

National Assessment Governing Board

Assessment Development Committee

Report of August 1-2, 2013

August 1, 2013

Closed Session

8:00 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 August 1, 2013 from 8:00 a.m. to 1:45 p.m.

Attendees: ADC – Alan Friedman (Chair), Shannon Garrison (Vice Chair), Doris Hicks, Brent Houston, Hector Ibarra, Dale Nowlin, Susan Pimentel, Cary Sneider; Other Board Members – Rebecca Gagnon, Tonya Miles; Governing Board Staff – Mary Crovo, Michelle Blair; NCES – Elvira Germino Hausken, William Ward; AIR – Kim Gattis, Teresa Neidorf, Yan Wang; ETS – Jay Campbell, Greg Vafis, Shu-Kang Chen, Andrew Latham, Lonnie Smith; HumRRO – Steve Sellman; Fulcrum IT – Saira Brenner, Jud Cole, Gregory Anderson.

Review of Technology and Engineering Literacy (TEL) Tasks and Discrete Items

Lonnie Smith of ETS provided an overview of the NAEP Science TEL development process and timelines leading up to the 2014 operational TEL assessment in grade 8. The first portion of the meeting was spent reviewing the TEL computer-based scenarios and accompanying items. ADC members had seen these tasks during various stages of their development, and had provided numerous comments for improving the tasks and items. Committee members expressed their appreciation to NCES, ETS, and other NAEP contractors on the excellent set of TEL scenario-based tasks. The ADC had a few relatively minor changes to the tasks and items for clarity.

The second part of the August 1 closed session focused on the TEL discrete items. Committee members were pleased overall with the rigor and quality of the items. However, members had a number of changes related to language clarity, assessment targets measured, scoring rubrics, and clarity of the graphics.

Review of Science Hands-on Tasks (HOTs)

The third part of the meeting addressed the Science Hands-on Tasks (HOTs) being prepared for the 2015 operational assessment at grades 4, 8, and 12. ADC comments included clarification of directions, attention to language complexity, improvement to scoring rubrics, revision to some assessment targets addressed by the tasks, and other substantive changes to the HOTs. At this stage members reviewed written descriptions of the HOTs, without having the physical materials, which need to be considered before final approval.

Members also received a briefing on a proposal to move toward “hybrid” hands-on tasks where students would use both a computer and physical manipulatives. This hybrid model has several advantages, including reducing the reading load and task set-up time, since some directions and video demos could be presented to students on the computer. Students could also record data from their experiments in chart or graph form and answer the HOTS test questions on the computer.

ADC members supported the plan to transition to HOTS tasks that involve both a computer and hands-on equipment and materials. However, the Committee emphasized that hands-on tasks involving science equipment and materials must remain an important part of the NAEP Science assessment.

August 2, 2013

Closed Session

10:00 am – 12:30 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 August 2, 2013 from 10:00 a.m. to 12:30 p.m.

Attendees: ADC – Alan Friedman (Chair), Shannon Garrison (Vice Chair), Doris Hicks, Brent Houston, Hector Ibarra, Dale Nowlin, Susan Pimentel, Cary Sneider; Governing Board Staff – Mary Crovo; NCES – Suzanne Triplett, Elvira Germino Hausken, William Ward, Ebony Walton; AIR – Kim Gattis, Teresa Neidorf, Yan Wang; ETS – Jay Campbell, Greg Vafis, Shu-Kang Chen, Andrew Latham; Westat – Dianne Walsh; Pearson – Connie Smith; HumRRO – Steve Sellman, Sheila Schulz; Fulcrum IT – Saira Brenner, Jud Cole, Gregory Anderson; CRP – Edward Wofford; Hager Sharp – Lauren Werner.

Review of Science Interactive Computer Tasks (ICTs)

Andrew Latham of ETS provided an overview of the ICT development work at grades 4, 8, and 12. The Committee reviewed multiple short and extended ICTs at each grade level. Mr. Latham presented the “beta” versions of the tasks, which had previously been reviewed and commented on by the ADC when the tasks were in an outline and also an “alpha” format. Alpha and beta builds are the first- and second-draft versions of the rendered task, respectively.

The ADC was pleased overall with the topics, rigor, and relevance of the proposed tasks. They commented that the tasks will measure important content and practices in science and will be very engaging to students. Members also commented on the generally good match between the ICTs and the assessment targets from the NAEP Science Framework. 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, providing a better match to the assessment targets for some items, and other factors.

Update on 2013 Technology and Engineering Literacy (TEL) Pilot Test

William Ward of NCES provided a status report on the TEL pilot test, which was administered to 16,000 eighth-grade students in both public and private schools. The sample size for the TEL pilot was larger than is typical for NAEP pilot tests, due to additional analyses planned to help prepare for the 2014 operational assessment.

Mr. Ward shared preliminary observations from the TEL pilot. TEL items can be scored using existing NAEP scoring procedures and the scoring reliability for TEL is similar to other NAEP subjects. TEL items yielded a range of responses and students demonstrated a wide range of ability on the constructed response items. ADC members were able to view a distribution of percent correct pilot results, subdivided by the three TEL areas: Technology and Society, Design and Systems, and Information and Communication Technology. Following this information, Mr. Ward presented some sample TEL scenario- based tasks and discrete items, along with sample student responses.

Finally, Mr. Ward presented a new TEL video that explores a TEL task in-depth. This task (the Wells task) was released on the NAEP website in June 2013 to illustrate the nature of the complex TEL tasks. This new video, scheduled for release in August 2013, explains what the task measures, what students are asked to do, and other features of the “Wells” task. In October 2013, additional TEL information is due to be released on the website including observations from the pilot test for this task and possible extended reporting scenarios.

ADC members commented that the TEL pilot information was extremely interesting, and Committee members were pleased that the pilot was successful. They requested a briefing at their December 2013 meeting on subsequent analyses from the pilot and plans for the 2014 operational assessment. The ADC also commended NCES for the work to release a TEL task and related information in advance of the 2014 assessment.

Update on Reporting Grade 4 Computer-Based Writing Information

Arnold Goldstein of NCES updated the ADC on progress since their May 2013 meeting on reporting information from the grade 4 computer-based Writing pilot. Based on the feedback provided by the ADC and other groups, NCES and its contractors have made a number of changes to the grade 4 writing report to be put on the NAEP web site.

Mr. Goldstein explained that the goal of the grade 4 Writing pilot report was to communicate what was learned in the development and implementation of the grade 4 assessment. He then provided the ADC with an overview of the various web pages developed for the grade 4 writing release.

Members were very complimentary of the format and content of the embargoed web pages. The ADC particularly liked the question and answer format used on the site, and the fact that a user can print a summary report from the website home page.

Committee members provided some specific feedback they felt was essential to incorporate to make the site more user-friendly. For example, the amount of text at the top of the home page should be reduced in length and the acronym, WCBA, should be

replaced with a more user-friendly term on subsequent slides. In addition, graphs should display score points on the y-axis starting with 1 at the bottom and progressing to 6 at the top. Similar bar charts should have lower values or categories near the bottom and higher values/categories near the top of the y-axis. On some of the horizontal bar charts, shading or lines should be added to separate subgroups such as gender or race/ethnicity, to more clearly display the large amount of data. Members noted that the stacked vertical bar charts were not easily understood. It is also important to explain to the user why there were four points in rubrics for the 20-minute prompts and 6 six points in the 30-minute prompt rubrics.

Mr. Goldstein thanked the ADC members for their helpful feedback and noted that the web-based report should be ready for release in December 2013. Members commented that the website will be a very important resource for educators, testing specialists, and policy makers since this is the first large-scale computer-based writing study ever conducted. The ADC recommended that NCES and Governing Board staff work collaboratively on a release event for the grade four writing web report.

Open Session

The ADC took the following three actions in open session, all of which were approved unanimously:

- 1. ACTION: The Assessment Development Committee approves the NAEP Science Interactive Computer Task (ICT) beta builds 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 Hands on Tasks (HOT) for grades 4, 8, and 12, with changes to be communicated in writing to NCES.**
- 3. ACTION: The Assessment Development Committee approves the NAEP Technology and Engineering Literacy (TEL) scenario-based tasks and discrete items at grade 8, with changes to be communicated in writing to NCES.**

New Topic

ADC Chair, Alan Friedman, noted that Chairman Driscoll recently received a letter from Michael Cohen of Achieve, stating some concerns with the NAEP Writing assessment. Chairman Driscoll assigned the letter to the ADC. Due to a very full agenda on August 1 and 2, the Committee will consider the letter via teleconference in the near future.

I certify the accuracy of these minutes.



Alan Friedman, Chair

Aug. 13, 2013

Date