

## Selecting Schools for Participation in State-Level NAEP

The National Assessment of Educational Progress (NAEP) is an essential measurement of student achievement in the United States.

- First administered in 1969, NAEP is the largest continuing and nationally representative assessment of what our nation's students know and can do in core subjects such as mathematics, reading, science, and writing.
- NAEP is administered by the National Center for Education Statistics (NCES) within the Institute of Education Sciences of the U.S. Department of Education.
- NAEP monitors academic progress over time and reports on student achievement nationally.
- The results of NAEP are released as The Nation's Report Card.
- NAEP has reported results for states since 1990.
- NAEP also reports results for districts participating in the Trial Urban District Assessment (TUDA), which began in 2002.

### Introduction

NAEP provides results on student achievement, instructional experiences, and school environment factors for the nation, states, and participating urban districts. Since NAEP is not designed to report results for individual students or schools, it is not necessary for every student in every school to take the assessment. Instead, an accurate picture of student performance is obtained by administering NAEP to a sample of students who represent the student population of the nation as a whole and of individual states and districts participating in TUDA.

To ensure that a representative sample of students is assessed, NAEP is given in a sample of schools whose students reflect the varying demographics of a specific jurisdiction, be it the nation, a state, or a district. Within each selected school and grade to be assessed, students are chosen at random to participate in NAEP. Every student has the same chance of being chosen—regardless of race/ethnicity, socioeconomic status, disability, status as an English language learner, or any other factors.

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It is important that all selected schools and students participate in NAEP. Participation is vital for valid information about the performance of students across the country to be collected and shared. Elected officials, policymakers, and educators all use NAEP results to develop ways to improve education.

### **The NAEP Sampling Process**

The following steps are used to select a sample of public schools and students in a year when NAEP reports state-level results. Private schools are not included in a state-level sample, which focuses solely on public schools.

#### Identify all potential schools in each state.

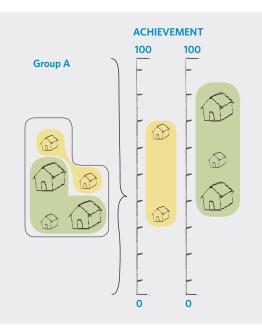
An initial list of all public schools in the nation is compiled using the U.S. Department of Education's most current public education system database. The national list is then divided into separate lists of schools within each state to begin the sampling process.

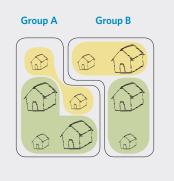
#### Classify schools into groups.

Using the list, schools within each state are classified into groups, first by type of location and then by the racial/ethnic composition of the schools within those locations. This step ensures that the sampling process takes into account the distribution of schools and students across rural, suburban, and urban areas, and the diversity of the student population in each state.

# Within each group, order schools by student achievement.

Within each group, schools are sorted by a measure related to student achievement to ensure that schools with varying levels of student performance are represented in the NAEP sample. This is done using school-level results on state achievement tests.







# Develop an ordered list for sampling.

The groupings of schools determined in steps 2 and 3 are then placed into a comprehensive ordered list for sampling, i.e. by type of location, race/ethnicity, and student achievement. The probability of a school being selected for the NAEP sample is calculated based on the size of its enrollment in relation to the size of the state's student population at the selected grade level and the number of schools needed for the assessment. Schools with large enrollments are more likely to be selected because their students represent a large proportion of the state's student population.

# Select the school sample.

The sample of schools is drawn for NAEP participation with a systematic sampling procedure. The procedure ensures that each school has the correct selection probability, as calculated in Step 4. By proceeding systematically throughout the entire list, schools of different sizes and varying demographics are selected and a representative sample of students in the state will be chosen for the assessment.



#### Confirm school eligibility.

The list of schools selected to participate is sent to each state department of education to verify that the schools are eligible for participation. Some factors that would make a school ineligible include school closure or if the school does not have students in the grade level being assessed.



# Within sampled schools, select students to participate in NAEP.

In each sampled school, a list is compiled of all students within the grade to be assessed. From this list, a sample of students is randomly selected by NCES for participation in the assessment. Every student in a sampled school has an equal probability of being selected. After the sample is drawn, students are assigned a single subject area in which to answer questions. NAEP staff members work with the school to verify the accuracy of student demographic information.



# Frequently Asked Questions about the NAEP Sampling Process

#### Why are some schools selected frequently?

The probability (or chance) of being selected for the NAEP sample depends on the size of the student enrollment at each school. Generally, if a school is chosen frequently it is because the school's enrollment in the grade constitutes a relatively large proportion of the state's student population. Therefore, large schools are more likely to be selected than smaller ones. The sampling process is repeated for each year that NAEP is administered to account for changes in schools and shifts in student demographics across states and the nation.

### Why does the number of schools and students selected to participate in NAEP vary from year to year?

The number of schools and students selected to participate in NAEP varies each year, depending on the number of subjects being assessed and the level of results to be reported (i.e., national, state, or district-level).

**National Results:** For NAEP results to be representative of the nation, far fewer schools and students need to participate than when results for states are being reported. Within each state, the number of schools selected to participate will vary depending on the size of its student population. For example, California is much more likely to have schools in the sample than Wyoming, as it has a much larger share of the U.S. student population.

**State Results:** In years when NAEP also reports state-level results, a larger number of schools are needed to ensure that the results are representative of each state's student population. Approximately 3,000 public school students per subject and grade are assessed in each state.

**District Results:** The number of schools and students needed to represent the districts participating in TUDA varies, depending on the size of the district. Generally, in each district, approximately 1,500 public school students per subject and grade are assessed. These schools and students are added to and contribute to the state's sample. While TUDA districts have a large sample, their data are combined with the state's data proportionally so as not to over-represent the district in the overall state results.

### How are private schools selected to participate in NAEP?

The process for private school selection is similar to the public school selection process, but depends on the U.S. Department of Education's private education system databases to create the initial list of all known private schools. Private schools are sampled to be representative of private schools nationwide. The results for private schools are not included in state-level results which are solely focused on public schools.

#### Can states choose which schools are sampled for NAEP?

No. NCES selects a sample of schools using the NAEP sampling process to ensure the validity of the results. States verify if the selected schools are eligible to participate. This process ensures that NAEP assesses the most representative sample of students as possible.

### Are students with disabilities and English language learners included in the NAEP sample?

Yes. Students are randomly selected from a list of *all* students enrolled in the grade that is to be assessed in each school. NAEP's policy has always been to include as many sampled students as possible in the assessment so that results are representative of all students. NAEP offers a comprehensive array of research-based accommodations for students with disabilities, students with 504 plans, and English language learners to participate in the assessment.

### For more information about NAEP, visit: http://nces.ed.gov/nationsreportcard

For more technical information on NAEP sampling, visit: http://nces.ed.gov/nationsreportcard/tdw/sample\_design