

# National Assessment Governing Board

## Reporting and Dissemination Committee

**November 30, 2012**  
**9:30 a.m.-12:00 p.m.**

### AGENDA

9:30 – 9:50 am	Welcome and Introductions Overview of Committee Work <i>Andres Alonso, Committee Chair</i>	Attachment A
9:50 – 10:00 am	Review of NAEP Release: NAEP Writing 2011 <i>Stephaan Harris, NAGB Staff</i> <i>Amy Buckley, Reingold Communications</i>	Attachment B
10:00 – 10:10 am	Projected Schedule for Future NAEP Reports <i>Angela Glymph, NCES</i>	Attachment C
10:10 – 10:30 am	Update on Mega-States and Other Focused Reports <i>Ebony Walton, NCES</i>	Attachment D
10:30 – 11:05 am	Planning for Parent Outreach Activities <i>Stephaan Harris and Ray Fields, NAGB</i> <i>Amy Buckley, Reingold Communications</i>	Attachment E
11:05 – 11:30 am	Puerto Rico Assessment and Reporting in 2013 <i>Emmanuel Sikali, NCES</i>	Attachment F
11:30 am – 12:00 pm	Implementation of Policy on Students with Disabilities and English-Language Learners <i>Grady Wilburn, NCES</i>	Attachment G



**Adopted: August 4, 2006**

## **National Assessment Governing Board**

### **Reporting, Release, and Dissemination of NAEP Results**

#### **Policy Statement**

***The Nation's Report Card™ informs the public about the academic achievement of elementary and secondary students in the United States. Report cards communicate the findings of the National Assessment of Educational Progress (NAEP), the only continuing and nationally representative measure of achievement in various subjects over time. The Nation's Report Card compares performance among states, urban districts, public and private schools, and student demographic groups.***

#### **Introduction**

NAEP collects data through representative-sample surveys and reports fair and accurate information on academic achievement to the American public. By law (P.L. 107-110, as amended by P.L. 107-279), NAEP is administered by the Commissioner of the National Center for Education Statistics (NCES) under policy set by the National Assessment Governing Board ("the Governing Board"), a bipartisan, independent policymaking body.

According to the statute, the Governing Board shall exercise "independent judgment, free from inappropriate influences and special interests" and in the exercise of its responsibilities, "shall be independent of the Secretary and the other offices and officers of the Department [of Education]." Among the responsibilities specifically delegated to the Governing Board are: (1) "develop guidelines for reporting and disseminating [NAEP] results"; (2) "take appropriate actions needed to improve the form, content, use, and reporting of [NAEP] results"; and (3) "plan and execute the initial public release of [NAEP] reports."

To carry out these responsibilities, the Governing Board hereby adopts policy principles and guidelines for the reporting, release, and dissemination of *The Nation's Report Card*.

As outlined in the appendix, this policy defines *The Nation's Report Card* as, and applies to, the initial reporting of NAEP results from national, state, and trial urban district assessments (TUDA), and to other special reports or studies authorized by the National Assessment Governing Board, including printed reports and the initial release Web site.

## **Delineation of NAEP Reporting, Release, and Dissemination Responsibilities**

The NCES Commissioner, under Governing Board policy guidance, is responsible for administering the assessment, ensuring the technical soundness and accuracy of all released data, preparing NAEP reports, and presenting NAEP results.

In addition to setting policy, Governing Board is responsible for ensuring policy compliance of Governing Board-authorized NAEP reports, determining their respective dates of release, and planning and executing the initial public release of NAEP results.

### **Part I: Report Preparation and Content**

#### **Policy Principles**

1. The primary means for the initial public release of NAEP results shall be a printed summary report, known as *The Nation's Report Card*, accompanied by a separate, dedicated Web site – <http://nationsreportcard.gov>.
2. The primary audience for *The Nation's Report Card* is the American public.
  - a. All reports shall be written in language appropriate for an audience of the interested general public, the majority of whom are unlikely to have a technical understanding of education statistics or assessment.
3. *The Nation's Report Card* shall report data objectively, accurately, clearly, and fairly, in accordance with NCES data quality standards. Results shall be insulated from ideological and other special interests.
  - a. *The Nation's Report Card* shall include straightforward presentations of data. Reports may suggest correlations, but should not conclude cause-and-effect relationships. Any interpretation of results must be strongly supported by NAEP data.
  - b. *The Nation's Report Card* and its Web site may include references and links to the National Assessment Governing Board Web site, NCES Web site, and the NAEP Validity Studies Panel. Non-NAEP materials and links to non-NAEP resources shall not be included in initial release documents, with the exception of relevant federal and state government information, such as NCES surveys and other district, state, national, or international testing programs.

- c. To improve public understanding of results, *The Nation's Report Card* should contain information about Governing Board-approved NAEP contextual variables and subject-specific background information—as outlined in the *Background Information Framework for the National Assessment of Educational Progress* (adopted by the National Assessment Governing Board, 8/1/03)—when available and reliable. Reports may also contain other contextual information from trustworthy sources outside of the NAEP program, such as expenditures per pupil, student/teacher ratios, and student enrollment.
4. In accordance with the law, *The Nation's Report Card* shall include results for the nation; states and school districts, when collected in conjunction with specific NAEP programs, respectively; and school types, disaggregated by subgroup whenever reliable. Subgroup results shall be prominently positioned to facilitate public review but shall not be used to adjust findings.
  - a. Disaggregated subgroup data should be accompanied by information about demographic changes in the student population assessed.
  - b. Results for states and school districts may be presented in alphabetical or rank order, accompanied by appropriate language to make the public aware of any data comparison limitations.
  - c. Data shall be publicly released on inclusion and accommodation rates for all NAEP samples, including national, state, district, and school type. Results for students with disabilities and English language learners shall be presented separately.
5. *The Nation's Report Card* shall report results by Governing Board-adopted achievement levels, average scale scores, and percentile distributions. Trend information shall be an important part of reports unless comparable and reliable data are not available.
  - a. Reports shall contain clear explanations of achievement levels, including item maps and sample test questions and answers to illustrate what students in each grade assessed should know and be able to do at each achievement level.
6. All NAEP data determined by the NCES Commissioner to be valid and reliable shall be made available on the World Wide Web at the time of initial public release, except for data from limited special purpose samples and pilot studies. A separate, dedicated Web site aimed at a broad public audience – <http://nationsreportcard.gov> – shall be utilized for initial public releases.
  - a. All released NAEP data shall be subject to NCES quality control procedures to ensure accuracy and completeness.
  - b. At least one block of released NAEP questions shall be posted on the World Wide Web for each subject and grade for which results have been collected.
  - c. Concise information on test content, methodology, performance standards, and scoring shall be included in all NAEP reports. More extensive material on these topics should be readily accessible on the World Wide Web.

7. Results of special studies authorized by the Governing Board will be reported after careful review of information quality and statistical validity. These shall be treated as initial public releases of *The Nation's Report Card*, and shall be subject to NCES quality control procedures and Governing Board policies.
8. The Governing Board shall adopt general guidelines to inform the development of *The Nation's Report Card* and its Web site, and may set additional specifications for particular reports.
9. The Governing Board shall review the format and content of initial releases, including Web pages, to ensure compliance with Governing Board policy.
  - a. *The Nation's Report Card* shall contain a description of the policymaking roles and responsibilities of the National Assessment Governing Board, including a list of current Governing Board members, their affiliations, and regional locations.

## **Part II: Public Release of NAEP Results**

### **Policy Principles**

1. Release activities shall be planned and executed by the National Assessment Governing Board. The Governing Board shall determine the release date, time, embargo policies, and manner of release for *The Nation's Report Card*, as covered by this policy.
  - a. After the Governing Board has approved the final draft of *The Nation's Report Card*, including the pages that will be made available through the initial release Web site, the Chairman of the Reporting and Dissemination Committee, on behalf of the Governing Board, shall determine the date of the initial public release, in consultation with the Chairman and Executive Director of the National Assessment Governing Board and the NCES Commissioner.
  - b. The initial release shall be completed within 30 days of approval of the final draft of *The Nation's Report Card*. In setting that release date, attention will be paid to balancing the priorities of an expeditious release with provision for adequate planning time, given the scheduling circumstances of the various parties involved.
  - c. Prior to the initial public release, NAEP results may be provided on an embargoed basis to federal, state, and TUDA-district officials and members of the press.
2. The Governing Board shall be responsible for organizing and conducting the release event and related activities.
  - a. A release plan shall be adopted by the Governing Board for each report. Elements of the plan may include issuance of a press release, a press conference and/or Web-based announcement, distribution of summary

- findings and graphics, time period for the initial public release phase of <http://nationsreportcard.gov>, and other related activities.
- b. The official press release announcing NAEP results shall be issued by the Governing Board. Accompanying statements from the Governing Board's Executive Director or Governing Board members may also be issued.
  - c. At the press conference or other event for release of NAEP results, the NCES Commissioner or his/her designee shall present major data findings, accompanied by a written statement. The National Assessment Governing Board shall select members to provide individual commentary on the meaning of results. In addition, the Governing Board may invite other officials or experts to comment on the significance of the results in accordance with the approved release plan.
  - d. At press conferences, questions from the audience shall be limited to accredited members of the media. At other public release events, the Governing Board shall determine who may attend and ask questions or comment.
3. *The Nation's Report Card* shall seek to encourage wide public attention to NAEP results and clear understanding of their meaning and significance.
    - a. Video materials may be prepared to accompany the release. These shall be clearly identified as having been provided by the Governing Board or NCES of the U.S. Department of Education. The video materials may only contain sound bites, background footage, and other information for journalists to develop their own stories.
  4. Release procedures shall underscore the credibility of *The Nation's Report Card* and encourage the participation of schools, school districts, and states in NAEP.
    - a. NAEP data in statements distributed at *The Nation's Report Card* initial public release events shall be checked for accuracy by NCES.
  5. *The Nation's Report Card* releases shall be clearly separated from any ideological or other special interests.
    - a. Activities related to the initial public release of *The Nation's Report Card* shall not be used to disseminate any materials unrelated to NAEP. No materials of any kind may be distributed at an initial release event without the prior approval of the Governing Board.
  6. The National Assessment Governing Board will cooperate with the NCES Commissioner in the release of technical reports, working papers, and secondary analyses not covered by the policy.
  7. The Governing Board will develop a reporting schedule each year for upcoming NAEP assessments based on data review and report production plans that are provided and updated by NCES.

## Part III: Dissemination and Outreach

### Policy Principles

1. Information from *The Nation's Report Card* shall be disseminated through the media, the World Wide Web, and special publications and materials. Efforts shall be made to develop widespread public awareness of NAEP data and their meaning and of the value of *The Nation's Report Card* to the nation and participating jurisdictions.
  - a. NAEP results shall be available in both printed and electronic form, including on *The Nation's Report Card* Web site, at the scheduled time of release and in the permanent record.
  - b. To build public awareness of *The Nation's Report Card*, the home page of the initial release Web site shall remain on-line and include links to previous releases. This homepage shall link to respective pages found on the NAEP Web site.
2. To build understanding of *The Nation's Report Card* and the data it reports, other information about NAEP may be disseminated at the time of the initial release and on a continuing basis.
  - a. Informational materials accompanying results shall explain the mission and value of *The Nation's Report Card* in clear and compelling terms.
3. *The Nation's Report Card* and supplementary NAEP materials shall be made available through a wide network of education, business, labor, civic, and other interested groups and to policy makers and practitioners at all levels of education and government.
  - a. *The Nation's Report Card* shall be distributed promptly to governors and chief state school officers, as well as to superintendents of TUDA districts. The reports shall be posted on the World Wide Web immediately at the time of initial release, with printed copies available to the public upon request.
  - b. Notification of upcoming releases shall be widely disseminated. Schools and school districts participating in NAEP samples shall be provided with information on how to access reports electronically and obtain printed copies upon release.
  - c. NCES and Governing Board staff shall encourage national and state organizations that are interested in education to disseminate NAEP results to their members.
  - d. The NCES Commissioner and staff, Governing Board members and staff, and NAEP State Coordinators are encouraged to increase awareness and understanding of NAEP among the public, educators, and government officials. They are encouraged to speak about the

NAEP program to a variety of audiences; at meetings and conferences of national, state, and local organizations; on radio and television; and to writers for magazines and newspapers and other members of the media.

- e. Talking points on key data findings shall be developed for each release and distributed to Governing Board members.
4. A variety of materials shall be developed, appropriate to various audiences, to carry out NAEP dissemination. Key audiences for these materials shall include the interested general public, policymakers, teachers, administrators, and parents.
  5. Detailed data on cognitive results, Governing Board-approved contextual variables, and subject-specific background information (as outlined in Part I, Policy Principle 3, Item C) shall be made readily available through the World Wide Web to all those wishing to analyze NAEP findings, subject to privacy restrictions. Additional restricted data shall be available for scholarly research, subject to NCES licensing procedures.
    - a. The limitations on interpretations, conclusions, and recommendations in official NAEP reports (as outlined in Part I, Policy Principle 3) shall apply fully to any materials disseminated as part of the NAEP program by NCES and the Governing Board.
    - b. Researchers receiving secondary analysis grants from NCES may analyze data and provide commentary. Their reports may be disseminated by NCES if they meet NCES standards.



## **Appendix**

### **NAEP Initial Release Reporting Covered by this Policy**

#### ***The Nation's Report Card™***

The primary means for the initial public release of NAEP results shall be a summary report in each subject, known as *The Nation's Report Card™* and intended for the interested general public. The reports shall be made available in both print and electronic (Web-based) form. These reports shall present key findings and composite and disaggregated results. The printed reports shall be relatively brief, and written in a clear, jargon-free style with charts, tables, and graphics that are understandable and attractive. Data tables may be included in an appendix, either bound into the report or printed separately. This format shall be used to report key results for the nation and the states and of NAEP Trial Urban District Assessments.

A separate, dedicated Web site for the initial release of NAEP results shall be focused on a broad public audience, including less sophisticated users of the technology. The URL – <http://nationsreportcard.gov> – should be readily located via Internet search engines. Key NAEP findings will be available, clearly organized and prioritized. World Wide Web pages shall provide key findings, including composite and disaggregated results, as well as access to more extensive data sets.

#### **Individual State and School District Reports**

Relatively brief reports of key results shall be prepared for individual states, as well as for TUDA-participating school districts. All reports shall contain composite and disaggregated data, and may include an appendix with data tables.

#### **Special Studies and Reports**

Special studies and reports authorized by the National Assessment Governing Board and based on NAEP data collections will focus on specific topics of public interest and educational significance. They are aimed at policymakers and interested members of the public. They may include newly released data as well as data previously released that are analyzed to address issues identified by the Governing Board.



## **NATIONAL ASSESSMENT GOVERNING BOARD STRATEGIC COMMUNICATIONS PLAN**

### **INTRODUCTION**

The theme of this plan is getting beyond the scores and NAEP releases to expand outreach of the Governing Board and NAEP. The two main objectives are:

1. Enhance and elevate the NAEP brand as the gold star of academic assessment and thought leadership in advancing excellence in achievement reporting.
2. Strengthen the relevance and use of NAEP – The Nation’s Report Card – results and NAEP research and resources by existing and new audiences.

To achieve these communications objectives, there will be a new approach that includes the following areas of engagement:

1. Practice consistent, year-round outreach and engagement with stakeholders and audiences.
2. Enhance collaboration with NCES and other entities involved with NAEP.
3. Use multiple communications channels, including social media.
4. Mobilize stakeholders and partners.

The Governing Board defines its audience as the general public. Effective communication requires breaking down the audience into segments based on their level of interest in the Board’s work and education in general, how they might use the Board’s information, and their capacity and tools to influence and effect change. This segmentation will allow resources to be targeted and used most efficiently by delivering messaging and information that are most pertinent to each audience.

The target audiences are as follows:

- **General Public** – the broad grouping of individuals who would be inclined to be receptive to effective messaging and information about NAEP.
- **Education Policymakers** – federal, state, and local officials with responsibility for enacting legislation and policies affecting elementary and secondary education.

- **Higher Education** – educators and administrators of postsecondary institutions, including two- and four-year colleges and trade schools.
- **Business Leaders** – Public and private sector employers, including the military, which are interested in the knowledge and skills of entry-level workers.
- **Education and Workforce Stakeholder Groups** – membership, advocacy and policy groups addressing education and workforce issues.
- **K-12 Teachers** – professionals in public, private, or charter schools who teach K-12.
- **Parents** – families of K-12 students in public, charter, and private schools.

Each of these audiences will require specific messaging and a well-defined “call to action,” such as:

- Learn more about NAEP and the Governing Board.
- Understand how NAEP and the work of the Governing Board may be relevant to issues that are important to you.
- Use NAEP and the Governing Board as a resource in your pursuits.

### **COMMUNICATION STRATEGIES**

The Governing Board’s communications plan is built on six distinct but integrated strategies focused on the most effective ways to educate and engage these target audiences. The strategies are designed to leverage the reach and impact of messaging delivered through other organizations, the media, and the Internet. At the same time, they provide the flexibility needed to pursue timely opportunities. Specifically, these strategies will use:

- I. **Report Card Releases** – Reinventing the release events to reach broad audiences with greater impact and use the releases as a catalyst for other Board communications efforts.
- II. **Stakeholder and Partnership Outreach** – Identifying organizations with valuable contacts and communications vehicles for spreading the Governing Board’s messaging.
- III. **Traditional Media** – Using targeted media relations with traditional print and media outlets that provide skilled and trusted educational reporting.
- IV. **Social Media** – Identifying and participating in emerging electronic media that reach the Board’s targeted audiences and offer interactive, real-time discussion formats.

- V. **Website Development** – Enhancing the site to ensure that target audiences can readily find it, use it as a resource for both learning about and informing education initiatives, and pursue web tactics to increase traffic and impact.
- VI. **NAEP Communications Alignment** – NAGB and NCES working together to review branding, materials and outreach.

## I. REPORT CARD RELEASE STRATEGY

Release of The Nation’s Report Card will be conducted as part of a comprehensive, integrated communication campaign with a series of planned activities designed to generate traditional news coverage, to disseminate information about the assessment to stakeholder groups, and to further position The Nation’s Report Card as the most trusted national yardstick of student achievement. This can be accomplished through the following:

- **Webinar-style NAEP Releases.** With declining attendance and higher costs of renting venues, the traditional press conference is not giving the Board the best return on its investment. We recommend online webinar releases whenever possible and appropriate for future releases. So panelists can participate via Web-Ex and graphics and presentations can be seen by the viewing public. However, for releases like TUDA and Grade 12 Reading and Mathematics that involve specific cities or states, we leave open the option of having the more traditional style of release in a city or state that would involve local leaders as guests and panelists and add a unique angle to the release.
- **Strategic Release Dates.** Choose Report Card release dates (within the dictates of Board policy and NCES timeline) that optimally use media cycles, coinciding events, and other opportunities to leverage attention so that the release is driven by a date not vice versa.
- **More Accessibility to Media and Other Stakeholders.** The Board can take important and innovative steps to expand Report Card outreach to media and others, by facilitating better access through methods such as:
  - Pursue meetings and deskside briefings with key education journalists to illuminate them on various data, trends, and related efforts.
  - Issue a post-event news release that updates the reactions to NAEP results, gathering some of the best quotes from superintendants, parents, and other stakeholders and using them in another round of outreach to relevant groups.
  - Conduct phone chats with journalists and stakeholders before and after the release to help shape and influence media stories on NAEP.
  - Pitch the participation of event panelists and the Board chair and executive director in online events, including web chats, online forums, or discussion room Q&As with major news organizations such as the Washington Post.

- **Utilizing Web Site and Social Media.** The Board should harness its web site and social media opportunities to extend the life of each Report Card. Several ideas include:
  - Obtain video and audio sound bites of Governing Board staff, members, and other panelists from each event to disseminate to media and post online.
  - In advance of each release, create a “splash” page on the [www.nagb.org](http://www.nagb.org) to host all materials related to the event, including bios of panelists, facts from past and related releases, information about relevant Board task forces and commissions to build momentum for the event.
  - Develop an integrated social media strategy that links to the splash page that will help create a following on social networking sites leading up to the launch.

## II. STAKEHOLDER AND PARTNERSHIP OUTREACH

As a highly respected, independent source of unique objective data, the Governing Board is an attractive partner for numerous organizations. Relationships are mutually beneficial: the Board gains the support of other respected organizations and another outlet for its message, while the partner’s stature and message are also enhanced. Partnership activities can range from simply establishing website links to publishing reports and newsletters; co-sponsoring workshops, events, and forums; creating awards programs; actively participating in partners’ initiatives and conferences; and disseminating NAEP resources to organizational constituents.

### Potential Partner Types

- The Media
- Colleges and Universities
- Think Tanks
- Education Advocates
- Parent Groups
- Foundations
- Private Companies
- Minority Advocacy Groups
- Governmental Organizations
- Individuals
- Other Testing Entities

### Recommended Partnership Activities

Implementing a partnership strategy involves several steps to review, vet and establish the optimal partnership. The following list suggests a handful of specific ideas for activities for the Governing Board to undertake with potential partners. It ranges from big events to daily interactions and demonstrates the cumulative power of partnership development.

This course of action will entail such initial tasks as developing a list of recommended partners and related database; conducting research on priority stakeholders in each audience category; creating a partnership scorecard that identifies the specific opportunity, approach, and outcome for each group; developing partnership outreach materials and other content; and conducting ongoing stakeholder monitoring to identify partnership opportunities.

- ***Events***
  - Present NAEP and related issues at education conferences.
  - Join with a teacher group like Teach for America, Phi Delta Kappa, or the National Staff Development Council to hold workshops for teachers on how to use NAEP.
  - Increase partnership with NCES and NAEP State Coordinators and local education groups to host state conferences and/or workshops in states or TUDA districts.
  - Partner with national and local PTAs to hold workshops for parents.
  
- ***Content***
  - Co-sponsor a series of monthly webinars, with a different NAEP-related topic.
  - Create electronic newsletters on Board and NAEP subject-specific topics, using NAEP data and other information.
  - Publish booklets or one-pagers on Board initiatives, task forces, or important topics.
  - Partner with a media outlet or a local university to do background reports on TUDA cities to put the TUDA data in richer context.
  
- ***Other Outreach***
  - Co-sponsor sections on the websites of NAEP partners, such as the Council of Chief state School Officers, and establish linking agreements with each.
  - Create an association of school districts that commit to using NAEP as a resource, partnering with them on assessment matters and making resources available school staff and parents on how NAEP works.
  - Work with the Hechinger Institute (a non-profit organization based at Columbia University that focuses on training education reporters and producing in-depth national and investigative journalism on education) to showcase NAEP as a resource for reporters.
  - Join with a teacher's group to give an annual award to a district, school, or principal that demonstrates best use of NAEP to improve instruction.

### **III. TRADITIONAL MEDIA STRATEGY**

The traditional print and broadcast media are important vehicles for public education. However, NAEP coverage in the media has been largely limited to Report Card releases. The extent and value of traditional media coverage can be increased through a number of tactics and tools. These might include media events, a Board directory and experts "tip sheet," op-eds, a story bank, and improved website usability for the press. The Report Card releases will be used as a

catalyst for generating ongoing use of NAEP data in coverage of broader educational policy issues. Ideas include:

- **More Events.** Create additional media events to release new frameworks, for example, or respond to emerging issues, and not just rely on Report Cards to generate news.
- **Media Training.** Conduct media training for Board members so they are comfortable and prepared for interviews.
- **Experts Directory.** Develop an expert’s directory of Board members, alumni and staff available for interviews and speaking opportunities, as appropriate.
- **Op-eds.** Write and pitch op-eds to various newspapers, magazines, and online sites on NAEP-related topics and Board endeavors.
- **Develop Contacts.** Cultivate media contacts and resources by regularly keeping in touch, seizing opportunities to send occasional emails and making phone calls.
- **Advance Outreach.** Conduct media pre-calls to create initial effective media placements on Board releases, events, and ongoing work.
- **Interactive Website.** Create dynamic online press kits and updating the “what’s new” section with press releases and video releases to entice more media interest.
- **Multiple Platforms.** Reporters for mainstream media now routinely produce web stories, videos, audio Q and As, and blog entries for each assignment. Outreach efforts should acknowledge these areas and tailor story ideas to a number of formats, helping reporters repurpose the material for different platforms.
- **Story Bank.** The Board should create a bank of broader story ideas that came out of release events, reports, and publications, and pitch those to journalists.
- **Database Expansion.** Expand media lists to include influential bloggers, online journalists, and others outside of traditional mainstream media.

#### IV. SOCIAL MEDIA STRATEGY

The Governing Board can engage in social media effectively while honoring its mission and maintaining its position of independence. Tactics include the following.

- **Create Facebook and Twitter Accounts.** The Board should develop profile pages for Facebook and Twitter to allow it to quickly and easily communicate with others using a variety of social media tools, including blogs, videos, images, tags, lists of friends, forums, and messaging. Alerts and postings on Board happenings and resources – events, data, background variables, etc. – can easily be disseminated and daily or weekly account

updates keep the Board in the spotlight between releases. Also, Board members and staff with Facebook and Twitter accounts already can help promote Board activities.

- **Blogs by Board Members.** Board members can rotate in writing a blog for [www.nagb.org](http://www.nagb.org), with postings prompted by test score trends, framework issues, news topics, and the like. Board members can share insights, pose questions, and provoke thoughtful discussion without overstepping their bounds. Ideally, the content would then be picked up by other bloggers who will send it to others, generating a viral effect.
- **Disseminate E-mail Newsletters.** The Board can develop a robust newsletter that includes content of interest to various audience groups, including teachers, associations, alumni, parents, and students who may not be aware of the Board and NAEP. It will help to forge connections and a sense of community among these audiences.

## V. WEBSITE STRATEGY

To position the Governing Board as a leading voice and authority on the complex issues of academic assessment and advancing educational innovation and excellence, its website should be positioned to play a more prominent role in achieving its objectives. This requires a redesign that supports and promotes the various communications channels and content of the entire communications plan outlined above, including:

- **Website Design.** The overall design should support the key content areas the website is targeting and be organized for easy navigation by subject or audience.
- **Search Engine Optimization (SEO).** Reingold, the Board’s communications contractor, will work with the Board and its web contractor, Quotient, to ensure the website receives full credit from search engines for content as it is published. This will involve ensuring design, word usage, tags, and the like will be positioned to help [www.nagb.org](http://www.nagb.org) show up on searches, so that people looking up phrases like “national assessment” and “high school achievement” would find us as well.
- **Keyword Research.** This process will help the Board identify high-traffic subject areas and the associated keywords or search terms most frequently used to research them. It will help shape the organization and development of content in the “language” of the Board’s target audiences, using keywords and phrases they use when navigating search engines to find information and relevant content. Because nearly 90 percent of all clicks from search engine results pages originate on the first results page, it is critical to understand which words and phrases the Board can realistically compete for to achieve a first-page position and then ensure those keywords and phrases appear in the target page’s URL, title, meta description, image alt text, video narration, and/or body text.
- **Content Development.** Once the above preliminary work is done, the site’s content that is interesting and relevant to the Board’s target audiences must be continuously developed, integrating your targeted keywords, posted in the appropriate areas of the site, and refreshed regularly.



- **Link-Building & Outreach.** The Board should develop an effective link-building campaign that includes initial research to identify a broad list of other relevant and authoritative websites, blogs, forums and other outlets based upon the [www.nagb.org](http://www.nagb.org) content and keyword strategy and approved by Board members and staff. Reingold can then approach these sites with requests that should identify a specific page on their website and connect that content/topic back to a specific page on the [www.nagb.org](http://www.nagb.org) website with complimentary content, information or resources. The strategy would increase Board exposure and improve SEO efforts.

## VI. NAEP COMMUNICATIONS ALIGNMENT

In the campaign's first six months, Reingold will help the Governing Board work with NCES and other internal stakeholders to develop the foundation for expanded outreach. This foundation will focus on specific tasks under the strategies for stakeholder outreach and partnerships, traditional media, social media, Report Card releases, and the website.

### Overarching Tasks

- **Review Governing Board branding.** Reingold will help the Governing Board and NCES to review the NAEP brand platform, determining how well its messaging and graphic elements distinguish and elevate NAEP and communicate the roles of the Governing Board and NCES.
- **Establish working group with NCES.** The Governing Board will create a NAEP working group with NCES to examine the activities and outreach undertaken by each group to determine if optimization is possible through greater coordination and collaboration. The group also can review the effectiveness of all NAEP materials and the Report Card release process, provide feedback, and recommend improvements.
- **Collaborate.** The Board staff and Reingold will define release plan roles, discuss deadlines, and streamline approval processes for release materials with NCES in a timeframe that enables optimal messaging, materials and content development.
- **Synergy.** The Board and NCES will work to align outreach strategies in communications and the website. For example, if NCES and its contractors sponsor a NAEP booth at a convention, then the Board can look into offering a member or staffer to give a presentation related to NAEP. Also, the Board and NCES can link to each other's sites more regularly on NAEP-related items so that each group is contributing to increased exposure for the other.



**THE NATION'S REPORT CARD**  
**WRITING 2011, GRADES 8 AND 12**  
**SEPTEMBER 14, 2012**

**Overview**

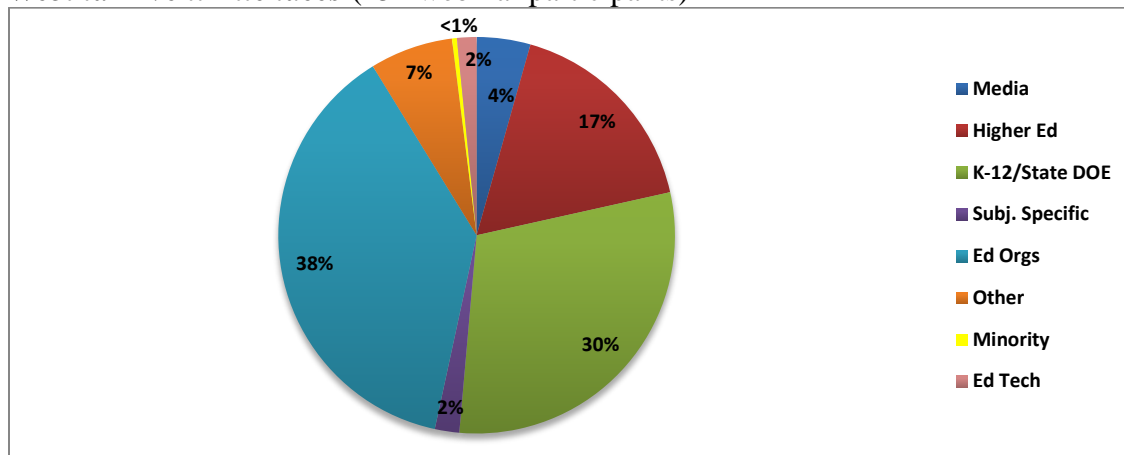
The public release of *Writing 2011, Grades 8 and 12* took place on September 14, 2012, at 11 a.m. EDT as a webinar. For this release, there were a total of 251 webinar participants (internal staff and contractors were not counted). In fewer than two business days, 18 original articles appeared in 209 outlets. An additional 210 news websites ran “The Nation's Report Card Releases Results” news release. Stories appeared in publications and on websites based in 43 states, Washington D.C., the United Kingdom and Australia.

**Release Event**

Webinar panelists included:

- **Arthur Applebee**, Distinguished Professor of Education; Chair, Department of Educational Theory and Practice; Director, Center on English Learning and Achievement, University at Albany, State University of New York
- **Jack Buckley**, Commissioner, National Center for Education Statistics
- **Beverly Chin**, Director, English Teaching Program, Department of English, University of Montana, Missoula
- **Susan Pimentel**, Educational Consultant; Curriculum Specialist and Member, National Assessment Governing Board
- **Mary Crovo**, Deputy Executive Director, National Assessment Governing Board (moderator)

**Webinar Event Attendees** (251 webinar participants)



## **The Nation's Report Card: Writing 2011, Grades 8 and 12 Selected Media Clips**

### **Nation's Report Card: Even with Spell-check, Just a Quarter of Students Proficient in Writing**

Associated Press, Sept. 14, 2012 – Christine Armario

### **NAEP Shows Most Students Lack Writing Proficiency**

Education Week, Sept. 14, 2012 – Nora Fleming

### **Writing Scores Could Preview New Standards' Effects**

USA Today, Sept. 14, 2012 – Greg Toppo

### **Teenagers' Texting Time Fails to Translate Into Sparkling Prose**

Bloomberg News Service, Sept. 14, 2012 – John Hechinger

### **Nation's Report Card: Writing Test Shows Gender Gap**

CNN, Sept. 17, 2012 – Donna Krache

### **Most U.S. Students Lack Writing Proficiency, National Assessment Of Educational Progress Finds**

The Huffington Post, Sept. 14, 2012 – Alex Kuczynski-Brown

## *Associated Press*

### **Nation's Report Card: Even with Spell-check, Just a Quarter of Students Proficient in Writing**

**By Christine Armario**

Students who have access to computers at home and regularly use them for assignments are more likely to be strong writers, a national exam suggests. But it also says just a quarter of America's eighth- and 12th-grade students have solid writing skills.

Twenty-seven percent of the students at each of those grade levels were able to write essays that were well developed, organized and had proper language and grammar — 24 percent were considered proficient, 3 percent advanced. The remainder showed just partial mastery of these skills.

“It is important to remember this is first-draft writing,” said Mary Crovo, deputy executive director of the National Assessment Governing Board, which administers the Nation's Report Card tests. “They did have some time to edit, but it wasn't extensive editing.”

Students who took the writing test in 2011 had an advantage that previous test takers did not: computers with spell-check and thesaurus. Previously, young people taking the National Assessment of Educational Progress writing test had to use pencil and paper; the switch was made in line with changes in technology and a need for today's students to write across electronic formats.

Because this was the first version of the computerized test, the board cautioned against comparing the results to previous exams. In 2007, some 33 percent of eighth-grade students scored at the proficient level, which represents solid writing skills, as did 24 percent at grade 12.

Crovo said most students already use such technology as spell-check on a daily basis. Without those tools, she said, “It's as if years ago we had given them a pencil to write the essay and took away the eraser.”

She said word processing tools alone wouldn't result in significantly better writing scores if students didn't have the core skills of being able to organize ideas and present them in a clear and grammatical fashion.

Still, students in both grades who used the thesaurus and the backspace key more frequently had higher scores than those who used them less often. Students who scored below the 25th percentile were less likely to have computers at home: 87 percent said they did, compared to 99 percent were in the top quarter.

The technology gap was hinted at in other statistics as well: The lowest scorers reported less daily computer use for school assignments, and 44 percent fewer said they always used a computer to make changes to papers or reports.

Mark Warschauer, an education professor at the University of California, Irvine, said research consistently shows the use of computers in the classroom improves writing performance. He said students end up writing more, getting more feedback from peers and teachers and publishing more, all of which keeps them motivated.

“It just improves every aspect of the writing process,” he said.

The latest test results make a strong argument for more use of technology in English language programs at school, Warschauer said, as home access is more uneven.

The results at both grade levels showed a continuing achievement gap between white, black, Hispanic and Asian students. At the eighth grade, Asian students had the highest average score, which was 33 points higher than black students on a 300-point scale. At the 12th grade, white students scored 27 points above black students.

There was also a gender gap, with girls scoring 20 points higher on average than boys in the eighth grade and 14 points higher in 12th grade. Those who qualified for free and reduced price lunch, a key indicator of poverty, had lower scores than those who did not; there was a 27 point difference between the two at the eighth grade.

For the 2011 exam, laptops were brought into public and private schools across the country and more than 50,000 students were tested to get a nationally representative sample. Students were required to write essays that explained, persuaded or conveyed an experience.

Kathleen Blake Yancey, a professor at Florida State University who served on the advisory panel for the test, said one factor to keep in mind is that research shows most students in the United States don't compose at the keyboard.

“What they do is sort of type already written documents into the machine, much as we used to do with typewriters four decades ago,” she said.

Yancey said for this reason there was some concern about having students write on computers as opposed to by hand. Likewise, having the advantage of spell-check assumes students know how to use it. And in some schools and neighborhoods, computers are still not easily accessible.

“There are not so many students that actually learn to write composing at the keyboard,” she said. Yancey added that many kids who do have access to computers are not necessarily using them to write at school, but to take standardized tests and fill in bubbles.

“Digital technology is a technology,” she said. “Paper and pencil is a technology. If technology were the answer, that would be pretty simple.”

## **Education Week**

### **NAEP Shows Most Students Lack Writing Proficiency**

By Nora Fleming

After decades of paper-and-pencil tests, the new results from the “nation’s report card” in writing come from a computer-based assessment for the first time, but only about one-quarter of the 8th and 12th graders performed at the proficient level or higher. And the proficiency rates were far lower for black and Hispanic students.

With the new National Assessment of Educational Progress in writing, students not only responded to questions and composed their essays on laptop computers, but also were evaluated on how frequently they used word-processing review tools like “spell check” and editing tools such as copying and cutting text. Some prompts also featured multimedia components.

According to the NAEP report, released today, the switch from paper and pencil to a computer-based test is tied to recognition of the role technology plays in a 21st-century student’s life. In 2009, a hands-on and computerized science NAEP was administered, and all new NAEP exams are slated to be computerized, including, for example, a 2014 technology and engineering assessment administered entirely on computers.

“This is a very exciting time for us,” said Mary Crovo, the executive director of the National Assessment Governing Board, which sets policy for NAEP, on a conference call with reporters. “[Technology] is becoming more the norm than the exception in our nation’s schools and certainly the way students communicate in college and the workplace.”

### **New Framework**

With the new format, which is evaluated on a revised NAEP writing framework, the latest results are not comparable to past exams, but future tests will use these results as a benchmark. The most recent paper-and-pencil tests were administered in 1998, 2002, and 2007.

On the new writing NAEP, given last year, the nationally representative sample of students—24,100 8th graders and 28,100 12th graders—were asked to respond to two 30-minute writing prompts that asked them to persuade, explain, or convey experiences. Results show the percentages of students in each grade reaching the “basic,” “proficient,” or “advanced” levels, which reflect how well they could communicate purposeful messages to specific audiences, such as a college-admissions committee.

At the 8th grade level, for example, one exercise called “Lost Island” asked students to imagine they had arrived on a remote island and listen to an audio file that included nature sounds and lines of a journal read aloud. Students then were required to write personal stories that chronicled an experience they would have had on the island, had they been there.

To reach “advanced” on the exam, students told well-organized stories with strong details, precise word choices, and varied sentences, according to the NAEP report. Students at the “basic” level would use some detail in their stories, but organization was “loose,” sentence structure unvaried, and word choice limited.

Teachers of students who took the new exam were surveyed on how frequently they assign schoolwork to be completed on computers. The report finds that those students who were required by teachers to use computers more often to write and edit assignments for school performed better on the test.

Overall, only 27 percent of students in both grades tested scored at or above the proficient level in 2011. The data also reveal some persistent achievement gaps. For instance, at the 12th grade level, 9 percent of black students and 12 percent of Latinos scored proficient or above, compared with 34 percent of white students.

Also, females outperformed males at both grade levels. In 8th grade, 37 percent of girls scored proficient or above, compared with 18 percent of boys. Such performance differences for various populations were similar to those seen with the paper-and-pencil tests, according to NAEP data.

David P. Driscoll, the chairman of the NAEP governing board, saw reason for concern in the new data.

“We need to focus on supporting students beyond the ‘basic’ levels so that they have a solid grasp of effective writing skills,” he said in a press release.

### **Access to Technology**

Beverly Ann Chin, a professor of English at the University of Montana, in Missoula, said the report provides insights on how students use technology to write. She also highlighted the stronger outcomes for students who used computers regularly in class.

“These findings support the importance of integrating computers into writing instruction,” she said in a statement. “When teachers encourage students to use word-processing features on a regular basis, students learn how computers can facilitate their writing processes and improve their final product.”

Ms. Chin raised concerns about access to technology, noting survey data from the NAEP report suggesting that students from low-income families were less likely to be asked by their teachers to use computers to draft and review their writing.

“Students who are skilled in using technology tools in writing will be more successful in school, the workplace, and society,” she said.

A pilot test of the writing NAEP also was given to 4th grade students. Students at that grade level will be included in the regular administration of the exam moving forward.

## **USA Today**

### **Writing Scores Could Preview New Standards' Effects**

By Greg Toppo

Just one in four middle- and high-schoolers produced solid writing on a new, more rigorous federally administered exam, offering a glimpse of what schools nationwide may face as they move to a similarly tough set of writing standards over the next two years.

The findings, out Friday from the federal government's National Assessment of Educational Progress (NAEP), suggest that new standards in writing and other topics, due in 2014, could put pressure on teachers to raise kids' basic skills.

"This does telegraph what we might expect to see in those early 2014 assessments," said Elyse Eidman-Aadahl, director of national programs for the National Writing Project, a network of college-level instructors who train teachers nationwide.

The new NAEP results show that only 24% of students scored "proficient," representing what educators call "solid academic performance" at each grade level.

Today's results represent the first from a more rigorous test administered last year to 52,200 eighth- and 12th-graders by the U.S. Department of Education's National Center for Education Statistics. Part of a push to align what they learn with what colleges and workplaces require, the new framework resembles the Common Core, a series of new standards developed over the past several years and approved by 46 states. Eidman-Aadahl said the lackluster showing suggests that educators may soon realize how poorly many schools teach the topic. "It's going to take a lot of shift to get people teaching writing again," she said.

When they looked at how kids composed, examiners also found a curious phenomenon: Using government-issued laptops loaded with rudimentary word-processing software, students were asked to compose two longish pieces of writing in one hour. In the course of writing, records show, only about one in five students even touched the "cut," "copy," "paste" or "delete" buttons. Meanwhile, 100% hit the "backspace" key at least once.

The results suggest that the teenage "digital natives" backspaced their way through mistakes as their grandparents might. Either they weren't comfortable with basic editing functions or simply didn't bother. By contrast, 89% used the computer's spell-check function before they handed in their writing assignment.

The complete results are available online at: [http://nationsreportcard.gov/writing\\_2011/](http://nationsreportcard.gov/writing_2011/)



## **Bloomberg News Service**

### **Teenagers' Texting Time Fails to Translate Into Sparkling Prose**

By John Hechinger

U.S. teenagers' texting, tweeting and posting on Facebook hasn't improved their writing, even when students have laptops with a spell-checking program.

Nearly three-quarters of the eighth- and 12th graders failed to achieve proficiency on a national writing test, according to a U.S. government report released today. For the first time, the exam let students use a computer, rather than pencil and paper.

Most students' writing "falls far short of the well-organized, well-developed prose that connects with those they are trying to reach," Susan Pimentel, a member of the U.S. Education Department board overseeing the test, said in a statement. That performance will hurt them in college, damaging their career prospects and earnings potentials.

The 2011 test, known as the Nation's Report Card, adds to concern about American schoolchildren's knowledge of math and science relative to other countries, particularly China, Japan and other Asian economic rivals. Lagging student performance has bedeviled U.S. presidents from Republican Ronald Reagan to Democrat Barack Obama.

The new version of the test, officially called the National Assessment of Educational Progress, offered students the tools of modern writing: a laptop with a word-processing program, including spell-checking, cutting and pasting and other editing functions, as well as a thesaurus.

More than 24,000 eighth graders and 28,000 12th graders took the exam. The report cards, which measure subjects such as math, reading, science and history, are the largest nationally representative of American student learning. Students have fallen short of national standards in other subjects, as well.

### **Writing Skills**

On the writing exam, 24 percent of students were considered proficient in writing and 3 percent, advanced.

The 2011 results can't be compared with the past pencil- and-paper exams. In 2007, the last time the government assessed writing, scores had increased from five years before, though most students also had poor writing skills.

On the latest report card, students who wrote more often at home did better on the test. So did those who made use of computerized tools during the exam to revise their work or find words on the thesaurus. By contrast, those who relied heavily on spell check scored lower.

Mirroring demographic results on other tests, Asian students outperformed other ethnic groups in eighth grade. In 12th grade, white, Asian and multiracial students performed comparably. Whites did better than blacks and Hispanics. Poor students lagged richer ones. Private and Catholic schools scored higher than public schools.

Girls beat boys by a higher margin than for any other subject. On questionnaires, girls said they wrote more and were more likely to call it a favorite activity.

### **Organization, Detail**

The Education Department judged writing based on organization, level of detail and variety of sentence structure. The students wrote for 30 minutes. The results were evaluated as first drafts, rather than polished works. Students wrote narratives, including fiction, and essays.

In one eighth-grade assignment, students imagined they were stranded on an island.

A weak response featured the following sentence: “There is five guys and five girls, the girls will get to sleep inside the plane so they don’t get to cold or scared.”

One of the stronger passages built suspense, conjuring a threat from dinosaurs:

“We slowly trudged through the dense sand back to our boat, which was now in sight. But it seemed that time stopped and the next thing I saw was a gigantic foot on top of our ruined boat. A dinosaur’s face 20 feet above leered down at us and growled.”

## CNN

### **Nation's Report Card: Writing Test Shows Gender Gap**

By Donna Krache

When it comes to writing, girls are better than boys.

That's a generalization, but it's one that is supported by the latest writing test from the National Assessment of Educational Progress (NAEP), better known as the Nation's Report Card.

The test, taken by 24,100 eighth-graders and 28,100 students in the 12th grade, was administered in early 2011. NAEP tests in different subjects have been given to students in the U.S. since 1969. This year, however, marked the first time that the writing test was computer-based. Students were able to take advantage of editing software and other writing tools, such as spell check and a thesaurus, as they crafted their writing samples.

Since this was the first large-scale writing assessment designed to be taken on a computer, the National Assessment Governing Board, which administers the NAEP, said that it could not make comparisons to previous "paper and pencil" writing tests.

Students were asked to perform writing tasks in three areas: To persuade, trying to change the reader's point of view; to explain, trying to broaden a reader's understanding of a topic; and to convey experience, trying to provide an account of a real or imaginary experience to a reader.

The NAEP writing test is a scaled test with a range of 0-300, and a mean score of 150. "Achievement levels" were set along that scale for the categories Below Basic, Basic, Proficient and Advanced.

Among eighth-graders, about 3% scored advanced, 24% scored proficient or above, 54% basic, and 20% below basic. (Because the numbers were rounded, they do not add up to 100%).

Among 12th-graders, about 3% scored advanced, 24% scored proficient or above, 52% basic and 21% below basic.

According to the board, performances varied by race, ethnicity, gender, school location and other factors, such as parents' educational attainment. But the most notable achievement gap was between males and females in both eighth and 12th grades.

On average, female students in the eighth grade scored 160; their male counterparts scored 140.

On average, female students in the 12th grade scored 157; males scored 143.

Education analyst Susan Pimentel, one of the team presenting the test scores on Friday's NAEP conference call, said that while this test cannot determine cause and effect, there are some clues as to why the gap exists. Students were surveyed to find out some additional information about them as they took the test. Among those surveyed, said Pimentel, 53% of girls agreed or strongly

agreed that “Writing is one of my favorite activities”, but only 35% of the boys felt that way. Since writing improves with practice, she said this is “an important variable to observe.”

According to the survey, 39% of 12th-graders said they write only one page of homework or less per week in English, which is also of concern as high school teachers focus on college readiness as one of the goals of the Common Core State Standards, said Pimentel.

The NAEP test also revealed that regardless of income, students who frequently use computers to draft and revise their writing performed better than those who regularly do not.

To improve on writing scores, the board encourages engaging boys in “meaningful” writing as part of the curriculum and providing all students with opportunities to use computers to write and edit whenever possible.

## **The Huffington Post**

### **Most U.S. Students Lack Writing Proficiency, National Assessment Of Educational Progress Finds**

By Alex Kuczynski-Brown

Only roughly one quarter of eighth and 12th graders are proficient in writing, according to results from the National Assessment of Educational Progress' first-ever computer-based writing assessment. The new framework represents a move away from the traditional paper-and-pencil format that has dominated the testing scene for nearly four decades.

NAEP's exams are considered the gold standard measurement of student achievement. In May, results showed that about a third of eighth graders who took its science exam were proficient, a statistic National Science Teachers Association's interim director Gerry Wheeler slammed as "unacceptable." Similarly, only 32 percent of students performed at the proficient level on NAEP's math exam in 2007, ranking the U.S. 32nd out of 65 countries that were tested on the 2009 Programme for International Student Assessment (PISA), NAEP's international equivalent. This trend also appears to hold true for writing, though the format may have changed.

Drawing from a sample of 24,100 eighth graders and 28,100 12th graders representing both public and private schools, the 2011 writing assessment asked students to complete two 30-minute tasks, each of which was designed to measure one of three communicative purposes: to persuade, explain or convey experience. The prompts were presented in multimedia formats that included video or audio segments, newspaper articles, real-world data and other materials around which students could formulate a response. They recorded their answers on a laptop that featured commonly used word-processing tools such as spell check and a thesaurus.

“[Those who developed the framework] felt it was definitely time that we start assessing our students using computers,” Dr. Mary Crovo, deputy executive director of the National Assessment Governing Board, said in a statement. “This is becoming more the norm than the exception in our nation’s schools, and it is certainly the way that students write and communicate in higher education and in the workplace. So we feel very strongly that this is a solid assessment for 21st century skills.”

Results showed 24 percent of students at both grade levels scored at the proficient level on the writing assessment, while 54 percent of eighth graders and 52 percent of 12th graders met the benchmark for "basic." Around 20 percent of both grades performed below basic, while only 3 percent scored at the advanced level.

Among eighth graders, Asians outperformed other racial/ethnic groups, averaging a score of 165 on a 300-point scale. A mean of 150 was set for both grades. At the 12th-grade level, however, white students, Asian students and students of two or more races performed comparably. In both grades, African American and Hispanic students had lower average scores than the other races.

In addition to assessing students' writing ability, the new computer-based format of the exam allowed test administrators to collect extensive information on 24 separate student "actions," including keystrokes, backspacing, deletions and their use of spell-checking programs. Results found that at both grade levels, students who used the backspace key and thesaurus tool more frequently scored higher than those who did not routinely engage in these practices. Furthermore, English language learners were less likely to use the thesaurus tool than non-English language learners.

Dr. Jack Buckley, commissioner of the National Center for Education Statistics, said in a press call that the standards of proficiency were tailored to reflect the computer-based nature of the assessment, and that students' writing was evaluated holistically -- taking into account development of ideas, organization and language facility and conventions.

Thus, while the spell check tool might have provided students with an advantage they did not have when taking the old paper-and-pencil tests, spelling was only evaluated under the category of "use of conventions," and to the degree that it might interfere with what the student was saying.

"The raters who are scoring the students' results were asked to consider these as first drafts. They don't expect to see a polished final report; they're expected to see first-draft quality," Buckley said, later pointing out that the word processor tool is not going to result in significantly better writing if the student is not already fluent in expressing his or her ideas.

While the new computerized framework makes it difficult to directly compare results to the past, Buckley acknowledged, "there was not a lot of difference in levels of proficiency" from 2007, when the most immediate prior writing assessment was administered.

On the 2007 pencil-and-paper tests, 35 percent of eighth graders and 25 percent of 12th graders scored at or above proficient -- on par with 2011's results, at least for 12th grade.

Additionally, female students in both grades scored higher than their male counterparts on the 2011 writing assessment -- a pattern that is consistent with previous results, according to Buckley.

Crovo, the deputy executive director of the National Assessment Governing Board, said that the NAEP hopes to add fourth graders to the sample in the near future.

Said Crovo, "We're hopeful this new 2011 computer-based assessment can serve as a baseline for looking at trends over time."

## Upcoming NAEP Reports as of November 2012

Report	Expected Release Date
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### Initial NAEP Releases

<i>2009 and 2011 Reading Vocabulary</i>	December 2012
<i>2012 Economics</i>	April 2013
<i>2012 Long-Term Trend</i>	June 2013
<i>2013 Mathematics Grades 4, 8, 12</i>	October 2013
<i>2013 Reading Grades 4, 8, 12</i>	October 2013
<i>2013 Mathematics TUDA Grades 4, 8</i>	December 2013
<i>2013 Reading TUDA Grades 4, 8</i>	December 2013

### Other NAEP Reports

<i>2005 HSTS Math Curriculum Study</i>	January 2013
<i>Linking NAEP and TIMSS 2011 Mathematics and Science Results for the 8<sup>th</sup> Grade</i>	March 2013

### NAGB Reports

<i>Mega-States Report: Grades 4, 8, and 12</i>	February 2013
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### Other Related Reports from NCES

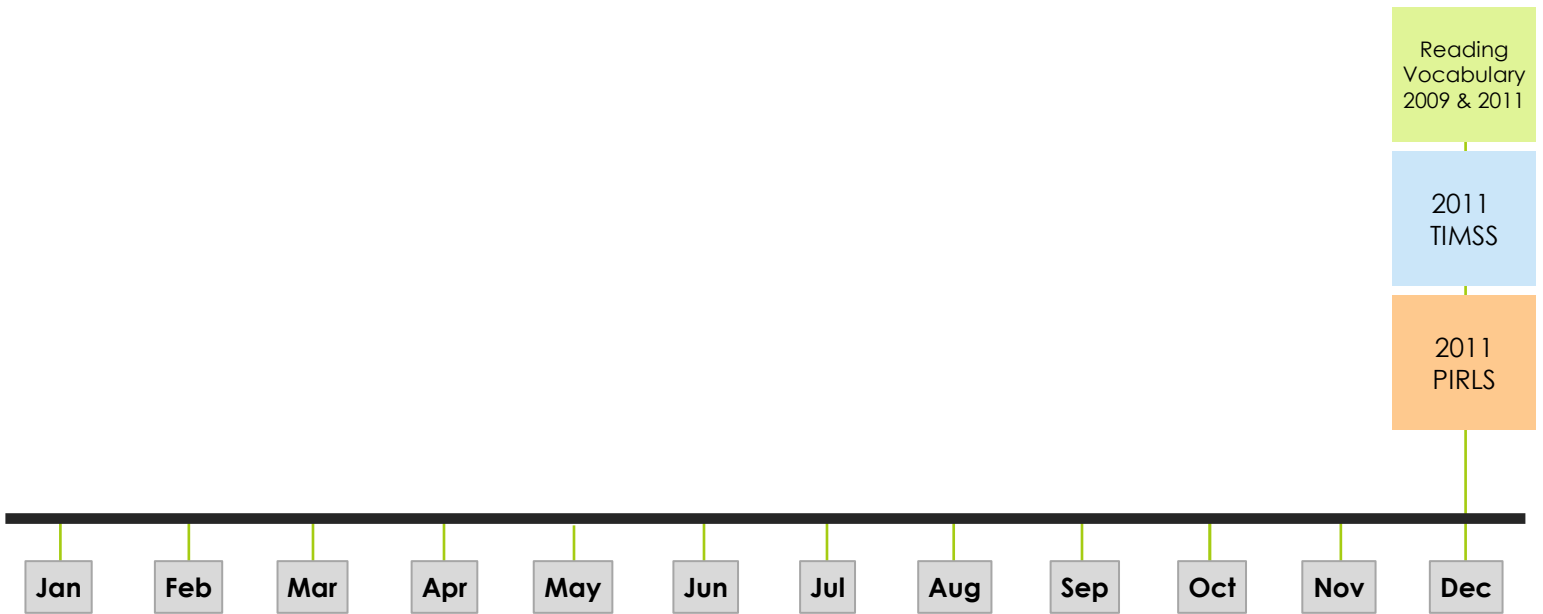
<i>Applying Simulation Methods to National TIMSS Data to Estimate State- Level Average Scores</i>	October 2012
<i>Revenues and Expenditures for Public Elementary and Secondary Education: School Year 2009-2010</i>	October 2012
<i>Access to and Use of Educational Technology, by School Level and Poverty Concentration, in 2008 and 2009</i>	November 2012
<i>Dual Credit and Exam- Based Courses in U.S. Public High Schools: 2010-2011</i>	November 2012
<i>Enrollment in Post-Secondary Institutions, Fall 2011, Financial Statistics , Fiscal Year 2011 and Graduation Rates, Selected Cohorts, 2003-2008</i>	December 2012
<i>Debt Burden Among Non-Completers</i>	December 2012

<i>Highlights from PIRLS 2011: Reading Achievement of 4<sup>th</sup> Grade Students in an International Context</i>	December 2012
<i>Highlights From TIMSS: 2011 Mathematics and Science Achievement of U.S. 4<sup>th</sup> and 8<sup>th</sup> Grade Students in an International Context</i>	December 2012



# 2012

## NCES Assessment Data Release Timeline

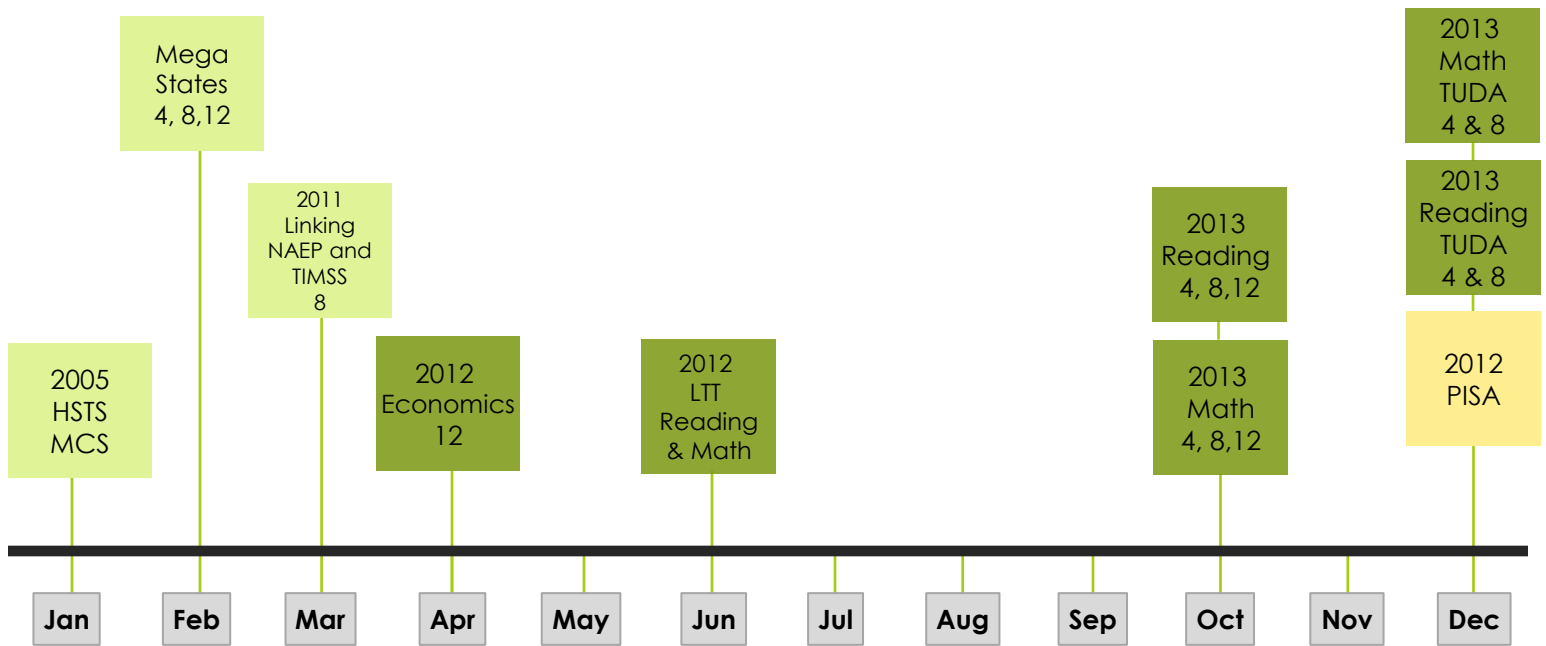


**LEGEND**

- NAEP Report Cards
- NAEP Studies
- TIMSS
- PIRLS
- PISA

# 2013

## NCES Assessment Data Release Timeline



### LEGEND

- NAEP Report Cards
- NAEP Studies
- TIMSS
- PIRLS
- PISA

## Releases in 2012

- ❑ 2009 and 2011 Reading Vocabulary
- ❑ 2011 TIMSS : Grades 4 and 8 (National only)
- ❑ 2011 PIRLS : Grade 4 (National only)

## Releases in 2013

- ❑ Linking NAEP and TIMSS 2011 Mathematics and Science Results for the 8<sup>th</sup> Grade
- ❑ Mega States Report: Grades 4, 8, and 12
- ❑ 2012 Economics Report Card: Grade 12 ( National only)
- ❑ 2012 Long-term Trend (LTT) Reading & Math: Ages 9, 13, and 17 (National only)
- ❑ 2013 Reading Report Card: Grades 4 and 8
- ❑ 2013 Reading Report Card: Trail Urban Districts (TUDA): Grades 4 and 8
- ❑ 2013 Mathematics Report Card: Grades 4 and 8
- ❑ 2013 Mathematics Report Card: Trial Urban Districts (TUDA): Grades 4 and 8

## Assessment Data Collection Schedule 2013

- ❑ Reading: Grades 4, 8, 12
- ❑ Math: Grades 4, 8, 12
- ❑ Writing: Grade 4 (National only)

## National Center for Education Statistics Update on Focused Reports Requested by Governing Board

NCES is in the process of developing several reports of interest to the Governing Board.

A Focus on NAEP on gender gaps will examine the differences in performance between 4<sup>th</sup> and 8<sup>th</sup> grade boys and girls in NAEP mathematics, reading and science using 2011 data. It is currently in development and is expected to be released in the spring of 2013.

A profile of Black male students is expected to be released in the Fall/Winter of 2013. Focusing on 8<sup>th</sup> grade males, this report will use performance on NAEP mathematics, reading, and science as well as background questions. The report will also include information from other Department of Education surveys to help contextualize the data presented.

NCES is also planning reports on charter and private school performance, which will include 2013 results. Both reports will focus on 4<sup>th</sup> and 8<sup>th</sup> grade mathematics and reading performance. The reports will include comparisons with public school results. The two reports are expected to be released in 2014.

*Prepared November 2012*



## **Mega-States: An Analysis of Student Performance in the Five Most Heavily Populated States in the Nation**

This report will provide NAEP results for the five Mega-States—the most populous states in the nation. The Mega-States are California, Florida, Illinois, New York, and Texas. Close to 40 percent of the nation’s students attend schools in these states. Additionally, eight of the ten most heavily populated cities are located in the Mega-States and they represent distinct regions of the country. They also have the highest number of English language learners (ELL) in the nation. Given the scope of these school systems and the challenges they face, outcomes in these states inform and influence decision makers regionally and nationally. An NCES report that tabulates, organizes, and discusses these specific results provides a needed service to the educational community.

### **CONTENT**

The NAEP 2011 Mega-States report will discuss NAEP results for fourth- and eighth-graders in reading, mathematics, science, and writing in California, Florida, Illinois, New York, and Texas. In particular, the report will show how score changes in these states compare to score changes nationally. It will look at score gains made in these states overall and by major reporting groups (e.g., race/ethnicity, National School Lunch Program eligibility status, disability status, and English Language Learner status). These comparisons will be presented graphically within the report and online. The report also offers graphical representations of the percentage of students in selected student groups at or above *Proficient*. The report will present these data for the most recent assessment year, while online users may view how the data points have changed over time. The web report will present special data visualization tools for users to investigate how student performances in these Mega-States compare with the nation and each other and how their individual performances have changed over time. There will be tables and graphs displaying trends in scores and achievement-level results. Additionally, there will be a concise display of the performance for all Mega-States in one interactive figure.

### **PUBLICATION PLANS**

The report will be issued in both printed and electronic formats. The printed report will contain the main findings, comparisons, and trends. Links will be embedded in the electronic form of the report to more detailed findings on the NAEP web sites. This companion Web report will complement this presentation with interactive displays and state ranking tools, and will also include contextual variables and additional demographic data.

**Governing Board Review:** 9/20/2012

**Projected Release:** February/March 2013

REPORTING AND DISSEMINATION COMMITTEE —11/2/09

## **NAEP 2009 Mega-States Report**

### **STATES INCLUDED**

California, Texas, Florida, New York, and Illinois

### **RATIONALE**

These five mega-states, each enrolling over 2 million students in public school, are of great importance to the United States as a whole because they contain the nation's largest cities, ports, and industrial and financial centers. Together they account for almost 40 percent all U.S. public school students, and share common factors of diversity and size.

### **FORMAT, SUBJECTS, AND GRADES**

The report will be designed primarily for the Internet, and will be accompanied by a short highlights document to be available both in print and on-line. It will present NAEP data across the curriculum at grades 4 and 8 for reading, mathematics, science, and writing. In addition, data for grade 12 reading and math will be presented for Florida and Illinois, the two mega-states that participated in the NAEP 12<sup>th</sup> grade pilot assessment.

Almost all the data included will be available on the NAEP Data Explorer. The mega-states report will repackage this material to permit much more accessible comparisons and analysis.

### **YEARS AND METRICS FOR REPORTING**

Data will be reported for the most recent year assessed—2009 for reading, math, and science; 2007 for writing—with trends back to the first year in which the state participated in NAEP. For 8<sup>th</sup> grade math that would go back to 1990. Data will be presented in terms of both scale scores and achievement levels. Changes will be highlighted from the initial assessment year, the most recent previous assessment, and from 2003, the first year in which all states were required to participate in NAEP.

### **TIMELINE, FUNDING, AND RELEASE**

The report will be issued in November-December 2010 following the initial release of national, state, and urban district results for all grades and subjects in the 2009 National Assessment. The report will be prepared by the National Center for Education Statistics and paid for from regular NAEP appropriations. The release will be conducted by the National Assessment Governing Board.

**GROUPS FOR WHICH DATA WILL BE PRESENTED**

- Statewide overall
- Racial/ethnic—white, black, Hispanic, and Asian
- Male-female
- Socio-economic status—poverty (as measured by eligibility for federal school lunch program) and level of parent education
- Districts in the Trial Urban District Assessment (TUDA) compared with achievement in the balance of each state
- English language learners and students with disabilities

**ADDITIONAL DATA ELEMENTS**

- Demographic profile of each state, showing selected subgroups as percentage of total student population with comparison to base year and 2003.
- Composite of student achievement across grades and subjects, based on percentage of students above Proficient and/or national percentile rankings for average scores.
- International benchmarks when available through linking studies.
- Charter and regular public school schools.
- Comparisons between NAEP and state standards, placed on the NAEP scale.
- Achievement gaps between black, white, Asian, and Hispanic students. Difference between 10<sup>th</sup> and 90<sup>th</sup> percentiles statewide.
- Contextual factors of public policy interest, such as class size, per pupil spending, algebra in 8<sup>th</sup> grade, teacher experience and major or minor in discipline taught, availability of classroom computers and Internet, and frequent school changing (years the student has been in school).



## **Introduction – Parent Outreach Planning Proposal**

At its May 2012 meeting, the Governing Board approved recommendations by the Ad Hoc Committee on NAEP Parent Engagement to increase outreach activities to inform parent leaders and parent groups about NAEP. From this point on, the Reporting and Dissemination Committee will play a key role in reviewing and recommending activities and strategies designed to inform parent leaders about NAEP and how it can be a useful resource for the nations' parents. The goal is to develop ways the Board and others can use NAEP data and resources to increase awareness among parents about the urgency to improve overall student achievement and reduce achievement gaps by race, ethnicity, and income.

The following document, "Parent Outreach Planning Proposal," outlines recommendations from Board staff and Reingold, the Board's communications contractor, on potential outreach activities the Board can pursue. At its November 30 meeting, the Reporting and Dissemination Committee will provide feedback on the parent outreach recommendations and input on additional ideas the Board should consider. This information will be collected to create an overall strategy that will be formally approved by the committee and then the full Board, potentially at the March 2013 Board meeting. Below are several discussion questions suggested by Board staff to facilitate the conversation on parent outreach.

### **Discussion Questions**

How can NAEP be relevant to parents, especially as there are no data available at the student or school level?

What messages and information would we most want parent leaders and organizations to hear and know about NAEP and the Governing Board?

What kinds of education-related resources would be useful to parents that NAEP can provide?

Besides organizations like PTA, which groups or communities would benefit from parent-centered outreach on NAEP?

What activities and strategies might best resonate with parents, parent leaders, and parent groups?

Which parent outreach strategies should receive a high priority during the first six months of implementation?



# Parent Outreach Planning Proposal

## OVERVIEW

The National Assessment Governing Board recognizes that parents have a vital interest in the quality of our students' education and can be an influential force to effect change. The Board understands that parents have a fundamental personal interest in the education of their children; the challenge therefore is to communicate messages that also instill a concern for increasing the achievement of *all* children. Parents are therefore a key audience for the valuable information NAEP provides.

To alert parents to the crises we face in K-12 education and to encourage them to use NAEP resources to educate themselves and advocate for improvements in education, the Governing Board formed an Ad Hoc Committee on NAEP Parent Engagement in March 2011. The final report of that Committee was issued March 2, 2012, and presents recommendations for how the Governing Board can meet the overriding goal of effectively communicating to parents the urgent need to improve student achievement and close achievement gaps. These recommendations, approved unanimously by the Board on May 19, 2012, include:

- **Audience:** *Specify the target audience: national, state, and local parent leaders and parent organizations.*
- **Partnerships and Outreach:** *Establish relationships with recognized parent and community-based organizations.*
- **Materials:** *Develop presentations and materials targeted to parents for use by Governing Board members and others.*
- **Website and Online Outreach:** *Develop parent pages on the Governing Board and NAEP websites.*

What follows is a set of recommended approaches for Board consideration. It is important to note that the Governing Board defines its primary parent audience as parent leaders and influencers at the national and local level. It is not practical to assume that all parents can be reached effectively, nor is it sufficient to communicate only with parents of children participating in NAEP.

The Governing Board and the National Center for Education Statistics (NCES) both seek to inform parent leaders about NAEP and encourage them to use its numerous resources. The organizations should coordinate outreach activities to minimize duplication of effort or potential outreach gaps. This outreach proposal takes into account activities undertaken to date by the Governing Board and NCES to engage parent leaders with NAEP, and suggests additional strategies and tactics, across a variety of communications channels, to assist the Governing Board in effectively implementing the recommendations of the Ad Hoc Committee.

## GOALS FOR OUTREACH

The Governing Board's parent outreach efforts should clearly convey how the Board believes parent leaders can use NAEP. Initiatives should inspire parents to take the following actions:

- Learn about NAEP and understand the data and resources available.
- Access and use NAEP tools to better understand achievement trends and drivers.
- Have discussions and ask questions about improving student achievement and narrowing achievement gaps.

## **OUTREACH EFFORTS TO DATE**

As background to our recommendations, it is important to note the outreach activities the Governing Board and NCES have pursued thus far to reach the parent audience.

The Governing Board has extensively tested materials and messages with parent leaders over the last year. These leaders have made it clear there is a demand for NAEP data and resources that are presented in a parent-friendly manner. Feedback suggests there is still work to be done to create materials and website resources to better meet parent leaders' needs.

**Audience.** The Governing Board has targeted its outreach efforts to influential parent organizations and parent leaders that are in a position to have an impact on education policy, and can act as conduits to their potentially broad national networks of parents. Parallel efforts by NCES have focused on general parent audiences, as well as specifically on parents whose children have been selected to take NAEP.

**Partnerships and Outreach.** The Governing Board's initial efforts have been promising. The Board has successfully established relationships with nationally recognized parent-focused organizations including the National PTA and Public Education Network (PEN).

Both organizations helped to recruit parent leaders for meetings in February 2012 to review Governing Board materials, and both have begun to share NAEP information with members through channels including newsletters and social media. National PTA invited Ad Hoc Committee Chair Tonya Miles to give presentations at its legislative conference in March 2012 and annual conference in June 2012.

The Board also received enthusiastic participation and substantive input from Washington, D.C.-area parent leaders from organizations including Learning First Alliance, The Parent Institute, Parents Across America, Parent Educational Advocacy Training Center, and Parent Advocacy Coalition for Educational Rights at outreach events in August of 2011 and 2012.

Last, the Board is planning an education summit for parents in early 2013 in Washington, D.C., and available across the nation via live-streaming Internet video, with the potential for live TV and radio coverage. The objective of the summit is to convey the urgency of improving student achievement in the United States for all children and the urgency of reducing achievement gaps among student subgroups. The audience of 150 to 300 would consist primarily of parent and community leaders, parent organizations, and leaders in education, business, civil rights, the religious community, and legislative policy.

**Materials.** The Governing Board has developed working outreach materials including a PowerPoint presentation and state profile one-pagers, which were presented at workshops held in February 2012 for the national organizations named above. The materials were well received; participants indicated that a demand exists for parent-focused materials and requested access to

additional NAEP data and resources. The materials were subsequently refined, in response to participant feedback.

NCES has developed a brochure for the general parent audience, “[What Every Parent Should Know About NAEP](#),” which debuted at the National PTA annual conference in June 2012. It is available in both English- and [Spanish-language](#) versions and can be downloaded from NCES’ website, and will be available at the meeting. Details on major materials are as follows:

***Materials in Process:***

- **Parent PowerPoint.** The draft PowerPoint was developed to use at Governing Board events, conferences, and other stakeholder activities. It is also suitable for use by parent leader groups with their constituencies. The presentation features the core messages for parent leaders (discussed in detail below), illustrating how NAEP materials can help parent leaders ask the right questions. It comes with a tested script and includes basic information on NAEP online tools, frameworks, achievement levels, the assessment landscape, noteworthy economic indicators, and report card results. This presentation and variations have been made with parent leaders and received very positive feedback. Available here: “[Improving Achievement and Closing Gaps: What Parent Leaders Can Do](#).” Reingold has submitted to the Board options for ways that parent leaders can customize the presentation with their local or state data.
- **State and District Profiles.** Reingold worked with the Governing Board to develop a snapshot template for possible print use and download from the Board website. These are intended to be parent-friendly versions of the NAEP state and district profiles, with a focus on *Proficient*-level achievement information and key background variable findings. They also include brief explanations of what the data show, including trend lines. This document was shared with parent leaders and feedback received.
- **Mapping State Standards One-Pager.** This piece was developed to call attention to the differences among state standards, the role NAEP plays in facilitating state standards comparisons, and the discrepancies between NAEP’s *Proficient* achievement level and the states’ various levels for “proficiency.” The piece also includes interpretations for reading the graphs. This document has not yet been tested with the parent leader audience.

**Website and Online Outreach.** In July 2012, the Governing Board launched its redesigned website, including a section targeted specifically to the parent audience with information on NAEP and the Governing Board, news for parents, and links to various tools parents can use.

At its parent outreach event in August, the Board presented the new pages to parent leaders and facilitated a discussion to capture their feedback. Attendees expressed a high level of interest in the Board’s parent activities, and gave numerous suggestions for ways to make the site more user-friendly for parents. Key feedback included:

- The pages are dense and potentially intimidating to parents. There is a lot of text with few visuals and no clear hierarchy of content.

- The pages should convey more clearly what actions a parent visiting the site should take and give a better understanding of how they can use NAEP resources. This call to action could include specific questions parents can ask of education leaders or examples of how parents have used NAEP data.
- The pages should be more direct in conveying NAEP’s relevance to parents. They should emphasize how NAEP sheds light on education at the local level, how subjects on which students are tested are relevant to life skills, and how NAEP is distinct from state and local assessments.
- The content should be available in other languages, especially Spanish.
- Parent leaders would be eager to use NAEP resources available from the site—for example, materials that parents can customize with their local information.

Reingold has also submitted to the Governing Board an audit of the new website, which includes additional recommendations for ways to revise the parent pages.

NCES has also developed pages for parent audiences, available at [nationsreportcard.gov/parents](http://nationsreportcard.gov/parents) and [nces.ed.gov/nationsreportcard/parents/](http://nces.ed.gov/nationsreportcard/parents/), which focus on, respectively, general parent audiences and parents of students taking NAEP.

## **PARENT MESSAGES**

Prior to developing further materials and conducting outreach, the Governing Board should confirm its core messages for parent leaders. Messages should reflect NAEP data to make the case that there is an urgent need to improve student achievement and close achievement gaps. Once parent leaders understand that urgent need, the messages must include suggestions for how they can use NAEP resources as a foundation to ask questions and discuss ways to have productive conversations with state and local educators and policymakers that are focused on improving student achievement and closing achievement gaps.

Featured for consideration below are proposed primary messages (in bold) and secondary messages (bulleted) for the Board to consider. These messages would be used across various outreach materials and activities.

### **Our nation faces a crisis in K-12 education.**

- There is an urgent need to improve our students’ achievement and close persisting gaps between underserved students and their peers.
- In the core subjects of reading and mathematics, less than 40 percent of 4th, 8th, and 12th graders meet the *Proficient* level on NAEP.
- Today’s students are the drivers of tomorrow’s economy. Low student achievement will affect the competitiveness of our future workforce and our nation’s prosperity.
- U.S. student achievement has fallen significantly behind that of students in the highest-performing countries.
- Demographics are changing. Our nation cannot afford for minority groups to achieve at levels below their peers.

- Our nation is dedicated to the principle of equality. It is morally unacceptable to allow wide gaps on the basis of race or income level to persist between groups of students.

**NAEP is a truth teller, shining a light on how our nation’s students are performing.**

- As the only nationally representative measure of student achievement, NAEP provides a unique diagnosis of the condition and progress of education at the national, state, and urban district levels.
- NAEP doesn’t report on individual students, but rather provides the big picture.
- Unlike state tests, which vary in their standards from state to state, NAEP is a common measure across all states. It also allows a comparison of student achievement across urban districts and student subgroups.
- The Governing Board identifies the *Proficient* level of achievement as the benchmark. *Proficient* designates “mastery over challenging subject matter,” and helps us understand what is “good enough” in terms of student achievement.
- NAEP collects background information from students, teachers, and administrators that helps identify both in-school and at-home factors related to achievement.

**Parent leaders can use NAEP as a tool to engage other parents in helping improve student achievement and close achievement gaps.**

- Parents are the primary advocates for their children’s education, and they can also serve as an influential force advocating for improved education for all students.
- Parent leaders can use NAEP data and tools to identify where student achievement stands, as well as areas that deserve further attention to improve achievement.
- NAEP resources can help parent leaders have productive conversations with peers and state and local educators and policymakers to promote student achievement and close gaps.

## PROPOSED OUTREACH RECOMMENDATIONS

Based on the established goals, messages, and existing activities described above, Reingold proposes the following outreach strategies, presented in the context of the Ad Hoc Committee's recommendations. We have commented on the level of effort required and anticipated impact to assist the Governing Board in setting priorities in its outreach approach.

### Audience

In its report, the Ad Hoc Committee has identified the target audience for parent outreach as follows: *Groups of active parents and parent organizations who see the connection between system performance and the potential for impact on individual students. These include local and state leaders, often members of recognized parent and community organizations, who regularly work with the leaders of education systems, examine data, and ask fundamental questions to support and foster improved achievement and the closing of achievement gaps.*

**RECOMMENDATION:** Having defined its audience, the Governing Board should:

- Review its stakeholder database to ensure that all relevant groups have been captured.
- Develop a relationship map that connects Board members, alumni, and other NAEP champions with the target parent leader audience.
- Develop a list of 50 key parent leaders on which to focus initial outreach efforts. These contacts can help to reach as many parents as possible by using their networks to efficiently disseminate the Board's messages.

### Partnerships and Outreach

**RECOMMENDATION:** The Governing Board should continue to identify key parent influencers and approach them about opportunities to partner, present, or share in activities, including co-hosting in-person or online events.

- **Target education journalists or publications and pitch parent-focused articles or newsletters.** The Board's media database includes parent-focused journalists who receive alerts regarding report card releases, but there has not yet been a coordinated effort to reach these journalists with targeted messages. Reingold suggests the following:
  - Further refining a parent-specific media database.
  - Developing specific messages to send to contacts between releases, and encouraging them to write articles for the parent audience.
  - Providing content to education and parent reporters or bloggers to post on their social media pages or in their newsletters.
- **Co-sponsor panels, forums, or workshops with local and national parent-focused groups.** Such events could be held after a report card release to break down the results specifically for parent leaders. The Board could also hold an online national conversation on assessments—a town hall meeting, or “NAEP Day”—during which experts can provide comments and be available to answer assessment-related questions. Further, the

Board could partner with civil rights groups that have significant parent involvement for sessions on using NAEP tools to gain insights on achievement gaps. Many groups, such as the Alliance for Excellent Education, put on webinars with education leaders. The Board has already participated in several of these, and could seek additional opportunities to participate in similar webinars with a parent group leader like National PTA to discuss the importance of parent involvement in education, or what the latest NAEP results mean for parents.

- **Partner with prominent organizations to develop parent-focused op-eds.** Board members or parent groups that use NAEP could write op-eds on a timely education topic that highlights NAEP results in the context of various local and regional education issues.
- **Distribute materials to community groups and schools.** Community facilities including parks, recreation and community centers, churches, and libraries are potential places for parents to find NAEP information. The Governing Board can work with NAEP state coordinators and parent groups to distribute materials at these points. There may also be opportunities at schools, such as during back-to-school events, book fairs, and parent-teacher conferences, where NAEP materials for parents can be shared. Additionally, administrators and school counselors could be invited to workshops or webinars on how to use NAEP resources to inform and empower parents.
- **Speak at education-related conferences.** Most large parent, education, and civil rights organizations have annual conferences. Representatives of the Board who are practiced in speaking to parents could present on the ways parent leaders can use NAEP. At a larger education conference such as Education Nation, the Governing Board could team up with a national, state, or local recognized parent leader and co-present on a topic, such as using data for improving achievement.
- **Work with NAEP state coordinators to connect with parent leaders.** NAEP state coordinators provide invaluable opportunities to reach parent organizations at the state level. The Board should collaborate with NCES on ways to consider having state coordinators assist in raising awareness of NAEP among parent leaders, establish relationships, connect parent leaders with NAEP resources, and explain how parent leaders in their states use NAEP.

## Materials

**RECOMMENDATION:** Existing and new parent materials will be integral to the outreach effort. Relevant materials should be customized for particular states and urban districts. Many of the materials listed below can serve as important assets for outreach activities listed in this proposal.

### *Proposed New Materials:*

- **High Standards One-Pager.** Reingold has created a concept version of this piece, which includes a summary of the overall student achievement crisis and the need to narrow

achievement gaps in the United States. The one-pager also includes a call to action for parent leaders, with priority tools and information they can use to get involved. The document would feature:

- An overview of the urgency of addressing low achievement and achievement gaps
  - Definitions of the achievement levels, communicating NAEP’s *Proficient* level as the benchmark to aim for
  - Sample questions mapped to achievement levels as practical examples through which parent leaders can better understand what *Proficient* means
  - Information on economic and social implications of low achievement
  - Callouts such as parent testimonials, questions parents can ask, and compelling background variable statistics
- **Parent Leader Testimonials.** The Governing Board should gather testimonials from parent leaders who have used NAEP as a resource and motivator for change. This could be a video to show on the Web or at conferences, or a PDF file for print distribution. The tools would include:
- Examples of how parent leaders can use the frameworks, report card data, NAEP tools, and other resources
  - Quotes that convey “I use NAEP to...”
  - Parent leader-created checklists with steps others can take to get parents involved in improving education for all children
- **Background Variable One-Pager and Quiz.** This tool would include a one-pager with information on collected background variable data and how parent leaders can use these data. An interactive quiz for parent leaders—its goal to educate parents in ways to improve student achievement—could test their knowledge of ways to improve academic performance, focused on compelling findings from a cross section of report cards. The tool would include:
- Information on the collection of the background data, the questionnaires, and the types of information that are made available through them
  - A results page or section with report card findings, for example, the 2011 NAEP Reading finding about students who read outside of school at least once a week

In addition, we strongly recommend the renaming of “background variables.” While a suitable term for educators, we don’t believe it will connect with parent leaders. We offer “achievement drivers” as a starting point for consideration.

- **Parent Leader Discussion Guide.** Parent leaders could use this tool when speaking to a teacher, administrator, or policymaker to learn how their school, school system, or state compares with others nationwide, and to learn what is being done to increase academic rigor and achievement for all students. It should include general talking points to shape the conversation in a way that fosters collaboration, yields valuable information, and identifies next steps.



- **Promotional Materials.** A variety of materials could be produced and distributed at conferences and other events to create awareness of NAEP and provide potential partners and advocates with takeaways to better remember key messages. These include USB drives, pencils, bumper stickers, erasers, or posters; all could contain a one-line statement for parent leaders on the value of using NAEP, with links to the appropriate websites.

## Website and Online Outreach

**RECOMMENDATION:** As described above, parent leaders at the Board’s August outreach event provided a variety of thoughts and recommendations for improving the parent Web pages. Reingold also performed an audit of the website, looking specifically at the parent pages from that audience’s perspective, and provided further recommendations on revising the pages’ structure, design, and prioritization of content to better reach and engage parents. The Board should also pursue supplementary online and social media outreach efforts to reinforce the website and reach parents through the channels they use online.

- **Refine the parent Web pages per the feedback from parent leaders and the recommendations from Reingold’s website report.** The parent landing page should be the primary portal for parents and parent leaders seeking information and resources. The Governing Board can redesign or restructure the website to visually prioritize the information it wants parent leaders to access, and to eliminate redundant or unrelated content. The Governing Board should also expand its suite of materials available to parents, as outlined above in the “Materials” section, and provide user-friendly access and customization from the website. All recommendations—including both content and design—are included in the outreach meeting notes and website services findings report.
- **Develop a quarterly newsletter for parent leaders.** A newsletter would help the Board stay top of mind with parent leaders by informing them of Board news and events, such as report card release data, updates on upcoming assessments, and highlights of other Board initiatives. Although some periods may have more news content than others, newsletters can be brief and direct, and encourage parent leaders to visit the website for more information.
- **Perform search engine optimization (SEO) to capitalize on search terms parent leaders use.** Reingold can help determine priority keywords the Board can use to optimize its parent pages for search engines. By creating or refining website content based on language that research shows parents use, the Governing Board can use SEO to help raise the website’s ranking in search engine results, increasing the chances parents will find and use the website content and resources.
- **Share social media content with targeted parent groups.** Develop a list of 25 priority parent leader groups and provide them a monthly calendar with the latest news from the Governing Board, compelling NAEP stats from recent releases, and other updates, for their use when developing their editorial calendars.

- **Seed topics on discussion portals where parent leaders share ways for parents to get involved in education.** The National Coalition for Parent Involvement in Education is a clearinghouse with links on its website to numerous parent organizations, including the Governing Board and NCES. The Board could co-sponsor a parent portal on such a site and work with the forum or site managers to promote topics, questions, or conversations on some of the many other sites where parent leaders share information.
- **Develop and disseminate data infographics.** Infographics are being used more frequently to display statistics and data, and would provide a great opportunity to communicate report card findings visually. The Governing Board can work with NCES to package report card results into compelling infographics geared toward parent leaders. Examples of what this might look like include [The Nation's Report Card: Writing 2011 infographic](#) and "[Six Years and a Thousand Students.](#)"
- **Create an assessment resource directory for parent leaders on the Governing Board website.** As the Governing Board serves as a thought leader on assessments, it is natural that the Board would offer a list of resources for parent leaders seeking information on NAEP, student education data, and other educational sources.
- **Develop a blog on the Governing Board website.** Board members, report card release panelists, and others can provide perspectives that relate NAEP to various topics of interest to parent leaders. Hosting a blog on the Governing Board's site would keep the site timely and drive website traffic if promoted through outlets such as media and social media. This could also be included in a newsletter.
- **Develop an interactive NAEP data map.** Maps are visually attractive and approachable, and can serve as a valuable entry point to complex data. A NAEP map would be hosted on the Governing Board website and allow users to click on a given state to access NAEP highlights by subject and grade level, featuring the most compelling information from the state profiles. The map could also include district data, and would allow parent leaders to click through to bring them deeper into NAEP tools. Examples of similar concepts are here: [dataqualitycampaign.org/](http://dataqualitycampaign.org/); [washingtonpost.com/wp-srv/special/nation/census/2010/](http://washingtonpost.com/wp-srv/special/nation/census/2010/); [achieve.org/states](http://achieve.org/states); [completecollege.org/state\\_data/](http://completecollege.org/state_data/).

**National Assessment Governing Board**  
**Resolution on Report of Ad Hoc Committee on NAEP Parent Engagement**  
**Adopted May 19, 2012**

Whereas, the National Assessment Governing Board is implementing an initiative to make a difference in fostering the improvement of student achievement in the United States and of closing achievement gaps by race, ethnicity, and income levels using NAEP data and resources; and

Whereas, the National Assessment Governing Board established the Ad Hoc Committee on NAEP Parent Engagement in March 2011 to

“present recommendations...the Governing Board and representatives of the NAEP program can take directly, and/or support the efforts of others to increase parent awareness about the urgency to improve the levels of student achievement in the U.S. and the urgency to reduce the size of achievement gaps by race, ethnicity, and income levels, using NAEP data and resources”; and

Whereas, the Ad Hoc Committee on NAEP Parent Engagement presented its recommendations to the National Assessment Governing Board on March 2, 2012; and

Whereas, the Ad Hoc Committee on NAEP Parent Engagement recommended that the National Assessment Governing Board

- Specify National, State, and Local Parent Leaders and Parent Organizations as the Target Audience
- Establish Relationships with Recognized Parent and Community-based Organizations
- Develop Presentations and Materials Targeted to Parents for Use by Governing Board Members and Others
- Develop Parent Pages on the Governing Board and NAEP Websites
- Conduct a Parent Education Summit in Late Summer/Early Fall 2012; and

Whereas, adoption of the Ad Hoc Committee recommendations will be valuable, feasible, and consistent with the Governing Board’s authority to “develop guidelines for reporting and disseminating results” and “...improve the form, content, use, and reporting of [NAEP} results...”; and

Whereas, implementation of the Ad Hoc Committee recommendations will require staff and financial resources and oversight by one or more standing committees of the National Assessment Governing Board;

Therefore, the National Assessment Governing Board hereby

1. adopts the recommendations of the Ad Hoc Committee on NAEP Parent Engagement presented on March 2, 2012;
2. approves the use of appropriate staff and financial resources to implement the recommendations; and
3. authorizes the assignment of oversight of these activities to Governing Board standing committees.



# **Ad Hoc Committee on NAEP Parent Engagement**

## **Reaching Parents with NAEP Resources**

**March 2, 2012**

### **Committee Members**

**Tonya Miles, Chair**  
**Louis M. Fabrizio**  
**Shannon Garrison**  
**Doris R. Hicks**  
**Hector Ibarra**  
**Henry Kranendonk**  
**Warren T. Smith**  
**Blair Taylor**

### **Staff**

**Ray Fields**

# **Ad Hoc Committee on NAEP Parent Engagement**

## **Overview of Recommendations**

1. Specify the Target Audience: National, State, and Local Parent Leaders and Parent Organizations
2. Establish Relationships with Recognized Parent and Community-based Organizations
3. Develop Presentations and Materials Targeted to Parents for Use by Governing Board Members and Others
4. Develop Parent Pages on the Governing Board and NAEP Websites
5. Conduct a Parent Education Summit in Late Summer/Early Fall 2012

## **Committee Activity Timeline**

November 2010	Recognize Need to Address NAEP Parent Engagement
March 2011	Approve Mission Statement and Establish Ad Hoc Committee on NAEP Parent Engagement
April 2011	First Ad Hoc Committee Teleconference
May 2011	First Committee Meeting
August 2011	Second Committee Meeting
October 2011	Second Teleconference
December 2011	Third Committee Meeting
February 2012	Third Teleconference
March 2012	Final Committee Meeting; Present Recommendations to the Board

## Foreword

The National Assessment Governing Board, in overseeing the National Assessment of Educational Progress (NAEP or the Nation’s Report Card), is carrying out an initiative to raise public awareness about the status of student achievement in the United States.

The Governing Board believes that the low levels of student achievement and the persistent, large achievement gaps between student demographic subgroups are cause for alarm—for individuals, for families, for communities, and for the nation’s future.

Although the release of NAEP reports brings periodic public attention to this problem, this attention is not sustained for very long.

Consequently, the Governing Board is implementing an initiative to convey the urgency of improving achievement for all students and of closing achievement gaps between student subgroups by race, ethnicity and income levels, using NAEP data and resources.<sup>1</sup>

One part of this initiative is aimed at reaching parents. In March 2011, the Governing Board established the Ad Hoc Committee on NAEP Parent Engagement, composed of Board members. The Ad Hoc Committee’s assignment was to study ways to reach parents with NAEP data and resources and to present the Committee’s recommendations to the Governing Board by March 2012.

The members of the Ad Hoc Committee have worked diligently over the past year and are pleased to present our report and recommendations on the following pages.

We would like to express appreciation for the important contributions of the National Center for Education Statistics in supporting the Ad Hoc Committee’s work and in embracing the objective of reaching more parents with NAEP data and resources. We also thank the Governing Board’s CCSSO<sup>2</sup> Policy Task Force members for their valuable comments and suggestions.

Tonya Miles  
Chair  
Ad Hoc Committee on NAEP Parent Engagement

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<sup>1</sup> The authority for this initiative is found under the Governing Board’s duties in the NAEP legislation, Public Law 107-279. Specifically, Section 302(e)(1) authorizes the Board to “take appropriate actions needed to improve the form, content, use, and reporting of results” and “plan and execute the initial public release of National Assessment of Educational Progress reports.”

<sup>2</sup> The acronym CCSSO stands for Council of Chief State School Officers.

## **Introduction**

The National Assessment Governing Board, recognizing that NAEP report releases were not conveying a sense of urgency, began an initiative in May 2010 to see what the Board could do to “make a difference” in fostering concern and action about the need to improve achievement and reduce achievement gaps, using NAEP data and resources. Toward this goal, the Governing Board established the Ad Hoc Committee on NAEP Parent Engagement. The Committee’s task was to develop recommendations on ways to reach parents with NAEP information. The purpose of this report is to document the work of the Ad Hoc Committee and present its recommendations.

## **Background**

U.S. Secretary of Education Arne Duncan addressed the Governing Board on November 19, 2010. He focused on the urgent need to improve student achievement and reduce achievement gaps among student subgroups. He has said publicly that “our nation will pay the price socially and economically” if we fail to act with determination and dispatch and stressed to the Board that “we have to continue to awaken our country to the huge consequences” of inaction.

Secretary Duncan emphasized the important role of parents in improving student achievement. He told the story of President Obama meeting with the President of South Korea, Lee Myung-bak. President Obama asked him about education issues in South Korea. President Lee said his biggest challenge is that parents in South Korea are very assertive in demanding a good education from their schools and great effort from their children. He emphasized that this includes parents of all income levels.

Implicit in this story is the fact that South Korean students, as well as others in the world, outperform U.S. students in mathematics and science on TIMSS.<sup>3</sup> Today’s students are tomorrow’s workers and leaders. It follows that failing to improve U.S. student achievement could have disastrous effects on the nation’s future work force and global competitiveness, and that parents have an important role to play in promoting improved student achievement.

Secretary Duncan continued by saying “I wish my biggest problem, my biggest challenge, was parents knocking down my door saying, ‘Get better faster!’” He said that there are good examples in the U.S. of parent initiatives that impact student achievement. But Secretary Duncan wanted to “scale up” parent engagement programs that “are really showing the ability to drive student achievement.”

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<sup>3</sup> The acronym TIMSS stands for the Trends in International Mathematics and Science Study.

The Secretary's remarks and the Board's initiative to make a difference served as the backdrop to Board member Tonya Miles asking what can the Board do to make NAEP data available to parents and guardians<sup>4</sup> about student achievement, especially about the urgency of addressing achievement gaps by race, ethnicity, and income levels.

The question—"What can the Board do?"—is pertinent and important. Parents have a significant stake in the quality of their local schools and, most immediately, in their own children's achievement.

Governing Board Chair David Driscoll recognized the opportunity and value of reaching parents with NAEP data. Therefore, at the conclusion of the November 2010 Governing Board meeting, he asked Ms. Miles, and she agreed, to lead a Board initiative to increase parent awareness about and access to NAEP data. The goal was to bring attention to the unacceptably low levels of student achievement in the U.S. and the disgraceful size of the achievement gaps.

## **The Mission**

At the March 2011 Board meeting, the Executive Committee approved the mission statement for and established the Ad Hoc Committee on NAEP Parent Engagement (Appendix A). The Committee would be composed of Board members and chaired by Ms. Miles. The Ad Hoc Committee's task was to present recommendations to the Governing Board by March 2012. The recommendations would describe steps and strategies the Governing Board and representatives of the NAEP program can take directly, and/or support the efforts of others

to increase parent awareness about the urgency to improve the levels of student achievement in the U.S. and the urgency to reduce the size of achievement gaps by race, ethnicity, and income levels, using NAEP data and resources.

The mission statement indicated that the recommendations were to be clear about the limits on the Board's role under the law. This was to ensure the Committee considered all appropriate options without exceeding the Board's authority.

The recommendations were to help reach parents in feasible, innovative, and meaningful ways, across all income levels, and whether residing in urban, rural, or suburban areas. Finally, the recommendations were to include strategies to make NAEP parent engagement an ongoing part of the work of the Board and the NAEP program.

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<sup>4</sup> The term "parents" as used throughout this report is intended to refer to parents and guardians of school children.



## **Committee Activities**

Members of the Ad Hoc Committee have met four times during the May 2011, August 2011, December 2011, and March 2012 Board meetings. The agendas for these meetings are in Appendix B.

The Ad Hoc Committee also has met three times in between Board meetings via conference calls:

- April 15, 2011 - reviewed the Committee's mission statement and a timeline for completing their work (Appendix C)
- October 12, 2011 - focused on formulating the Committee's preliminary recommendations for discussion at the December 2011 Board meeting (Appendix D)
- February 8, 2012 - reviewed the Committee's initial draft report

In addition, Chair Tonya Miles and Ray Fields conducted meetings with leaders of three nationally recognized parent-related organizations. The purpose was to brief them on the Board's initiative to reach parents with NAEP data, to receive their input and feedback, and to determine their interest in supporting this initiative. The three organizations are the National PTA, the Public Education Network, and the Center on School, Family, and Community Partnerships at Johns Hopkins University.

In connection with the August 2011 meeting in Washington, D.C., the Board conducted an outreach event with parent leaders and national and local parent organizations. The discussion with meeting participants, led by Ms. Miles and Governing Board Chair Driscoll, resulted in valuable feedback and input on the Board's parent initiative. A summary of the discussion at this parent outreach meeting is in Appendix E.

## **Concluding Comment**

Parents are the primary advocates for the quality of their children's education. Having solid information about education achievement improves their ability to advocate and ask the right questions. NAEP can be one potentially valuable source of such information. Therefore, it is appropriate to seek ways to reach parents with NAEP data and resources. Some progress already has been made, in a small way, as will be seen in the activities and relationships described below. The recommendations that follow are offered as a set of feasible next steps, all within the Governing Board's authority. All have the potential to reach parents in meaningful ways. Recommendations that the Governing Board decides to adopt should be assigned to appropriate Board committees and staff for implementation.

# Recommendations

## 1. Specify the Target Audience: National, State, and Local Parent Leaders and Parent Organizations

The target audience needs to be defined. Approximately 55 million students are enrolled in public and private K-12 schools in the U.S. It is not feasible to reach the parents of all these children with NAEP data, nor is it within NAEP or the Governing Board's scope to do so.

Further, the achievement of their own children is the most pressing and immediate interest of parents. Because NAEP does not provide individual student results, this interest of parents is not served by NAEP.

A unique aspect of NAEP is its ability to report patterns of overall and subgroup student performance within and across education systems. These patterns may reflect education system strengths and weaknesses that can affect the achievement of individual students. The NAEP data for the states and 21 urban districts<sup>5</sup> provide ample evidence of differences in achievement across comparable groups at points in time and differences in gains in achievement over time. The NAEP data also document persistent and unacceptable achievement gaps between groups. This NAEP information does have potential interest for parents.

Also of potential interest to parents is how their education systems compare internationally. The linking studies the Board has endorsed, beginning in 2011, between NAEP and the international assessments (TIMSS and PIRLS<sup>6</sup>) will provide a way to compare student achievement at the state level in the U.S. with achievement in other nations.

State and local education policymakers use NAEP data to ask fundamental questions about the levels of student achievement in schools under their authority. For example, Tennessee Commissioner of Education Kevin Huffman discussed how he uses NAEP at a November 2011 meeting in Nashville on NAEP 12th grade academic preparedness. Commissioner Huffman said that he analyzes student subgroup results in his state (e.g., students on free and reduced lunch) in comparison to other states. Raising questions about how subgroup performance compares across jurisdictions can help highlight where state or local policies may or may not be working. Asking thoughtful questions about the implications of NAEP results can be a positive way for parents to begin a productive conversation with state education leaders seeking to improve

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<sup>5</sup> The 21 participants in the NAEP Trial Urban District Assessment Program are: Albuquerque, Atlanta, Austin, Baltimore City, Boston, Charlotte, Chicago, Cleveland, Dallas, Detroit, Fresno, Hillsborough County, Houston, Los Angeles, Louisville, Ky. (Jefferson County), Miami (Dade County), Milwaukee, New York City, Philadelphia, San Diego, and Washington, DC.

<sup>6</sup> The acronym PIRLS stands for the Progress in International Reading Literacy Study.

achievement and close achievement gaps. Of course, while NAEP can be used as a source of information to help parents identify important questions to ask about the status of student achievement locally, the answers about what to do must be made by state and local officials with authority for the schools.

The Ad Hoc Committee believes there are groups of active parents and parent organizations who see the connection between system performance and the potential for impact on individual students. These include local and state leaders, often members of recognized parent and community organizations, who regularly work with the leaders of education systems, examine data, and ask fundamental questions to support and foster improved achievement and the closing of achievement gaps. These parent leaders and parent organizations should be the initial target audience for NAEP data and resources.

More specifically, because NAEP provides data for each of the 50 states and 21 urban districts, the initial target audience should be state and local parent leaders and parent organizations associated with these jurisdictions.

## **2. Establish Relationships with Recognized Parent and Community-based Organizations**

To reach the target audience with NAEP data, it is important to work collaboratively with existing parent and community-based organizations. Many of these organizations have state affiliates and/or affiliates associated with local school districts. These organizations have direct access to parent and community leaders through email networks, social media, newsletters, and websites. These mechanisms are potentially effective, viable avenues for the dissemination of NAEP data and resources. In addition, these organizations often conduct national and state conferences, which could afford opportunities for presenting NAEP data and resources.

The Ad Hoc Committee has initiated conversations with the National PTA (NPTA), with positive results (see Appendix F). For example, the NPTA has begun announcing NAEP release events through its email networks and social media. In addition, Tonya Miles has been invited to make a presentation on March 7, 2012 at the NPTA Legislative Conference and on June 21, 2012 at the NPTA Annual Conference. Further, the NPTA assisted in recruiting parents for a meeting on February 16, 2012 to help review the NAEP presentation and materials for parents described in Recommendation 3.

Likewise, collaborative activity has occurred with the Public Education Network (PEN). Cornelia Orr, Governing Board Executive Director, made a presentation on NAEP and 12<sup>th</sup> grade academic preparedness at the PEN annual conference in November 2011. PEN also helped recruit experts from among its member organizations for a one-day meeting held on February 14,

2012 to provide input and feedback on the NAEP presentation and materials for parents described in Recommendation 3. PEN already transmits information about NAEP data and NAEP releases to its members and newsletter subscribers.

The Governing Board should continue to develop the relationships with the NPTA and PEN, and develop similar collaborative relationships with other organizations.

### **3. Develop Presentations and Materials Targeted to Parents for Use by Board Members and Others**

Recognizing that the scope and depth of NAEP data and resources can be overwhelming, the Governing Board is working to develop a model PowerPoint presentation and associated materials for parents. Consistent with the information needs of the target audience in Recommendation 1, the presentation and materials can be customized for particular states and urban districts. The materials will include easy-to-understand charts and graphs and avoid the use of technical terms and jargon. In addition to explaining what NAEP is, the presentation will highlight NAEP data regarding the levels of achievement and the gaps between subgroups in ways that convey urgency.

The presentation and materials should be designed to help the audience understand the role of NAEP in the context of state and local assessments. Sample test items can be used to illustrate what content NAEP measures and how it is measured; consideration can be given to how this information about NAEP may complement state assessments. As noted in Recommendation 2, conducting input and feedback meetings with parent leaders and representatives of parent organizations is important to ensure that the level of detail and amount of information is appropriately tailored for the target audience.

The intent is for these resources to be available for use by Governing Board members invited to make presentations to the public and by interested parent and community-based organizations in making presentations specific to their locale.

The National Center for Education Statistics (NCES) is currently developing a general publication for parents. This publication will inform parents about what NAEP is, how it fits into the education landscape, and options to learn or do more. This publication will be debuted at the NPTA conference in June and displayed at the NAEP booth at the conference.

#### **4. Develop Parent Pages on the Governing Board and NAEP Websites**

Currently, the Governing Board website has no pages aimed at parents as the target audience. The NAEP website, managed by the National Center for Education Statistics (NCES) does have pages for parents whose child has been selected to take NAEP, but not for parents in general.

The Ad Hoc Committee invited NCES to examine what it can do to make NAEP information on the website more accessible to parents. As a first important step, NCES made the “parent” navigation button more prominent on the NAEP website landing page. NCES is exploring additional changes to make the NAEP data more accessible to parents. As they develop the parent publication mentioned in Recommendation 3, NCES will update the NAEP web pages to ensure consistency. This will help expand the NAEP website audience from just parents of students selected for the NAEP sample to all interested parents.

The Ad Hoc Committee asked the Board’s communications and website contractors, Reingold, Inc. and Quotient, to develop page mockups for parent pages on the Governing Board website (Appendix G). These should be further developed and incorporated as components of the Governing Board’s website redesign, which is currently underway. The model PowerPoint presentation and materials in Recommendation 3 should be available for easy downloading from the Governing Board website.

In addition, the Governing Board should seek ways to leverage mass communications (e.g., TV, radio, public service announcements, and social media) to reach parents with NAEP data and resources.

#### **5. Conduct a Parent Education Summit in Late Summer/Early Fall 2012**

The Ad Hoc Committee proposes a one-day parent summit on education for the late summer or early fall of 2012. The summit would be conducted in Washington, D.C. and available across the nation via live-streaming internet video, with the potential for live TV and radio coverage via C-SPAN.

The objective of the summit would be to convey the urgency of improving student achievement in the United States for all children and the urgency of reducing achievement gaps between student subgroups.

In addition to Governing Board members, the audience of 150-300 would consist primarily of parent and community leaders, parent organizations, and leaders in education, business, civil rights, the religious community, and legislative policy.

To help convey the non-partisan, universal interest in achieving the summit objective, as well as to focus on its importance for the nation's future, First Lady Michelle Obama and former First Lady Laura Bush would be invited to share the podium in delivering the keynote address.

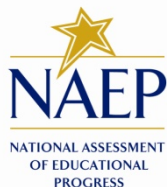
A distinguished journalist or media representative, acknowledged for intellect and freedom from bias, would be invited to moderate and provide a concluding summary.

A respected education advocate, with a strong reputation for compelling presentations on student achievement would be invited to present the NAEP data as evidence of the need to address the summit objective.

Individual and panel presentations would be made to address the national imperative for achieving the summit objective, from a wide range of perspectives which, taken together, would provide a compelling, unassailable argument for the urgent need to take action.

For example (not listed in priority order):

- Religious leaders would provide the moral perspective
- Economists would provide the national economic perspective
- Civil rights leaders would provide the equity perspective
- Military leaders would address the national security imperative
- Business leaders would address the human capital and employment imperative
- Scholars from nationally recognized policy institutions and foundations, representing a diverse range of philosophical orientations, would provide societal perspectives
- Demographers would address the implications from the perspective of a changing population
- Parent leaders would address the imperative for families and students
- Educators would describe actions that are needed to improve academic achievement overall and close achievement gaps



### **Plans for NAEP in Puerto Rico in 2013**

In 2011, NAEP conducted the mathematics KaSA (Knowledge and Skills Appropriate) study at grades 4 and 8. The purpose of the study was to increase the measurement precision in the estimation of student ability at the lower end of the NAEP scale, while still administering an assessment that is consistent with the NAEP mathematics framework.

The KaSA study included the administration of the 2011 operational assessment augmented by four KaSA blocks that were comprised of items targeted to the ability of lower performing students. These KaSA blocks were administered to students in both Puerto Rico and a relatively small national sample in the mainland U.S., in one of two book configurations: (1) books with two KaSA blocks, or (2) books with one KaSA block and one operational block. In addition, some students in the Puerto Rico sample were assessed using books with two operational blocks. This study design enabled comparisons of performance on the different kinds of items and blocks (KaSA or operational). The KaSA items and blocks functioned well and were, on average, more accessible than operational items.

In order to determine if the results from 2011 could be replicated in future years, the 2011 study will be repeated in 2013. As such, the same KaSA blocks from 2011 will be administered to students in both Puerto Rico and a relatively small national sample in the mainland U.S., using the same study design. We will determine whether the encouraging results of 2011 can be replicated in 2013, which will establish the level of confidence and validity desired to report trend results on the NAEP scale for Puerto Rico and use the KaSA items for operational purposes in the mainland U.S.



May 6, 2010

The Honorable Luis Fortuño  
Governor of Puerto Rico  
La Fortaleza  
P.O. Box 9020082  
San Juan, PR 00902-0082

Dear Governor Fortuño:

I am writing to keep you informed of the extensive research conducted and plans that are underway in regard to the testing of students in Puerto Rico on the National Assessment of Educational Progress (NAEP).

Public schools in Puerto Rico were included in the National Assessment for the first time under the No Child Left Behind law enacted in 2002. Because NAEP Reading is an assessment of reading in English the Commonwealth of Puerto Rico was granted a waiver from this exam. However, the mathematics assessment was translated into Spanish, the language of instruction in Puerto Rico, and has been administered three times to representative samples of students at grades 4 and 8 in 2003, 2005, and 2007.

After 2003, because of the low percent of questions answered correctly, NAEP introduced several changes in procedure in an effort to improve the reliability of Puerto Rico results. However, it became apparent after the third administration that the problems had not been resolved. Students in Puerto Rico continued to score at the low end of the NAEP scale where there are too few items to report change reliably. While the problem is most severe in Puerto Rico, similar issues have emerged for some jurisdictions on the mainland (e.g., some urban school districts).

To address these issues, the National Center for Education Statistics (NCES) convened an expert panel and conducted a major program of research in 2009. The goal of the studies was to evaluate the appropriateness of NAEP math items and their translation into Spanish and to understand how mathematics is taught and learned in Puerto Rico. On February 22, 2010 NCES shared the findings as well as planned future assessment activities with the Secretary of Education of Puerto Rico, who was very supportive of these efforts.



In large part based on the studies, NCES has developed a new set of NAEP questions, designed to improve measurement precision for lower-performing students both in Puerto Rico and on the U.S. mainland. In 2011 there will be a tryout of these questions. If that proves successful, we will incorporate them into NAEP operations in 2013, and resume NAEP reporting on Puerto Rico that year.

For your information, I am enclosing a written summary of the studies. If you have questions or need further clarification, please contact Cornelia Orr, Executive Director of the Governing Board, or Peggy Carr, Associate Commissioner for Assessment of the National Center for Education Statistics.

We believe it is important, as required by law, that the National Assessment provides reliable data on student achievement and achievement trends in Puerto Rico schools. This has proved challenging over past few years. We are hopeful now that the challenges will be resolved by producing a more accurate assessment over the full range of student performance. This will fulfill the mission of NAEP and benefit all those who turn to the National Assessment for sound, independent information both in Puerto Rico and throughout the United States.

Sincerely,



David P. Driscoll  
Chairman

Enclosure

Similar letters sent to:  
Secretary of Education Carlos Chardan  
Chairman and Ranking Minority Member, U.S. Senate HELP Committee  
Chairman and Ranking Minority Member, U.S. House Education and Labor Committee  
Hon. Pedro Pierluisi

*A Summary of Six Special Studies on the  
National Assessment of Educational Progress  
Mathematics Assessment in Puerto Rico*

NAEP Education Statistics Service Institute

Howard T. Everson

*NAEP ESSI*

Prepared for

U.S. Department of Education

National Center for Education Statistics

December 2009

## **ABSTRACT**

During the past year, the National Center for Education Statistics (NCES) created a Puerto Rico Working Group (PRWG) to design and oversee a series of special studies to investigate the performance of public school students in Puerto Rico on the National Assessment of Educational Progress (NAEP) Mathematics Assessment. Members of the PRWG included representatives from NCES, Alliance contractors, and NAEP-ESSI.

This report presents a summary of six separate studies conducted by the PRWG in 2009. These include: (1) studying the fit of the mathematics items for Puerto Rican students to examine both student and item characteristics that might have led to item misfit in the NAEP Mathematics assessment; (2) examining the Spanish translation of the NAEP mathematics items and the potential for translation errors; (3) convening a group of mathematics teachers in Puerto Rico to study the potential sources of difficulty in NAEP mathematics items; (4) conducting interviews and a “cognitive lab” study to determine how well students in Puerto Rico understood the NAEP mathematics items, and the describe the solution strategies they employed when tested; (5) assessing the degree of alignment between the NAEP mathematics framework and the mathematics content standards and assessments used in Puerto Rico’s state-wide accountability tests; and (6) investigating the feasibility of creating specially designed blocks of mathematics test items for use in Puerto Rico during the next round of NAEP testing. The findings from these six studies are synthesized and a set of recommendations aimed at strengthening the validity of the NAEP Mathematics assessment for use in Puerto Rico is presented for consideration by NCES.

## INTRODUCTION

In the pages that follow we present a summary of six separate studies commissioned in 2009 by the U.S. Department of Education's National Center for Education Statistics (NCES) to shed light on the poor performance of public school students in Puerto Rico on the National Assessment of Educational Progress (NAEP) Mathematics Assessment.

For nearly forty years, the NAEP has been gathering information on American elementary and secondary students' academic achievement across a variety of subjects. The NAEP assessments serve as the Nation's Report Card and, consequently, play a central role in gauging the educational achievement of American students—providing a highly regarded benchmark of student achievement. In an effort to gauge the mathematics achievement of elementary students in Puerto Rico, the NCES administered Spanish-language versions of the NAEP Mathematics assessment administered to public school students in Puerto Rico at grades 4 and 8 in 2003, 2005, and again in 2007. At each grade level, and on each assessment occasion, public school students in Puerto Rico scored much lower than students in other jurisdictions. Additionally, compared to other states and jurisdictions, higher levels of missing data and fewer correct responses were observed at the item level in Puerto Rico. Moreover, the discrepancy between observed (empirical) and expected (model-based) responses was large, indicating that many of the mathematics items did not fit the assumptions guiding the NAEP Mathematics scale development. These troubling results are documented in a series of reports published by NCES, and are available online at <http://nationsreportcard.gov/puertorico>.

To better understand the factors contributing to the performance of Puerto Rican students, the National Center for Education Statistics, in 2008, convened a *NAEP Puerto Rico Working Group* (PRWG) to design and conduct research that would, ultimately, inform the longer range goal of designing a NAEP mathematics assessment to measure accurately the achievement of public school students in Puerto Rico. This work resulted in a set of six separate investigations that included: (1) studying the fit of the mathematics items for Puerto Rican students to unveil student and item characteristics that might have led to item misfit in the NAEP Mathematics assessment; (2) examining the translation of the mathematics used in NAEP items and the potential for translation errors; (3) convening a group of mathematics teachers in Puerto Rico to study the potential sources of difficulty in NAEP mathematics items; (4) conducting interviews and a “cognitive lab” study to determine how well students in Puerto Rico understood the NAEP mathematics items and the solution strategies they employed when tested; (5) assessing the degree of alignment between the NAEP mathematics framework and the mathematics content standards and assessments used in

Puerto Rico's state-wide accountability tests; and (6) investigating the feasibility of creating specially designed blocks of mathematics test items for use in Puerto Rico during the next round of NAEP testing.

In the following section we describe each of these studies and the findings from each are presented and discussed. (The full reports of these studies, including methodological and technical details, are posted on the NAEP IMS at <https://ims.naepims.org/collaboration/puertorico/reports>.) These summaries are then followed by a synthesis of these findings that aim at extending our understanding of Puerto Rican students' pattern of poor performance on the NAEP Mathematics assessments. We conclude with a set of recommendations for steps that NCES might take to strengthen the validity of the NAEP Mathematics assessment in Puerto Rico.

## SUMMARY OF STUDIES

***In-Depth Analysis of the Puerto Rican NAEP Data (2009)***. Wu, M., von Davier, M., Kulick, E., Davis, S., Pitoniak, M. (Educational Testing Service) and Beaton, A. (Boston College).

This study has been referred to as “the person/item-fit study of NAEP mathematics in Puerto Rico.” As we noted earlier, a consistent pattern of results from the NAEP Mathematics assessments in Puerto Rico in 2003, 2005, and 2007 at both grades 4 and 8 showed that student performance in Puerto Rico did not fit the assumptions of the statistical (psychometric) model used to calibrate scores for students on the NAEP. This study attempted to identify both the item and student factors that may have contributed to model misfit. The research team reasoned that a clearer understanding of the factors that affect item and person psychometric model fit in Puerto Rico would possibly benefit future item development activities, as well as better inform interpretations of performance results.

*Design and Methodology.* This study extended the previous research on the NAEP mathematics model fit in Puerto Rico by examining the correlation of standardized fit residuals for the items, as well as comparing means and standard deviations of these residuals across groups of students. The standardized residuals, which were based on the Beaton Fit-Index, were calculated using data from the 2007 Mathematics assessment. Using factor analysis, the residuals were then examined for patterns across items, considering characteristics of the items (such as subscale, difficulty, verbal load, etc.) to identify patterns of misfit. Means and standard deviations (of the residuals) for different groups of students were compared using ANOVA techniques to identify characteristics that represent Puerto Rican students whose performance did or did not fit the NAEP model.

Measures of students' gender, motivation and need for learning accommodation, as well as school location and type, were used as covariates to explore their possible relationships to the emerging item-fit patterns. Although the focus of this study was on Puerto Rico, the interpretations were contrasted with results from other states tested by NAEP. The research team chose NAEP item-fit data from Missouri because it was more or less representative of the mathematics ability distributions of many states across the United States.

*Results and Findings.* In general, the magnitudes of residual correlations were rather small (ranging from 0.10 to 0.27 across all blocks of test items). These small residuals provided little evidence about significant patterns of item misfit. While the residuals in Puerto Rico were larger in magnitude than those from Missouri, there were no obvious patterns in the correlations of residuals. Indeed, the correlations were quite similar between Puerto Rico and Missouri. No dominant component was found in any of the block-based Principle Component analysis results. Thus the model fit, or lack thereof, in Puerto Rico could not be attributed to a certain type or cluster of mathematics items. The results of the ANOVAs suggested that the effect of gender on model fit was only marginally significant. All the other variables included in the ANOVAs were not significant. A summary table of fit statistics by item classifications was shared with the cognitive laboratory team to help inform their item selection process.

*Conclusions and Recommendations.* The results of the study provided little evidence that any of the factors investigated were related to the magnitude of misfit, item characteristics, or examinee background variables. While these findings do not fully explain the model behavior in Puerto Rico, they are informative from a test development point of view—the mathematics items showed consistency, and the instrument was “fair” for students with low mathematical abilities. However, because no clear associations emerged between the examined item and student attributes and the fit patterns, the authors were unable to make recommendations for possible adjustments to improve the model fit.

***Translation Review of NAEP Items from the 2007 Mathematics Assessment in Puerto Rico (2009).***  
**Solano-Flores, G. and Chia, M. Y., University of Colorado at Boulder.**

This study, known within the PRWG as the “translation study”, examined the relationship between the characteristics of the Spanish translation of the Mathematics used in the 2007 Grade 4 and Grade 8 National Assessment of Educational Progress (NAEP) in Puerto Rico and the performance of the Puerto Rican students on the assessment. Three research questions guided this study:

What kinds of translation errors could be identified in the items of the NAEP mathematics assessment administered in 2007 in Puerto Rico?

To what extent do those translation errors account for the low performance of Puerto Rican students in that assessment?

What lessons can be learned from reviewing translation error in this assessment that could then be used to improve the translation process of future Spanish translations of NAEP mathematics items used in Puerto Rico?

The theoretical foundation for the study comes from the theory of test translation error developed by Solano-Flores and his colleagues (Solano-Flores, Backhoff, & Contreras-Niño, 2009). From this perspective, errors of translation (in this case we are referring to the translation of NAEP mathematics items) are not necessarily the result of poor quality translations, but rather may stem from “the fact that languages encode meaning differently and have different sets of features like grammar differences and tolerance to ambiguity” (see p. 1, Solano-Flores & Chia, 2009).

*Design and Methodology.* A multidisciplinary team of nine native Spanish-speakers used a translation error coding system to examine the Spanish translation of a sample of 69 4<sup>th</sup> grade and 71 8<sup>th</sup> grade NAEP mathematics items used in 2007 in Puerto Rico. These items were drawn proportionately from each of the content areas tested by NAEP, and included proportional numbers of items with highest, intermediate, and lowest values of the Beaton fit index mentioned earlier in the study by Wu et al., 2009. The multidisciplinary team included two mathematicians, two 4<sup>th</sup> grade mathematics teachers, two 8<sup>th</sup> grade mathematics teachers, one mathematics curriculum specialist, one translator, one sociolinguist and a psychometric specialist.

The panel members coded the items according to nine primary translation error dimensions grouped into three major categories: design, language, and content. An additional category, “origin,” included errors that were present in the original version of the NAEP mathematics item. Participants first reviewed each item in Spanish only, and then compared the English and Spanish versions. After each participant coded the items alone, the research staff facilitated a group discussion and ultimately items were coded dichotomously at the category level through group consensus.

*Results and Findings.* Twenty-five NAEP mathematics items were classified as “objectionable”, and the remaining 115 were viewed as acceptable translations by the panel. A

number of translation errors were identified, including imprecise translation of terms, use of technical terms not used in Puerto Rico, confusing and unnatural syntax, use of unfamiliar contextual information, and distortions in graphic material that might lead to misinterpretations of graphs. The results from the correlation analyses suggested that translation errors do not appear to be an important factor with respect to the low performance of Puerto Rican students in the 2007 NAEP Mathematics assessment.

*Conclusions and Recommendations.* While various types of translation errors were observed, they did not appear to be responsible for low student performance. Translation errors occurred with about the same frequency among the 4<sup>th</sup> and 8<sup>th</sup> grade items; however, because of the variation in the academic language and the linguistic demands posed by certain item formats, translation errors may be more likely in some content areas than in others.

The authors suggest that NCES translation contractors be required to use a review procedure as the one described in this study as part of the routine process of test translation. These procedures include the approach used to code translation errors, as well as the use of multidisciplinary teams of translation reviewers. Finally, it was recommended that NCES conduct studies that examine the enacted curriculum in Puerto Rico. The authors argue that knowing what is taught in the classrooms in Puerto Rico is critical to properly interpreting the information on curriculum representation as manifested in the NAEP mathematics assessment.

***Review of 2007 NAEP Mathematics Items Used in Puerto Rico for Invalid Moderators of Difficulty (2009).*** Dogan, E. and Rivas, S. NAEP-ESSI, American Institutes for Research.

This study, “the blind item review study”, was designed to investigate whether fourth- and eighth-grade NAEP mathematics items used in Puerto Rico in 2007 included elements of invalid moderators of difficulty for the target population. An invalid moderator of difficulty was defined as an item characteristic that affects the students’ ability to demonstrate their true competence, and is irrelevant to the construct being measured. Conceptually, it is similar to the notion of construct irrelevant variance. In theory, invalid moderators of item difficulty occur when an item contains needlessly complex language, uses unfamiliar graphs, charts or tables, or contains unfamiliar terms, words or phrases. The contextual features of an item can also moderate item difficulty, depending on the learning experiences of the target student population.

*Design and Methodology.* Thirty five Puerto Rican teachers (20 at grade four and at 15 grade eight) rated both NAEP mathematics items and items drawn from local sources (i.e., from textbooks and tests used in Puerto Rico) without knowing the sources of those items. The teachers used a specially



designed questionnaire, known as the Item Review Tool, and rated each test item using 11 dimensions or characteristics representing types of invalid moderators of item difficulty (e.g., unfamiliar terms, needlessly complex language, unfamiliar graphics, etc.) In addition, a third pool of items (accessible block items) was also rated, which included grade four NAEP pilot items designed to reduce construct irrelevant aspects. NAEP and local items were compared on teacher ratings. Each booklet included roughly 40 items and each item was rated by seven raters. Teachers were also asked to comment on the items they rated unfavorably.

At grade four, the mean ratings of NAEP items with best- and worst-fit statistics were significantly different on three dimensions when contrasted with the mean ratings of the local items: familiarity of the visuals (such as graphs, tables, etc.) ( $p < .05$ ), complexity of the language ( $p < .05$ ) and how demanding the calculations were ( $p < .10$ ). For the most part, all the items, regardless of source, were rated favorably by the teachers. However, local items received perfect ratings more often from the teachers. On the other hand, when the mean ratings of the accessible NAEP items were compared to those of the local items, there were no significant differences except for the summative statement (I would use this item to assess my students) in the Item Review Tool. For this statement, the teachers rated the accessible items more favorably (at  $p < .10$ ) compared to the local items.

At grade eight, the teachers rated the local items more favorably ( $p < .05$ ) compared to both types of NAEP items included in the study (those with best and those with worst fit statistics) on five dimensions: familiarity of mathematical terms, complexity of the visuals (such as graphs, tables, etc.), how demanding the calculations were, how heavy the reading involved in the item was, and the familiarity of the context in the item.

*Conclusions and Recommendations.* There were a number of important dimensions on which the NAEP and local Puerto Rican mathematics items differed. In discussions with the teachers, a number of problematic features of the NAEP mathematics items, particularly at Grade 8, were identified. These included difficult and complex visuals, difficult abstractions and content knowledge, and minor translation issues. A majority of the teacher comments and recommended modifications to the 'problematic' NAEP items were aimed at making them less abstract, more concrete, and generally easier for their students. Future item development, translation and adaptation activities should take such dimensions into account. Moreover, the pilot accessible NAEP items fared well when contrasted with the local mathematics items. Hence, this study provides one piece of evidence that suggests that the use of accessible NAEP items in Puerto Rico ought to be considered in the future.

**Cognitive Testing of NAEP 4<sup>th</sup> and 8<sup>th</sup> grade Mathematics in Puerto Rico (2009).** Dion, G.,

Dresher, A., Fercsey, A., Garber, D., Ledesma, S., and Orchard, B. Educational Testing Service

While a number of the other investigations in this portfolio of studies focused on item translation/adaptation, or item fit, the purpose of this study was to examine in greater detail students' understanding of the cognitive items in the NAEP mathematics assessment. The motivation for the study centered on the belief that student interviews using the "cognitive lab" or "think aloud" methodology (Ericsson and Simon, 1999) would allow us to better understand students' comprehension of NAEP mathematics items, including: whether the student understood the Spanish version of the item as intended; or whether the student encountered any unfamiliar words, contexts, or stimulus materials (e.g., graphics, etc.); and how the student approached and solved the mathematics items. The interviews did not focus on whether the student answered the items correctly, although this information was collected, but rather on acquiring information that could potentially inform item development and translation/adaptation activities for future items. With this as the goal, the ETS research team conducted a series of one-on-one interviews in the Spring of 2009 with grade 4 and 8 students from public schools in Puerto Rico.

*Design and Methodology.* The ETS research team collaborated with ASPIRA Inc. of Puerto Rico (<http://www.aspirapr.org/>) to facilitate the field activity, including recruiting interviewers. The cognitive laboratory project was directly coordinated and overseen by the Executive Director of ASPIRA of Puerto Rico. ASPIRA had a number of responsibilities, including: hiring interviewers, participating in interviewer training, coordinating logistics in Puerto Rico, including working with the PRDE to identify the school sample, obtaining school and parent permission, administering the cognitive laboratory interviews, recording student responses, compiling student data and returning the data files to ETS, and participating in feedback session with ETS. Thirty-five items selected from grades 4 and 8 of the 2007 assessment were assembled into seven 5-item mini-tests. The items were representative of the different content areas and item types that appear on NAEP. For grade 4, about 40% of the items were from the accessible booklet study. Mathematics items with various types of stimuli (i.e., geometric figures, graphs, etc.) were also included. Also, the statistical item fit information obtained from the study described earlier, *In-Depth Analysis of the Puerto Rican NAEP Data*, was considered during the item selection process so that both items that did and did not fit the NAEP model were included in the study.

A generic interview protocol was developed which focused on two general questions: 1) Does the student's understanding of the Spanish version of the item match the intent of the item in the original

version in English?; and 2) has the student studied the particular topic assessed by the item in his or her math classes? A total of 151 students from seventeen schools participated in the study (76 grade 4 and 75 grade 8 students). All of the materials were provided in Spanish and the entire interviews were conducted in Spanish. The analysis of the cognitive laboratory data examined the information regarding the students' ability to read aloud the question, crossed with specific variables and questions of interest.

*Results and Findings.* A total of 372 responses to items ("instances") were coded from students at grade 4 and a total of 368 responses were coded from students at grade 8. Many of the items were read aloud correctly by the students (42% at grade 4 and 56% at grade 8). Approximately 9% of the instances in each grade had difficulty reading one word. Students had difficulty reading the items in 12% of the instances at grade 4, but only 3% of the instances at grade 8. In addition, in 23% of the grade 4 instances and 24% of the grade 8 instances, students misread or misinterpreted either a number, fraction, or symbol. Overall, about half of the item responses were read correctly. In addition, almost one-quarter of the item responses included a misinterpretation or misreading of a number, fraction, or symbol. At grade 4, poorer reading ability was associated with short constructed-response items types, and misinterpretation and misreading of numbers, fractions, or symbols was associated with multiple-choice and extended constructed-response items. Therefore, it seems that students' ability to understand the question is hampered by both their lack of reading ability and by their lack of knowledge of mathematical terms and symbols.

When asked to "think aloud" the process they used to answer the questions, students generally did not use the appropriate mathematical procedures. Rather, students would guess at an answer, particularly for multiple choice items, or estimate a response. In addition, students would often seem confident of their answer, but could not explain how they obtained the answer. The general patterns mentioned above may be tied to regional differences, particularly in the Metro area at grade 4 and the North area at grade 8. In addition, at grade 4, student responses associated with schools under an Improvement Plan under NCLB also showed the same general pattern. Reading the question correctly was associated with familiarity with the question or topic at grade 8, previously studying the concept in school at grade 4, and a correct response at both grades. In addition, while the findings are mixed across content areas, it is interesting to note that very few problems were seen for geometry items, at either grade. Of specific interest are the three concepts that were found to be problematic for students in Puerto Rico: fractions, temperature/degrees, and ordinal numbers.

*Conclusions and Recommendations.* It is important to keep in mind that in this study there was no control group, thus we are left wondering whether we would find comparable patterns among

students from other low-performing NAEP jurisdictions. The study results are, nonetheless, provocative. They indicate, for example, that student knowledge, particularly reading ability and familiarity with mathematical terms, is likely contributing to Puerto Rico student low-performance in NAEP.

***An Analysis of the Alignment of the NAEP 2009 Mathematics Framework and the Puerto Rico Mathematics Standards and Assessments (2009).*** Everson, H.T., Rivas, S. and Rodriguez, C.  
NAEP-ESSI

The goal of this study was to provide information and statistical data to permit a determination of the degree of alignment between and among the *NAEP Mathematics Framework for 2009* for grades 4 and 8, and the 2007 and 2009 mathematics standards and assessments that are associated with the *Pruebas Puertorriqueñas de Aprovechamiento Académico* (the PPAA) in Puerto Rico. *Design and Methodology*. A central design challenge for this project stemmed from the fact that the Puerto Rico mathematics frameworks and assessments changed substantially between 2005 and 2009. The relevant modifications to the mathematics standards and assessments were summarized in documents published by the Puerto Rico Department of Education (PRDE), including *Estándares de Excelencia, Programa de Matemáticas* (2000), *Estándares de Contenido y Expectativas de Grado* (2007), and *Pruebas Puertorriqueñas de Aprovechamiento Académico* (PPAA, 2009, see <http://de.gobierno.pr>). In general, the research design followed the approach outlined by Norman Webb (1997, 2005, 2007), and used the terms “standards” and “objectives” to describe the levels of expectations for what students should “know and be able to do” at specific grade levels.

The Webb alignment approach used in this study asks subject matter experts (i.e., reviewers or panelists) to code each test item and content standard or objectives along the dimensions of *categorical concurrence*, *depth-of-knowledge consistency*, and *range of knowledge correspondence* between standards and assessments.

A three-day alignment panel study was held in San Juan, Puerto Rico from July 28-30, 2009. Sixteen panel members, consisting of teachers, curriculum specialists, and mathematics education professors, drawn from elementary, secondary and post-secondary faculty in Puerto Rico, were recruited to review the 2009 NAEP mathematics content standards for grades 4 and 8, as well as the 2007 and 2009 mathematics content standards and assessments associated with the *Pruebas Puertorriqueñas de Aprovechamiento Académico*, the PPAA. The panelists examined the alignment between PPAA items and the NAEP framework (60 items for 2007, and 54 for 2009; in each grade). The research team was helped by the Director of Mathematics Curriculum in the Puerto Rico Department of Education, who made direct comparisons between the two sets of mathematics standards (the

*Estandares de Excelencia* and the *Estándares de Contenido y Expectativas de Grado*) and the current 2009 NAEP Mathematics Framework to assess their degree of alignment.

The degree of agreement between and among the PPAA content standards, the NAEP content standards, and the assessment items, was derived from the panelists' classifications whose responses were averaged among the panelists within grade-level. In general, the panel members were instructed to identify any one assessment item as corresponding to up to three objectives—one primary objective and up to two secondary objectives. Each review session was then followed by a short period of debriefing in which panel members were afforded the opportunity to share comments and suggestions for improving the alignment of the standards and assessment items.

*Results and Findings.* According to the panelists, four of five NAEP mathematics content standards were covered by the sample of 2007 4<sup>th</sup> grade PPAA mathematics items. Surprisingly, the algebra content standard was not covered sufficiently enough. In addition, the DOK levels for both the measurement and geometry items were considered “weak.” This sample of mathematics items had an acceptable *balance of representation*, but the *range-of-knowledge* criterion was not met. Overall, the alignment with NAEP appears insufficient.

The 2007 grade 8 PPAA items provided adequate categorical coverage of the NAEP standards. The DOK criterion for the geometry standard was considered “weak”, and the range of knowledge criterion was “weak” for both the geometry and algebra content standards in NAEP. The alignment of the 8<sup>th</sup> grade PPAA items from 2007 with NAEP is marginal.

The picture was considerably better for the 2009 PPAA items at both the 4<sup>th</sup> and 8<sup>th</sup> grades. At the 4<sup>th</sup> grade, for example, the *categorical concurrence*, *DOK*, and *balance of representation* criteria were all met. The item pool needs bolstering, in the reviewers' estimation, when it comes to the *range-of-knowledge* covered by the items—particularly with respect to number and operations, measurement, and geometry. A similar pattern emerged for the 8<sup>th</sup> grade PPAA mathematics items. The *categorical concurrence*, *DOK*, and *balance of representation* criteria were all met. This set of mathematics items, however, had less than acceptable *range-of-knowledge* for all the NAEP content standards, with the exception of algebra.

Working with one of the other panel members, the Director of Mathematics in the Puerto Rican Department of Education reviewed the *Estándares de Excelencia* (2000) and concluded that they did not adequately cover the 4<sup>th</sup> or 8<sup>th</sup> grade NAEP content standards—they were viewed as too broad and not aligned with the grade-level content

standards and objectives of NAEP. The reviewers, however, reported that the current mathematics standards in place in Puerto Rico, the *Estándares de Contenido y Expectativas de Grado* (2007), were well aligned with NAEP's content standards and objectives, and met the criteria for full alignment.

*Conclusions and Recommendations.* Overall, across all the alignment activities, the majority of panel members indicated that the PPAA test items did, indeed, cover the most important topics expected by the NAEP standards. There was a sense among the panelists that the 2007 PPAA items, in contrast to the 2009 PPAA items, covered fewer NAEP standards and objectives. The one consistent finding that emerged was that the current mathematics standards and assessments in Puerto Rico, though not perfectly so, were aligned better with the current NAEP Mathematics Framework than the previous set of standards used in Puerto Rico, which were in place at the time of the most recent NAEP mathematics assessment.

The single most consistent finding that emerged during the three-day meeting was that the current mathematics content standards and assessments in Puerto Rico, those based on the *Estándares de Contenido y Expectativas de Grado* (2007), were better aligned with the current NAEP mathematics content standards than the previous set. Thus, it is reasonable to assume that the demonstrable lack of alignment between the older set of PPAA mathematics content standards and the content assessed by NAEP in 2003, 2005 and again in 2007 may have contributed to the relative poor performance of public school students in the Puerto Rico.

***Mathematics Block Assembly Study (2009).*** Dion, G., Dresher, A., Kulick, E., Pioniak, M., Tang, C., von Davier, M., and Wu, M. Educational Testing Service.

This study used a two-stage approach to investigate and evaluate the feasibility and suitability of creating specially designed blocks of NAEP mathematics items for use in Puerto Rico that would function similarly if used in a larger national sample. If successful, this block assembly method would enable NCES to obtain meaningful and reliable results in Puerto Rico which would be comparable to those from the national sample.

*Design and Methodology.* The tasks delineated for Stage One included (1) identifying items from the 2007 operational assessments at grades 4 and 8 that performed similarly in both the Puerto Rico and National samples; (2) evaluating this collection of items to determine if they are sufficiently distributed across the framework to permit the assembly of two or more prototype blocks of NAEP mathematics items at the 4<sup>th</sup> and 8<sup>th</sup> grade; and (3) assembling the blocks using the items identified in step 1, above.

Stage Two required (4) Simulating performance on the blocks assembled in Stage 1 for both the Puerto Rico and the National Public samples; (5) performing item analysis on the simulated Puerto Rico and National Public samples to evaluate classical-test-theory-based psychometric characteristics of the pseudo blocks; (6) assembling a panel of experts to compare the group of items identified in Stage 1 with the remaining items from the 2007 assessment. The panel would look for patterns, based on various criteria that might emerge from comparing the two groups of items. The criteria for selecting the items included (a) students performing above the chance level on the items; (b) similar student performance in Puerto Rico and in the National samples; (c) scaled scores considered only if within the range attained by the majority of Puerto Rican students.

Finally, the resulting item pools were evaluated on the basis of meeting the major content areas covered by NAEP, balanced item types, sufficient mathematical complexity, and coverage of content subtopics.

*Results and Findings.* The items in the pool are not distributed across the content areas at either grade 4 or grade 8 in the proportion needed to assemble two blocks (i.e., at least one test book).

In summary, for each of the two grade levels, the distribution of the items in the pool by item type is close, but not identical to, the distribution specified in the NAEP Mathematics framework. On the other hand, for each grade level, the distribution of the items in the pool by complexity has a higher proportion of low complexity items than the operational assessment. And finally, at each grade, the distribution of items across the subtopics within the major content areas is insufficient to meet block assembly targets.

*Conclusions and Recommendations.* The study illustrated that it would only be possible to assemble one block at each grade level if the assumptions about similar performance in the Puerto Rico and national samples and about framework coverage were relaxed. The resulting blocks, we hasten to add, would not be representative NAEP mathematics blocks as currently configured.

Keeping in mind that, at most, one block can be assembled at each grade level, it does not seem to be worthwhile to pursue the Stage 2 tasks outlined in the earlier proposal. The results of the study suggest that it is not possible to assemble a subset of NAEP items for Puerto Rico that perform similarly in Puerto Rico and the Nation and that adequately represent the NAEP Mathematics framework.

## SYNTHESIS OF FINDINGS

It is now time to ask what have we learned from this collection of studies? What do the six studies collectively tell us? Do they, individually or collectively, uncover the reasons for the pattern of startlingly poor performance on the NAEP Mathematics assessment by public school students in Puerto Rico? Was it because of the psychometric quality of the NAEP assessment? Was something lost in the translation of the mathematics items into Spanish? Were the NAEP mathematics items too unfamiliar or linguistically complex for these students? Or perhaps, the students were not taught the mathematics tested by the NAEP. Given the pool of NAEP mathematics items, we asked if we could build an assessment for this sample of students that would be more informative and more useful. These questions, and many others, animated the efforts of the researchers whose work is summarized in this report.

From a psychometric perspective, the NAEP results in Puerto Rico reveal large amounts of missing data (e.g., omitted and not reached items), fewer correct responses than expected in every content area, and a surprising mismatch between expected and actual student performance on the mathematics items when compared to students performance in other states (Baxter, Ahmed, Sikali, Waits, Sloan, and Salvucci, 2007). The “person/item-fit study” reported earlier by Wu et al. (2009) found no clear relationship between the degree of item misfit and characteristics of the examinees. The research team of Solano-Flores and Chia (2009) shifted focus and examined the quality of the translations of the mathematics items. This study used state-of-art linguistic perspectives, and examined a variety of sources of translation error. Though they surfaced a number of issues related to the quality of the translations (e.g., imprecision in the translation of some terms, confusing syntax, etc.), their results indicated that such errors were unrelated to students performance on the 2007 NAEP mathematics assessment. In a related vein, Dogan and Rivas (2009) used school teachers in Puerto Rico to review and rate samples of mathematics items from NAEP and elsewhere to investigate if the NAEP items contain language and terms that would be unfamiliar to students in Puerto Rico, or contained strange and uncommon terms or graphics. Perhaps these item characteristics would account for the performance differences? In general, the teachers looked favorably on all the items, regardless of whether they were from NAEP or from assessments used locally in Puerto Rico. There were, however, some dimensions of the NAEP items that were identified as problematic by the teachers, including, for example, complicated visuals, minor translation issues (some of these were also noted by Solano-Flores & Chia), and contextual abstractness. Although the study by Dogan and Rivas produced no eureka effect, their work did shed light on ways to improve the NAEP mathematics items in the future.



These three studies, though generally informative, did not point us in a clear direction. The internal characteristics of the assessment—their fit to the psychometric model, their translations, their uniqueness—do not tell us much about the nature of the problem. So we are left to wonder if the students or teachers can tell us anything more that would help. Everson, Rivas, and Rodriguez (2009) convened a panel of 16 mathematics teachers from Puerto Rico and asked them to tell us about the degree of alignment between what is tested by NAEP and the mathematics curriculum that has been enacted in the public schools. The teachers told Everson et al. that, in their view, the alignment had improved over the past three or four years, as changes were introduced to the mathematics curriculum in Puerto Rico. The content standards in place between 2000 and 2006 was not well aligned with NAEP and, according to the teachers, may partially explain the depressed performance levels of Puerto Rican students on the NAEP in 2003 through 2007.

To continue our story, we turn to the cognitive laboratory study conducted by Drescher et al. (2009). In this study the researchers were interested in the mental processes (the cognitions) used by students in Puerto Rico as they attempted to solve NAEP mathematics items. Using these “think aloud” methods, they wanted to better understand how these students understood or comprehended the mathematics items. Do the students in Puerto Rico think differently about mathematics, and approach problem solving in ways that are not unlike students in other states? Could this explain why they performed so poorly? The findings here are provocative. While thinking aloud it was apparent that many of the students did not employ appropriate mathematics procedures, and many often guessed when they could not solve a problem. The research team also noted that overall levels of reading ability, and the accompanying unfamiliarity with standard mathematical terminology, may also be interfering with the students’ performance on the NAEP mathematics assessment. Again, these findings appear to tell only part of the story.

The remaining study in the sextet asked whether it was feasible to create a specially designed block of NAEP mathematics items for use in Puerto Rico. Perhaps such an assessment would shed more light on students’ achievement and be used comparatively in other national samples? A study by Dion et al, (2009) at the Educational Testing Service suggested, unfortunately, that this idea was not practical. There are simply too few items that functioned appropriately in earlier administrations of NAEP in Puerto Rico to cover adequately the NAEP assessment framework. Thus, the researchers concluded that it was not possible to create a subset (a block) of NAEP mathematics items for use in Puerto Rico that would also perform similarly when administered to a sample of students from other states. So where do these studies leave us? We turn, next, to the initial recommendations from the Puerto Rico Working Group (the PRWG).

## **Initial Working Group Recommendations**

After careful consideration of the collective findings from these six studies, the PRWG offered a number of field-based activities that could be conducted in Puerto Rico in 2011 to produce more meaningful data which could be reported on the NAEP scale. The activities include administering NAEP mathematics assessment in private schools in Puerto Rico, designing blocks of mathematics items that target knowledge and skills appropriate (KaSA) for use in Puerto Rico and elsewhere to improve measurement precision at the lower end of the ability continuum, and enhancing outreach activities in Puerto Rico to help boost student motivation and participation in NAEP. Each of these is described more fully below.

*Administering NAEP in Private Schools.* As is typical in NAEP, the student sample for Puerto Rico has been drawn only from public schools. This NAEP policy has been criticized in Puerto Rico because the population of students attending private schools is perceived as quite different in Puerto Rico, probably more so than in the mainland U.S. For example, 11% of mainland U.S. students attend private schools, while 18% attend private schools in Puerto Rico. Currently, NAEP has no information on the performance or behavioral characteristics of private school students in Puerto Rico. Therefore, the PRWG initially recommended that private schools be included in the sample for the 2011 NAEP administration. However, because of various policy concerns, NCES has decided not to exercise this recommendation at this point.

*Creating KaSA Blocks to administer in Puerto Rico and the Mainland.* In an effort to learn more about what students (including Puerto Rican students) performing at the lower end of the ability distribution know and can do, mathematics items that target the lower-end of the framework could be designed. We recommend, in this instance, that “KaSA blocks” be developed for use in both Puerto Rico and the mainland. In this scenario, these blocks of items would be administered to evaluate whether they do, in fact, provide improved estimates of students’ mathematical proficiency (i.e., smaller standard errors and improved model fit), relative to the regular, more traditional blocks of NAEP mathematics items.

Forming these so-called “KaSA blocks” would require the development of a blueprint that would identify objectives in the current NAEP Mathematics framework that could be assessed with less difficult items, as well as identifying clearly the characteristics of these easier items. The set of items, we suspect, could be developed in ways that are consistent with the NAEP Mathematics framework. However, the framework guidelines for testing time by item type would likely have to be relaxed for these new item blocks. The guidelines used to create the items for the NAEP Validity Study Panel’s *Accessible Booklet Study* may be a good starting place for this development effort. (See the

December 3, 2009 memo from the PRWG for more details on this particular design recommendation.)

*Outreach Activities.* Currently, NAEP has a very small presence in Puerto Rico. With the 2011 assessments around the corner, and the introduction of a new NAEP State Coordinator, we believe there is an opportunity to increase awareness about NAEP in Puerto Rico. Limited outreach materials exist for Puerto Rican students, and preliminary data suggest that many students in Puerto Rico have poor test taking skills. Therefore, the PRWG recommends improving these materials and making sure that the Puerto Rico NAEP State Coordinator receives the same support that other state coordinators enjoy.

*Additional Background Questions.* If NAEP is interested in learning additional information regarding the students, teachers, or school climate, a few background questions could be added to the questionnaires for 2011. These questions could be based on information learned from the six studies conducted earlier this year and provide additional insight into the educational situation and performance in Puerto Rico.

In closing, we restate that the principal aim of this paper was to review and summarize the studies conducted by the PRWG. We also note that these studies are part of a much larger body of research bearing on the validity of NAEP. The studies reviewed here add to this knowledge base and help provide NCES and NAEP with a stronger footing as it moves forward with efforts to assess what students in Puerto Rico know and can do.

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## **APPENDIX A**

### ***Members of the Puerto Rico Working Group***

The members of the Puerto Rico Working Group include:

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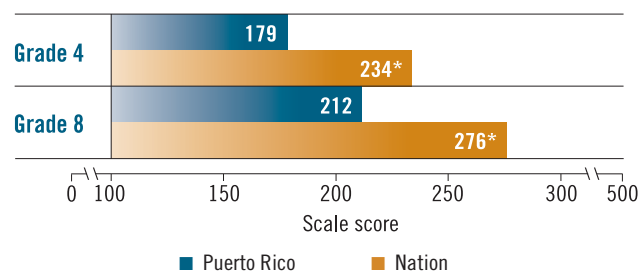
# Executive Summary

The NAEP mathematics assessment was administered to public school students in Puerto Rico for the first time in 2003. Although NAEP had previously administered some of the assessment in Spanish to students who required accommodations, this was the first time an entire NAEP administration was in a language other than English. The NAEP mathematics assessment was administered again to public school students in both fourth- and eighth-grades in Puerto Rico in 2005. This report presents the results of the NAEP mathematics assessment for Puerto Rico for 2003 and 2005. Because of modifications to the 2005 Puerto Rico administration, results from 2003 should not be compared to results from 2005. Although parallel changes were not made in the nation in 2005, within year comparisons between Puerto Rico and the nation are valid.

## 2003 Findings

- On average, fourth- and eighth-grade students in Puerto Rico scored lower than public school students in the nation.

Figure A.  
Average NAEP mathematics scores for public school students in Puerto Rico and the nation in 2003



\* Significantly different ( $p < .05$ ) from students in Puerto Rico.

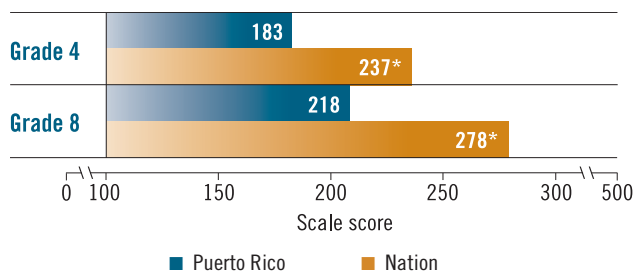
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment.

- At fourth-grade, 9 percent of students in Puerto Rico and 76 percent of students in the nation scored at or above *Basic*. At eighth-grade, 4 percent of students in Puerto Rico and 67 percent of students in the nation scored at or above *Basic*.
- Fourth-grade female students in Puerto Rico scored significantly higher than male students in the geometry and spatial sense content area.

## 2005 Findings

- Overall, fourth- and eighth-grade students in Puerto Rico scored lower, on average, than public school students in the nation.

Figure B.  
Average NAEP mathematics scores for public school students in Puerto Rico and the nation in 2005



\* Significantly different ( $p < .05$ ) from students in Puerto Rico.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005 Mathematics Assessment.

- Twelve percent of students in Puerto Rico and 79 percent of students in the nation scored at or above *Basic* in grade 4. Six percent of students in Puerto Rico and 68 percent of students in the nation scored at or above *Basic* in grade 8.
- Eighth-grade female students in Puerto Rico scored significantly higher than male students in the data analysis and probability content area.

## About this report

Throughout this report, results for Puerto Rico are compared to results for public school students in the nation because in Puerto Rico only public school students participated in the 2003 and 2005 NAEP mathematics assessments. The national sample does not include Puerto Rico at this time, although the intent is to include Puerto Rico as part of the national sample in future NAEP administrations.

# Executive Summary

In 2007, public school students in Puerto Rico at grades 4 and 8 participated in a Spanish-language version of the National Assessment of Educational Progress (NAEP) in mathematics. A representative sample of approximately 2,800 students from 100 public schools was assessed at each grade.

This report contains performance results on NAEP mathematics questions for public school students in Puerto Rico and the nation. Results are presented as the average scores for the correct answers (see box below)—expressed as decimals ranging from 0.00 to 1.00—for all the questions in the NAEP mathematics assessment and for questions in each of the five mathematics content areas (as shown in figures A and B).

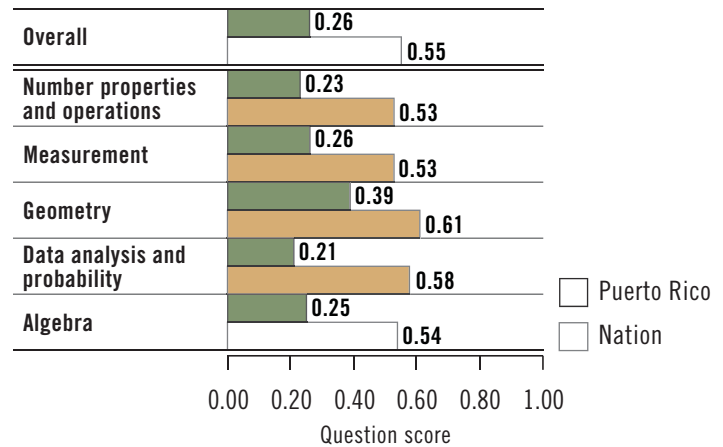
## At grade 4

- The average of the question scores for students in Puerto Rico was lower than the score for students in the nation overall and within each content area.
- There was no statistically significant difference in performance between male and female students in Puerto Rico overall and in each content area.

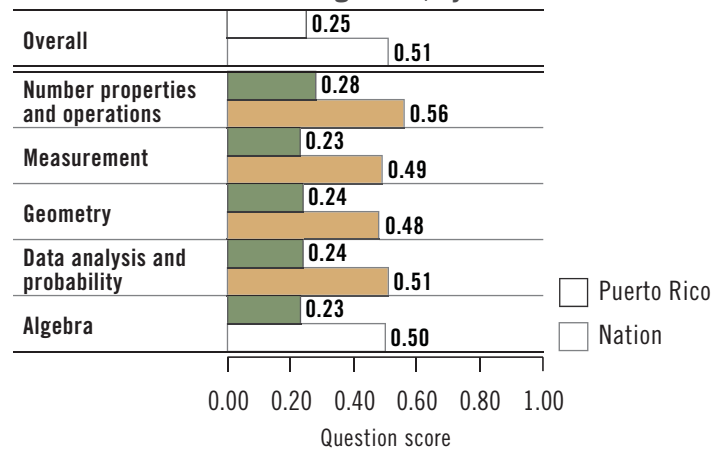
## At grade 8

- The overall average of the question scores for students in Puerto Rico was lower than the score for students in the nation. Results were similar for each content area.
- While there was no significant difference between the performance of male and female students in Puerto Rico overall, male students had a higher score than female students in the measurement content area, and female students had a higher score than their male peers in the data analysis and probability content area.

**Figure A. Average of the question scores in NAEP mathematics at grade 4, by content area: 2007**



**Figure B. Average of the question scores in NAEP mathematics at grade 8, by content area: 2007**



SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 Mathematics Assessment.

## Interpreting Results for Puerto Rico

Question scores are calculated as the percentages of correct responses for multiple-choice questions and for constructed-response questions that are scored either correct or incorrect. For constructed-response questions that allow for partial credit, the question score is the sum of the percentage of students receiving full credit and a fraction of the percentage receiving partial credit. Individual question scores are then averaged together to report an average question score for the entire mathematics assessment or for each of the five content areas.

Because of technical concerns regarding the placement of the 2007 results for Puerto Rico on the NAEP mathematics scale, performance results could not be reported as average scale scores for Puerto Rico in this report, and students' performance in 2007 could not be compared to performance in previous assessments.

When comparing the results for students in Puerto Rico to students in the nation, it is important to consider some of the differences in demographics. For example, between 76 and 78 percent of fourth- and eighth-graders in Puerto Rico attended public schools compared to 91 percent in the nation. All of the public school students in Puerto Rico were eligible for the National School Lunch Program compared to between 41 and 46 percent of fourth- and eighth-graders in the nation.

## Puerto Rico Attains Low NAEP Scores

By Kathleen Kennedy Manzo

Students in Puerto Rico's public schools are faring poorly in mathematics compared with their peers in the 50 states or even large urban districts, according to **results** of the National Assessment of Educational Progress released today.



Those results from the commonwealth were reported in a complicated format because of concerns about the validity of the scores the 4th and 8th graders received on the 500-point scale normally used in NAEP reports. Instead of scores, or achievement levels such as "basic" or "proficient," the results are reported as "the overall average of the question scores," meaning the percentage of correct responses on multiple-choice questions and those requiring short answers, some of which could receive partial credit.

"The reliability of our estimate for the Puerto Rico score was pretty unstable, in that it had a wide margin of error of confidence around the point estimate," said Peggy Carr, the associate commissioner of the National Center for Education Statistics, the arm of the U.S. Department of Education that oversees the test. "They were much less reliable in terms of our comfort level with particular estimates, and they were in fact very low."

Students on the island commonwealth struggled to answer most of the questions on the test. Puerto Rico's 4th graders received an average 26 percent of possible points, compared with 55 percent for students across the United States. Eighth graders earned an average 25 percent of possible points, compared with 51 percent for students from a representative national sample.

Because of those reporting problems, which Ms. Carr said do not reflect problems with the quality of the assessment, Puerto Rico will not be included in the 2009 math assessment. The NCES will conduct further studies to ensure that future results are reported in a format consistent with those of other tests, she said.

On the math assessment, administered in early 2007, students were tested on number properties and operations, measurement, geometry, data analysis and probability, and algebra. Some 2,800 students at each grade level took the test.

### Unique Status

Even relative to some of the nation's struggling cities, the student population in Puerto Rico is unique among test-takers on the assessment, experts say. All the students in the commonwealth are eligible for the federal free- and reduced-price lunch program. Although Spanish and English are Puerto Rico's official languages, the former is dominant.

The latest results cannot be compared against those given in Puerto Rico in 2003 or 2005 because of the different method of reporting them. On the 2005 test, whose results were released just last year, 12 percent of 4th graders and 6 percent of 8th graders in Puerto Rico's public schools scored at or above the "basic" level. So few students scored at the "proficient" or "advanced" level that the percentages rounded to zero.



Those low scores have angered some education officials in Puerto Rico, who argued in a letter to the federal Department of Education last month that the translation of NAEP in math, which has been given to Puerto Rican students in Spanish, as well as cultural differences not taken into account on test items, might be dragging down students' scores. In the Nov. 12 letter, the commonwealth's secretary of education, Rafael Aragunde-Torres, asked that U.S. officials allow Puerto Rico to be "permanently exempted" from participating in the test.

But Luis G. Fortuno, the governor-elect, countered in his own letter that the commonwealth should continue taking part. He is expected to appoint a new education secretary after he takes office. ("**Puerto Rican Officials Feud Over NAEP Participation**," Nov. 21, 2008.)

Puerto Rican students first took the math NAEP in 2003 and took it again in 2005. It was the first time NAEP had been administered to an entire jurisdiction in Spanish for students taught primarily in that language. Their scores were so low, and there was such a mismatch between expected and actual student performance, that federal officials had difficulty interpreting them, resulting in a delay of the release of test results. ("**Puerto Rico Falls 'Below Basic' on Math NAEP**," April 4, 2007.)

*Assistant Editor Sean Cavanagh contributed to this report.*



## **IMPLEMENTATION OF GOVERNING BOARD POLICY ON INCLUSION IN 2013**

In 2010, the Governing Board adopted the policy, *NAEP Testing and Reporting on Students with Disabilities and English Language Learners*. This policy requested changes in both the process of data collection and reporting for these two student groups. These changes will be implemented as part of the 2013 assessments. Certain aspects of the policy were implemented in 2011 and 2012. The 2011 NAEP report cards included a section highlighting those jurisdictions that did not meet the NAGB inclusion goals of 95% of all students and 85% of identified students with disabilities and English language learners. In 2012, NCES field tested the new SD and ELL decision trees. The reports from the field suggested that operationally the new decision trees would work and they could be used for the 2013 administration.

One aspect of the policy, however, was found to result in unintended consequences, and cannot be implemented in 2013. This issue concerns the re-classifying of students whose accommodations NAEP does not allow as “refusals” rather than “excluded.” While there are methodological complications that prevent NCES from reclassifying students who cannot participate because their IEP-specified accommodations are not allowed on NAEP, data will be collected in the 2013 assessments to 1) explore alternative ways to report such exclusions and 2) to document how implementation of this aspect of the policy would have affected NAEP results. NCES will discuss such plans at the November Board meeting.

# **National Assessment Governing Board**

## **Policy Statement on NAEP Testing and Reporting on Students with Disabilities and English Language Learners**

### **INTRODUCTION**

To serve as the Nation's Report Card, the National Assessment of Educational Progress (NAEP) must produce valid, comparable data on the academic achievement of American students. Public confidence in NAEP results must be high. But in recent years it has been threatened by continuing, substantial variations in exclusion rates for students with disabilities (SD) and English language learners (ELL) among the states and urban districts taking part.

Student participation in NAEP is voluntary, and the assessment is prohibited by law from providing results for individual children or schools. But NAEP's national, state, and district results are closely scrutinized, and the National Assessment Governing Board (NAGB) believes NAEP must act affirmatively to ensure that the samples reported are truly representative and that public confidence is maintained.

To ensure that NAEP is fully representative, a very high proportion of the students selected must participate in its samples, including students with disabilities and English language learners. Exclusion of such students must be minimized; they should be counted in the Nation's Report Card. Accommodations should be offered to make the assessment accessible, but these changes from standard test administration procedures should not alter the knowledge and skills being assessed.

The following policies and guidelines are based on recommendations by expert panels convened by the Governing Board to propose uniform national rules for NAEP testing of SD and ELL students. The Board has also taken into consideration the views expressed in a wide range of public comment and in detailed analyses provided by the National Center for Education Statistics, which is responsible for conducting the assessment under the policy guidance of the Board. The policies are presented not as statistically-derived standards but as policy guidelines intended to maximize student participation, minimize the potential for bias, promote fair comparisons, and maintain trends. They signify the Board's strong belief that NAEP must retain public confidence that it is fair and fully-representative of the jurisdictions and groups on which the assessment reports.

## **POLICY PRINCIPLES**

1. As many students as possible should be encouraged to participate in the National Assessment. Accommodations should be offered, if necessary, to enable students with disabilities and English language learners to participate, but should not alter the constructs assessed, as defined in assessment frameworks approved by the National Assessment Governing Board.
2. To attain comparable inclusion rates across states and districts, special efforts should be made to inform and solicit the cooperation of state and local officials, including school personnel who decide upon the participation of individual students.
3. The proportion of all students excluded from any NAEP sample should not exceed 5 percent. Samples falling below this goal shall be prominently designated in reports as not attaining the desired inclusion rate of 95 percent.
4. Among students classified as either ELL or SD a goal of 85 percent inclusion shall be established. National, state, and district samples falling below this goal shall be identified in NAEP reporting.
5. In assessment frameworks adopted by the Board, the constructs to be tested should be carefully defined, and allowable accommodations should be identified.
6. All items and directions in NAEP assessments should be clearly written and free of linguistic complexity irrelevant to the constructs assessed.
7. Enhanced efforts should be made to provide a short clear description of the purpose and value of NAEP and of full student participation in the assessment. These materials should be aimed at school personnel, state officials, and the general public, including the parents of students with disabilities and English language learners. The materials should emphasize that NAEP provides important information on academic progress and that all groups of students should be counted in the Nation's Report Card. The materials should state clearly that NAEP gives no results for individual students or schools, and can have no impact on student status, grades, or placement decisions.
8. Before each state and district-level assessment NAEP program representatives should meet with testing directors and officials concerned with SD and ELL students to explain NAEP inclusion rules. The concerns of state and local decision makers should be discussed.

## IMPLEMENTATION GUIDELINES

### For Students with Disabilities

1. Students with disabilities should participate in the National Assessment with or without allowable accommodations, as needed. Allowable accommodations are any changes from standard test administration procedures, needed to provide fair access by students with disabilities that do not alter the constructs being measured and produce valid results. In cases where non-standard procedures are permitted on state tests but not allowed on NAEP, students will be urged to take NAEP without them, but these students may use other allowable accommodations that they need.
2. The decision tree for participation of students with disabilities in NAEP shall be as follows:

#### **NAEP Decision Tree for Students with Disabilities**

##### BACKGROUND CONTEXT

1. NAEP is designed to measure constructs carefully defined in assessment frameworks adopted by the National Assessment Governing Board.
2. NAEP provides a list of appropriate accommodations and non-allowed modifications in each subject. An appropriate accommodation changes the way NAEP is normally administered to enable a student to take the test but does not alter the construct being measured. An inappropriate modification changes the way NAEP is normally administered but does alter the construct being measured.

##### STEPS OF THE DECISION TREE

3. In deciding how a student will participate in NAEP:
  - a. If the student has an Individualized Education Program (IEP) or Section 504 plan and is tested without accommodation, then he or she takes NAEP without accommodation.
  - b. If the student's IEP or 504 plan specifies an accommodation permitted by NAEP, then the student takes NAEP with that accommodation.
  - c. If the student's IEP or 504 plan specifies an accommodation or modification that is not allowed on NAEP, then the student is encouraged to take NAEP without that accommodation or modification.

3. Students should be considered for exclusion from NAEP only if they have previously been identified in an Individualized Education Program (IEP) as having the most significant cognitive disabilities, and are assessed by the state on an alternate assessment based on alternate achievement standards (AA-AAS). All students tested by the state on an alternate assessment with modified achievement standards (AA-MAS) should be included in the National Assessment.
4. Students refusing to take the assessment because a particular accommodation is not allowed should not be classified as exclusions but placed in the category of refusals under NAEP data analysis procedures.
5. NAEP should report separately on students with Individualized Education Programs (IEPs) and those with Section 504 plans, but (except to maintain trend) should only count the students with IEPs as students with disabilities. All 504 students should participate in NAEP.

At present the National Assessment reports on students with disabilities by combining results for those with an individualized education program (who receive special education services under the Individuals with Disabilities Education Act [IDEA]) and students with Section 504 plans under the Rehabilitation Act of 1973 (a much smaller group with disabilities who are not receiving services under IDEA but may be allowed test accommodations).<sup>\*</sup> Under the Elementary and Secondary Education Act, only those with an IEP are counted as students with disabilities in reporting state test results. NAEP should be consistent with this practice. However, to preserve trend, results for both categories should be combined for several more assessment years, but over time NAEP should report as students with disabilities only those who have an IEP.

6. Only students with an IEP or Section 504 plan are eligible for accommodations on NAEP. States are urged to adopt policies providing that such documents should address participation in the National Assessment.

### **For English Language Learners**

1. All English language learners selected for the NAEP sample who have been in United States schools for one year or more should be included in the National Assessment. Those in U.S. schools for less than one year should take the assessment if it is available in the student's primary language.

One year or more shall be defined as one full academic year before the year of the assessment.

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<sup>\*</sup> NOTE: The regulation implementing Section 504 defines a person with a disability as one who has a physical or mental impairment which substantially limits one or more major life activities, has a record of such an impairment, or is regarded as having such an impairment. 34 C.F.R. § 104.3(j)(1).

2. Accommodations should be offered that maximize meaningful participation, are responsive to the student's level of English proficiency, and maintain the constructs in the NAEP framework. A list of allowable accommodations should be prepared by NAEP and furnished to participating schools. Such accommodations may be provided only to students who are not native speakers of English and are currently classified by their schools as English language learners or limited English proficient (LEP).
3. Bilingual versions of NAEP in Spanish and English should be prepared in all subjects, other than reading and writing, to the extent deemed feasible by the National Center for Education Statistics. The assessments of reading and writing should continue to be in English only, as provided for in the NAEP frameworks for these subjects.
4. Staff at each school should select from among appropriate ELL-responsive accommodations allowed by NAEP, including bilingual booklets, those that best meet the linguistic needs of each student. Decisions should be made by a qualified professional familiar with the student, using objective indicators of English proficiency (such as the English language proficiency assessments [ELPA] required by federal law), in accordance with guidance provided by NAEP and subject to review by the NAEP assessment coordinator.
5. Schools may provide word-to-word bilingual dictionaries (without definitions) between English and the student's primary language, except for NAEP reading and writing, which are assessments in English only.
6. NAEP results for ELL students should be disaggregated and reported by detailed information on students' level of English language proficiency, using the best available standardized assessment data. As soon as possible, NAEP should develop its own brief test of English language proficiency to bring consistency to reporting nationwide.
7. Data should be collected, disaggregated, and reported for former English language learners who have been reclassified as English proficient and exited from the ELL category. This should include data on the number of years since students exited ELL services or were reclassified.
8. English language learners who are also classified as students with disabilities should first be given linguistically-appropriate accommodations before determining which additional accommodations may be needed to address any disabilities they may have.

## RESEARCH AND DEVELOPMENT

The Governing Board supports an aggressive schedule of research and development in the following areas:

1. The use of plain language and the principles of universal design, including a plain language review of new test items consistent with adopted frameworks.
2. Adaptive testing, either computer-based or paper-and-pencil. Such testing should provide more precise and accurate information than is available at present on low-performing and high-performing groups of students, and may include items appropriate for ELLs at low or intermediate levels of English proficiency. Data produced by such targeted testing should be placed on the common NAEP scale. Students assessed under any new procedures should be able to demonstrate fully their knowledge and skills on a range of material specified in NAEP frameworks.
3. A brief, easily-administered test of English language proficiency to be used for determining whether students should receive a translation, adaptive testing, or other accommodations because of limited English proficiency.
4. The validity and impact of commonly used testing accommodations, such as extended time and small group administration.
5. The identification, measurement, and reporting on academic achievement of students with the most significant cognitive disabilities. This should be done in order to make recommendations on how such students could be included in NAEP in the future.
6. A study of outlier states and districts with notably high or low exclusion rates for either SD or ELL students to identify the characteristics of state policies, the approach of decision makers, and other criteria associated with different inclusion levels.

The Governing Board requests NCES to prepare a research agenda on the topics above. A status report on this research should be presented at the November 2010 meeting of the Board.



***Technical Advisory Panel on Uniform National Rules  
for NAEP Testing of Students with Disabilities***

***Report to the National Assessment Governing Board***

***July 22, 2009***

***Chair: Alexa Posny***

***Members: Louis Danielson, George Engelhard,  
Miriam Freedman, Claire Greer, Robert Linn,  
Debra Paulson, and Martha Thurlow***

# **Technical Advisory Panel on Uniform National Rules for NAEP Testing of Students with Disabilities**

## **Executive Summary of Report to NAGB - July 2009**

*Chair: Alexa Posny*

*Members: Louis Danielson, George Engelhard, Miriam Freedman,  
Claire Greer, Robert Linn, Debra Paulson, and Martha Thurlow*

The panel believes the National Assessment of Educational Progress (NAEP) is an important tool for understanding academic achievement among students with disabilities. To ensure that NAEP samples are fully representative and to maintain the comparability of state and district NAEP results, the panel recommends that NAEP

1. Encourage as many students as possible to participate in NAEP, and provide for the use of allowable accommodations that are necessary to enable students with disabilities to participate.
2. Clarify and expand NAEP's guidance to schools, encouraging maximum participation of students with disabilities so at least 95% of those drawn for the NAEP sample participate.
3. Report separately on students who have individualized education programs (IEPs) and those with Section 504 plans, but (except to maintain trend) only count the students with IEPs as students with disabilities.
4. Provide incentives for schools to include students with disabilities, including additional outreach and public reporting of participation rates below 95% of students with disabilities.
5. Support research efforts to develop targeted testing for students at both the top and bottom levels of achievement, with sound procedures to identify students to receive targeted test booklets on the basis of their performance on some standard indicator of achievement.
6. Encourage and review research on the identification and progress of students who have a significant cognitive disability but in the short term do not test this 1% of students on NAEP.
7. Assess the English language proficiency of students with disabilities who are English language learners and are drawn for the NAEP sample and provide linguistically appropriate accommodations for those who need them before determining whether additional accommodations may be needed to address any disabilities those students may have.

Although NAEP can establish rules for students to be tested in the same way, individual students participate in NAEP on a voluntary basis, and it is their schools that normally make the decision about whether a student drawn for the NAEP sample participates or not. Therefore, the cooperation of schools and parents is essential to ensure that NAEP samples in every jurisdiction are fully representative and that test results are comparable among the states and districts assessed. The recommendations in this report are intended to be of practical use in determining NAEP testing procedures and in working with states and districts to continue the assessment's tradition of producing comparable results and useful information.

# **Technical Advisory Panel on Uniform National Rules for NAEP Testing of Students with Disabilities**

## **Report to National Assessment Governing Board**

**July 22, 2009**

*Chair: Alexa Posny*

*Members: Louis Danielson, George Engelhard, Miriam Freedman, Claire Greer,  
Robert Linn, Debra Paulson, and Martha Thurlow*

### **BACKGROUND AND INTRODUCTION**

The National Assessment of Educational Progress (NAEP) was established in 1969 to measure the academic achievement of a representative sample of elementary and secondary students in the United States. It is sometimes called the Nation's Report Card. Subsequently, the assessment was expanded to provide representative-sample results for states and large urban school districts.

NAEP is designed to produce valid, comparable data on large groups of students. It is prohibited by law from providing results for individual children or schools. Scores are not intended and (because no student takes the entire test) cannot be calculated for individual students. Because NAEP measures change over time, it can provide participating states and districts with reliable, independent information about the success of their efforts to improve education. It is an important common measure of student performance.

Recently, concern has arisen about the wide variation among states and districts in the rates at which students with disabilities participate in NAEP. Confusion can arise when in some states almost all students with disabilities who are selected for the NAEP sample take the test, and in others many do not. Some advocates for students with disabilities believe that having good information on the achievement of the full population of students with disabilities is a critical tool in improving services for them. The purpose of this report is both to increase the uniformity of NAEP participation rates among states and districts and to make participation rates high and participation procedures uniform.

Specifically, the National Assessment Governing Board (NAGB) convened a technical advisory panel to recommend a uniform set of rules for testing students with a disability on NAEP. The eight-member group held an all-day meeting in Washington, DC, on April 23, 2009, for initial briefings and discussion. The panel conducted four conference calls and exchanged numerous drafts and e-mails between May and July.

The Governing Board charged the panel to make recommendations that:

- provide that students with similar disabilities be tested on NAEP the same way, regardless of where they live;
- maximize student access and meaningful participation;
- ensure that the constructs on NAEP frameworks be measured and that all students may be placed on the same scale;
- permit only accommodations that maintain the validity, reliability, and comparability of NAEP results; and
- are feasible, logistically and financially, and without detrimental consequences.

## RECOMMENDATIONS

### **1. Encourage as many students as possible to participate in NAEP, and provide for the use of allowable accommodations that are necessary to enable students with disabilities to participate.**

The panel recommends that all students with disabilities participate in NAEP with appropriate accommodations that they need, which are approved by NAEP. The panel understands that some students will not be allowed to use on NAEP some of the accommodations or modifications that are permitted on tests administered by the state or district.

The panel defines an appropriate accommodation as:

- a change to the way NAEP is normally administered, and
- a change that does *not* alter the construct being measured, and
- a change that is needed to enable a student to take the test.

If a proposed accommodation alters the construct being measured, the panel considers it a modification. The panel defines a modification as:

- a change to the way NAEP is normally administered, and
- a change that does alter the construct being measured.

The panel recommends *against* the use of any change that would alter the construct NAEP is designed to measure, as defined by the NAEP frameworks.

The panel understands that the Governing Board defines the construct underlying the NAEP reading test as “an active and complex process that involves understanding written text.” Because the Governing Board defines this construct to include the ability to decode written text, the panel reaffirms the current NAEP practice of not allowing “read aloud” as an accommodation on the reading test.

The panel understands that the Governing Board defines the construct underlying the NAEP mathematics test as involving five elements, one of which is “Number Properties and Operations (including computation...)” Because this construct includes computation, the panel reaffirms current NAEP practice of not allowing the use of calculators on those parts of the NAEP math test that assess computation.

## **2. Clarify and expand NAEP’s guidance to schools, encouraging maximum participation of students with disabilities.**

As stated previously, the panel recognizes that the testing rules NAEP adopts will not yield comparable state and local results if jurisdictions vary in their participation practices. The panel therefore recommends changes to the guidance given school personnel in deciding whether students drawn for the NAEP sample are to be tested. The panel recommends advising schools on the purpose and nature of NAEP and the desirability of high participation rates, and setting the clear expectation that at least 95% of all students with disabilities drawn for the NAEP sample are expected to take the test.

In a departure from past guidance, the panel recommends state and local decision makers begin with the expectation that almost all students with disabilities will take the test, and then make decisions regarding the accommodations that individual students will be allowed to have. Specifically, the panel recommends this revised Decision Tree be provided to schools:

### **NAEP Decision Tree for Students with Disabilities**

#### **BACKGROUND CONTEXT**

1. NAEP is designed to measure constructs carefully defined by frameworks adopted by the Governing Board. Those frameworks include a definition of reading as “an active and complex process that involves understanding written text,” (including the ability to decode text) and include in its definition of mathematics five elements, one of which is “Number Properties and Operations (including computation...).”
2. NAEP provides a list of accommodations that are and are not allowed in reading, mathematics, and other subjects. [See Column B of appendix for accommodations allowed and not allowed on NAEP.]

#### **STEPS OF THE DECISION TREE**

3. In deciding how this student will participate in NAEP:
  - a. If the student has an IEP or 504 plan and is tested without accommodation, then he or she takes NAEP without accommodation.
  - b. If the student’s IEP or 504 plan specifies an accommodation permitted by NAEP, then the student takes NAEP with that accommodation.
  - c. If the student’s IEP or 504 plan specifies an accommodation or modification not allowed on NAEP, then the student takes NAEP without that accommodation or modification.

Students should be *excluded* from participating in NAEP *only* if they have previously been identified in an IEP as having a significant cognitive disability, and are assessed by the state on an alternate assessment based on alternate achievement standards (AA-AAS). Students should be *included* if tested on an alternate test with what is called modified achievement standards (AA-MAS).

The panel recommends that guidance to school decision-makers include:

- i) a short, clear account of the purpose and value of NAEP, why the inclusion of virtually all selected students is needed to provide representative samples, and the steps to determine how a selected student should participate, and
- ii) the target for the percentage of students appropriately to be excluded from participating in NAEP would be 1% of the sample.

The panel also recommends that a broader effort at public information be undertaken to explain the value of NAEP and of securing high participation rates in the assessment.

### **3. Report separately on NAEP results for IEP and 504 students.**

The panel recommends that NAEP report results for both IEP and 504 student groups, but report them separately, and calculate state scores for students with disabilities using IEP results only. At present the National Assessment reports on students with disabilities by combining the results for students with an individualized education program (who receive special education services under the Individuals with Disabilities Education Act [IDEA]) and those with Section 504 plans under the Rehabilitation Act of 1973 (a much smaller group who are not special education students but may be allowed test accommodations).

Under the Elementary and Secondary Education Act, only students with an IEP are counted as students with disabilities in reporting state test results. NAEP should be consistent with this practice. However, the panel recognizes the usefulness of maintaining NAEP trends, and therefore recommends reporting both sets of data and combining results for IEP and 504 students only to preserve the trend line. The panel recommends over time defining students with disabilities for NAEP as only those who have an IEP. All 504 students should participate in NAEP.

### **4. Provide incentives for schools to include students with disabilities.**

The panel recommends that NAEP make enhanced efforts to provide a short clear description of the purpose and value of NAEP and of full student participation in the assessment. These materials should be aimed at school personnel, state officials and the general public, including the parents of students with disabilities.

The panel recommends that upon release of each new set of NAEP results, information indicating the states and districts with more or less than 95% participation rates of students with disabilities with IEPs be among the information bullets highlighted for the

public and the press. All students with 504 plans are expected to participate. Participation rates should be reported both as a percentage of the total sample and as a percentage of the students identified with disabilities within the sample.

The panel further recommends undertaking special studies to look at any outlier states, with unusually high or low exclusion rates, and to continue work previously done for NCES to probe whether there is a cut point beyond which exclusion rates appear suspect.

Some members of the panel noted that there is significant variation among the states in the rate at which they identify students with disabilities for IEPs. While on average states identify about 12-13% of their students as having a disability and needing special education services, some states identify only 9% of their students, and others identify twice that percentage. The differences result mostly from state and local policy rather than the incidence of disability itself. Generally, jurisdictions with high identification rates include more students with mild disabilities. Those with low identification rates include only the more severe, which would make it more difficult to achieve 95% SD participation even though, overall, more of their students may be taking the assessment.

As an alternative to the 95% participation guideline for students with disabilities, some members of the panel recommend that NAEP study the possibility of developing a uniform SD participation guideline based on a percentage of the total student population, regardless of the percent identified as SD. If more than the selected percentage were excluded on the basis of disability, that would be noted in NAEP reports as indicating that the sample was not fully representative. For example, a maximum of 0.6% of the total sample not tested, or 99.4% participating, would correspond to a SD participation rate of 95% where 12% of the sample is identified as having a disability.

**5. Support research efforts to develop targeted testing for all students at both the top and bottom levels of achievement, with sound procedures to identify students to receive targeted test booklets on the basis of their performance on some standard indicator of achievement.**

The panel recommends that research and development efforts be pursued for NAEP to test all students, not only students with disabilities, at the top and bottom levels of achievement on targeted booklets with a high concentration of difficult or easy items that can be placed on the existing NAEP scale.

Currently all students are tested by NAEP with two 25-minute blocks of items covering a broad range of difficulty, some easy, some difficult, many in the middle. Any student might be randomly assigned any of the various booklets covering the complete range of difficulty for the grade and subject in which he or she is being tested.

The National Center for Education Statistics (NCES) is now developing booklets with a concentration of existing easy items that could be targeted for low-performing students. The panel recommends building upon this research effort, if successful, to create targeted tests at *both* the top and bottom of the achievement spectrum. High-performing students, those doing work well above grade level, would encounter more challenging items that



allow them to demonstrate knowledge at the advanced level. Likewise, low-performing students would encounter more items that allow them to demonstrate knowledge at the below basic level. This would allow NAEP to measure and report more accurately and in greater detail the knowledge and skills of those students scoring below basic and those scoring advanced. At both ends of the continuum, standard errors would be reduced, and better information would be available about student performance and improvements over time. If needed, additional easy and difficult items should be developed that test NAEP constructs on the existing NAEP scale.

The panel recommends that NAGB attend closely to NCES' on-going research in this area, and base future decisions on this work and similar research by others. If targeted testing becomes part of future NAEP operations, this information should be described carefully for state and local decision makers. Efforts should be made to explain how these innovations enable students with disabilities who are studying at below basic levels and those who are studying at advanced/above grade levels to engage with NAEP at all points of the continuum of achievement.

The panel recommends that NAEP find an objective and psychometrically sound method to identify which students take any targeted tests that are developed. It recommends consideration of the following possibilities:

**a) a universal 2-stage process, the system proposed by R. Darrell Bock, in which all students receive a comprehensive block first (a locator test), and then receive either a booklet with a concentration of easy items, a test with a concentration of difficult items, or the usual full-range test in the second block, depending upon their performance on the initial locator test.**

While this option was the preference of many panel members, it entails major issues of test administration that need to be taken into account before the technique would become feasible.

**b) a specially constructed new NAEP screener.**

This would entail new development work.

**c) student performance near the top or bottom percentile rank of the state's previously administered state assessment.**

While several panel members were hesitant to use results of varying state assessments, existing research shows that even the widely different tests used by states produce scores that correlate well enough with NAEP to be useful in identifying top and bottom performers who would be assigned high or low blocks of items.

**d) a new or different method that may emerge, which is psychometrically sound and easy to administer.**

The panel wants to see the adoption of a method that is fair, feasible, objective and effective, but recognizes that considerable technical development would be required before targeted testing can become a regular part of NAEP.

The panel recommends that the assignment of a targeted test to a student be based on how the student performs on some standard indicator of achievement (such as a test), and NOT upon a student's label, such as having a disability or being in advanced placement classes. The panel intends that the availability of the easy form of the test assure participating schools that low-performing students, including students with disabilities, are able to participate without altering NAEP standards. Likewise, high-performing students could be challenged on items in the assessment at the greater level of difficulty.

**6. Encourage and review research on the identification and progress of students who have a significant cognitive disability but in the short term do not test this 1% of students on NAEP.**

The Panel recommends that NAGB form a panel of experts and stakeholders to review research and best current practices for identifying, measuring and reporting the progress of students who have a significant cognitive disability, and to make recommendations to NAGB for how emerging findings can and should be applied to NAEP in the future so such students could be included in NAEP.

The panel believes that NAEP should encourage the appropriate assessment of all children, but recommends that for the near future students with a severe cognitive disability—about 1% of the student population—be excluded from NAEP. The exclusion of these students should not be considered in determining whether a jurisdiction meets participation rate guidelines.

**7. Assess the English language proficiency of students with disabilities drawn for the NAEP sample and provide NAEP-approved, linguistically appropriate accommodations for them before determining whether additional accommodations may be needed to address any disabilities these students may have.**

Some students drawn for the NAEP sample will be both English language learners and students with disabilities. For these students it is important first to determine the level of their English proficiency, and the accommodations allowed for them on NAEP. If these students have also been identified as having a disability and are eligible to receive special education services, they should receive whatever accommodations are allowed by NAEP that they need to participate in the NAEP assessment.

## APPENDIX A

### LIST OF MEMBERS AND AFFILIATIONS



### **Technical Advisory Panel on Uniform National Rules for NAEP Testing of Students with Disabilities**

- Alexa Posny, Kansas Commissioner of Education (Chair)  
Former Director, Office of Special Education Programs  
U.S. Department of Education
- George Engelhard, Jr.  
Professor of Educational Studies (Educational Measurement and Policy)  
Emory University, Atlanta, GA
- Louis Danielson, Managing Director, American Institutes for Research  
Former Director, Research to Practice Division, Office of Special Education  
Programs, U.S. Department of Education
- Miriam Freedman, attorney and author  
Stoneman, Chandler & Miller, Boston, MA
- Claire Greer, Consultant for Autism, Severe, and Multiple Disabilities  
Exceptional Children Division  
North Carolina Department of Public Instruction
- Robert Linn, Professor of Education (Emeritus)  
Research and Evaluation Methods Program  
University of Colorado
- Debra Paulson  
Middle school math and special education teacher  
El Paso, TX.
- Martha Thurlow, Director  
National Center on Educational Outcomes  
University of Minnesota

## APPENDIX B

### ACCOMMODATIONS ALLOWED ON NAEP

On state assessment this student:	COLUMN A	COLUMN B			
		Accommodations allowed on NAEP			
		Reading	Math	Science	U.S. history or geography or civics
<b>Presentation Format</b>					
Has directions read aloud/repeated in English or receives assistance to understand directions	<input type="radio"/>	Standard NAEP practice			
Has directions only signed	<input type="radio"/>	Y	Y	Y	Y
Has test items signed	<input type="radio"/>	N	Y	Y	Y
Has occasional words or phrases read aloud	<input type="radio"/>	N	Y	Y	Y
Has all or most of the test materials read aloud	<input type="radio"/>	N	Y	Y	Y
Uses a Braille version of the test	<input type="radio"/>	Y	Y	Y*	Y*
Uses a large print version of the test	<input type="radio"/>	Y	Y	Y*	Y
Uses magnifying equipment	<input type="radio"/>	Y	Y	Y*	Y
<b>Response Format</b>					
Responds in sign language	<input type="radio"/>	Y	Y	Y	Y
Uses a Braille typewriter to respond	<input type="radio"/>	Y	Y	Y	Y
Points to answers or responds orally to a scribe	<input type="radio"/>	Y	Y	Y	Y
Tape records answers	<input type="radio"/>	N	N	N	N
Uses a computer or typewriter to respond	<input type="radio"/>	Y	Y	Y	Y
		Spell/grammar check not allowed			
Uses a template to respond	<input type="radio"/>	Y	Y	Y	Y
Uses a large marking pen or special writing tool	<input type="radio"/>	Y	Y	Y	Y
Writes directly in the test booklet	<input type="radio"/>	Standard NAEP practice			
<b>Setting Format</b>					
Takes the test in a small group <sup>2</sup>	<input type="radio"/>	Y	Y	Y	Y
Takes the test one-on-one <sup>2</sup>	<input type="radio"/>	Y	Y	Y	Y
Takes the test in a study carrel	<input type="radio"/>	Y	Y	Y	Y
Receives preferential seating, special lighting, or furniture	<input type="radio"/>	Y	Y	Y	Y
Must have test administered by familiar person	<input type="radio"/>	Y	Y	Y	Y
<b>Timing Accommodations (Note: NAEP takes only 90 minutes.)</b>					
Receives extended time <sup>4</sup>	<input type="radio"/>	Y	Y	Y	Y
Is given breaks during the test	<input type="radio"/>	Y	Y	Y	Y
Must be allowed to take subject test over several days	<input type="radio"/>	N	N	N	N
<b>Other Accommodations</b>					
Uses a calculator, including talking or Braille calculator for computation tasks	<input type="radio"/>	NA	N*	NA	NA
Uses an abacus, arithmetic tables, graph paper	<input type="radio"/>	NA	N	NA	NA
Uses dictionary, thesaurus, or spelling/grammar-checking software or devices	<input type="radio"/>	N	N	N	N
Receives the following accommodation(s) not listed above.	<input type="radio"/>	Check with your NAEP representative			

## Fed Agencies Spar Over NAEP for Special Populations

**At issue is how many ELLs, Spec. Ed. students to test**

By **Nirvi Shah**



Despite a pending policy change aimed at including more students with disabilities and English-language learners in the "nation's report card," the federal agency that administers the national testing program appears to be softening the penalty for states that fail to improve inclusion rates.

The disagreement underscores the uneasy relationship between the National Center for Education Statistics, the federal agency that administers the national tests, and the **National Assessment Governing Board**, the independent body that sets policy for the exams. And it reflects an intensifying debate about how to ensure that the National Assessment of Educational Progress, a congressionally mandated set of tests designed to take the national pulse on student achievement, accurately allows for state-by-state comparisons of student achievement.

"These issues, as all issues with students with disabilities and English-language learners, are hot potatoes," said Cornelia Orr, the governing board's executive director.

Two years ago, NAGB **adopted a policy** that takes effect in January, during the next administration of NAEP, to limit how many students with disabilities and English-learners states can be cut from the testing pool. The policy says, essentially, that only students with severe cognitive disabilities and English-language learners who have been in the country for less than one year should be excluded from taking the exams in reading, mathematics, and other subjects.

Nationwide, some 830,000 4th and 8th graders from nearly 18,000 schools will take the tests in reading and math next year.

"The impetus for the NAEP policy was to push states to smooth out those state exclusion rates, to have the same proportion of students being tested across states," Ms. Orr said.

As written, that policy would help make NAEP scores more comparable from state to state. As it now stands, states that exclude more students with disabilities and ELLs have a record of posting better scores than states that are more inclusive.

### Case in Point

For example, in 2011, of 4th grade students with disabilities in the testing pool, Maryland included less than a third—31 percent—on the reading test. Other states included as many as 90 percent or more of

### Grade 4 Reading

If a new policy about including more students on the National Assessment of Educational Progress had been in effect in 2011, fewer students with disabilities and English-language learners would have been excluded from taking the exam. Federal statisticians estimate that the resulting changes in some states' exclusion rates would have led, in turn, to lower scores on the 4th grade reading exam that year.

	Student Exclusion Rate*		Mean Scores (0-500)	
	2011	Hypothetical	2011	Hypothetical
Delaware	70%	1.2%	225.1	223.1
Kentucky	8.7	1.3	225.1	223.6
Maryland	31.2	0.6	220.8	229.2

SOURCE: National Center for Education Statistics

those students, and the size of the testing pool—2,500 to 3,000 students—is the same in each state. Maryland posted **among the highest 4th grade reading scores in the country** that year, and it was one of the few states to improve its scores from previous years.

The discrepancies from state to state over which students are tested—and which are not—have been especially frustrating for states that have been more inclusive but have found their NAEP scores stagnating.

Florida's commissioner of education, Gerard Robinson, **wrote to NAGB** earlier this year, saying the board should consider a policy of only reporting or using state-level results if the minimum standards of inclusion are met.

NAGB's new policy says that the proportion of all students excluded from NAEP should not be more than 5 percent and that states should push to include 85 percent of all students with disabilities and ELLs identified to be part of the testing pool.

"This would ensure the validity of the reported results for the nation and for the participating states," wrote Mr. Robinson, whose state is among those with lower exclusion rates. "States not meeting the minimum standards should face funding sanctions."

From the beginning, the NCES, a branch of the U.S. Department of Education, disagreed with the policy, although the agency agreed with the greater goal of inclusion. ("**NAEP Board Curbs Special Ed. and ELL Exclusions**," March 17, 2010.) At the time it was adopted, Stuart Kerachsky, then acting commissioner of NCES, said that the statistics agency harbored concerns about "flagging" individual states' exclusion rates.

### **Reason for Disagreeing**

"There is no statistical basis for such standards," he wrote in a letter just days before the policy was adopted. "For that reason alone, NCES is unable to support this recommendation: We would be implicitly impugning jurisdiction results... without cause."

By law, the NCES is required to implement NAGB policy but, as this episode demonstrates, it has some degree of discretion to do so as it sees fit.

As created, the NAGB policy envisions dinging states that continue to exclude students with disabilities and ELLs from the testing pool when scores were tabulated.

The penalty would operate this way: Under the technical rules that guide NAEP, the federal agency is directed to impute, or estimate, the scores of such excluded students. In other words, if students with disabilities are excluded, their scores would still count in the calculation, using the average scores of other students with disabilities who were tested.

"Since students with disabilities tend to score lower on average than other students, disabled students ... would receive the same scores as similar disabled students, thus lowering the average," said Peggy Carr, the NCES' associate commissioner in the assessment division.

So the NCES is not planning to enact that penalty, she said.

But the NCES' plans are "contrary to the NAGB policy," said Lawrence Feinberg, the governing board's assistant director for reporting and analysis. "There's no question about that."

## Advocates Object

With the threat of lower scores removed, any pressure on states to be more inclusive of special education students and English-language learners evaporates, say advocates for those groups.

"We want the sample to be more exemplary of students" with disabilities, said Laura Kaloi, the public-policy director for the National Center for Learning Disabilities, in New York City. "Why are schools more focused on excluding students that they don't believe can pass than [on] looking at why so many can't pass a grade-level exam?"

One complicating wrinkle in that debate is that NAEP doesn't allow all of the same accommodations for students with disabilities or students learning English on its tests that states typically permit. Some states, for example, allow portions of their state exams, including the reading sections, to be read aloud as designated in a students' individualized education program, or IEP. But NAEP doesn't. However, NAGB wants most students with disabilities to take the exam even if there is an accommodation they are accustomed to but cannot use on the national assessment.

That's partly why so many students with disabilities in Maryland have historically not taken NAEP, said Mary Gable, the assistant state superintendent for academic policy. Schools have a legal responsibility to carry out students' IEPs, Ms. Gable said. She believes the state would be violating federal law if students whose plans say they are entitled to the read-aloud accommodation had to take NAEP without it.

There's a similar issue in Kentucky, which also has high exclusion rates.

## No Stakes

Mr. Feinberg said NAGB's understanding is that students could take NAEP even without every accommodation their education plans require, especially because the tests have no stakes for any individual student, such as determining whether students should be promoted to the next grade, and no records are kept about which students were tested.

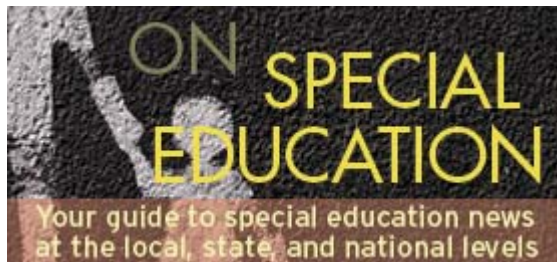
Beyond the read-aloud issue, nearly **all other accommodations** are allowed on NAEP, such as additional time for testing, one-on-one testing, small-group testing, bilingual Spanish-English test booklets for subjects other than reading and writing, additional breaks, and having directions read in sign language.

Including more students with disabilities on the math test may be less of an issue. NAEP only allows calculators on some portions of math, but some special education students are entitled to calculators any time they are working on that subject.

To encourage their participation, Ms. Carr said, those students will be assigned the portion of NAEP that allows calculators.

*Assistant Editor Stephen Sawchuk contributed to this report.*

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## GRADE 4 READING

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<b>Maryland</b>	10.3	0.6	230.8	228.3
<b>New Jersey</b>	9.1	0.5	231.2	228.6
<b>Tennessee</b>	7.1	1.5	214.6	212.6
<b>Texas</b>	9.9	1.6	218.3	216.3

\* Students with disabilities and English-language learners combined  
SOURCE: National Center for Education Statistics

