In spring 2018, NAEP was given across the nation for the area of Technology & Engineering Literacy (TEL) for approximately 15,400 eighth-grade students in 600 schools. The NAEP TEL assessment scores between 0-300 points. The TEL assessment was given once before in 2014 and is planned next in 2022.

TEL is completely computer-based and includes real-world problems and interactive scenario-based tasks. A random sample of students are selected to participate from a nationally representative sample of school and asked to solve technology and engineering problems.

**TEL Results**

Compared to 2014, there was a statistically significant 2-point increase in the overall TEL score in 2018 and 46% of eighth-graders scored at or above Proficient improving 3 percentage points from 2014.

- Students scored higher in all three TEL content areas and in all three practices in 2018
- There were increases in overall TEL scores for mid- and higher-performing eighth-graders similar to the NAEP 2017 mathematics and reading results.

In 2018, female students scored higher than their male peers in TEL overall and in all of the TEL content areas and practices. White, Black and Hispanic females outperformed their male counterparts (no gender difference was observed in Asian students).
TEL Results

More students (57%) reported taking at least one class related to technology or engineering compared to 2014 (52%).

Students who reported taking at least one technology- or engineering-related class in 2018 scored 7-points higher, on average, than those who reported not taking any of those classes.

In comparison to 2014, the 2018 scores increased for students who are

- White, Black, Asian, female and in public school
- Not identified as English language learners
- Not identified with disabilities
- Eligible for the National School Lunch Program
- Not attending charter schools
- Whose parents did not finish high school
- Whose parents graduated from college.

TEL Content areas

- **Technology and Society** – considering the effects that technology has on society and the environment as well as the ethical questions raised by those effects
- **Design and Systems** – focuses on the nature of technology and the processes used to develop technologies, as well as basic principles for dealing with everyday technologies
- **Information and Communication Technology** – software and systems used for accessing, creating and communicating information, and for facilitating creative expression

TEL Practices

- **Understanding Technological Principles** – focuses on how well students are able to make use of their knowledge about technology
- **Developing Solutions and Achieving Goals** – systematic use of technological knowledge, tools and skills to solve problems and achieve goals presented in realistic contexts
- **Communicating and Collaborating** – use contemporary technologies to communicate for a variety of purposes and in a variety of ways, working individually or in teams, with peers and experts