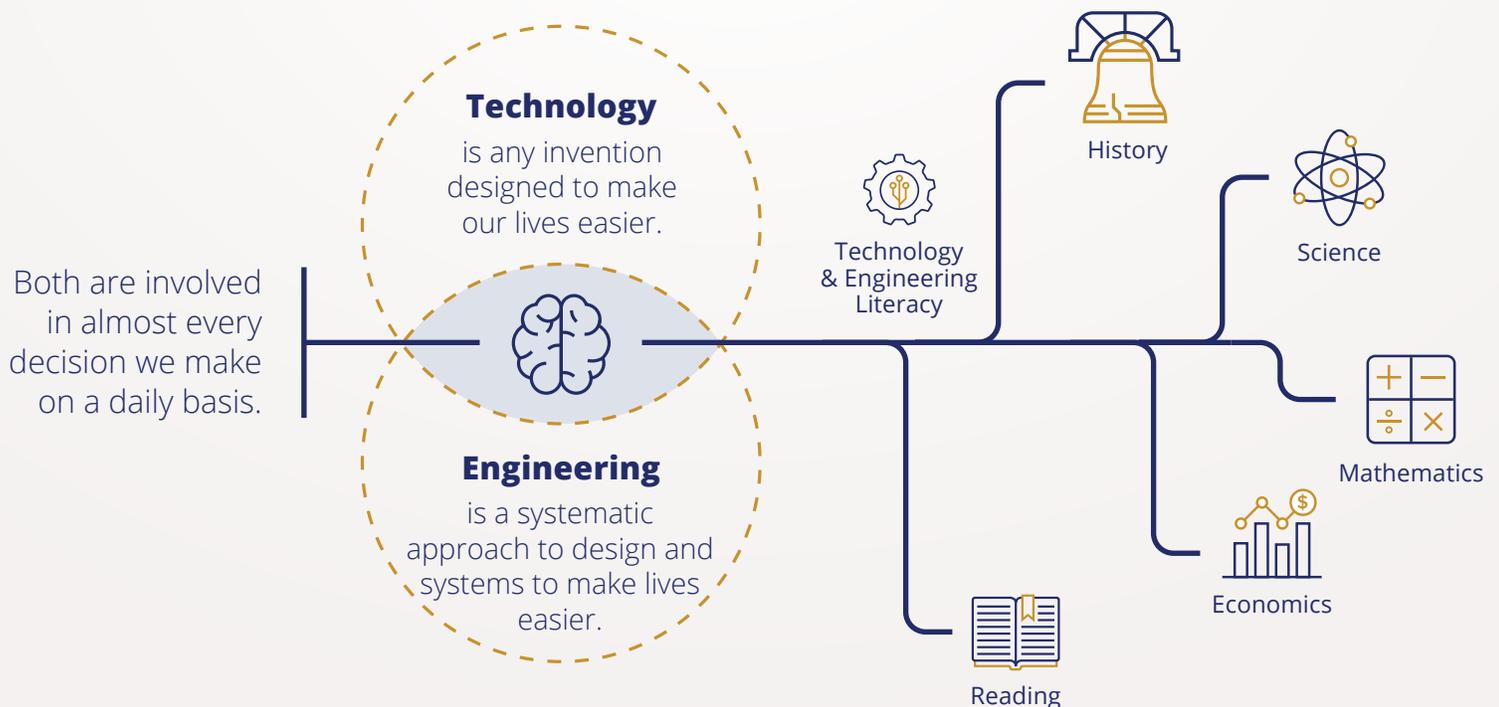




A New Generation of NAEP Assessments

Since 1969, the National Assessment of Educational Progress (NAEP) has been informing us on what students know and can do across the United States in different subjects. The Technology and Engineering Literacy assessment is one of the latest digitally based assessments from the National Center for Education Statistics (NCES).

Why is assessing Technology and Engineering Literacy important?



What does the Technology and Engineering Literacy assessment measure?

The Technology and Engineering Literacy assessment evaluates students' knowledge in three content areas and across three practices.

TECHNOLOGY AND ENGINEERING LITERACY CONTENT AREAS

TECHNOLOGY AND ENGINEERING LITERACY PRACTICES

TECHNOLOGY & SOCIETY

Effects that technology has on society and the environment as well as the ethical questions raised by those effects.

DESIGN & SYSTEMS

Processes used for designing and developing new technologies, and the need for maintenance and troubleshooting.

INFORMATION & COMMUNICATION TECHNOLOGY

Software and systems used for accessing, evaluating, managing, creating and communicating; how digital technologies facilitate collaboration and expression.

UNDERSTANDING TECHNOLOGICAL PRINCIPLES

Focuses on how well students are able to make use of their knowledge about technology.

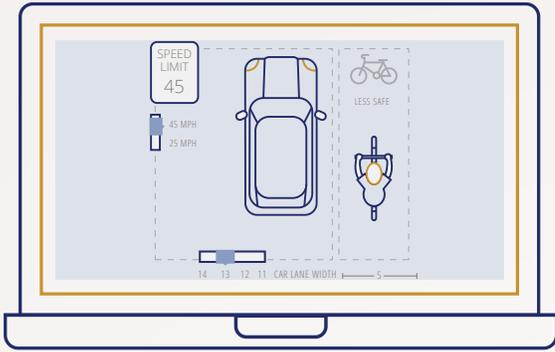
DEVELOPING SOLUTIONS & ACHIEVING GOALS

Refers to students' systematic use of technological knowledge, tools, and skills to solve problems and achieve goals presented in realistic contexts.

COMMUNICATING & COLLABORATING

Concerns how well students are able to 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.

How is Technology and Engineering Literacy assessed?



BIKE LANES TASK

Technology and Engineering Literacy marks the next generation of assessments for NAEP because it is completely digitally based and includes interactive scenario-based tasks — an innovative component of NAEP. In 2014, this assessment was administered to 21,500 eighth-grade students in about 840 schools across the nation.

To allow students to demonstrate the wide range of knowledge and skills in the three Technology and Engineering Literacy content areas and the three practices, they were asked to perform a variety of problem-solving tasks based on interactive scenarios reflecting realistic solutions.

What did the results tell us?

Performance on the Technology and Engineering Literacy assessment is reported as average scale scores and achievement levels. The assessment results are reported on a 0-300 scale, with an overall scale score and subscales for the three content areas and three practices. The overall average score on Technology and Engineering Literacy was 150.

Forty-three percent of eighth-grade students performed at or above the *Proficient* level in Technology and Engineering Literacy overall. Eighth-grade students performing at the *Proficient* level should be able to understand the interactions among parts within systems, systematically develop solutions, and contribute to teams (assessed virtually) using common and specialized tools to achieve goals.

Percentage at or above *Proficient*

