National Assessment Governing Board

Long-term Trend

Policy Statement

It is the policy of the National Assessment Governing Board to conduct Long-term Trend assessments as part of the National Assessment of Educational Progress (NAEP), as provided for by the National Assessment of Educational Progress Authorization Act (P.L. 107-110, as amended by P.L. 107-279). The Long-term Trend assessments, which continue national trends reported for mathematics since 1973 and reading since 1971, shall maintain the high standards of technical quality of all NAEP assessments. The design, methodology, and reporting of the Long-term Trend shall adhere to the requirements outlined in the following Guiding Principles, Policies, and Procedures.

Introduction

The Long-term Trend components of NAEP have provided the public the only continuous measures of U.S. student academic achievement over a period from the late 1960s and early 1970s through the present. Subject areas have included mathematics, science, reading, and writing, assessed in the nation’s schools in random samples of students at ages 9, 13, and 17. For technical reasons, the Governing Board discontinued the Long-term Trend in writing in 1999. In order to maintain the Long-term Trend in science, technical studies are required to enable necessary changes to the design of the assessment and revisions to the item pool. For that reason, science Long-term Trend results will not be reported in 2004. As part of its overall NAEP assessment schedule, currently extending through the year 2012, the Governing Board establishes the schedule for the Long-term Trend.

Many individuals and policy organizations that use NAEP view the Long-term Trend assessment as an important part of NAEP, complementary to the main NAEP assessments regularly conducted at the national and state levels. The main assessments are designed to reflect curriculum policies and content in the nation’s schools, and, hence, are modified from time to time. Long-term Trend assessments are designed to reflect a fixed curriculum
framework established early in the NAEP program. Thus, the Long-term Trend allows for continued monitoring of content elements that might receive reduced attention in the main assessments.

The NAEP legislation specifies that the Commissioner of the National Center for Education Statistics (NCES) “shall, with the advice of the National Assessment Governing Board . . . carry out . . . a National Assessment of Educational Progress, which collectively refers to a national assessment, State assessments, and a long-term trend assessment in reading and mathematics.” Further, the Act specifies that the Commissioner shall “continue to conduct the trend assessment of academic achievement at ages 9, 13, and 17 for the purpose of maintaining data on long-term trends in reading and mathematics.” In addition, the House-Senate Conference Report states, “The Conferees intend the long-term trend assessment shall continue to be administered in the same manner as prior to the enactment of [the NAEP legislation]. Further, the Conferees intend that the Governing Board shall formulate policy for the long-term trend assessment.”

Given the importance of these mandates, it is incumbent upon the Governing Board to ensure that the highest standards of technical quality are employed in the design, methodology, and reporting of the Long-term Trend NAEP for 2004 and subsequent assessment years. At this time the Governing Board faces a major challenge. The Governing Board has already made some policy changes that affect the Long-term Trend assessment design and methodology. It is necessary to reconfigure assessment booklets, release and replace test items, replace background questions, allow accommodations for special needs students, and change administrative procedures. These changes are discussed further in some of the policies and procedures that follow. The Governing Board must make decisions about these suggested changes prior to the assembly of the Long-term Trend booklets for the 2004 assessment. This requires final decisions to be made at the May 2002 Governing Board meeting. The challenge is to make changes deemed necessary and appropriate while maintaining the mandate of the law to continue reporting the trends back to prior generations of students from the late 1960s and early 1970s.

Most of the following Guiding Principles are accompanied by Policies and Procedures to be followed by the Governing Board, NCES, and contractors in implementing NAEP Long-term Trend assessments.
Principle 1

The NAEP Long-term Trend assessments are intended to provide data on academic achievement of 9-, 13- and 17-year-old students in the nation’s schools. Content specifications for the Long-term Trend assessment instruments shall remain unchanged for assessments in 2004 and subsequent years.

Policies and Procedures

1. Mathematics and reading shall be subject areas for the Long-term Trend assessment for 2004 and subsequent years. Science results will not be reported in 2004 but new items will be developed and field tested for use in future Long-term Trend assessments.

2. The Long-term Trend content documents used for assessments through 1999 shall be assembled and the Governing Board will oversee development of a single coherent framework for each subject area. The framework documents shall be made public.

3. The Long-term Trend content frameworks shall continue to differ from the frameworks and specifications used in the main NAEP assessments in the same subject areas. The main assessments are designed to reflect current curriculum content in the nation’s schools. The Long-term Trend assessments are designed to reflect a fixed curriculum framework. Thus, the Long-term Trend assures continued monitoring of curriculum topics that might receive reduced attention in revised main NAEP frameworks.

Principle 2

To the extent feasible, the design and methodology used for the Long-term Trend assessments shall remain constant over assessment years so as to maximize comparability of results over time. When the Governing Board, in consultation with NCES, determines that a design or procedural change is necessary, a bridge study should be conducted. Data from a bridge study are used to link the scale of the revised assessment to the scale established previously, so that trend reporting may be continued.

Policies and Procedures

1. Generally, the design for test booklets and the procedures for administering them to students shall remain constant over assessment years.

2. Whenever changes in the test booklet design become necessary, a bridge study should be conducted to link scales from the new booklets to the existing scales. A bridge study is one in which two randomly equivalent samples of students are selected. One sample is assessed using the existing design and the other using the modified design. The primary purpose of a bridge study is to maintain a constant scale for trend reporting.
3. Changes to the booklet structure will require a bridge study for the 2004 assessment year.

4. Bridge studies shall be undertaken to enable the elimination of audiotape pacing of directions and questions for the Long-term Trend.

5. A structure comprising blocks of items administered in a design like that used in main NAEP shall be used in 2004 and subsequent assessments.

**Principle 3**

Test items and background variables administered in the Long-term Trend samples shall be reviewed by the Governing Board to help ensure that students’ responses continue to be effective in enabling reporting of trend.

**Policies and Procedures**

1. The Governing Board shall determine how often such review is necessary.

2. The review shall focus on whether the content of questions, directions, or reading passages require modification because they are no longer current or accurate. If the context in which skills are assessed has become less familiar to students, questions may measure something different from what was intended or may measure with less precision.

**Principle 4**

The NAEP Long-term Trend assessments for 2004 and subsequent years shall continue to be administered to random samples of students at three age levels, using sampling methodology that will allow reporting results for subgroups of students similar to those for which data have been reported in previous assessments.

**Policies and Procedures**

1. The Long-term Trend assessment shall continue to be administered to random samples of students in public and nonpublic schools in three age groups: 9 year olds, 13 year olds and 17 year olds. In general, students should not be assessed if their responses will not be used in reporting. Thus, grade samples shall no longer be assessed in 2004 and subsequent assessments.

2. The 13-year-old sample shall continue to be assessed in the fall, the 9-year-old sample in the winter, and the 17-year-old sample in the spring. Hence, for the 2004 assessment, the 13-year-old sample shall be assessed in the fall of 2003, the 9-year-old sample in the winter of 2004, and the 17-year-old sample in the spring of 2004.
3. The age definitions used in assessments prior to 2004 shall be used in 2004 and subsequent assessment years. These are:
   - Age 9: student attains 9th birthday in the calendar year of the assessment (e.g., 2004 for the 2004 assessment).
   - Age 13: student attains 13th birthday in the calendar year of the assessment (e.g., 2003 for the 2004 assessment).
   - Age 17: student attains 17th birthday between October 1st and September 30th in the school year of the assessment (e.g., between October 1st 2003 and September 30th 2004 for the 2004 assessment).

4. The time periods for testing shall be selected to be consistent with those used through the 1999 assessment. They are defined as October through December for the age 13 sample, January through mid-March for the age 9 sample, and mid-March through May for the age 17 sample.

5. Reports on the Long-term Trend assessment for 2004 and subsequent years shall provide summary data on trends for student subgroups similar to those reported through the 1999 assessment. These include gender, race/ethnicity, type of school attended (public or nonpublic), and groups formed according to responses to certain background variables (for example, parents’ level of education, course taking patterns, availability of technology and equipment in the classroom, and amount of time spent on homework). Reporting categories for additional racial/ethnic groups shall be introduced as sample sizes permit. Reporting reliable data for some subgroups may require oversampling of those subgroups.

**Principle 5**

The Long-term Trend assessment for 2004 and subsequent years shall provide for inclusion of and accommodations for students with disabilities and limited English proficient students, in accordance with the relevant policies and procedures adopted for the main NAEP assessments.

**Principle 6**

Beginning as soon as feasible, a sample of test items from each Long-term Trend assessment shall be made public.

**Policies and Procedures**

1. Release of items shall follow the Governing Board’s general principles and procedures for item release.

2. To enable the regular release of items, new items shall be developed for each Long-term Trend assessment and field tested using procedures established by the Governing Board.