



This fact sheet reports data from the National Assessment of Educational Progress (NAEP)<sup>1</sup> scores and enrollment for English learners (ELs)<sup>2</sup> and students who are not English learners from the NAEP and the National Academies of Sciences, Engineering, and Medicine’s *English Learners in STEM Subjects: Transforming Classrooms, Schools, and Lives*.

## National Assessment of Education Progress Science Score Comparison for English Learners and Students Who Are Not English Learners: Fourth<sup>3</sup> and Eighth Grade

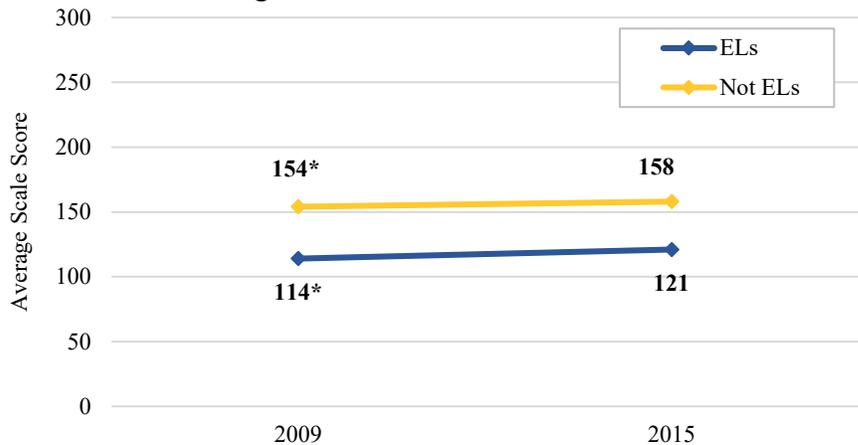
### FACT

Average NAEP science scores for ELs in fourth and eighth grade increased by seven points between 2009 and 2015.

Average scores for students who are not ELs increased by four points between 2009 and 2015.

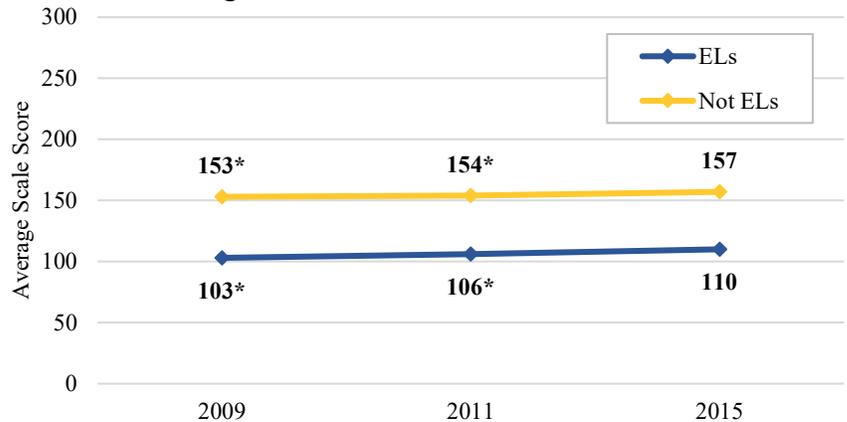
There was a 36-point gap between the average scores of ELs and not ELs in fourth grade in 2015. There was a 46-point gap between the average scores of ELs and students who are not ELs in eighth grade in 2015.<sup>4</sup>

### Average 4<sup>th</sup> Grade NAEP Science Scores



\* Significantly different (p < .05) from 2015

### Average 8<sup>th</sup> Grade NAEP Science Scores



\* Significantly different (p < .05) from 2015

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP) 2009, 2011, and 2015 Science Assessment. For more information, visit <http://www.nationsreportcard.gov>

<sup>1</sup> The NAEP, also known as the Nation’s Report Card, is the largest nationally representative assessment of what students know about mathematics, reading, science, writing, the arts, civics, economics, geography, U.S. history, and technology and engineering. In order to be representative, the NAEP attempts to maximize the participation of ELs. NAEP results for ELs are based on students who were assessed and cannot be generalized to the total EL population.

<sup>2</sup> **English learner (EL)** is a term used to describe students who are in the process of acquiring English language skills and knowledge. <https://nces.ed.gov/nationsreportcard/glossary.aspx#e>

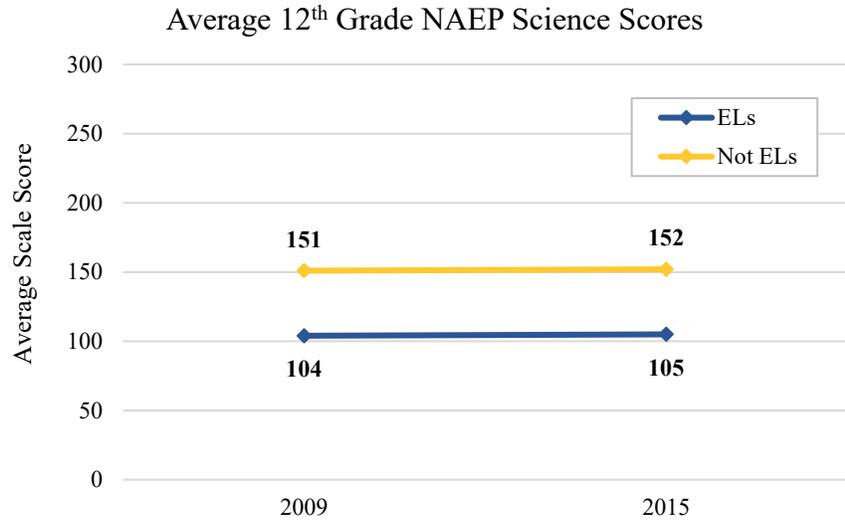
<sup>3</sup> Grade four assessment data were not collected in 2011.

<sup>4</sup> The line graphs display rounded values. These average score gaps are based on the unrounded scale scores.

## National Assessment of Education Progress Science Score Comparison for English Learners and Students Who Are Not English Learners: 12th Grade<sup>5</sup>

### FACT

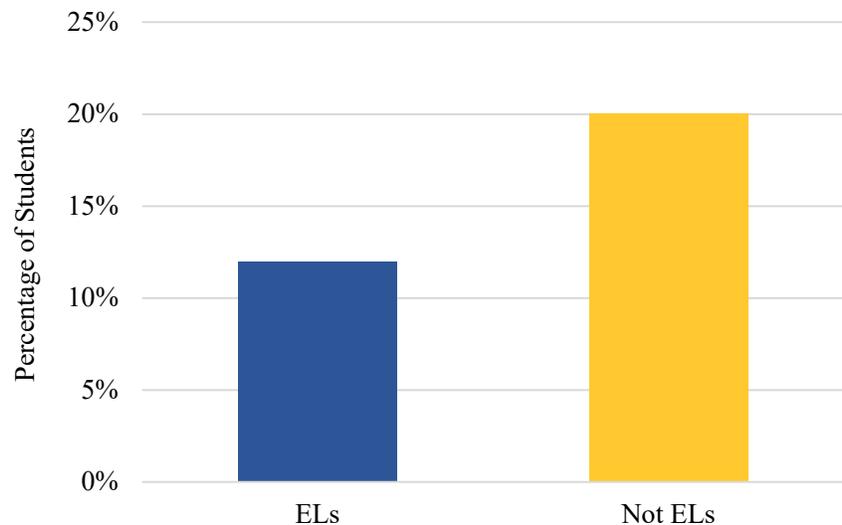
There was a 47-point gap between the average scores of ELs and students who are not ELs in 12th grade in both 2009 and 2015.



## Participation in Honors-Level High School Science Courses by English Learners<sup>6</sup> and Students Who Are Not English Learners<sup>7</sup>

### FACT

Nearly 12% of ELs took honors-level science courses during high school compared with 20% of students who were not ELs.<sup>8</sup>



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*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/25182>

<sup>5</sup> In comparison to 2009, the previous assessment year, average 12<sup>th</sup>-grade science scores in 2015 were not statistically significantly different for any reported student demographic group. Grade 12 assessment data were not collected in 2011.

<sup>6</sup> “English Learners” are defined as students who indicated they took at least one English as a second language (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).

<sup>7</sup> The term “not 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.)

<sup>8</sup> The analyses do not account for the 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).



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