



## ORIGINS OF THE PREPAREDNESS INITIATIVE

In 2002, the National Assessment Governing Board established the National Commission on NAEP 12th Grade Assessment and Reporting. This blue-ribbon panel was charged to review the National Assessment of Educational Progress (NAEP) at grade 12 and recommend improvements.

In March 2004, the panel delivered its report—*12th Grade Student Achievement in America: A New Vision for NAEP* (available at [http://www.nagb.org/publications/12\\_gr\\_commission\\_rpt.pdf](http://www.nagb.org/publications/12_gr_commission_rpt.pdf)). The panel made five recommendations, including transforming NAEP to report on the academic preparedness of 12th graders for college, job training, and the military.

The panel’s rationale was that:

1. Grade 12 is the transition point to adult pursuits, particularly postsecondary education and training.
2. For national security and economic viability, it is important for the U.S. to have an indicator of 12th-grade student achievement.
3. NAEP is trusted for its quality and integrity.
4. As the only source of nationally representative data on 12th-grade student achievement, NAEP is uniquely positioned to serve as a preparedness indicator for college and job training.

The Governing Board accepted the blue-ribbon panel’s report in March 2004 and began immediately to address whether and how NAEP could be transformed from a measure of what students know and can do to a predictive indicator of 12th-grade students’ academic preparedness. The primary and central concern has been validity—that is, whether it is technically feasible for NAEP to develop and support valid statements about 12th-grade students’ preparedness for postsecondary education and training. Toward this end, the Governing Board’s key activities have included:

- **September 2004 – February 2005:** Commissioning experts to prepare papers on specific issues in transforming NAEP as a measure of 12th-grade preparedness.
- **April 2005:** Convening Governing Board committees to study the issues and reach agreement on next steps for NAEP as a measure of preparedness.
- **May 2005:** Approving unanimously a resolution to “pursue assessment and reporting on 12th-grade student achievement as it relates to preparedness for postsecondary pursuits....”
- **November 2005:** Setting the 2009 assessments as the target for preparedness reporting and establishing the Ad Hoc Committee on Planning for NAEP 12th Grade Assessments in 2009 to recommend necessary steps.

## OVERVIEW OF NAEP 12TH GRADE PREPAREDNESS STUDIES

- **2005 – 2006:** Commissioning Achieve, Inc., to review the NAEP 12th-grade reading and mathematics frameworks and assessments for enhancements to improve NAEP as a measure of preparedness, and approving the recommendations.
- **November 2006:** Appointing the Technical Panel on 12th Grade Preparedness Research, chaired by Michael Kirst.
- **November 2008:** Accepting the Technical Panel’s final report, including the general research approach and recommendations for research studies to report 12th-grade preparedness for reading and mathematics in 2009 (see <http://www.nagb.gov/publications/PreparednessFinalReport.pdf>).
- **March 2009:** Approving a program of preparedness research studies.
- **March 2009 – Present:** Awarding contracts to carry out preparedness research and receiving research results.

## THE PROGRAM OF PREPAREDNESS RESEARCH

Based on the recommendations of the Technical Panel on 12th Grade Preparedness Research, five categories of research studies are being pursued:

- Statistical relationship studies
- Content alignment studies
- Judgmental standard-setting studies
- Higher education survey
- Benchmarking studies

**Statistical Relationship Studies:** In these studies, the same or similar samples of students take NAEP and another relevant assessment as a means of establishing statistical relationships between the two assessments. The College Board agreed to partner with the Governing Board to study the relationship between performance on the SAT in reading and mathematics and performance on 12th-grade NAEP. This provided a statistical linking of SAT and NAEP scores for all students in the 2009 12th-grade NAEP who had taken the SAT by June 2009. This study is planned for replication in 2013. In addition, there are plans to partner with ACT to conduct a similar study in 2013.

The Florida Department of Education is partnering with the Governing Board in a study analyzing data from the state’s longitudinal database for students who participated in the 12th-grade NAEP state pilot in 2009. From NAEP’s state-representative sample of Florida 12th graders, the Governing Board examined the relationship between student achievement on NAEP and the ACT, ACCUPLACER, and SAT. Also to be gathered is employment data and salary data for Florida examinees, along with course grades in college and job training programs. In 2013, the Governing Board will conduct similar studies with additional state partners: Illinois, Kentucky, Massachusetts, Michigan, and Tennessee. This will include studies examining the relationship between performance on 8th-grade NAEP and 8th-grade EXPLORE in reading and mathematics.

The need for strict confidentiality, security, and quality control on the part of all partners in these studies is extremely high. A plan to allow for electronic transfers of data has been developed that secures the identity of the students, consistent with the NAEP legislation, federal and state law, and the requirements of each assessment program.

The Governing Board continues to seek opportunities to work with the military, the world’s largest occupational training organization, to gain access to expertise and data for use in determining academic preparedness for job training programs.

## OVERVIEW OF NAEP 12TH GRADE PREPAREDNESS STUDIES

**Content Alignment Studies:** Content alignment studies are a means for determining the degree of content overlap between NAEP and another relevant test. Panels of experts, following a rigorous protocol, make judgments about the degree of match between the two assessments being examined. The alignment studies inform the interpretations of preparedness research data in relation to the statistical linking studies and help to shape the statements that can be made about preparedness. Content alignment studies have been completed that compare NAEP 12th-grade reading and mathematics assessments with the ACT, SAT, ACCUPLACER, and WorkKeys.

**Judgmental Standard-Setting Studies:** A series of judgmental standard-setting studies was conducted to produce reference points on the NAEP 12th grade reading and mathematics scales. These reference points were intended to represent the knowledge and skills in reading and mathematics associated with the academic preparedness to qualify for entry into job training programs and for placement in college credit-bearing courses.

Panels of experts in college placement and in training for five separate occupations were convened. Each of these six panels was led through a comprehensive standard-setting process to set reference points in reading and in mathematics.

The five occupational training programs were automotive master mechanic; computer support specialist; heating, ventilation, and air-conditioning technician; licensed practical nurse; and pharmacy technician.

**Higher Education Survey:** A nationally representative sample of two-year and four-year public and private postsecondary institutions was surveyed to gather information regarding the tests and cut scores in reading and mathematics used to place freshmen into entry-level credit-bearing courses or into remedial/developmental courses.

**Benchmarking Studies:** In these studies, NAEP 12th-grade assessments in reading and mathematics will be administered to specific reference groups, such as military recruits and individuals in certain job training programs. In the fall of 2010, the Governing Board conducted a small feasibility study in which NAEP was administered to a sample of Texas college freshmen in nine volunteering 2-year and 4-year postsecondary institutions. The response rate was too low to make a full-scale study with college freshmen practicable. The Governing Board continues to seek partners for benchmarking studies.

## OVERVIEW OF NAEP 12TH GRADE PREPAREDNESS STUDIES

### STATUS OF THE RESEARCH STUDIES

The following chart includes the studies in each category conducted in connection with the 2009 NAEP. The studies, taken together, are intended to comprise a coherent program of research, aimed at providing mutually confirming and cross-validating information to support NAEP reporting on the academic preparedness of 12th graders in reading and mathematics.

#### Status of Studies Recommended for 12th-Grade Preparedness Research

Studies for Reading and Mathematics	Underway	Completed
<b>Statistical Relationships Between NAEP and Other Assessments</b>		
1. National NAEP Sample and SAT Examinees: Collect Data and Produce Statistical Relationship		<b>X</b>
2. Florida Study (Collect data to link NAEP with SAT, ACT, ACCUPLACER): Collect and Analyze Data for Each Assessment and Subject. (Note: This is a multi-year study; first year analyses are complete.)	<b>X</b>	
<b>Content Alignment Studies</b>		
3. Preliminary Content Alignment Study NAEP–SAT		<b>X</b>
4. Draft Design Document for Content Alignment Studies		<b>X</b>
5. NAEP–WorkKeys Content Alignment (2 studies)*		<b>X</b>
6. ID Exemplar Job Training Programs: Military & Civilian		<b>X</b>
7. ACT Assessment and Standards for College Preparedness: Content Alignment and Item Classification (2 studies)*		<b>X</b>
8. Full-Scale NAEP–SAT Content Alignment (2 studies)*		<b>X</b>
9. Full-Scale NAEP–ACCUPLACER Content Alignment (2 studies)*		<b>X</b>
<b>Judgmental Studies</b>		
10. Panel to Set Cut Scores for Job Training in Five Exemplar Occupations (10 studies)*		<b>X</b>
11. Panel to Set Cut Scores for College Course Placement (2 studies)*		<b>X</b>
<b>Surveys</b>		
12. Survey of tests and cut scores used for placing freshmen into credit-bearing and remedial/development courses, by a nationally representative sample of postsecondary education institutions, by type of institution (2-year & 4-year; public & private).		<b>X</b>
<b>Benchmarking Studies</b>		
13. Administering 12th-Grade NAEP to Texas College Freshmen (feasibility study)		<b>X</b>

\*Separate studies were conducted for reading and for mathematics.