

History of the

Twelfth-Grade Challenge

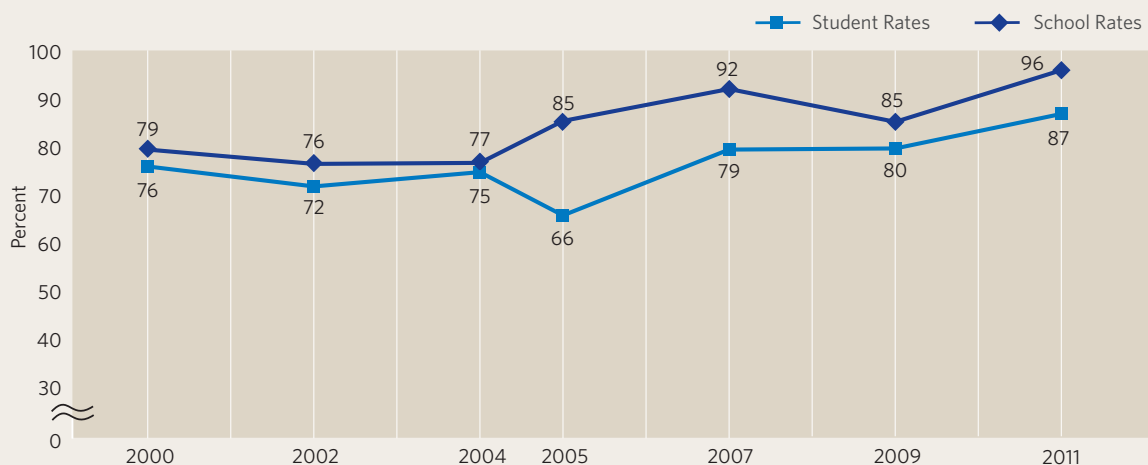
Historically twelfth-grade student participation on NAEP has been a challenge. However, NAEP twelfth-grade participation has increased dramatically in recent years, due to schools implementing proven strategies to support student participation and engagement. These strategies are described in the *Best Practices Guide*, provided to high schools participation in NAEP each year. Student participation increased 21 percentage points, from a low of 66 percent in 2005 to 87 percent in 2011. The graph below shows the NAEP twelfth-grade school and student participation rates from 2000 to 2011.

When NAEP results are released, there is considerable discussion about the results in the media and among policymakers. Both low participation and low motivation can undermine the validity and credibility of NAEP results for high school students. The National Center for Education Statistics (NCES), which administers NAEP, and the National Assessment Governing Board, which sets policy for NAEP, have been concerned about participation and motivation of high school seniors to do their best on NAEP.

To address this problem, NCES convened a Secondary School Principals Working Group in 2005. After discussing participation rates, student motivation, and the results for high school students, the Principals Working Group concluded that the results did not reflect the true level of achievement of their students. The Principals Working Group also concluded that high school principals and other school leaders could help solve the problem by obtaining teacher buy-in and motivating students to show up and do their best, and that best practices for achieving high participation should be shared with principals. Their recommendations set the stage for the initial *Best Practices Guide* prepared for the 2007 assessment.

In this section you will find information about the strategies used by schools and data on student participation rates. Additional information, including NAEP in the news, highlighting the importance of NAEP, and recommendations from the Principals Working Group, is in the section “More on the Twelfth-Grade Challenge” on page 51.

NAEP school and student participation rates for public schools: Grade 12



The Twelfth-Grade Challenge:

The Initiative to Improve Student Participation and Engagement

Even though student participation has increased dramatically in recent years, efforts to support student participation and engagement need to be renewed each year. Based on recommendations from the Secondary School Principals Working Group, NCES implemented a broad set of strategies that were aimed at increasing student participation and engagement for the NAEP assessments.

Highlights of the strategies include:

- **Notify** schools early that they have been selected for NAEP to allow administrators to include the assessment on school calendars for the following year.
- **Provide** flexible scheduling on assessment day to ensure that seniors are in school and available at the time of the assessment. This includes conducting multiple assessment sessions throughout the day.
- **Develop** a *Best Practices Guide* with tips for administrators and teachers to improve student participation.
- **Implement** communication and outreach efforts by NAEP State Coordinators and NAEP representatives to share best practices ideas and tools and to discuss and confirm strategies that the school selected to use.

How did these strategies support grade 12 public school student participation rates in recent years?

- The results indicate a broad improvement in student participation.
- The overall student participation rate improved to 87 percent in 2011, an increase of 21 percentage points from the low of 66 percent in 2005.
- Participation rates improved in all geographic regions.
- Improvements were seen across all racial/ethnic groups, for both genders, and among students eligible for free/reduced-price lunch as well as students who were not eligible for free/reduced-price lunch.
- Increases in student participation were observed in small, medium, and large schools¹ and in schools located in rural, suburban, and urban locations.²

¹ Small schools have fewer than 300 seniors. Medium schools have between 300 and 600 seniors. Large schools have more than 600 seniors.

² Location codes were developed to describe a school's location ranging from large city to rural. The codes are based on a geographic database maintained by the U.S. Census Bureau.

What is the impact of grade 12 strategies on student participation?

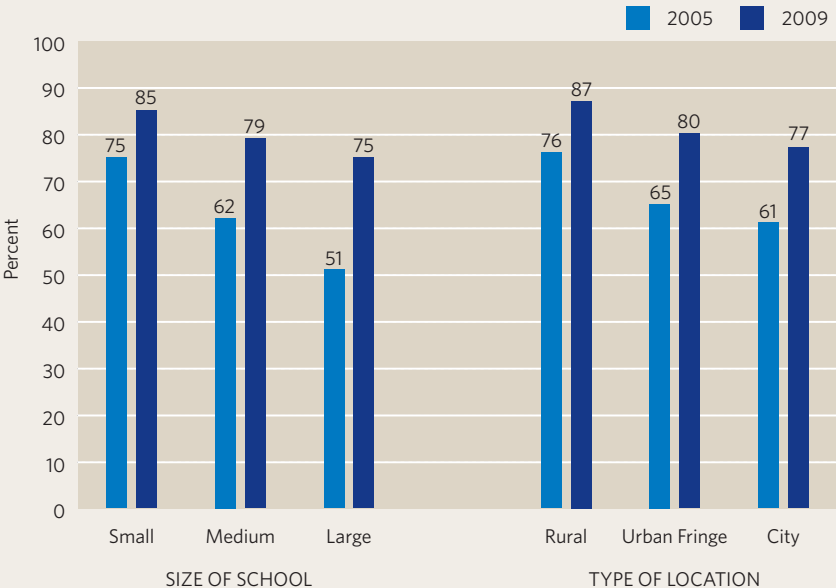
The strategies described in this section are based on data from the past grade 12 NAEP assessments in mathematics and reading, 2005 and 2009. While some strategies were implemented in almost all schools, others were selected by smaller numbers of high school principals and other school leaders to use in their schools. Data were collected on which strategies were implemented in each school. While NAEP did not conduct an experiment to investigate causality, a comparison of average student participation rates for schools that used each strategy versus those that did not gives an indication of impact.

Six strategies emerged that were associated with a statistically significant difference in average student participation rates between schools that used the strategy and those that did not:

- holding a meeting with seniors to explain NAEP and how important it is that all students selected participate and try their best;
- holding a faculty meeting to explain NAEP and the importance of student participation and motivation;
- thanking students for participating in NAEP;
- sharing NAEP publications with school faculty;
- providing food for students before or after the assessment; and
- placing NAEP on the school calendar.



Grade 12 Student Participation Rates for Public Schools, by Size of School and Type of Location



Number of Strategies Used by Schools and Their Student Participation Rates

Number of Strategies	Student participation rate
None of these strategies	76%
One strategy	83%
Two strategies	83%
Three strategies	84%
Four strategies	85%
Five strategies	87%
Six strategies	90%

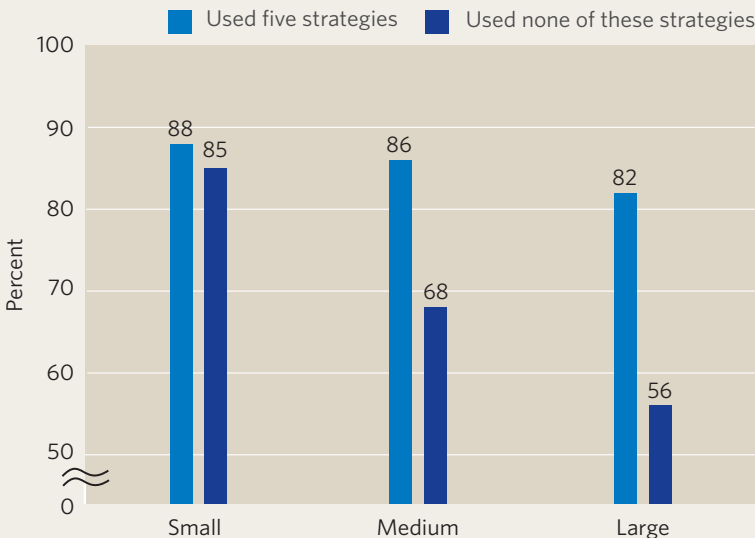
Average student participation rates tended to increase with the number of strategies used, especially among large schools.

In general, the relationship between use of these strategies and average student participation rates held for small, medium, and large schools. Small schools have fewer than 300 seniors. Medium schools have between 300 and 600 seniors. Large schools have more than 600 seniors.

The majority of schools used more than one strategy, and average participation rates tended to increase with the number of strategies that were used, especially among large schools. For example, the student participation rate for large schools was 82 percent when those schools implemented five of the six strategies. This is 26 percentage points higher than the rate for large schools that used none of these six strategies and 11 percentage points higher than schools that used only one of the strategies.



NAEP 2009 Student Participation Rates: Five Strategies vs. None, by Size of School



What incentives did schools use?

Schools were very creative in the variety of incentives they used to encourage students to “show up” for the NAEP assessment. Many of their strategies did not cost the school anything. Examples of incentives that schools implemented include:

- a raffle for the use of the principal’s parking space for a day;
- extra credit;
- reduced-price prom tickets;
- raffle of gift certificates; and
- certificate for community service (provided by NAEP).

How did students perform on the NAEP 2009 grade 12 mathematics and reading assessments?

Mathematics

- Average scale score increased by 3 points from 2005.
- All racial/ethnic and gender groups made gains since 2005.
- Approximately one-quarter of students performed at or above the *Proficient* level in 2009, and about two-thirds performed at or above *Basic*.

Reading

- Average scale scores increased by 2 points from 2005.
- White students, Asian/Pacific Islander students, and male students made gains since 2005.
- Thirty-eight percent of students performed at or above the *Proficient* level in 2009, and 74 percent of students performed at or above *Basic*.

What did we learn?

The main message of the *Best Practices Guide* is that “students take their cues from YOU.” The adults in the school have the most impact on students and their participation, and perhaps even their motivation to try hard. In schools where the school leadership implemented strategies that demonstrated their commitment to NAEP, participation was higher.

NAEP State Coordinators reported that schools recognized that NCES was serious about the problem of student participation and that they put extraordinary effort into improving the situation, including early sample notifications, a professional *Best Practices Guide*, customized materials for schools, and personal communications with schools. It appears that leadership from all levels had an impact on participation, from NAEP to states, from states to districts and schools, and from school leadership to teachers and students.

In summary:

- Universal strategies that are provided to all schools, such as early sample notification and the *Best Practices Guide*, are important to increasing buy-in.
- Identifying ways to increase communications with faculty and students is also extremely important.
- An approach that combines multiple strategies works best.

High School Senior Motivation Focus Group

Research Summary

Background

During February and March of 2008, focus groups were held around the country with high school seniors to explore what motivates and influences them, especially as it relates to participation and engagement in NAEP.

Respondents were recruited to ensure a mix of various criteria, including gender, ethnicity, plans after high school, and academic ranking. Students were recruited from schools in urban, suburban, and rural areas.

Findings

- Students generally responded positively to the idea of NAEP and understood the need for strong participation and engagement.
- Students are aware that states are compared to each other and that the United States is compared to other countries on educational progress.
- Students thought that a better understanding of the test and knowledge about it before assessment day would improve participation and engagement. This information should include the subject areas to be assessed and the types of questions to be asked.
- Most students indicated that if they chose to participate, they would do their best.
- Students indicated that flexibility in scheduling the time of the assessment would be beneficial. Many students were concerned about making up missed work from classes.
- Recognition of students who participated is a motivator for some students. Examples include a statement at graduation, a certificate, or community service hours.
- Students in all groups indicated that providing food at the test site would encourage them to show up.
- Students indicated that their motivation, in general, comes from within. Teachers and parents can provide positive feedback and recognition of a job well done.

Source: National Assessment of Educational Progress High School Senior Motivation Focus Group Research. Topline Report. Maria Ivancin, lead researcher.