# National Assessment Governing Board

## **Assessment Development Committee**

## Report of February 28 and March 1, 2013

## February 28, 2013 Closed Session 8:30 am – 1:45 pm

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 February 28, 2013 from 8:30 a.m. to 1:45 p.m.

Attendees: ADC – Alan Friedman (Chair), Shannon Garrison (Vice Chair), Brent Houston, Hector Ibarra, Dale Nowlin, Susan Pimentel, Cary Sneider; Other Board Members – David Driscoll, Rebecca Gagnon, Tonya Miles; Governing Board Staff – Mary Crovo, Michelle Blair; NCES – Elvira Germino Hausken; AIR – Kim Gattis, Yan Wang; ETS – Greg Vafis, Andy Latham, Shu-Kang Chen, Madeline Keehner; HumRRO – Steve Sellman; Fulcrum IT – Scott Ferguson, Jud Cole, Saira Brenner.

### **Review of Science Interactive Computer Tasks (ICTs)**

Andrew Latham of ETS provided an overview of the NAEP Science ICT development process and timelines. ADC members then reviewed draft outlines for 12 ICTs in grades 4, 8, and 12 for the 2014 NAEP pilot test, in preparation for the 2015 operational Science Assessment. The ADC was pleased overall with the rigor, topics, and timeliness of the proposed tasks. A substantial number of comments were provided by the ADC on modifications to improve the tasks in terms of clarity, increasing the level of student engagement, and other factors.

Following the review of ICT outlines, the Mr. Latham provided the ADC with preliminary computer renditions of ICTs proposed for the 2014 pilot. As with the ICT draft outlines, the ADC was very complimentary of the tasks overall. They felt that the computer renditions were engaging, authentic, and conveyed challenging tasks. Comments provided by ADC members focused on improving graphics, revising the computer interface for clarity, and other revisions. Action on the Science ICTs was taken in open session during the ADC's March 1, 2013 meeting.

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 – Arnold Goldstein, Suzanne Triplett, Jamie Deaton, Jing Chen, Kashka Kubzdela; AIR – Kim Gattis, Young Yee Kim; ETS – Greg Vafis, Jonas Bertling, Jay Campbell; HumRRO – Carrie Wiley; Fulcrum IT – Scott Ferguson, Saira Brenner; Hager Sharp – Melissa Spade; CRP – Rebecca Posante; Pearson – Connie Smith; Optimal Solutions – Mark Partridge.

### Update on Reporting Grade 4 Computer-Based Writing Information

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 requested that information from the grade 4 pilot be made widely available because of the widespread interest in this new methodology itself. This pilot test involved a large, nationally representative sample and NAEP is the first program to conduct a large-scale pilot test of 4<sup>th</sup> grade writing using computers.

Mr. Goldstein discussed four phases in the proposed reporting plan along with target dates for each phase:

- 1. Assemble key findings (review pilot data and field information) February 2013
- 2. Develop materials (design accessible reports and graphics) April 2013
- 3. Roll out materials (finalize products and post on the web) June 2013
- 4. Outreach (publicize to audiences and distribute through partners) June through December 2013

The key question for this pilot study was whether 4<sup>th</sup> grade students can write using a computer and commonly available word processing tools. Areas of further inquiry relate to the length of students' written responses, comparison of computer skills of higher vs. lower performing students, and differences in computer skills by race/ethnicity.

Mr. Goldstein provided an overview of important audiences for these reports. For example, state and local testing directors, test developers, and researchers are key audiences in the assessment community. Assessment consumers who would find the grade 4 writing information useful include the general public and parents, policymakers, legislators, education administrators, and teachers.

Following this presentation on intended audiences, Mr. Goldstein described the types of "lessons learned" that would be reported from this large-scale writing pilot. Finally, Mr. Goldstein outlined the type of reports NCES is considering. Criteria for developing those reports include making them easily readable, web-based publications of approximately one to two pages in length. In addition, information targeted toward specific audiences would take the form of a four-page brochure-type publication for policymakers, teachers, testing experts, and other audiences. As an example, Mr. Goldstein shared a "mock-up" of one two-page report for a

general public audience. It highlighted key findings from the grade 4 writing pilot with easy-toread graphics and bulleted text.

ADC members provided input on the NCES proposal for reporting on grade 4 computer-based writing. Members stated that the reports should not de-emphasize the positive findings, by communicating what aspects of this pilot test methodology worked well for showing what students know and can do. However the reports should also describe areas where students had difficulties, and convey the lessons learned for future computer-based testing.

Additional comments by ADC members were that the reports should focus on key differences between paper and pencil vs. computer-based testing. The reports should not dwell on writing assessment issues that NAEP has reported on extensively from previous paper-based writing assessments. Members felt that it was also important to report on key background variables such as access to computers, both in and out of school. In commenting on the prototype report, the ADC recommended that the presentation and graphics avoid "childish" style fonts and graphs as these would undermine the importance of the findings.

The reports should highlight students' use of word processing tools to edit their writing, and report on differences across grade levels. In previous presentations, the ADC noted that these findings were particularly interesting and would be informative to a broad set of audiences. ADC members recommended expanding the outreach when releasing these reports. Many education and policy associations will find these reports interesting and valuable. As was stated in the NCES presentation, this information is eagerly awaited by states, the assessment consortia, teachers, and others. In terms of comparisons, the ADC emphasized that gender differences at grade 4 will be extremely important to highlight in the reports. Additional "observable data" from the computer-based testing is also a major set of findings to convey in these reports.

ADC members discussed whether there should be a seminar-style release with a panel of speakers representing teachers, curriculum and testing experts, and others to highlight the importance of this information.

The ADC thanked Mr. Goldstein for his comprehensive presentation. The Committee looks forward to hearing more about this ongoing work at its May 2013 meeting.

### **Review of NAEP Science Background Questions**

ADC Chair, Alan Friedman, led the Committee through a review of science background questions to be administered to students, teachers, and schools in the 2014 pilot, in preparation for the 2015 Science operational assessment.

During the nearly two-hour review session, the ADC made a number of comments to delete, add, and revise the background questions. Overall the ADC was pleased with the thoroughness of the questions, the clarity of wording, and the inclusion of questions related to students' out-of-school science learning experiences. Many comments related to updating and clarifying questions and examples.

The ADC took the following two actions in open session, both of which were approved unanimously.

- 1. ACTION: The Assessment Development Committee approves the NAEP Science Interactive Computer Task outlines in grades 4, 8, and 12 with changes to be communicated in writing to the National Center for Education Statistics (NCES).
- 2. ACTION: The Assessment Development Committee approves the NAEP Science Background Questions for students, teachers, and schools with changes to be communicated in writing sent to NCES.

I certify the accuracy of these minutes.

affile

3-22-13

Alan Friedman, Chair

Date