# Measure Up

**NAEP News for the School Community** 



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# Spring/Summer 2019



Stock image is for illustrative purposes only.

#### Thank You!

Thanks to all schools that participated in the NAEP 2019 assessments and helped to make it a success.

The NAEP 2019 assessments were administered January 28–March 8, 2019. Grades 4 and 8 students participated in mathematics, reading, and science, as well as mathematics and reading pilot assessments. Results from the pilots will be used to inform future NAEP assessments. Grade 12 students participated in mathematics, reading, and science assessments.

Results from the 2019 grades 4 and 8 mathematics and reading assessments are expected to be released in fall 2019. Results from the science assessments and all grade 12 assessments will be released in 2020.

<u>Special studies</u> were also conducted in 2019, which included the <u>National Indian Education Study (NIES)</u>. Later in 2019, the <u>High School Transcript Study</u> will analyze transcripts from a sample of high school graduates.

## The NAEP 2019–2020 Program

Age or Grade	Type of NAEP	Subjects	Format	National Results	Assessment Window
13-year-olds	Long-term trend	Reading	Paper & Pencil	~	October 14, 2019 – December 20, 2019
		Mathematics	Paper & Pencil	~	
9-year-olds	Long-term trend	Reading	Paper & Pencil	~	January 6, 2020 – March 13, 2020
		Mathematics	Paper & Pencil	~	
17-year-olds	Long-term trend	Reading	Paper & Pencil	~	March 16, 2020 – May 22, 2020
		Mathematics	Paper & Pencil	V	







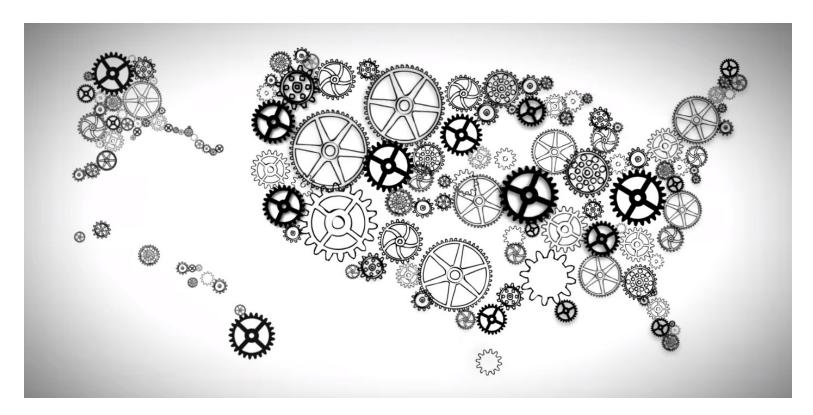


## The NAEP 2020 Assessments

During the 2019–2020 school year, the NAEP long-term trend assessment will be administered in schools across the country. NAEP long-term trend assessments measure student performance in mathematics and reading, and have allowed the performance of today's students to be compared with students since the early 1970s. The table on page 1 describes the 2019–2020 assessment program for which national results will be available.

Assessments in mathematics and reading will be conducted with nationally representative samples of 9-, 13-, and 17-year-old students. Selected students will participate in paper-based mathematics or reading assessments, and each student will be assessed in only one subject. NAEP representatives will bring all materials and equipment to the school on assessment day. Students will spend up to 90 minutes completing the assessment, which includes transition time, directions, and completion of a short student questionnaire. The questionnaire provides valuable information about the students' educational experiences and learning opportunities both inside and outside of the classroom. There will be no school or teacher questionnaires for the long-term trend assessment.

For more information about the long-term trend assessment, visit <a href="https://nces.ed.gov/nationsreportcard/ltt">https://nces.ed.gov/nationsreportcard/ltt</a>.



## NAEP 2018 Technology and Engineering Literacy Assessment (TEL)

Between January and March 2018, NAEP administered a nationally representative assessment of technology and engineering literacy (TEL) at eighth grade. Approximately 15,400 eighth-graders from about 600 schools across the nation participated in 2018. The TEL assessment included a variety of scenario-based tasks reflecting the TEL content areas. Students used laptops to answer questions that assessed their knowledge and skills in understanding technological principles, solving technology and engineering-related problems, and using technology to communicate and collaborate. Total cognitive testing time per student was 60 minutes. Survey questionnaires were administered to students and school administrators. Students were asked about their opportunities to learn about and engage in technology and engineering in and outside of school.

#### **How NAEP Assesses TEL**

In the NAEP TEL assessment, students were tested using computer simulations of technology and engineering problem-solving tasks set in a variety of real-world contexts. Through interaction with these multimedia scenario-based tasks, students used an assortment of tools and applied their TEL knowledge and skills to solve problems across the content areas and practices.

The TEL assessment measures three interconnected content areas—technology and society, design and systems, and information and communication technology—and three practices that cut across the content areas: understanding technological principles, developing solutions and achieving goals, and communicating and collaborating. When solving problems, students are expected to demonstrate a wide range of knowledge and skills by applying each of the practices within and across the content areas.

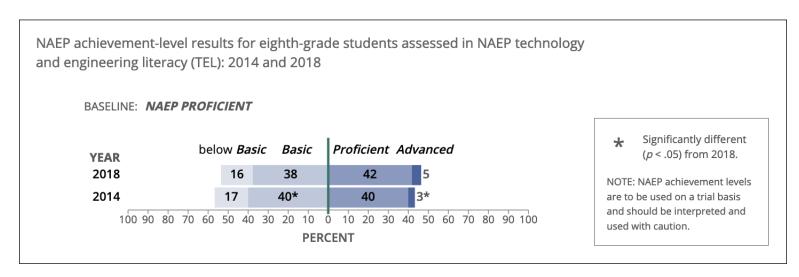
Explore the national results online at the Nation's Report Card interactive web sites for the 2018 TEL assessment at <a href="https://www.nationsreportcard.gov/tel">https://www.nationsreportcard.gov/tel</a>.

## **Overall NAEP TEL Achievement Level Results**

NAEP achievement levels are performance standards that describe what students should know and be able to do. Results are reported based on <u>three achievement levels</u>: *Basic, Proficient,* and *Advanced.* The NAEP Proficient achievement level does not represent grade-level proficiency but rather competency over the subject matter.

In 2018, about 46 percent (i.e., 42 percent *Proficient* + 5 percent *Advanced* are rounded to the nearest whole number) of eighth-grade students performed at or above the <u>NAEP Proficient</u> level on the TEL assessment, which was significantly different than the 43 percent of students in 2014, the previous assessment year. About 84 percent of eighth-grade students performed at or above the <u>NAEP Basic</u> level, which was not significantly different compared to 2014. Five percent of eighth-graders performed at the <u>NAEP Advanced</u> level in 2018, which was higher in comparison to 2014. The chart below lists the percentages of eighth-grade students performing at each of the TEL NAEP achievement levels in 2014 and 2018.

Learn more about the TEL achievement level results at <a href="https://www.nationsreportcard.gov/tel/results/achievement">https://www.nationsreportcard.gov/tel/results/achievement</a>.



SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2014 and 2018 Technology and Engineering Literacy (TEL) Assessments.

## **NAEP TEL Sample Scenario-Based Task**

TEL is completely computer-based and includes interactive, multimedia scenario-based tasks (SBTs). SBTs engage students to solve technology and engineering problems in a variety of real-world contexts and are designed to allow students to demonstrate the range of knowledge and skills detailed in the three TEL content areas and three practices. Some tasks measure students' abilities in one content area and practice while other tasks measure more than one content area or practice.

The Andromeda task below is an example of a SBT task that was administered as part of the 2014 and 2018 TEL assessments. In the task, a television network is promoting a television show about the Andromeda Galaxy. Students need to identify a suitable image of the Andromeda Galaxy for use on the website. They must secure permission to use a copyrighted image and properly credit use of the image in accordance with fair use guidelines.

Sixty percent of students correctly identified images that could be legally used on a website. Fifty-one percent of students identified the proper reference style to use for writing a citation, and 29 percent of students successfully wrote a citation that included all required copyright information.

Try a scenario-based task and learn how students engaged with and performed on specific TEL assessment tasks at <a href="https://www.nationsreportcard.gov/tel/tasks">https://www.nationsreportcard.gov/tel/tasks</a>.



60%

of students correctly identified images that could be legally used on a website.

**51%** 

of students identified the proper reference style to use for writing a citation.

**29**%

of students successfully wrote a citation that included all required copyright information.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2014 and 2018 Technology and Engineering Literacy (TEL) Assessments.