



Office of English Language Acquisition

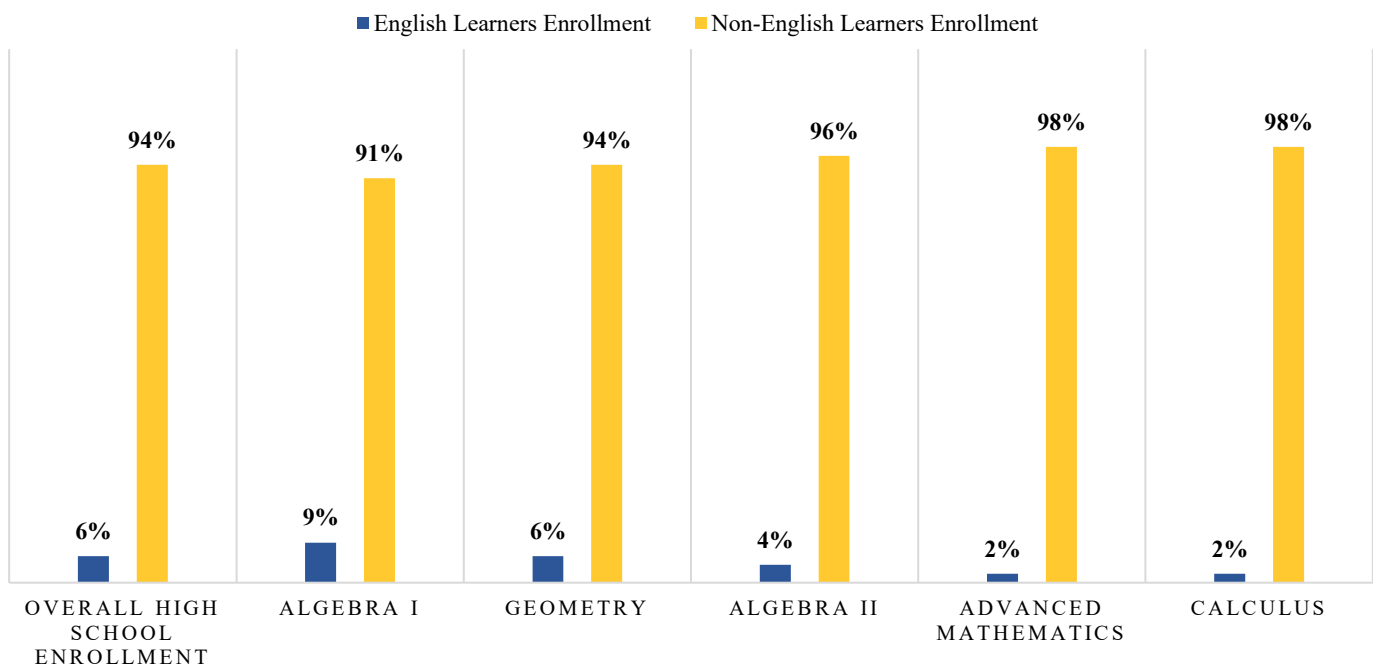
English Learners and High School Mathematics

This fact sheet shares findings from the following reports: *2015–16 Civil Rights Data Collection STEM Course Taking: Data Highlights on STEM Course Taking in Our Nation’s Public Schools*¹ and the National Academies of Sciences, Engineering, and Medicine’s *English Learners in STEM Subjects: Transforming Classrooms, Schools, and Lives*.

Distribution of Students Enrolled in High School² Mathematics Classes³

FACT

- Over 963,000 ELs were enrolled in high schools across the U.S. in the 2015–16 school year, representing 6% of total high school enrollment.
- ELs represented 9% of enrollment in algebra I.
- ELs represented 2% of enrollment in advanced math and calculus.



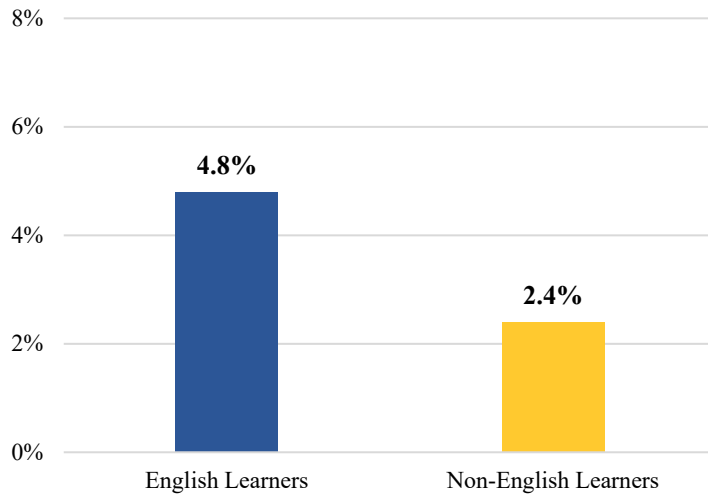
SOURCE: U.S. Department of Education, Office for Civil Rights (2018). *2015–16 Civil Rights Data Collection STEM Course Taking: Data Highlights on STEM Course Taking in Our Nation’s Public Schools*. Based on Figure 9, p. 9. Retrieved from <https://www2.ed.gov/about/offices/list/ocr/docs/stem-course-taking.pdf>

¹ The Civil Rights Data Collection consists of self-reported data from school districts. Any analysis should be considered an estimation with the understanding that submitted data by districts may differ from their actual values due to the occurrence of non-sampling errors. <https://ocrdata.ed.gov/Downloads/Data-Notes-2015-16-CRDC.pdf>

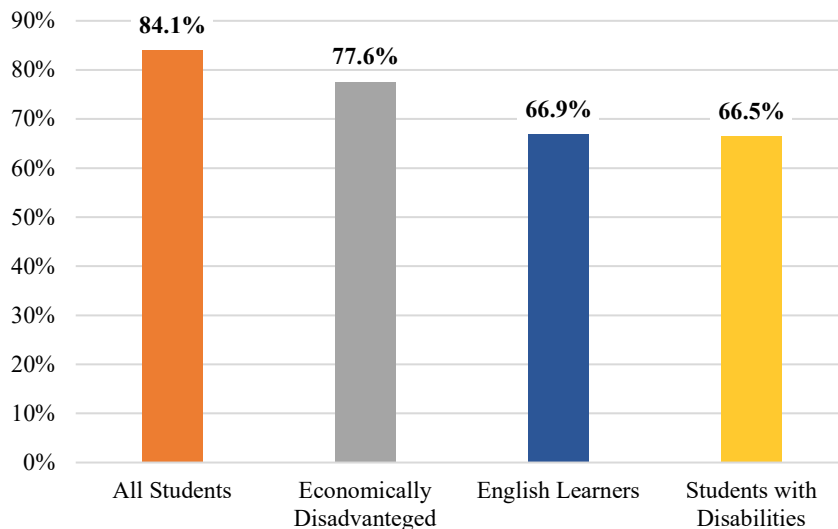
² For the purpose of STEM course taking, high schools include any school or justice facility with any grade nine to 12 or ungraded high school-age students.

³ Figure 9 of the U.S. Department of Education’s Office for Civil Rights’ *2015–16 Civil Rights Data Collection STEM Course Taking: Data Highlights on STEM Course Taking in Our Nation’s Public Schools* report (2018) presents the percentage distribution of students enrolled in high school mathematics course, by English learners.

Percentage of Students Who Failed to Pass Any Mathematics Course in High School, by English Learners⁴ and Non-English Learners^{5, 6}



Percentage of Students Who Graduate from High School, by Subgroup: SY 2015–16



FACT

Student progression through mathematics courses in high school is a key indicator of preparedness for higher education. Due to the consecutive arrangement of math courses, students who do not pass lower-level courses (such as algebra I) often cannot access more advanced coursework in math or science. In the High School Longitudinal Study of 2009, data indicated that ELs were both overrepresented in lower-level math courses and more likely to not pass any mathematics courses compared to non-ELs.⁷

SOURCE: High School Longitudinal Study of 2009 as cited in National Academies of Sciences, Engineering, and Medicine. 2018. *English Learners in STEM Subjects: Transforming Classrooms, Schools, and Lives*. The National Academies Press. <https://doi.org/10.17226/25182>

U.S. Department of Education, Consolidated State Performance Report: Part I: 2015-16 (OMB #1810-0724). These data were reported by state educational agencies from the 50 states, District of Columbia, and Puerto Rico.

⁴ English learners (ELs) are defined as students who took at least one ESL course during high school (National Academies of Sciences, Engineering, and Medicine. 2018. *English Learners in STEM Subjects: Transforming Classrooms, Schools, and Lives*. The National Academies Press, p. 45).

⁵ The term non-English learners refers to native English speakers (non-bilinguals whose primary language is English) or other bilinguals (students who identified as bilingual and indicated that they had never taken an ESL course during their secondary education).

⁶ Data is taken from the High School Longitudinal Study of 2009. The analyses do not account for students' level of English proficiency, time in U.S. schools, or other issues that impact ELs' course-taking (National Academies of Sciences, Engineering, and Medicine, 2018, p. 46).

⁷ National Academies of Sciences, Engineering, and Medicine, 2018, pp. 44-45.



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