# Introduction to NAEP

This chapter provides a brief introduction to the National Assessment of Educational Progress (NAEP) and the NAEP 2006 program. This chapter also describes the layout of this manual.

# 1. NAEP Overview

# NAEP is the only national assessment of students in the United States performed on a continual basis.

Widely known as the "Nation's Report Card" – NAEP is the leading national assessment of what America's students know and can do in key academic subjects. NAEP, a program of the U.S. Department of Education, provides information on state and national student achievement, and how that achievement has changed over time.

NAEP is administered by the National Center for Education Statistics (NCES), a division of the U.S. Department of Education. NAEP selects representative samples of public and nonpublic schools and students to be assessed. These samples vary from year to year, depending on the number of subjects and items to be assessed. Reading and mathematics assessments occur most frequently, but assessments also cover writing, science, U.S. history, geography, civics, economics, and the arts.

# NAEP includes state and national assessments, long-term trend assessments, and ongoing special studies.

State NAEP occurs every 2 years in reading and mathematics, and in either science or writing at the fourth and eighth grades. Federal law requires all states that receive Title I funds to participate in State NAEP reading and mathematics assessments at grades 4 and 8. School districts that receive Title I funds and are selected for the NAEP sample are also required to participate.

National NAEP occurs every year and reports information for the nation and specific geographic regions of the country. It includes students drawn from both public and nonpublic schools and reports results for student achievement at grades 4, 8, and 12.

### **NAEP** is:

- an assessment at grades 4, 8, and 12 that allows student educational achievement to be compared across states and regions of the country;
- an assessment that identifies the percentages of students in the nation who meet standards for Advanced, Proficient, or Basic performance in a variety of subjects;
- a yardstick that state educators, legislators, and governors can use to gauge the effectiveness of state educational policies;
- the only reliable, ongoing measurement tool that members of Congress, the President, and other policymakers and researchers can use to review student progress during the past 30 years at the national level; and
- a source of information that allows the public to assess the academic performance of students in their state and the nation as a whole.

### **NAEP** provides:

- state and national performance results in reading, mathematics, science, and writing;
- national student performance results in U.S. history, geography, civics, the arts, world history, and economics;
- long-term trends in national student performance in reading, mathematics, and science over the past 30 years; and
- comparisons in student performance based on factors such as race/ethnicity, gender, public and nonpublic schools, level of parental education, prior course-taking, and classroom and school conditions and practices.

NAEP reports student performance nationally and for states. It does not report information on the performance of individual schools or individual students.

### A. Characteristics of NAEP

### An independent body decides what is tested.

The National Assessment Governing Board (NAGB) selects the academic subject areas to be assessed and develops content "frameworks," or test blueprints. NAGB is an independent, bipartisan group whose members include governors, state legislators, local and state school officials, educators, business representatives, and members of the general public.

### NAEP ensures confidentiality.

No information on individual students, families, or schools is included in NAEP data releases or reports. No records are kept that connect students' names with the answers they gave on the assessment. It is against federal law to identify any student participating in NAEP. The law specifies severe penalties for anyone revealing the identity of the students taking NAEP.

### Participation in NAEP is designed to cause minimal disruption of school activities.

Most students spend only 90 minutes of their time taking NAEP. No student preparation time is necessary. Assessments are conducted by NAEP staff and take place either in school classrooms or other locations in the school selected by school officials. School officials are invited to observe the assessment.

### NAEP encourages inclusion of special needs students.

The national and state NAEP assessment procedures encourage inclusion of students with disabilities (SD) and English language learners (ELL). To include the highest possible percentage of sampled students, NAEP permits most commonly offered testing accommodations for special needs students during the assessment.

#### NAEP uses a variety of assessment formats.

NAEP includes both multiple-choice and open-ended questions, which require students to write an answer that, depending on the question, can range from a few words to more than a page. Recent NAEP assessments have used stimulus materials, including mathematics manipulatives, photographs, and printed materials, to augment the traditional multiple-choice format.

# NAEP administers background information questionnaires to explore factors and practices that influence learning.

Students, teachers, and school administrators are surveyed to collect contextual background information regarding student and school characteristics, instructional practices, and curricula. NAEP asks only questions directly related to the appraisal of academic achievement. The input in the questionnaires is used only to analyze overall academic achievement. Individual performance is not evaluated.

# **B. NAEP Organizational Structure**

The chart on the next page shows the current organizational structure of NAEP. The Commissioner of Education Statistics, who heads NCES in the U.S. Department of Education, is responsible, by law, for carrying out the NAEP project through competitive awards to qualified organizations. The Associate Commissioner for Assessment at NCES executes the program operations and technical quality control.

NAGB, appointed by the Secretary of Education but independent of the U.S. Department of Education, governs the program. Authorized to set policy for NAEP, the Governing Board is broadly representative of NAEP's varied audiences. NAGB selects the subject areas to be assessed and develops guidelines for reporting. While overseeing NAEP, NAGB often works with several other organizations. For example, NAGB has contracted with the Council of Chief State School Officers (CCSSO) to ensure that content is planned through a national process and with ACT, Inc. to identify achievement standards for the subjects and grades tested.

NCES contracts with private companies for test development and administration services. Currently, Educational Testing Service (ETS) is responsible for developing the assessment instruments, analyzing the data, and reporting the results. Westat is responsible for selecting the school and student samples, and managing field operations (including training, assessment administration and data collection activities). Pearson Educational Measurement (Pearson) is responsible for printing and distributing the assessment materials and for scanning and scoring students' responses. American Institutes for Research (AIR) is responsible for developing the background questionnaires. Government Micro Resources, Inc. (GMRI) is responsible for NAEP web operations and maintenance.

# 2. The NAEP Program for 2005/2006

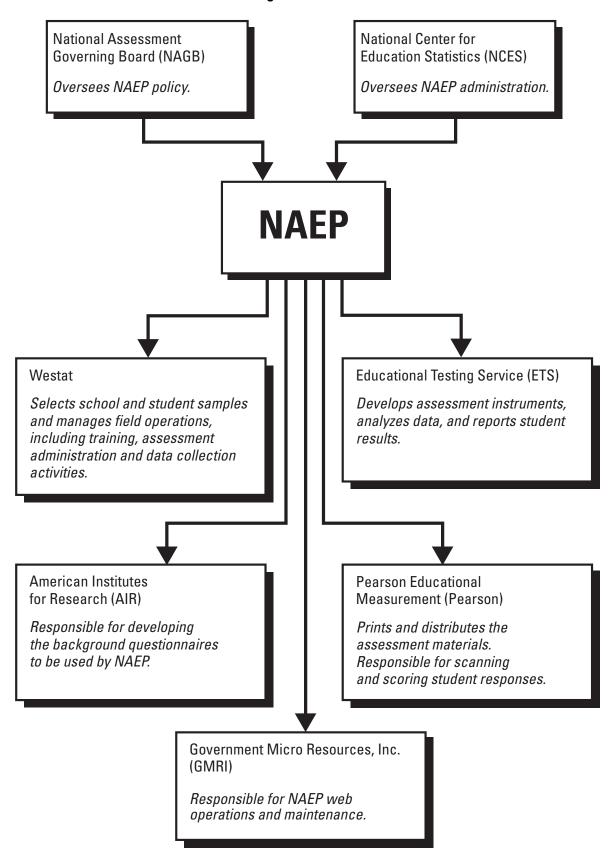
For NAEP 2006, we will be hiring and training assessment teams composed of supervisors and assessment administrators (AAs) to conduct the assessments in approximately 1,600 public and nonpublic schools. The NAEP program for the school year 2005/2006 consists of the following components:

- the operational NAEP assessment, which includes assessments in civics and U.S. history at grades 4, 8, and 12; and economics at grade 12 only,
- pilot and field test studies in reading (grades 4 and 8), mathematics (grades 4 and 8), and writing (grades 8 and 12), and
- a special study called the Sensitivity to Instruction (STI) Study (grade 8).

Page 1.6 describes these components in more detail.

To get more information about NAEP, visit the Nation's Report Card web site at http://nces.ed.gov/nationsreportcard.

# **NAEP Organizational Structure**



### A. NAEP 2006

The 2006 assessment will be conducted from January 30 through March 10, 2006, in a nationally representative sample of approximately 1,600 fourth-, eighth-, and twelfth-grade schools located throughout the United States. Approximately 90,000 students will participate in the assessment.

There are three types of assessments to be conducted in 2006: operational, pilot, and field test.

The 2006 operational assessment consists of National NAEP and is the only study that will produce reports. The subjects for National NAEP this year are civics and U.S. history at grades 4, 8, and 12, and economics at grade 12 only.

Pilot test and field test subjects include writing at grades 8 and 12, and reading and mathematics at grades 4 and 8. The purpose of the pilot and field tests is to test new items and procedures in preparation for the 2007 assessment.

Although you will be aware of the different assessment components, the distinction between these components as separate studies will not be apparent in the majority of schools.

All assessment subjects and components (operational, pilot test, and field test) will require approximately 90 minutes to administer to students, including the distribution and collection of materials. All subjects from all components <a href="except U.S. history">except U.S. history</a> will be combined and administered in the same sessions in the same schools. U.S. history must be administered in a separate session because the session scripts used for conducting the history assessment are different from all the other subjects. The NAEP 2006 training program will prepare you for handling schools with both session types.

In grade 4 schools with up to 150 students, all students will be selected to participate in NAEP. In grade 4 schools with more than 150 students, 123 students will be randomly selected. In grade 8 and grade 12 schools with up to 143 students in the sampled grade, all students will be selected to participate. In grade 8 and grade 12 schools with more than 143 students, 95 students will be randomly selected.

### B. Sensitivity to Instruction (STI) Study

The STI Study will involve testing grade 7 and grade 8 students in 40 schools in four states (Arkansas, Colorado, Oregon, and Texas) that are teaching a challenging, reform-based mathematics curriculum called Connected Mathematics Project (CMP). Using the NAEP 2005 grade 8 mathematics booklets and the Balanced Assessment of Mathematics (BAM)—a reformed-based assessment—students will be assessed within the first 3 weeks of the school year (fall) and within the last 3 weeks of the school year (spring) in order to evaluate whether the NAEP eighth-grade assessment is sensitive to learning gains for students participating in the CMP.

# 3. The NAEP Code of Ethics

The NAEP assessment teams are critical to NAEP's success. You conduct the assessments and are the face of NAEP in the schools. Assessment sessions must be administered in a standardized and professional manner for the results to accurately reflect the achievement of American students. Only if the sessions are conducted properly will each child have the opportunity to show what he/she knows and can do in the subject being assessed. If the data are not valid, not only will all analyses and reports be incorrect, but the 30-plus-year reputation of NAEP will be discredited.

Because you serve as a representative of NAEP, your attitude and conduct in working with school officials, teachers, and students must reflect the importance and seriousness of this project. Fulfilling your responsibilities in a professional manner will indicate to others that you consider the project worthy of the time and effort that students, parents, teachers, and school, district, and state staff have devoted to NAEP.

As a member of the NAEP data collection team, you are expected to abide by the NAEP Code of Ethics for Assessment Administration and Data Collection. This Code of Ethics is a set of principles that NAEP expects all staff members to follow. The Code defines principles that are the foundation for fair and accurate test administration and data collection.

If you have not previously done so during any past employment on NAEP, at the end of the inperson training, you will be asked to sign the following Oath of Office committing yourself to uphold the principles stated in the Code:

"I acknowledge that I have been instructed in and understand the NAEP Code of Ethics. I do solemnly swear (or affirm) that I will adhere to this Code of Ethics; that I take this obligation freely, without any mental reservation or purpose of evasion; and that I will well and faithfully discharge the duties of the office upon which I am about to enter."

### **NAEP Code of Ethics**

NAEP is firmly committed to the collection of high quality, independent, and unbiased measures of student academic performance.

This Code of Ethics defines the principles that are the foundation for fair and accurate test administration and data collection. NAEP grantees, contractors, and subcontractors must ensure that all procedures, materials, training programs, and administrative guidelines are derived from these principles.

This Code of Ethics applies to all staff and contracted employees who are involved in the collection of NAEP data. Each individual must have the opportunity to review the Code before becoming a part of the NAEP team. Prior to collecting NAEP data, an individual must swear or affirm his/her commitment to uphold the principles stated in this Code.

The basic principles guiding NAEP data collection are accuracy, integrity, and respect.

#### **ACCURACY**

Accuracy ensures that NAEP results precisely reflect student achievement across the nation.

- Sampled schools and sampled students who are eligible for the assessment are to be
- included in the assessment to the greatest extent possible.
- Students shall be assessed using accommodations as specified in their education plans and offered by NAEP.
- The NAEP testing environment shall be correctly structured and a positive atmosphere established so that all students have a fair chance to perform to full capacity.

#### INTEGRITY

Integrity ensures that rigorous, ethical, and consistent procedures are used for NAEP test administration and data collection.

- Persons administering and monitoring NAEP assessments shall comply with standard NAEP procedures for administering and monitoring the assessment.
- Persons authorized by NAEP to have access to NAEP testing materials shall follow the NAEP Guidelines for Viewing Assessment Materials.
- NAEP staff and other proctors assigned to testing sessions shall receive clear, unambiguous guidance on testing procedures.
- Deviations from proper procedures shall be documented, and those affecting student performance shall be reported immediately.

### RESPECT

Respect ensures that students, school staff, and others affected by NAEP test administration and data collection are treated with professionalism, openness, and courtesy.

- Schools shall be notified in advance of the assessment and provided all relevant information about NAEP, NAEP assessment procedures and schedules, and NAEP personnel who might be entering the school.
- Test takers and other stakeholders shall have access to information about NAEP, including sample items and NAEP reports.
- Persons administering and monitoring NAEP assessments shall be sensitive to the needs of students, teachers, and the school in administering NAEP.
- NAEP staff members are to ensure the confidentiality of all information provided by students and school staff in response to assessment and questionnaire items
- Any complaint or concern about a NAEP assessment shall be addressed directly by testing personnel in the field and promptly reported to NCES, or its designee.

# 4. NAEP Guidelines for Viewing Assessment Materials

Since its inception, NAEP has administered both cognitive test questions and background questionnaires. The test questions assess student knowledge and skills in academic subject areas. The background questionnaires provide information for reporting categories and collecting noncognitive data, related to achievement, on students, their family background, teachers, and schools.

By statute (P.L. 107-110), "the public shall have access to all assessment data, questions, and complete and current assessment instruments" of NAEP with two important exceptions:

- "Personally identifiable" information about individual students, their families, and schools
  must remain confidential in accordance with the Federal Privacy Act (Sec. 552a of Title 5,
  U.S. Code); and
- 2. Access to cognitive questions may be restricted to maintain security if such questions are to be reused. Breaches of security are punishable as a felony.

To fulfill the first requirement, NAEP has made sure since its inception that no information on individual students or schools is included in its data releases or reports. The names of students who have taken NAEP shall not leave the school building in which the assessment is administered, and all information collected by NAEP about individual students and schools will remain strictly confidential.

To fulfill the second requirement, NAGB adopted a strict policy on how to handle requests to see NAEP assessment booklets. All requests to view NAEP assessment booklets must be handled in the following ways:

If a request is made to view the background questions asked in the student's assessment booklets, you must provide copies of the NAEP Sample Questions Booklets.

The Sample Questions Booklets contain the NAEP 2006 background questionnaires. Your supervisor will receive a supply of Sample Questions Booklets from Westat, and the booklets will also be posted on the MySchool and NAEP web sites.

If a request is made to view the actual test questions by school staff members, parents, or anyone else, that person or persons must submit a written request to NCES.

Under the statute, all secure cognitive questions must be made available within 45 days after a written request, provided test security is maintained. All written requests to view test questions should be sent to the NAEP State Coordinator or the Field Manager, who in turn will contact NCES.

In addition, never, under any circumstance, allow anyone to examine materials completed by students or school staff.

Copying or duplicating actual assessment booklets is never permitted. Following each assessment, NAEP releases to the public approximately 25 percent or more of the test questions. These released questions will not be used in future assessments and appear in the NAEP reports and on the NAEP web site. You should encourage any interested party to view the previously released NAEP test questions on the NAEP web site at http://nces.ed.gov/nationsreportcard.

# 5. NAEP Quality Control Checks

### A. Quality Control Checks Conducted by Your Supervisor

Your supervisor will have many important responsibilities, one of which is to perform and document quality control (QC) checks of the procedures you will be carrying out, as described in this manual.

Using the Quality Control Booklet, your supervisor will document each QC check so that at the end of the assessment, Westat can analyze the data for all AAs. This QC check is done to ensure each procedure is completed according to the standards NAEP set out.

### B. School Visits by NCES, ETS, and Westat

Staff members from NCES, ETS, and Westat will regularly conduct both scheduled and unannounced quality control visits to schools on assessment day. The main purpose of these site visits is to ensure that the procedures before, during, and after the administration are being conducted according to NAEP guidelines.

### C. Quality Assurance Conducted by HumRRO

NCES has contracted with the Human Resources Research Organization (HumRRO) to conduct independent quality assurance (QA) activities throughout the NAEP test cycle. HumRRO's QA efforts include randomly selecting schools to conduct site visit observations of NAEP test administration. A large portion of HumRRO's quality assurance activities includes visits to training and assessment locations. The locations of assessment observations are selected from a comprehensive listing of all testing sites and the selection represents schools from across the country, as well as schools of various sizes. Particular NAEP staff members are not targeted for observation.

This QA check is an integral and necessary part of NAEP's quality control program and is primarily designed to obtain an overall evaluation of how well the field procedures are being followed by all field staff.

A HumRRO staff member will contact the supervisor (or other contact provided by Westat) affiliated with each selected site visit location to inform him/her the site had been selected for QA observation. At that time, he/she will discuss the details of the visit and make arrangements to meet the team on the day of the administration.

### **Observation Protocol**

A team of two observers conducts most HumRRO site visits. Observation teams are instructed to split up during the visit, to observe all session types being conducted in a given school (e.g., regular and accommodation sessions), and to remain as unobtrusive as possible. HumRRO staff members may need to ask questions of NAEP staff to ascertain whether certain activities have been performed, but should do so only when it will not disrupt the assessment administration

activities. Anytime a task is not observed being performed as trained, HumRRO observers are trained to provide full documentation of the specifics of the situation (for example, any extenuating circumstances that may have prevented the task from being performed).

#### **Observation Checklist Items**

HumRRO has designed separate rating sheets for pre-, during- and post-assessment activities, and for both supervisor and AA duties. It is important to note that these are only activities that NAEP staff members are expected to perform on the day of assessment. An additional checklist addressing the secure handling of NAEP materials is also completed. Checklists include items related to (though not limited to) the following assessment day responsibilities:

- room preparation,
- informing AAs of school protocol,
- classroom management during testing,
- completion of paperwork, and
- general handling of materials.

### Interactions Between HumRRO and NAEP Staff Members

Based on the above checklist items, it is clear that HumRRO observation teams and NAEP assessment administration teams may experience a variety of interactions, including the following:

- observation from a distance,
- personal inquiry (as to whether or not a specific task was performed), and
- "looking over the shoulder" observation.

### **Observation From a Distance**

The majority of assessment day activities will be easily observable by HumRRO staff. It should be possible for NAEP staff to go about performing job tasks while taking little or no notice of the HumRRO team. Observers generally try to find a seat in which they can observe all activities while maintaining a comfortable distance between themselves and the assessment administration team.

### **Personal Inquiry**

In some instances, job tasks may be performed prior to the arrival of the HumRRO team, or are simply not directly observable. If the opportunity arises, a HumRRO staff member may approach a member of the administration team to verify that a given task was indeed performed.

### "Looking Over the Shoulder" Observation

HumRRO staff members are instructed to observe detailed job tasks including the proper completion of testing materials and paperwork. In some situations, HumRRO staff may quietly walk amongst team members and view their work.

A collegial atmosphere has emerged between HumRRO and NAEP staff during many site visits, which has led to more frequent interchanges between members of either group. As a result, it may seem that when HumRRO staff members are present, they are working with NAEP staff. It is important, however, to note that HumRRO staff members are <u>not</u> present to advise NAEP staff on proper procedure. Some additional examples of what should not be expected of HumRRO observation staff include:

- preparing or assisting in the preparation and/or completion of assessment materials,
- monitoring classrooms/answering students' questions, and
- maintaining security of test materials.

At the end of each site visit, time permitting, HumRRO observers may ask the NAEP team members a series of questions designed to gather information on how the efficiency and accuracy of future administrations might be improved. Any feedback collected during this brief interview, along with any comments made throughout the visit, may be included in the site visit report and clearly noted as NAEP staff comments.

# D. School Visits by Your Field Manager

In addition to the observations by NAEP staff, your field manager will conduct school visits to observe each assessment team periodically throughout the assessment period. These visits will be scheduled with your supervisor in advance. The purpose of these visits is similar to that of the NAEP staff visits. He/she will observe each assessment team and check that all administrative procedures conducted by the assessment team are carried out according to proper procedure. The field manager will also be available during these visits to answer questions that school staff may have about NAEP and to assist the NAEP team as necessary with assessment procedures.

# E. Followup Telephone Calls

As a further QC check, your field manager will call a subset of schools within several days after the assessment date to review with the school coordinator how the session(s) went and to obtain suggestions and comments about NAEP assessments.

# 6. Goals of the NAEP 2006 Training Program

Ensuring the data you collect is of the highest quality has always been the top priority for NAEP. It is critical that the procedures for collecting data are followed exactly as NAEP intended.

As an AA, many of your responsibilities directly affect the reliability and accuracy of the data collected. NAEP has procedures in place that ensure the data you collect have statistical validity. You'll see the term "statistical validity" throughout this manual and during the training.

Statistical validity means the data collected are accurate and reliable, and have been collected in a uniform manner across schools.

NAEP goals for 2006 reflect important priorities:

### Ensure statistical validity through quality control.

Each piece of data you collect or procedure you carry out that affects statistical validity will also be checked by your supervisor for accuracy. QC checks are an integral and necessary part of NAEP's quality assurance program. The checks are designed to ensure the integrity of NAEP assessments, to identify and correct potential errors, and to guide corrective actions, when necessary.

### Promote the NAEP Code of Ethics.

The NAEP Code of Ethics is a set of principles that NAEP expects all staff to abide by when administering the assessment and collecting NAEP data. The Code outlines the three principles – accuracy, integrity, and respect – that guide all NAEP procedures and actions of all NAEP staff. The Code also outlines how these principles are reflected in NAEP procedures and in the actions of its staff.

### Protect the security and confidentiality of NAEP materials.

NAEP materials contain sensitive information that must be protected in many different ways. Some information cannot leave the school, some information can only be seen by field staff that have signed the Affidavit of Nondisclosure, and some information must be destroyed. The terms "security" and "confidentiality" refer to specific ways this information must be treated by field staff. These are outlined in greater detail at later points in your manual.

# 7. Manual Format

This manual is organized chronologically. The remaining manual chapters follow the assessment process step by step.

In addition, there are a series of icons used to help you navigate your way through the manual. The table below identifies the icons and their meanings.



This icon indicates the task you are about to complete impacts the statistical validity of the assessment. Expect these items to have a quality control procedure attached to them.



This icon indicates a quality control check or "QC check" will be required. All the QC checkpoints will require your supervisor to check that the work was completed according to standard NAEP procedure.



This icon indicates the NAEP materials you are working with must be kept secured and/or confidential.

# **Voices of Experience:**

These boxes offer tips and practical advice from experienced NAEP staff who have honed their skills in the field.

# **Chapter 1 Summary**

Upon completing this chapter, you should now be able to:

- identify NAEP's purpose, and
- describe the NAEP program goals for 2006.