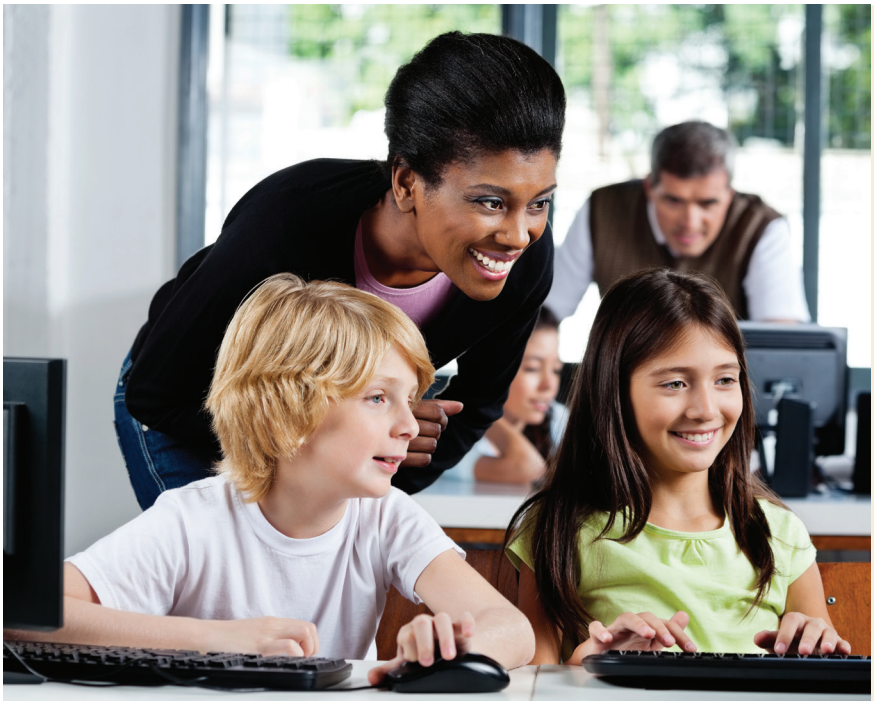
Measure Up

NAEP News for the School Community

NAEP
NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS

In This Edition

Fall 2016



What's Happening in the World of NAEP?

Fall 2016

- Results from the NAEP 2015 science assessment conducted in grade 8 will be released.

Winter 2017

- Assessment window: January 30–March 10, 2017
- Grades 4 and 8: Mathematics, reading, and writing
- Pilot assessments on tablets – Grade 8: Civics, geography, mathematics, reading, U.S. history

Technology & Engineering Literacy (TEL) Assessment

In 2014, about 21,500 eighth-grade students across the nation were administered the technology & engineering literacy (TEL) assessment. Results of this innovative assessment were released in May 2016. The TEL assessment is completely computer-based and presents interactive real-world scenario-based tasks involving technology and engineering challenges. Students were asked to respond to questions aimed at assessing their knowledge and skill in understanding technological principles, solving technology and engineering-related problems, and using technology to communicate and collaborate. Students were also surveyed on their opportunities to learn about technology and engineering in and out of school.

Learn more about the 2014 TEL assessment and its results at http://www.nationsreportcard.gov/tel_2014.

For more information about NAEP, visit: http://nces.ed.gov/nationsreportcard

Find us on: YouTube

TEL Scenario-Based Task Samples

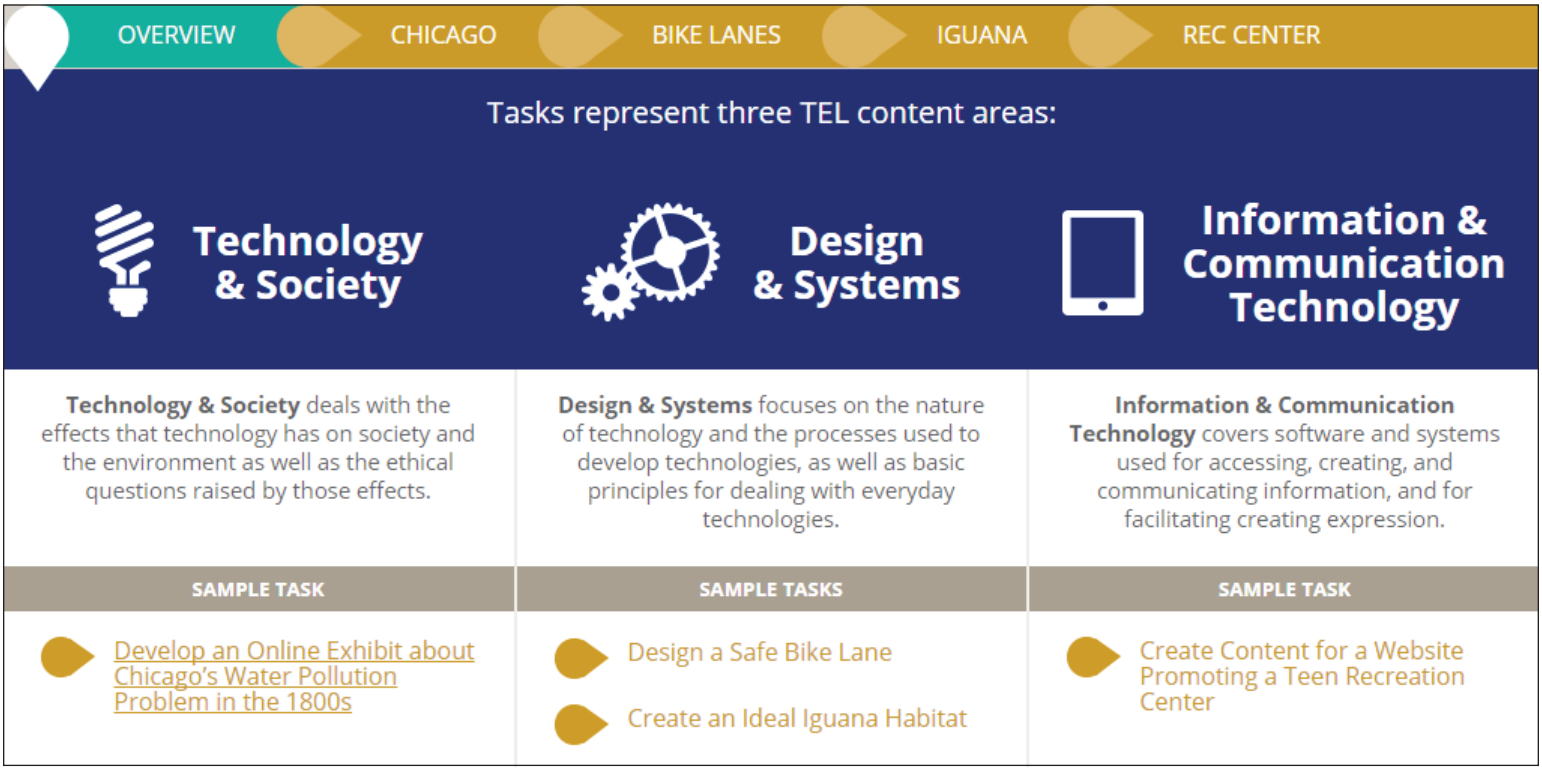
In the NAEP TEL assessment, eighth-grade students were tested using computer simulations of technology and engineering problem-solving tasks set in a variety of real-world contexts to solve problems across three content areas – Technology & Society; Design & Systems; and Information & Communication Technology and three practices – Understanding Technological Principles; Developing Solutions & Achieving Goals; and Communicating & Collaborating.

Some tasks measured student performance in one content area and practice while other tasks measured more than one content area or practice. The assessment included long tasks (about 30 minutes) and short tasks (about 10 to 20 minutes). Tasks were designed to be accessible to all students so they could progress through each task to completion and demonstrate their TEL knowledge and skills.

The TEL assessment also included interactive discrete questions, single individual questions that were not part of a scenario. See examples of the discrete questions in the NAEP Questions Tool. Explore how selected items are mapped on the NAEP TEL scale by using Item Maps.

Select the links or image below to experience a TEL task as students did:

- Develop an online exhibit about Chicago's water pollution problem in the 1800s
- Design a safe bike lane
- Evaluate and explain how to fix the habitat of a classroom iguana
- Create website content to promote a teen recreation center



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

Digitally Based Assessments – Maintaining Trend Lines

In 2017, the National Assessment of Educational Progress (NAEP) program will administer mathematics and reading assessments to students in grades 4 and 8. Most students will take the assessment on tablets with keyboards provided by NAEP representatives. A small subset of students, in a session separate from those taking the assessment on tablets, will take paper-and-pencil versions of the assessment. Administering these assessments via both tablet and paper and pencil will help NAEP evaluate any differences in student performance between the two types of administration.

Comparing results from paper and digitally based versions of the same assessment content will allow NAEP to establish a link between administration modes and help its audiences interpret performance trends across the transition from paper to digital delivery. NAEP studied the mode effect during and after NAEP 2015 to provide additional information that NAEP's trend links remain meaningful indicators of changes in student performance over time.

Maintaining trend lines (the ability to compare performance results from one year to another) is a priority. To do this, NAEP uses a multistep process to move from paper to digital technology to protect trend reporting. The process involves two stages of piloting before administering an operational digitally based NAEP assessment:

Stage 1. Adapt the paper-based questions for tablet delivery and pilot them in the same year as a main paper-based NAEP administration. Comparing results from paper and digitally based versions of the same assessment content will allow NAEP to establish a link between administration modes and help interpret performance trends across the transition from paper to digital delivery.

Stage 2. Develop new assessment questions and innovative question types and tasks that make use of digital technologies. The new digital assessment content will be gradually introduced into the assessment after studying the effects of including these new items and item types.

Results will be released at the national, state, and TUDA levels. It will be the first time that NAEP will report state and TUDA data collected via tablets. Each student will be assessed in only one subject and in one type of administration. NAEP representatives will bring all necessary materials and equipment to schools on assessment day. Schools will only need to provide space for students to take the assessment, desks or tables, and an adequate number of electrical outlets in the assessment location. Schools will not need to provide internet access.

NAEP will also administer writing assessments on tablets with keyboards at grades 4 and 8. Some students in these schools will be selected for pilot assessments on tablets for mathematics and reading at grades 4 and 8, and civics, geography, and U.S. history at grade 8 only. Results from these pilot assessments will not be released but will be used to inform future NAEP assessments.

Learn more about digitally based assessments at http://nces.ed.gov/nationsreportcard/dba.

Online Resources

What's Happening in the World of NAEP?	
Mathematics assessment	http://nces.ed.gov/nationsreportcard/mathematics
Reading assessment	http://nces.ed.gov/nationsreportcard/reading
Writing assessment	http://nces.ed.gov/nationsreportcard/writing
Science assessment	http://nces.ed.gov/nationsreportcard/science
Technology & Engineering Literacy (TEL)	
Technology & engineering literacy assessment	http://www.nationsreportcard.gov/tel_2014/#about/overview
Problem-solving tasks	http://www.nationsreportcard.gov/tel_2014/#about/focus/framework
Content areas and practices	http://www.nationsreportcard.gov/tel_2014/#about/areas
NAEP Questions Tool	http://nces.ed.gov/NationsReportCard/nqt
NAEP Item Map	http://nces.ed.gov/nationsreportcard/itemmaps/?subj=TEL&grade=8&%20year=2014
Sample scenario-based tasks"	http://www.nationsreportcard.gov/tel_2014/#tasks/overview
Digitally Based Assessments (DBA)	
Digitally based assessment (DBA)	http://nces.ed.gov/nationsreportcard/dba

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