

National Assessment Governing Board Assessment Development Committee

Report of July 31-August 1, 2014

Closed Session – July 31, 2014

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 July 31, 2014 from 8:30 a.m. to 3:00 p.m. to review secure NAEP test questions.

Attendees: ADC – Shannon Garrison (Chair), Cary Sneider (Vice Chair), Doris Hicks, Brent Houston, Hector Ibarra, Dale Nowlin; Governing Board Staff – Mary Crovo, Michelle Blair; NCES – Eunice Greer, Elvira Germino Hausken; AIR – Kim Gattis, Sarah Guile, Chrysantha Rice, Teresa Neidorf; ETS – Greg Vafis, Kathleen Scalise, Rebecca Moran; HumRRO – Steve Sellman, Sheila Schulz; Fulcrum IT – Scott Ferguson, Kevin Price

The Assessment Development Committee (ADC) met in closed session to review Science operational test questions in grades 4, 8, and 12, followed by a review of Science interactive computer tasks (ICTs) for the 2015 pilot. ADC members commented on the high quality, engaging items and ICTs. Comments were made related to fine tuning the tasks, clarifying the Framework assessment targets measured by the tasks, and several corrections on test items.

Open Session – August 1, 2014

Attendees: Shannon Garrison (Chair), Cary Sneider (Vice Chair), Doris Hicks, Brent Houston, Hector Ibarra, Dale Nowlin; Governing Board Staff – Mary Crovo; NCES – Elvira Germino Hausken, William Ward, Holly Spurlock, Dana Kelly, James Deaton, Eunice Greer, Emmanuel Sikali, Taslima Rahman; AIR – Kim Gattis, Teresa Neidorf, Marcus Broer, Fran Stancavage; ETS – Jay Campbell, Greg Vafis, Rebecca Moran, Kathleen Scalise, Jonas Bertling; HumRRO – Sheila Shulz; Optimal Solutions Group – Roger Stanton; CRP – Ed Wofford; Pearson – Connie Smith; Fulcrum – Scott Ferguson, Kevin Price; CCSSO – Fen Chou

The ADC took action on the NAEP Science items and ICTs that were reviewed in closed session on July 31, 2014. The Committee unanimously approved the following motion:

ACTION: The Assessment Development Committee approves the NAEP 2015 Science operational test items in grades 4, 8, and 12, and the 2015 pilot Science interactive computer tasks at grades 4, 8, and 12 with revisions to the tasks, scoring criteria, and assessment targets. These revisions will be communicated in writing to the National Center for Education Statistics.

Discussion on NAEP Writing Assessment

The ADC discussed at length the comments made by Michael Cohen of Achieve at the August 1, 2014 Board plenary session. The ADC members expressed their understanding of Mr. Cohen's issues with the current NAEP Writing Framework and the importance of writing for college and career preparedness. The Committee requested a review of the NAEP Writing Framework and secure NAEP writing tasks at their November 2014 meeting. This will enable the ADC to be in a better position to recommend next steps related to Michael Cohen's concerns. ADC members also discussed the measurement challenge of testing reading and writing using an integrated approach, and problems associated with the possible confounding of these two constructs.

Technology and Engineering Literacy (TEL) Assessment Update

William Ward of NCES presented an update on the 2014 TEL assessment, which is now in the data analysis stage. It is anticipated that the analysis will be completed later in 2014, and a draft report would be prepared by spring 2014. Mr. Ward then described several options for release of TEL tasks and items, when the TEL Report Card is ready for publication. ADC members spent time discussing these options for releasing TEL tasks and discrete items. The Committee expressed a strong interest in ensuring that at least a small number of TEL tasks and items are released in conjunction with the report. Members also commented that the TEL Report Card should include the achievement levels, to ensure the report contains as much information as possible, instead of releasing the TEL Report Card in advance of Board action on the TEL levels. Cary Sneider recommended forming a cross-committee work group on TEL reporting as the issues relate to ADC, COSDAM, and R&D areas of responsibility.

Following this discussion, Jonas Bertling of ETS described some exciting data analyses on TEL contextual modules. This approach is consistent with the newly adopted Board policy on NAEP contextual questions. The TEL contextual question data look very promising and ADC agreed this information will be of great interest to everyone engaged in STEM instruction and practice. Results would be available by subgroups, including breakdowns by key demographic variables. This approach is consistent with innovative reporting strategies being implemented in the international assessments. Mr. Bertling noted that he will present some of this information to the full Board on August 1, during his session on NAEP contextual variable modules.

Transitioning to NAEP Technology Based Assessments (TBA) in Reading and Mathematics

Eunice Greer of NCES presented information on the TBA transition. The 2017 TBA subjects include Reading and Mathematics, however other subject areas are scheduled for TBA administrations in the coming years. In this presentation, Ms. Greer focused on work to transition NAEP paper and pencil items to the tablet platform. This process is known as trans-adaptation.

Ms. Greer provided the timeline for the TBA transition, and the various development and pilot activities for both reading and mathematics. Bridge studies are being planned to help ensure that

NAEP trendlines are maintained. A major component of this presentation included details for trans-adaptation of multiple choice and constructed response items in reading and mathematics. The ADC saw some sample released items and learned how these paper and pencil items could be trans-adapted to the tablet platform. Issues of stimulus presentation and response mode options were discussed for each subject area. ADC members were impressed by the careful process for TBA transition to maximize the likelihood of reporting trends in these subject areas. The ADC commented that the tablet-based items were accessible, clear, and used important features of the tablet to interact with the items. Ms. Greer explained that an interactive tutorial will be part of the assessment, so that students become familiar with the how to answer the items using the tablet.

For reading, Ms. Greer showed how the original passages were being trans-adapted for the tablet, including the use of color graphics from the source document. The ADC noted that the use of color is also important in the mathematics assessment, as this is consistent with instructional materials used in the classroom.

Finally, Ms. Greer presented timelines and development activities for the transition of international assessments from a paper and pencil to a computer-based delivery system. She also noted that a transition from paper-based to computer-based delivery is occurring with all of the major international assessments in the coming years.

NAEP and the Next Generation Science Standards (NGSS): A Comparison Study

Teresa Neidorf of the American Institutes for Research (AIR) provided a status report on this study comparing NAEP frameworks and the NGSS. The NGSS is being compared to the three NAEP STEM-related frameworks: science, TEL, and mathematics (relevant aspects).

The NAEP/NGSS comparisons are being performed for both content similarity and practices alignment. Ms. Neidorf outlined the major goals of the comparison study, along with the specific research questions related to science, TEL, and mathematics. She then shared a sample content mapping table so the ADC could see the level of comparisons made between NAEP and the NGSS. The ADC heard about work completed to date, including an expert panel meeting that took place in mid-July 2014. The expert panel performed the content comparisons between the NAEP frameworks and the NGSS, after being trained in a webinar on the comparison study methodology. The panel's data are currently being analyzed and a report is due in December 2014. ADC requested an update on the study at its November 2014 meeting.

NAEP Item Review Schedule

With the transition to TBA, the ADC will need to revise its current item review process and timeline. Issues to consider involve the frequency of reviewing items from the same assessment, when in the life cycle of the TBA tasks the ADC will conduct its reviews, the overall development timeline, and other factors. Governing Board and NCES staff are discussing a revised review process that will enable the Committee to adhere to the congressionally mandated

responsibility the Board has for item review, while ensuring the review process is efficient and well adapted to the TBA environment. Staff will provide an update on this topic at the November 2014 ADC meeting.

I certify the accuracy of these minutes.

Shannon Garrison, Chair

Date