



NATIONAL ASSESSMENT  
OF EDUCATIONAL  
PROGRESS

# NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS (NAEP) READING ASSESSMENT

## Summary of Frameworks and Assessment Design

### Chronology of NAEP Reading assessment administration

- National and State samples:
  - Grade 12 at the national level in 1996, 2000, 2005, 2009, 2011, and 2013. Grade 12 at the state level was administered for the first time in 11 states in 2009. In 2013 it will be administered in 13 states as a state assessment and a national assessment.
  - Grade 4 in 1992, 1994, 1998, 2002, 2003, 2005, 2007, 2009, 2011 and 2013. (Reading was assessed in 2000 but Florida did not participate).
  - Grade 8 in 1998, 2002, 2003, 2005, 2007, 2009, 2011, and 2013.
- TUDA samples:
  - TUDA Grades 4 and 8 in 2002, 2003, 2005, 2007, 2009, 2011, and 2013.

### Students chosen to be assessed in NAEP

- NAEP assessments are administered to a stratified random sample of students from grades 4, 8, and 12.
- Both public school and nonpublic school students are assessed at the national level.
- At the state level, only the results of public school students in grades 4 and 8 are reported.
- Fifty-two jurisdictions participate in the NAEP Reading assessment—the 50 states, the District of Columbia Public Schools, and the Department of Defense Activity schools.
- Accommodations are offered to English language learners (ELLs), students with a 504 plan, and students with disabilities (SD) who have Individual Education Plans (IEPs). The most typical accommodations include:
  - extra testing time
  - individual or small-group administrations
  - large-print booklets

### Reading content assessed

- All NAEP frameworks are developed under the guidance of the National Assessment Governing Board (NAGB).
- A new NAEP Reading framework was used for the 2009 National Assessment of Educational Progress Reading assessment. A bridge study was part of the 2009 assessment, the results of which determined that the trend line, begun in 1992, could continue.

- A framework specifies what is to be assessed and how it is to be assessed. The new reading framework can be accessed at <http://www.nagb.org/publications/frameworks/reading-2011-framework.pdf>.
- A NAEP framework does not specify how a subject should be taught nor does it prescribe a particular curricular approach to teaching.
- The NAEP Reading assessment measures student reading comprehension in English and the ability to apply vocabulary knowledge to assist in comprehending what is read.
- The NAEP reading framework provides a broad definition of reading that includes:
  - understanding written texts
  - developing and interpreting meaning
  - using meaning as appropriate to type of text, purpose, and situation
- Two types of texts are included on the assessment:
  - literary texts
    1. fiction
    2. literary nonfiction
    3. poetry
  - Informational texts
    1. exposition
    2. argumentation and persuasive text
    3. procedural texts and documents

#### **Distribution of Items by Type of Text and Grade**

| <b>Grade</b> | <b>Literary</b> | <b>Informational</b> |
|--------------|-----------------|----------------------|
| <b>4</b>     | <b>50</b>       | <b>50</b>            |
| <b>8</b>     | <b>45</b>       | <b>55</b>            |
| <b>12</b>    | <b>30</b>       | <b>70</b>            |

- The NAEP Reading assessment includes vocabulary items. The assessment of vocabulary occurs in the context of the passage and functions as a:
  - measure of passage comprehension
  - test of a reader's specific knowledge of a word's meaning as intended by the passage author
- The reading framework defines reading as an active and complex process that involves:
  - three contexts of reading
    1. understanding written text
    2. developing and interpreting meaning
    3. using meaning as appropriate to type of text, purpose, and situation
  - three cognitive targets referring to the kinds of thinking that underlie reading comprehension
    1. locate/recall
    2. integrate/interpret
    3. critique/evaluate

### Percentage Distribution by Cognitive Targets and Grade

| Grades | Locate/Recall | Integrate/Interpret | Critique |
|--------|---------------|---------------------|----------|
| 4      | 30            | 50                  | 20       |
| 8      | 20            | 50                  | 30       |
| 12     | 20            | 45                  | 35       |

### Reading assessment administration

- Assessment takes approximately 90 minutes to administer. This includes two separately timed blocks of items, each 25 minutes in length, and background questions.
- Students are given assessment booklets containing reading passages and comprehension questions.
- Passages are 200 to 800 words in length at grade 4; 400-1,000 words at grade 8; and 500-1,500 words at grade 12.
- Questions are presented in two formats:
  - multiple-choice
  - constructed-response
    - short answer constructed-response questions - require a one- or two-sentence answer
    - extended answer constructed-response questions - require a paragraph or full-page response

### Item Construction by Type of Format and Grade

| Grade           | Multiple-Choice | Constructed Response |
|-----------------|-----------------|----------------------|
| Grade 4         | 50%             | 50%                  |
| Grades 8 and 12 | 40%             | 60%                  |

### Distribution by Time to Be Spent on Specific Item Types

| Grade | Multiple-Choice | Short Constructed Response | Extended Constructed Response |
|-------|-----------------|----------------------------|-------------------------------|
| 4     | 50%             | 40%                        | 10%                           |
| 8     | 40%             | 45%                        | 15%                           |
| 12    | 40%             | 45%                        | 15%                           |

- Because each block is spiraled with other blocks and is administered to a representative sample of students, the results can be combined to produce average group and subgroup results based on the entire assessment.
- Background questions gather information that is used for analyzing a number of student demographic and instructional factors related to student achievement. Questions such as, “How many books are there in your home?” are asked and four different number ranges are provided for the student to choose from.
- The reading assessment cannot be read aloud, and no alternate language version is available for Florida students since the assessment measures reading in English.

## Scoring criteria for constructed-response items used on all NAEP assessments

- Unique scoring guides are developed for each question.
- Scoring guides describe the specific criteria for assigning a score level to student responses.
- Scoring process:
  - Expert scorers are extensively trained how to determine what score level to assign to student responses.
  - Scoring is monitored to ensure the scoring standards are being adhered to reliably
  - Monitoring measures the consistency of scoring the same items administered in different assessments—therefore ensuring consistency of application standards across assessment years
  - The percentage of exact agreement among raters of the same student responses are tracked

## Reporting NAEP scores on all NAEP assessments

- Results are used to compile national, state, and selected urban district data. No results are generated for schools or individual students.
- National results reflect the performance of all grades 4, 8, and 12 students in public schools, private schools, Bureau of Indian Education (BIE) schools, and Department of Defense Activity schools.
- National Public and State results reflect the performance of students in public schools in grades 4 and 8.
- Overall results are reported for various groups of students: by race/ethnicity, eligibility for the National School Lunch Program, students with disabilities (SD), English language learners (ELL), and by gender.
- NAEP reports scores in two different ways: average scale scores and achievement levels. Both scores are based on the performance of samples of students, not the entire population.
- Reading average scale scores indicate how much a student *knows and can do* based on a 0–500 scale. The scores are reported as:
  - Average scale scores (range from 0–500)
  - Percentiles (10<sup>th</sup>, 25<sup>th</sup>, 50<sup>th</sup>, 75<sup>th</sup>, and 90<sup>th</sup>), which show trends in performance for lower-, middle-, and higher-performing students
- Achievement levels
  - offer a means of identifying percentages of students who have demonstrated certain proficiencies
  - are performance standards based on scale scores and define the degree to which student performance meets expectations of what students *should know and be able to do*
  - are set by NAGB
    - *Advanced* represents superior performance
    - *Proficient* represents solid academic performance. Students reaching this level have demonstrated competency over challenging subject matter

- *Basic* denotes partial mastery of prerequisite knowledge and skills that are fundamental for proficient work at a given grade
- Below *Basic* is reported, but is not considered to be an achievement level.
- Achievement-level descriptors for grade 4 reading can be found at <http://nces.ed.gov/nationsreportcard/reading/achieveall.asp#grade4>
- Achievement-level descriptors for grade 8 reading can be found at <http://nces.ed.gov/nationsreportcard/reading/achieveall.asp#grade8>
- Achievement-level descriptors for grade 12 reading can be found at <http://nces.ed.gov/nationsreportcard/reading/achieveall.asp#grade12>

### **Interpreting NAEP scores for all NAEP assessments**

- Differences between average scale scores or between achievement-level percentages are discussed in NAEP reports only when they are statistically significant. Statistically significant means it is unlikely the differences in scores occurred by chance. The differences are referred to as “significant differences” or as being “significantly different.”
- NAEP assesses a representative sample of students in each state and in selected urban districts. The number of students tested determines the standard error for a particular jurisdiction. Because of sample design, performance standard error must be considered in reporting NAEP results. Statistical tests that factor in the standard errors are used to determine whether the differences are significant at the 0.05 level.
- Estimates based on smaller groups are likely to have relatively large standard errors. In these cases, some seemingly large differences may not be statistically significant.
- Results data for all NAEP assessments can be found at the NAEP Data Explorer Web site at <http://nces.ed.gov/nationsreportcard/nde>. Reports of Florida’s NAEP results can be found at <http://www.fldoe.org/asp/naep/>.