National Assessment Governing Board

Assessment Development Committee

Report of November 30, 2012

November 30, 2012   **Open Session**   **9:30 – 10:40 am**

Attendees: ADC – Alan Friedman (Chair), Shannon Garrison (Vice Chair), Brent
Houston, Hector Ibarra, Dale Nowlin, Susan Pimentel, Cary Sneider; Governing Board
Staff – Mary Crovo; NCES – Bobby Woods, Suzanne Triplett, Eunice Greer, Arnold
Goldstein, Bill Ward, Elvira Germino Hausken, Bill Tierre, Kaska Kubzdela; AIR – Kim
Gattis, Teresa Neidorf; ETS – Jay Campbell, Greg Vafis, Lonnie Smith, Andy Latham,
Aaron Rogat; HumRRO – Sheila Schulz; Optimal Solutions Group– Mark Partridge;
Fulcrum IT – Scott Ferguson, Jud Cole, Lori Rokus, Saira Brenner, Michael Scharf, Teagan
O'Bar; Pearson – Connie Smith; Westat – Dianne Walsh; Hager Sharp – Joann Lim; SRI –
Terry Vendlinski.

Plans for Reporting on the 2012 Grade 4 Computer-Based Writing Pilot Test
Arnold Goldstein of NCES briefed the Assessment Development Committee (ADC) on
plans to report findings and "lessons learned" from the recent grade 4 computer-based pilot
test of the NAEP writing assessment.

While NAEP traditionally does not report findings from pilot tests, at its August 2012
meeting the ADC had requested that information from the grade 4 pilot be made widely
available. This pilot test involved a large, nationally representative sample and NAEP is
the first program to conduct a large-scale pilot test of 4th grade writing using computers.

Mr. Goldstein outlined several research questions that are being studied in terms of
developing a report on this pilot study:
1. Do 4th grade students have the skills to respond to writing prompts on a computer-
   based assessment?
2. Are there any limitations on students' skills that effect the quality of their responses,
   and can scorers be trained to score reliably, given these limitations?
3. What have we learned in the test design and development process that can inform
   future assessments?
4. Are there opportunities to report more and different information about what students
   know and can do, related to the data we can collect on students' actions on the
   computer?

Some considerations for reporting this information include whether there were unexpected
patterns in student response rates, response frequencies, scoring reliability, or performance
by subgroups. The writing pilot information may also inform decisions on the appropriate
length of time for computer-based writing tasks for students of this age group. Of particular
interest to educators, policymakers, and the general public would be information on young

students' use of editing tools, typing speed, use of references such as a thesaurus, and other observable data collected during the pilot (e.g., number of words in their written responses).

ADC members engaged in a question and answer session with Mr. Goldstein following the briefing. The Committee was very interested in the reporting timeline. Mr. Goldstein stated that a spring 2013 release could be possible. Members also noted that typing speed for 4th graders was not as important as word count and students' use of editing tools. Many students will write a phrase or a sentence, then pause to think about what they have written or perhaps use an editing tool to improve their writing. This will affect their typing speed overall, therefore the total word count will be much more important information to report.

The ADC was also interested in the types of background questions included as part of this computer-based assessment. In particular, background questions related to students' in-school and out-of-school use of computers would be very important to analyze in comparison to their writing scores and related data such as use of word processing tools.

Finally, the ADC encouraged NCES to think "outside the box" in terms of the format for this report. Besides being primarily an online report, the Committee asked for innovative ideas on effective and expedient ways to report this valuable information on 4th grade writing using a computer. At their March 2013 meeting, the ADC requested an update on this topic, along with an outline of the proposed report.

Update on NAEP Technology and Engineering Literacy (TEL) Assessment
William Ward of NCES provided an update on development work leading up to the 2013 grade 8 pilot test of the Technology and Engineering Literacy (TEL) assessment. Approximately 15,000 grade 8 students in about 600 schools will be tested nationwide.

Mr. Ward noted that the design of the TEL pilot includes an extra block of discrete test questions that students can take if they finish the first two blocks of cognitive TEL items. Since there are so many background questions to be pilot tested, the TEL design also will incorporate the spiraling of background questions so that more data can be collected using this approach.

Mr. Ward reviewed several informational flyers developed to communicate to the public, parents, and school-based staff regarding the purpose and content of this innovative, computer-based assessment. The Committee then viewed the newly-released TEL video, which ADC Chair Alan Friedman had helped to develop. ADC members were extremely pleased with the TEL materials and the video in particular. The Committee stated that the video was extremely engaging, and it communicated TEL concepts in a very clear manner.

ADC members then engaged in a lengthy discussion about the importance of communicating with school principals about the purpose and value of NAEP. Members felt that not enough is being done by the NAEP program as a whole to reach principals about NAEP's many benefits, the data it can provide, and the online tools that teachers can use. It was noted that unless a principal is aware of NAEP, it is unlikely that teachers in that school will use NAEP resources. A number of the school-based ADC members spoke from their experience as principals and teachers about the importance of communicating more

effectively with principals about NAEP. In addition to the Board's parent outreach work, the ADC felt that an increased effort to reach principals is an important initiative to pursue.

November 30, 2012   **Closed Session**   **10:40 am – 12:00 pm**

Attendees: ADC – Alan Friedman (Chair), Shannon Garrison (Vice Chair), Brent Houston, Hector Ibarra, Dale Nowlin, Susan Pimentel, Cary Sneider; Governing Board Staff – Mary Crovo; NCES – Bobby Woods, Suzanne Triplett, Eunice Greer, Arnold Goldstein, Bill Ward, Elvira Germino Hausken, Bill Tierre, Kaska Kubzdela; AIR – Kim Gattis, Teresa Neidorf; ETS – Jay Campbell, Greg Vafis, Lonnie Smith, Andy Latham, Aaron Rogat; HumRRO – Sheila Schulz; Optimal Solutions Group– Mark Partridge; Fulcrum IT – Scott Ferguson, Jud Cole, Lori Rokus, Saira Brenner, Michael Scharf, Teagan O'Bar; Pearson – Connie Smith; Westat – Dianne Walsh; Hager Sharp – Joann Lim; SRI – Terry Vendlinski.

Review of Secure Science Interactive Computer Tasks (ICTs)
In accordance with the provisions of exemption (9)(B) of Section 552b(c) of Title 5 U.S.C., the Assessment Development Committee (ADC) met in closed session on November 30, 2012 from 10:40 a.m. to 12:00 p.m.

Jay Campbell of ETS introduced the review session with a brief overview of the design for the 2015 NAEP Science assessment. ETS is working collaboratively with SRI and Fulcrum IT to develop a new generation of Interactive Computer Tasks (ICTs) using an evidence-centered design approach. This methodology is similar to that used for the Technology and Engineering Literacy (TEL) assessment. Mr. Campbell noted that the main construct to be measured by the Science ICTs is scientific inquiry. In the future the ICTs will be integrated into the main NAEP Science scale for reporting, as well as having a separate ICT report. In 2019 there will be an opportunity to report on trends in student performance on the ICTs between 2015 and 2019.

The ADC then reviewed secure draft task outlines for the NAEP 2015 Science interactive computer tasks (ICTs) to be piloted in 2014. The ADC reviewed task outlines in grades 4, 8, and 12. Some of the task outlines also had story boards, which the ADC also reviewed. The Committee members provided detailed comments on all eight Interactive Computer Tasks. Written comments from this review session will be provided to NCES by December 5, 2012. The next set of ICT draft outlines will be reviewed via teleconference in January 2013.

I certify the accuracy of these minutes.

12-21-12
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Alan Friedman, Chair   Date