National Assessment of Education Progress (NAEP) 2019 Overview and Update

Kim Ackermann
Texas NAEP State Coordinator
Agenda

- NAEP defined
- Overview of 2019
- NAEP 2019 Inclusion Policies for SD and ELL
- Latest Results – 2017
- NAEP on Social Media
- International Update
- Resources
What is NAEP?

- Congressionally mandated since 1969
- Assesses reading, math, science, writing, social studies, economics, arts (grades 4, 8, & 12)
- A representative sample of students
- Low stakes: used to make comparisons between states and measure student progress over time
NAEP 2019 Program Overview
Overview of NAEP 2019

- Reading and mathematics at grades 4 and 8—completely Digitally Based Assessment (DBA)
- Continue transition to DBAs for grade 12 reading and mathematics, science at grades 4, 8, and 12
- Pilots in mathematics, reading and vocabulary in grades 4 & 8
- Special Studies
### NAEP 2019 Assessment Components

<table>
<thead>
<tr>
<th>Subject/Study</th>
<th>Grades</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operational Assessments</strong></td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>4, 8, 12</td>
</tr>
<tr>
<td>Reading</td>
<td>4, 8, 12</td>
</tr>
<tr>
<td>Science (including Hands on Tasks—HOTS)</td>
<td>4, 8, 12</td>
</tr>
<tr>
<td><strong>Pilots</strong></td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>4, 8</td>
</tr>
<tr>
<td>Reading</td>
<td>4, 8</td>
</tr>
<tr>
<td>Vocabulary</td>
<td>4, 8</td>
</tr>
<tr>
<td><strong>Special Studies</strong></td>
<td></td>
</tr>
<tr>
<td>National Indian Education Study (NIES)</td>
<td>4, 8</td>
</tr>
<tr>
<td>Computer Accessibility and Familiarity Study (CAFS)</td>
<td>4, 8, 12</td>
</tr>
<tr>
<td>Socioeconomic Status—Student Questionnaire (SES-SQ)</td>
<td>4, 8</td>
</tr>
<tr>
<td>Middle School Transcript Study (MSTS)</td>
<td>8</td>
</tr>
<tr>
<td>High School Transcript Study (HSTS)</td>
<td>12</td>
</tr>
</tbody>
</table>
NAEP 2019 Operational Assessments

- Mathematics
  - Grades 4 and 8—national, state, TUDA
  - Grade 12—national

- Reading
  - Grades 4 and 8—national, state, TUDA
  - Grade 12—national

- Science
  - Grades 4, 8, and 12—national
NAEP 2019 Pilot Assessments

- Mathematics
  - Grades 4 and 8—national
- Reading
  - Grades 4 and 8—national
- Vocabulary
  - Grades 4 and 8—national
# NAEP 2019 Program

<table>
<thead>
<tr>
<th>State/TUDA Grades 4 &amp; 8</th>
<th>National Grades 4 &amp; 8</th>
<th>National Grade 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>State/TUDA</td>
<td>State/TUDA</td>
<td>National</td>
</tr>
<tr>
<td>Puerto Rico</td>
<td>Pilot (+ Vocabulary)</td>
<td>National</td>
</tr>
<tr>
<td>Reading</td>
<td></td>
<td></td>
</tr>
<tr>
<td>State/TUDA</td>
<td>Pilot</td>
<td></td>
</tr>
<tr>
<td>Science</td>
<td>National</td>
<td></td>
</tr>
</tbody>
</table>

## Assessment Details

- 📱 = 2 sessions of about 25 students each, 📱 = 1 session of about 25 students, 📱 = 2 sessions of about 21 students each. All tablet sessions last approximately **120 minutes**.

- ✍️ = 1 session of about 12 to 13 students, ✍️ = 1 session of about 33 students. All paper sessions last approximately **90 minutes**.

**Special Studies** = Computer Access and Familiarity Study, Socioeconomic Status (SES) Student Questionnaire, High School Transcript Study, Middle School Transcript Study, NAEP Field Trials

**Assessment window** = 1/28/19 – 3/8/19
National, state, TUDA
- DC, DoDEA and Puerto Rico (PR mathematics only)
- All DBA
  » Standard DBA sections:
    - Two 30-minute cognitive sections
    - One 15-minute student questionnaires section
    - Total about 120 minutes

» NAEP-provided tablets
» Two sequential sittings of 25 students per school (typical) for a total of 50 students
NAEP 2019 Operational: Science at Grades 4 and 8

- National
- DBA
  » NAEP-provided tablets
  » Two sequential sittings of 25 students per school for a total of 50 students

- PBA
  » One session of 12-13 students—all science

- Administered in separate sample of schools along with reading, mathematics & vocabulary pilots
NAEP 2019 Operational: Reading, Mathematics, and Science at Grade 12

- National
- DBA
  » NAEP-provided tablets
  » Two sequential sittings of 21 students per school for a total of 42 students
- PBA
  » One session of 33 students
Science Hands-On Tasks (HOTS)

- Students perform tasks with science equipment and answer questions in eNAEP
- Can be in same setting as other students
- Science HOTS is DBA only
Special Studies

National Indian Education Study (NIES)

- Purpose: Provide valuable information on the educational achievement and experiences of American Indian and Alaska Native (AI/AN) students at grades 4 and 8
- In grades 4 and 8 operational sample
- Additional student questionnaire in DBA for AI/AN students
Purpose: examine relationship between student’s familiarity with electronic devices and achievement

Grades 4, 8, and 12 national sample

Additional short student questionnaire administered at end of DBA and PBA for students in selected schools
Special Studies

Socioeconomic Status—Student Questionnaire Study (SES-SQ)

- Purpose: improve NAEP’s measurement of SES and to develop survey items that are more inclusive of students living in diverse households
- Grades 4 and 8 national sample
- Additional short student questionnaire administered at end of DBA for students in selected schools
Special Studies

Middle School Transcript Study (MSTS)

- Purpose: analyzes middle school (grades 6, 7 and 8) student course taking patterns and examines their relationship to achievement on eighth-grade NAEP
- Grade 8 TUDAs
- Electronic transcripts
- NAEP TUDA Coordinators involved
Special Studies

High School Transcript Study (HSTS)

- Purpose: analyzes transcripts from a nationally representative sample of high school graduates to provide information about course taking patterns and examines relationships with educational achievements through the link to NAEP data.
- Grade 12 national sample
- Electronic transcripts where possible
NAEP 2019 Inclusion Policies for SD and ELL
NAEP Inclusion Policy

- Adopted March 2010
- Purpose of the policy
  - Reduce variation in exclusion rates for SD and ELL across jurisdictions
  - Develop uniform national rules for including students on NAEP
  - Ensure NAEP is fully representative of SD and ELL
  - Maximize student participation in NAEP
Students with Disabilities (SD)

- Only SD who participate in STAAR Alternate 2 may be excluded from NAEP
- All other SD should participate with or without NAEP allowed accommodations
- Only students on an Individualized Education Plan (IEP) or Section 504 Plan can receive accommodations on NAEP
English Language Learners (ELL)

- Only ELL students who have been enrolled in U.S. schools for less than 1 full academic year before the NAEP assessment and cannot access NAEP may be excluded from NAEP.
- All other ELL students should participate in NAEP with or without NAEP allowed accommodations.
- Formerly ELL students cannot receive accommodations on NAEP.
Reporting Goals

- Reported for the first time in the NAEP 2011 report cards
- Goal to include 95% of all students
  - Denominator is all students
- Goal to include 85% of SD and ELL
  - Denominator is SD or ELL students
- Reported for all operational assessments at the national-level and in state years at the state and TUDA levels.
Texas

NAEP 2017 Results
The results of NAEP are released as The Nation’s Report Card.
- The report card provides national, state, and district-level results, results for different demographic groups, inclusion information, and sample questions.

NAEP Results are reported in two formats
- Average Scale Scores
  » Numeric scale
  » 0 – 500 on mathematics and reading assessments
  » Scores cannot be compared across content areas
- Achievement Levels
  » Categorical scale
  » Below Basic, Basic, Proficient, Advanced
Grade 4 Mathematics Results
Average Scale Scores

Grade 4

*Significantly different (p < .05) from 2017.
State Comparisons

Grade 4

2017 Texas average score (0-500)

TX 241

11 jurisdictions performed significantly higher
19 jurisdictions not significantly different
21 jurisdictions performed significantly lower
0 jurisdictions no assessment / data not available

Mathematics, grade 4
Difference in average scale scores between all jurisdictions and Texas, for All students [TOTAL], 2017
## Student Group Score

### Grade 4

<table>
<thead>
<tr>
<th>Year</th>
<th>Jurisdiction</th>
<th>White</th>
<th>African American</th>
<th>Hispanic</th>
<th>Asian/Pacific Island</th>
<th>American Indian</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>National Public</td>
<td>248</td>
<td>223</td>
<td>229</td>
<td>258</td>
<td>228</td>
</tr>
<tr>
<td></td>
<td>Texas</td>
<td>253 (8th)</td>
<td>229 (6th)</td>
<td>236 (5th)</td>
<td>265</td>
<td>‡</td>
</tr>
</tbody>
</table>

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</thead>
<tbody>
<tr>
<td>2015</td>
<td>National Public</td>
<td>248</td>
<td>224</td>
<td>230</td>
<td>256</td>
<td>228</td>
</tr>
<tr>
<td></td>
<td>Texas</td>
<td>255 (4th)</td>
<td>233 (2nd)</td>
<td>239 (4th)</td>
<td>271</td>
<td>‡</td>
</tr>
</tbody>
</table>

‡ Reporting standards not met.
Grade 8 Mathematics Results
Average Scale Scores

Grade 8

*Significantly different (p < .05) from 2017.
State Comparisons

Grade 8

2017 Texas average score (0-500)

TX 282

18 jurisdictions performed significantly higher
17 jurisdictions not significantly different
16 jurisdictions performed significantly lower
0 jurisdictions no assessment/data not available

Mathematics, grade 8
Difference in average scale scores between all jurisdictions and Texas, for All students [TOTAL], 2017
# Student Group Score

**Grade 8**

<table>
<thead>
<tr>
<th>Year</th>
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</thead>
<tbody>
<tr>
<td>2017</td>
<td>National Public</td>
<td>292</td>
<td>260</td>
<td>268</td>
<td>310</td>
<td>268</td>
</tr>
<tr>
<td></td>
<td>Texas</td>
<td>297 (7th)</td>
<td>266 (7th)</td>
<td>274 (8th)</td>
<td>322</td>
<td>‡</td>
</tr>
<tr>
<td>2015</td>
<td>National Public</td>
<td>291</td>
<td>260</td>
<td>269</td>
<td>305</td>
<td>267</td>
</tr>
<tr>
<td></td>
<td>Texas</td>
<td>298 (6th)</td>
<td>267 (6th)</td>
<td>277 (4th)</td>
<td>312</td>
<td>‡</td>
</tr>
</tbody>
</table>

‡ Reporting standards not met.
Grade 4 Reading Results
Average Scale Scores

Grade 4

*Significantly different (p < .05) from 2017.
State Comparisons

2017 Texas average score (0-500)

TX 215

35 jurisdictions performed significantly higher
14 jurisdictions not significantly different
2 jurisdictions performed significantly lower
1 jurisdiction no assessment / data not available

Reading, grade 4
Difference in average scale scores between all jurisdictions and Texas, for All students [TOTAL], 2017
## Student Group Score

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<td>231</td>
<td>205</td>
<td>208</td>
<td>238</td>
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</tr>
<tr>
<td></td>
<td>Texas</td>
<td>231 (23rd)</td>
<td>210 (9th)</td>
<td>206 (32nd)</td>
<td>238</td>
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<td>238</td>
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<tr>
<td></td>
<td>Texas</td>
<td>235 (12th)</td>
<td>205 (23rd)</td>
<td>210 (23rd)</td>
<td>248</td>
<td>‡</td>
</tr>
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</table>

‡ Reporting standards not met.
Grade 8 Reading Results
Average Scale Scores

![Graph showing average scale scores from 2003 to 2017 for National Public and Texas, with proficiency and basic levels indicated.]

*Significantly different (p < .05) from 2017.
State Comparisons

2017 Texas average score (0-500)

**TX 260**

- **34** jurisdictions performed significantly higher
- **14** jurisdictions not significantly different
- **3** jurisdictions performed significantly lower
- **0** jurisdictions no assessment / data not available

Reading, grade 8

Difference in average scale scores between all jurisdictions and Texas, for All students [TOTAL], 2017
# Student Group Score

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<td>253</td>
</tr>
<tr>
<td></td>
<td>Texas</td>
<td>271 (37th)</td>
<td>247 (21st)</td>
<td>254 (31st)</td>
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<td>Texas</td>
<td>274 (21st)</td>
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<td>252 (35th)</td>
<td>283</td>
<td>‡</td>
</tr>
</tbody>
</table>

‡ Reporting standards not met.
NAEP on Social Media
Current Landscape

- Since 2011, NAEP has gained...
- 7,800+ Twitter followers
- 1,600+ Facebook fans
- 190+ YouTube subscribers
- 50 Vine followers
Who Are Our Twitter Followers?

- Teachers: 18%
- Advocates: 6%
- Associations: 8%
- Education Software Companies: 5%
- Journalists/Media: 3%
- Others/No Bio: 38%
- Principals: 6%
- Consultants: 5%
- Researchers: 7%
- Superintendents: 1%
- Schools: 3%

- Total: 100%
**NAEP on Twitter**

Fun math fact of the day. #IWD2015

8th-grade girls who talked about their studies at home more than 2-3 times a week scored higher in math than those who didn’t.

[nationsreportcard.gov](http://nationsreportcard.gov)
NAEP on Facebook
NAEP on YouTube
- Visit NAEP:
  - http://nationsreportcard.gov

- Follow NAEP:
What is Up and Coming in International Assessments
## International Studies in 2018-2019

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Subjects</th>
<th>Grade or Age Level</th>
<th>Administration Window</th>
<th>Recruitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIMSS</td>
<td>Mathematics and Science</td>
<td>4 and 8</td>
<td>April—May 2019</td>
<td>May 2018 (with NAEP)</td>
</tr>
<tr>
<td>IELS</td>
<td>Emergent Literacy, Emergent Numeracy, Self-Regulation, and Empathy/Trust</td>
<td>Kindergarten</td>
<td>Fall 2018</td>
<td>Winter/Spring 2018</td>
</tr>
<tr>
<td>PISA</td>
<td>Reading, Mathematical and Science Literacy</td>
<td>15-year olds</td>
<td>Fall 2018</td>
<td>Winter/Spring 2018</td>
</tr>
</tbody>
</table>
PISA Overview

- Rotating topics: reading, mathematics, and science literacy; other subjects also offered (problem solving, financial literacy)
- Administered every 3 years
- Target population: Students aged 15 years (mostly in grades 9 and 10)
- Coordinated by the Organization for Economic Cooperation and Development (OECD)
- International contractors, led by ETS
TIMSS Overview

- Trends in mathematics and science achievement
- Students in grade 4, 8, and 12
- Administered every 4 years at grades 4 and 8
- Coordinated by the International Association for the Evaluation of Educational Achievement (IEA)
- International contractors, led by Boston College
- National contractors, led by Westat
PIRLS Overview

- Coordinated by the International Association for the Evaluation of Educational Achievement (IEA) and Study Directors located at Boston College
- In 2011, 53 education systems participated
- Literacy at grade 4 (informational and literary texts)
- Open-ended and multiple-choice format questions
- Student, teacher, and school questionnaires
International Computer and Information Literacy Study (ICILS)

- Computer-based assessment for 8th-graders and questionnaires for students, teachers, and principals
- Assessment:
  - Computer and information literacy (CIL): “an individual’s ability to use computers to investigate, create, and communicate in order to participate effectively at home, at school, in the workplace, and in society”
    - **Digital information** – focuses on understanding computers, gathering information, producing information, and digital communications
    - **Computational thinking** – focuses on conceptualizing problems and operationalizing solutions, the style of thinking used when programming a computer or developing an application for another type of digital device
International Activities Program

What’s available on the website?

[Website screenshot]

http://nces.ed.gov/surveys/international/
For More Information

NCES
http://nces.ed.gov/

NCES International Activities Program
  ▪  http://nces.ed.gov/surveys/international/

International Table Library
http://nces.ed.gov/surveys/international/table-library.asp

International Data Explorer
http://nces.ed.gov/surveys/international/ide/
The NAEP Questions Tool enables users to explore more than 2000 released questions, student responses, and question-level data across multiple content areas. 
http://nces.ed.gov/nationsreportcard/ITMRLS/

NAEP Item Maps help to illustrate what students know and can do in NAEP subject areas by positioning descriptions of individual assessment items along the NAEP scale at each grade level. 
http://nces.ed.gov/nationsreportcard/itemmaps/
The NAEP Data Explorer (NDE) is a web-based application for accessing NAEP data. [http://nces.ed.gov/nationsreportcard/naepdata/](http://nces.ed.gov/nationsreportcard/naepdata/)

The NAEP State Comparisons Tool lists states and jurisdictions according to average scale scores of students overall and average scale scores of selected student subgroups for a specific year. [http://nces.ed.gov/nationsreportcard/nde/statecomp/](http://nces.ed.gov/nationsreportcard/nde/statecomp/)
Contact Information

– Texas Education Agency – Student Assessment
  – Kim Ackermann, NAEP Coordinator
  – Kim.Ackermann@tea.texas.gov
  – 512-463-9536

– [www.mynaep.com](http://www.mynaep.com) (MySchool Web Site)

– NAEP Help Desk 1-800-283-6237 or naephelp@westat.com Monday through Friday between 8 a.m. and 5 p.m. ET.