (from 31% in 2005).

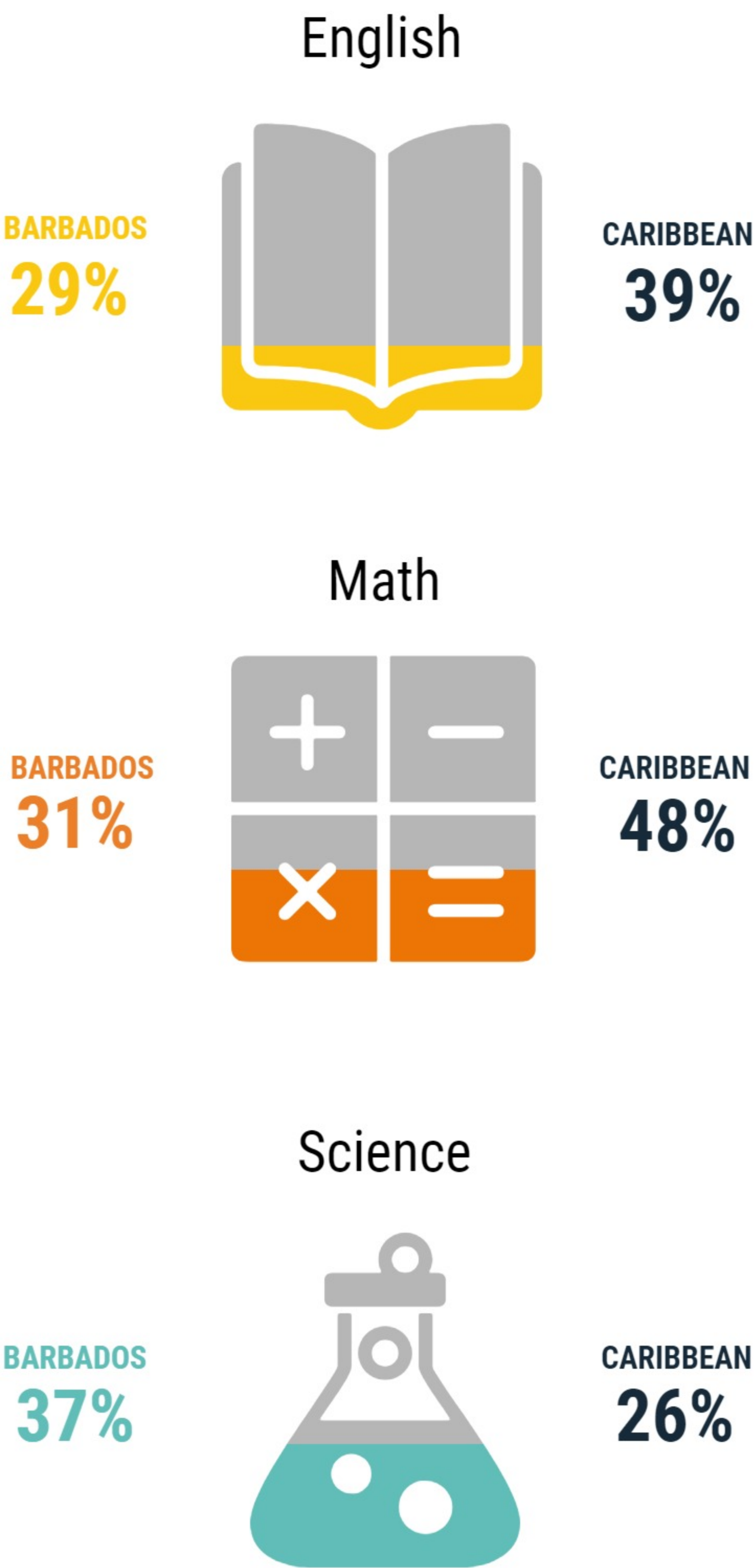
PERCENTAGE OF LOW ACHIEVERS IN CSEC BY CLUSTERS OF SCHOOLS 2005 -2015



Source: CIMA, IDB.

Note: Clusters of schools corresponds to the top 10 public institutions and bottom 12 public schools.

PERCENTAGE OF LOW ACHIEVERS IN CSEC BY SUBJECT, 2015



Source: CIMA, IDB, 2015
Note: Caribbean region average includes Barbados, Guyana, Jamaica, and Trinidad and Tobago

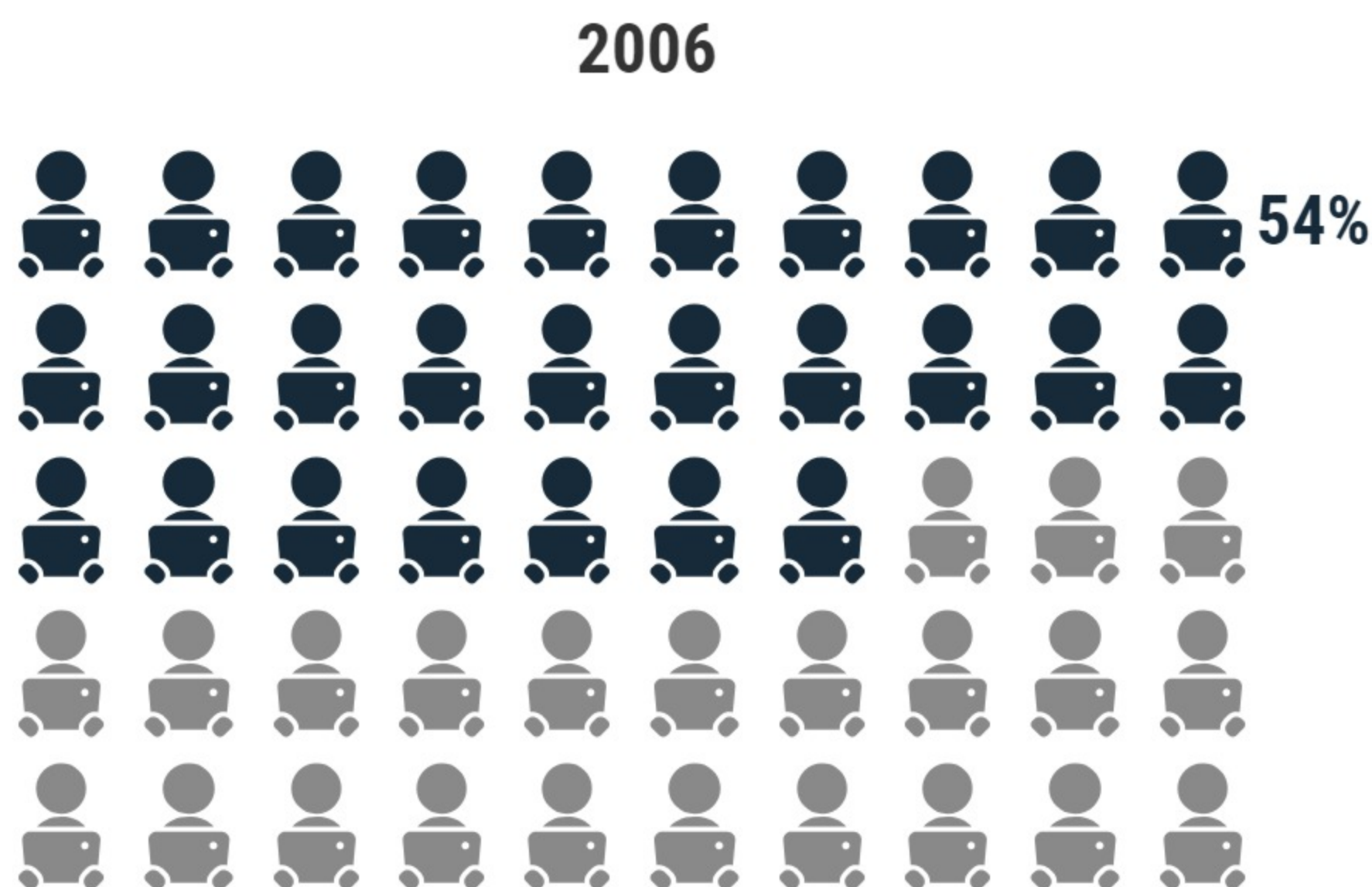
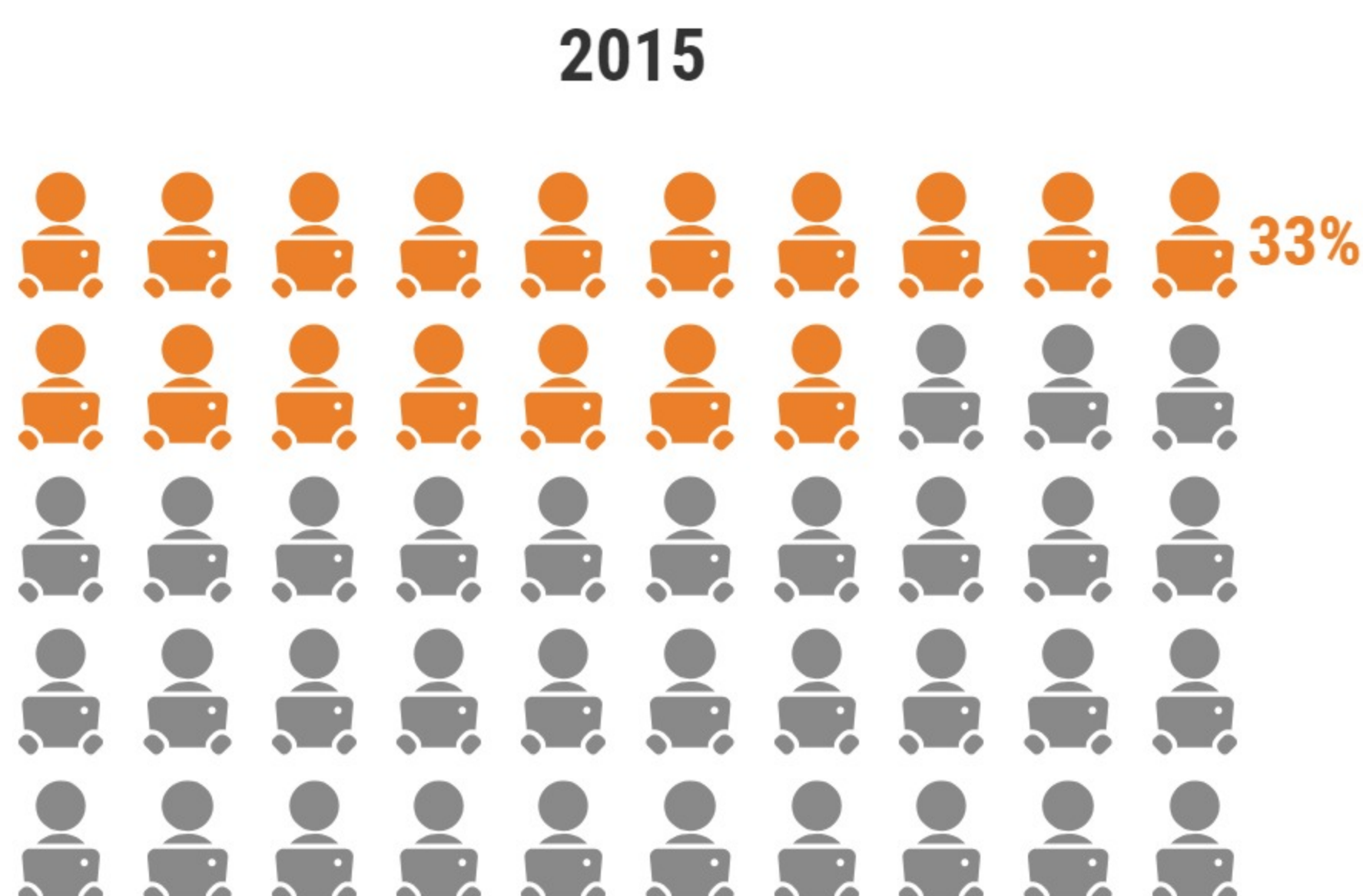
The gaps between the top and bottom schools are wide and increasing over time

- The top-performing public schools have the lowest proportion of low achievers in the secondary education test (CSEC). Likewise, the bottom-performing public schools have a relatively high concentration of low performing students in the CSEC test.
- In 2015, the percentage of low achievers in math for the top public schools was 29%. On the other hand, this proportion for the bottom schools was 76%.
- Between 2005 and 2015, the proportion of low-performing students in math was reduced in greater proportion for the bottom schools than for the top ones (a 21 and 17 p.p. less, respectively).
- During the same period, the percentage of low achievers in English for the top public schools was 25%, while for the bottom ones this proportion was 45 p.p. higher (48%)

Young people finish secondary education, but do not get a formal certificate

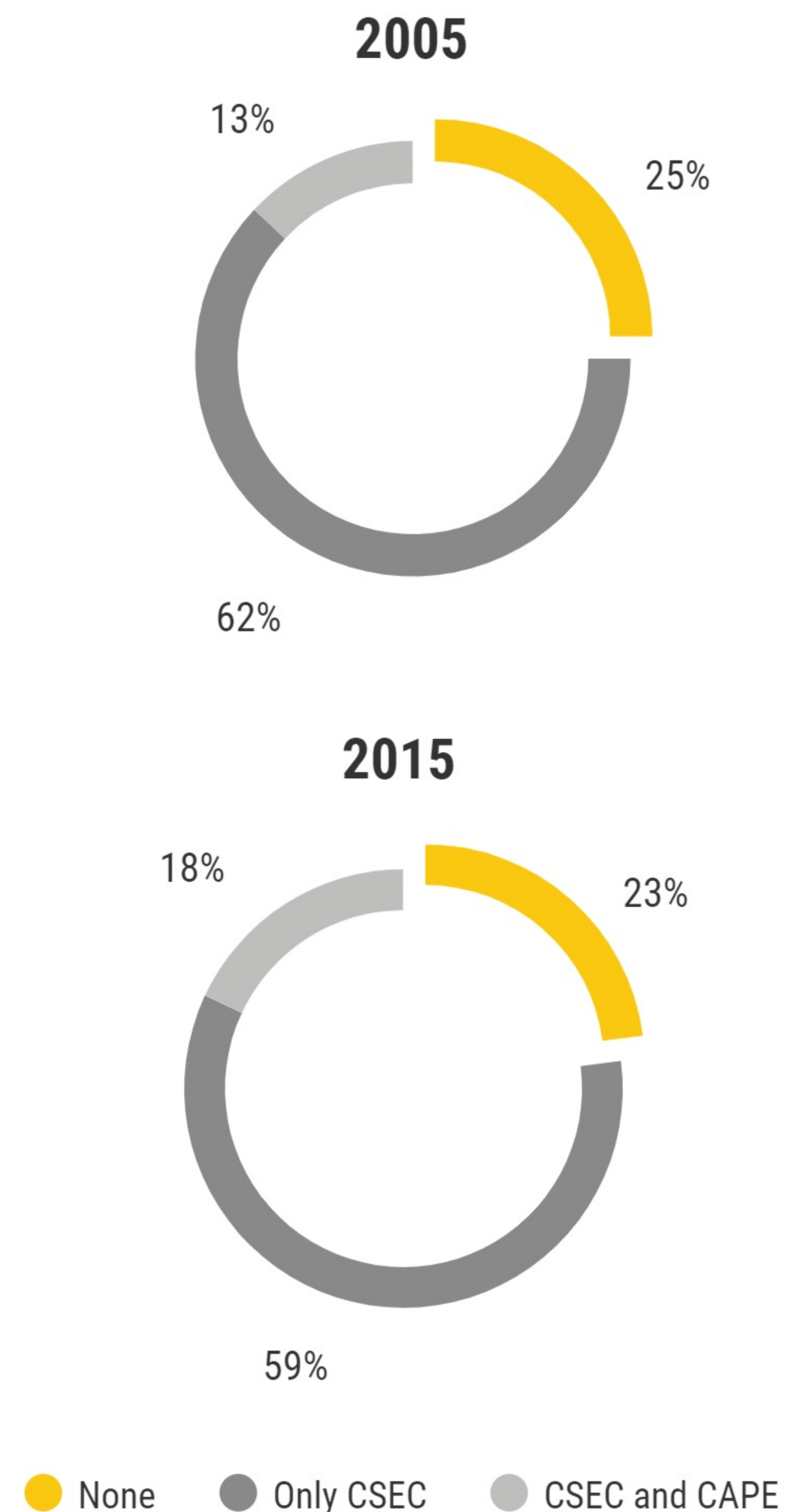
- To enter secondary education in Barbados, students are required to take the Barbados Secondary Schools' Entrance Examination (BSSEE).
- Barbados' secondary completion rate is one of the highest among the region. According to UIS, 94% of young people manage to finish high school. This proportion is 42 p.p. higher than the LAC average.
- After five years of secondary school, students take the CSEC to graduate. Not all students who complete secondary education get the CSEC. Among the young people who took the BSSEE test at the end of primary school in 2009, 23% did not take the CSEC test in 2015.
- Comparing the primary school graduating classes of 2000 and 2009, there was a 3 p.p. decrease (25%) in the proportion of students who took the BSSEE but did not take the CSEC.
- Students seeking to further their academic, vocational or technical studies can take the Caribbean Advanced Proficiency Examination (CAPE). Between 2005 and 2015, the proportion of students who took both CSEC and CAPE increased from 13% to 18%, an increase of 5 p.p. in ten years.

PERCENTAGE OF STUDENTS WHO OBTAIN 4 OR MORE PASSES IN CSEC, 2006 - 2015



Source: Authors calculations using CSEC database 2005 - 2015.

PERCENTAGE OF STUDENTS WITH NO CSEC CERTIFICATE, 2005 AND 2015



Source: Authors calculations using BSSEE, CSEC and CAPE.

The percentage of young people who do not meet the tertiary education requirements is decreasing

- In order to work in the public sector or be admitted by universities, high school graduates need to get between 4 and 5 passes in the CSEC test, respectively.
- In 2015, 13% of students did not pass any subject, 27% passed only one, 18% passed two, and 9% passed three subjects in multiple sittings.
- Thirty three percent of students who took the test in 2015 had 4 or more passes. This proportion fell 20 p.p. since 2006 (54%).
- In 2015, 67% of the students who finished high school could not work for the public sector nor study in college.
- The biggest increase occurred for students who got 1 pass (11 p.p. since 2005).

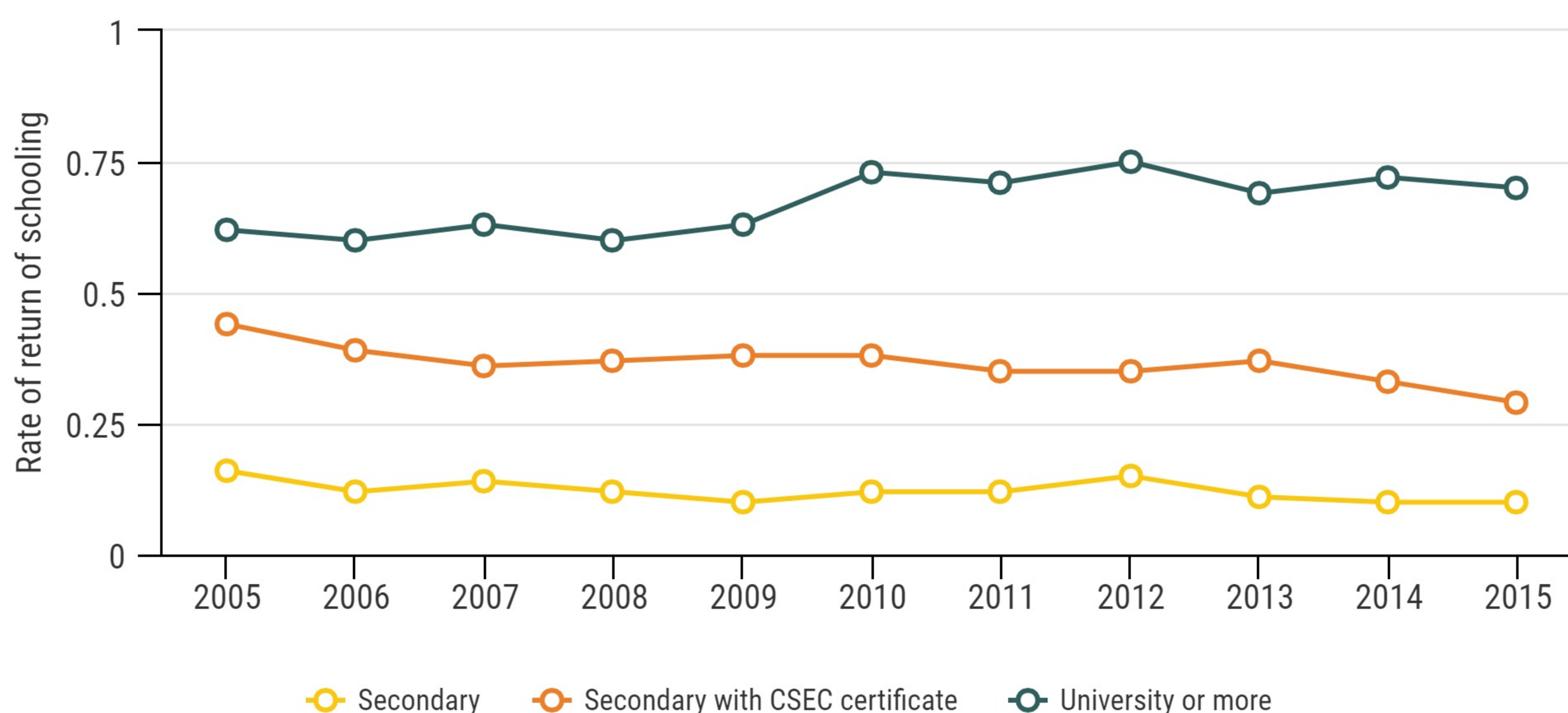
The consequences of not having the CSEC certificate are considerable

- Young people who finish high school and do not have the CSEC are less likely to be employed than those who obtain the certificate.
- Measuring the relationship between the number of years of schooling and salaries (returns to education), helps estimate the value of an additional year of education.
- Those who manage to finish high school without the CSEC certificate have lower salaries than those who do not.
- In 2015, the difference of returns to secondary education with a CSEC certificate is 0.3 p.p. greater than the returns of secondary education without a certificate.
- The trends of returns over the last 10 years show that finishing high school with no certification has been increasingly penalized by the labor market.

Students are not well prepared to participate in an economy based on technology and innovation

- In 2015, the top 5 subjects chosen by the students for the CSEC test are: English, mathematics, principles of business, social studies, and biology.
- Information technology was chosen by 4% of the students in 2015. It was the 6th most selected subject for the CSEC test.
- Subject choice is still influenced by traditional gender roles. The distribution is in favor of men in subjects such as math (2 p.p. more than women) and information technology (2 p.p. more than women).
- On the other hand, women are 2 p.p. more likely to choose areas such as food, nutrition, and biology compared to their male peers.

EVOLUTION OF RETURNS TO EDUCATION BY LEVEL OF EDUCATION 2005 - 2015



Source: Authors' calculations using Barbados Labor Force Surveys.

Note: The graph plots the rate of return of schooling by year, controlling for gender, marital status, and age. The residual level of education is "less than secondary" and each point represents how much more salary (in percentage) a person earns with their current level of education (Secondary, Secondary with CSEC or University+) than a person with incomplete secondary or less.

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.

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References: 1. Barbados Secondary School's Entrance Examination (BSSEE) is a test taken by primary school students for placement at any of the secondary schools, and tests their skills in English, math and composition writing. 2. The Caribbean Secondary Education Certification (CSEC) examinations are usually taken by students after five years of secondary school, and mark the end of standard secondary education.

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