

# Highlights from the 2018 Technology and Engineering Literacy Assessment (TEL)

## Overview

- TEL was administered between January and March in 2018
- TEL was delivered via laptops and included 15 scenario-based tasks and 77 discrete questions
- Total testing time per student was 60 minutes
- National samples:
  - 15,400 eighth-graders
  - 600 schools across the nation
- Results available for the nation only
- Performance reported as:
  - Average scale scores (0-300 scale)
  - NAEP Achievement levels (*NAEP Basic*, *NAEP Proficient*, *NAEP Advanced*)

## SCORES AT A GLANCE

### Increase in average overall TEL score for eighth-graders in 2018 compared to 2014



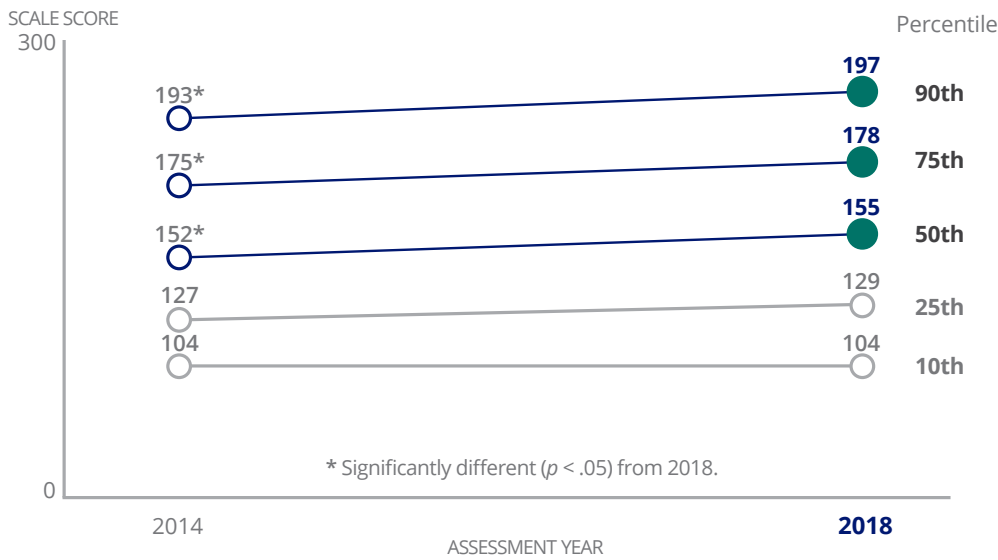
- Compared to 2014, there was a 2-point increase in the average overall TEL score at grade 8 in 2018.

		2018 Score	Score Change
<b>TEL Content Areas</b>	Technology & Society	152	<b>2 pts</b> ↑
	Design & Systems	153	<b>3 pts</b> ↑
	Information & Communication Technology	153	<b>3 pts</b> ↑
	Understanding Technological Principles	152	<b>2 pts</b> ↑
<b>TEL Practices</b>	Developing Solutions & Achieving Goals	152	<b>2 pts</b> ↑
	Communicating & Collaborating	153	<b>3 pts</b> ↑

- In 2018, eighth-grade students also scored higher in all three TEL content areas and in all three practices compared to 2014.

## SCORES BY PERCENTILES

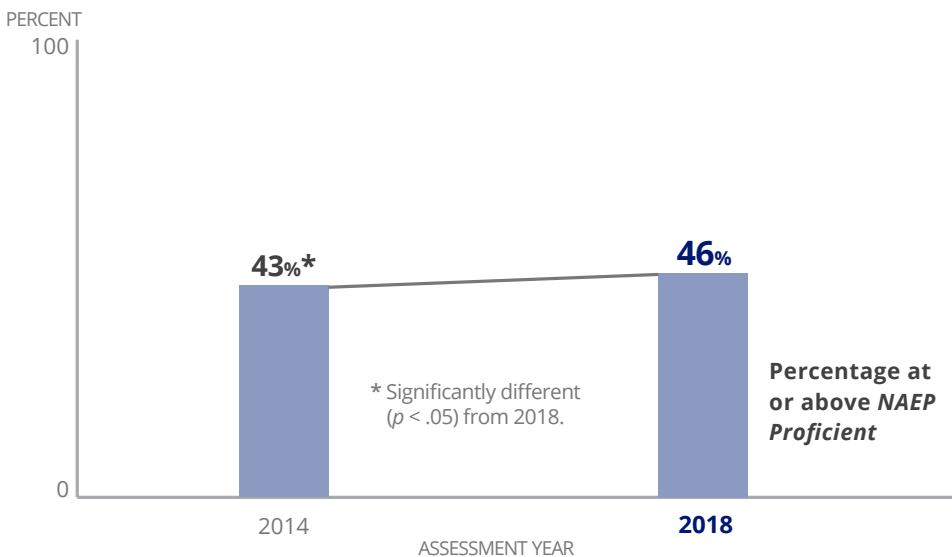
### Increases in overall TEL scores for middle- and higher-performing eighth-graders in 2018



- NAEP reports scores at five selected percentiles to show the progress made by lower- (10th and 25th percentiles), middle- (50th percentile), and higher- (75th and 90th percentiles) performing students.
- In comparison to 2014, the 2018 overall TEL scores were higher for eighth-graders performing at the 50th, 75th, and 90th percentiles.

## ACHIEVEMENT-LEVEL RESULTS

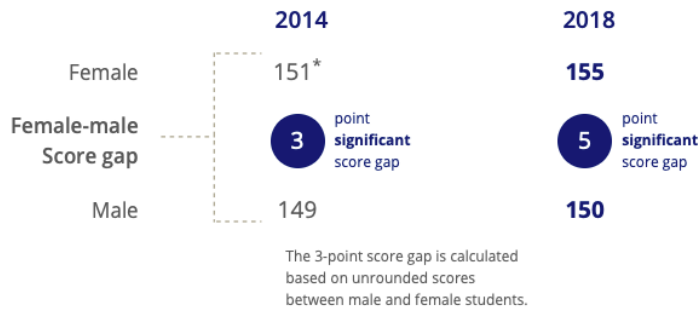
### Higher percentage of eighth-graders at or above *NAEP Proficient* compared to 2014



- In 2018, forty-six percent of eighth-grade students performed at or above the *NAEP Proficient* level in TEL compared to 43 percent of students in 2014.

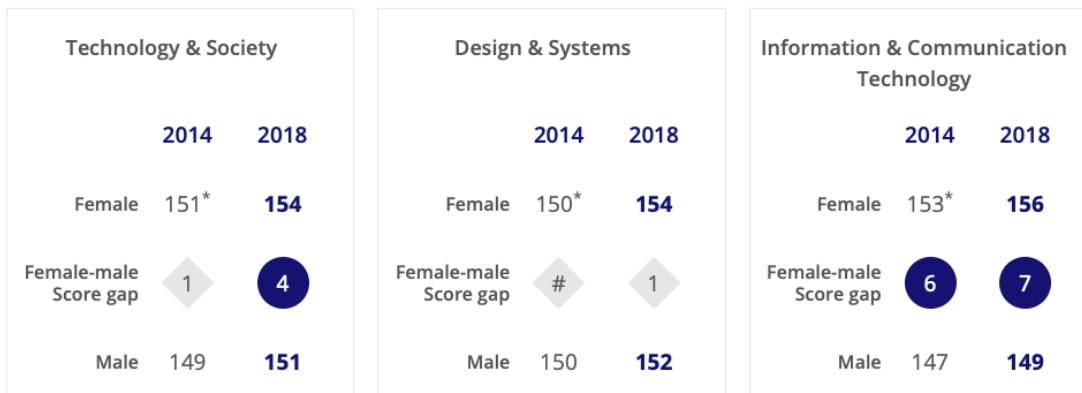
# Female students outperformed male students in TEL

## TEL Overall



- In 2018, female students scored higher than their male peers in TEL overall. Female students also scored higher than their male peers in more content areas and practices in 2018 compared to 2014.

## TEL Content Areas



## TEL Practices



NOTE: Score gaps are calculated based on unrounded scores between male and female students.

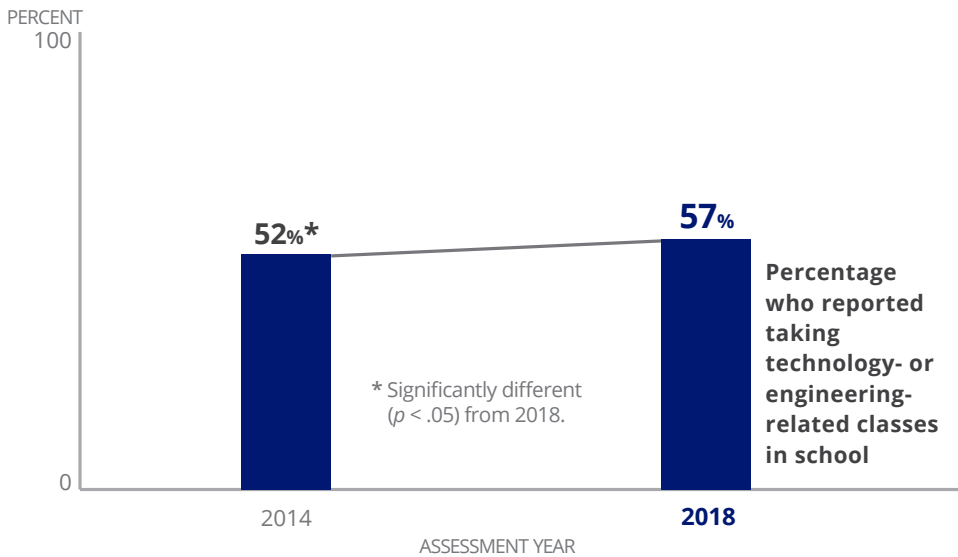
# Rounds to zero.

\* Significantly different ( $p < .05$ ) from 2018.

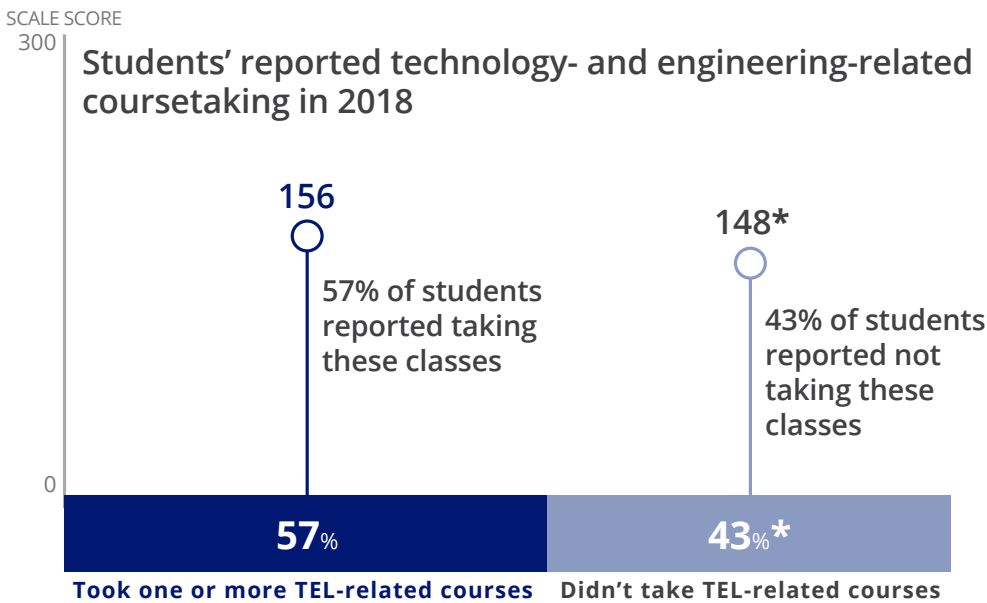
● Significant difference

◇ No significant difference

## A higher percentage of students reported taking at least one course related to technology or engineering compared to 2014



- Fifty-seven percent of eighth-graders reported taking at least one class related to technology or engineering in 2018, an increase of 5 percentage points compared to 2014.



- Students who reported taking at least one technology- or engineering-related class in 2018 had a higher TEL score on average than those who reported not taking any of these classes.

\* Significantly different ( $p < .05$ ) from values for students taking one or more TEL-related courses.