

National Assessment Governing Board
Assessment Development Committee
Report of November 20-21, 2014

Thursday, November 20, 2014 – Closed Session

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 20, 2014 from 9:00 a.m. to 3:00 p.m. to review secure NAEP test questions.

Attendees: ADC – Shannon Garrison (Chair), Cary Sneider (Vice Chair), Frank Fernandes, Doris Hicks, Dale Nowlin, Susan Pimentel, Chasidy White; Governing Board Staff – Mary Crovo, Michelle Blair, Laura LoGerfo; NCES – Eunice Greer, Elvira Germino Hausken, Ebony Walton Chester, William Ward, Amy Yamashiro; AIR – Alka Arora, Kim Gattis; ETS – Marc Berger, Jay Campbell, Gloria Dion, Andreas Oranje, Greg Vafis; CRP – Shamai Carter; Hager Sharp – David Hoff, Joann Lim; HumRRO – Steve Sellman; Pearson – Connie Smith; Optimal Solutions – Brian Kramer, Rukayat Akinbiyi; Yvette Clinton.

Briefing on Technology Based Assessments (TBA) Activities in Reading and Mathematics

Eunice Greer of NCES provided an update on the NAEP TBA work. The presentation covered an overview of NAEP and transitioning to TBA, followed by in-depth information on the TBA transition for reading and mathematics. Ms. Greer displayed a timeline for the TBA transition showing the item development, pilot testing, and operational phases. The primary goal of the TBA transition is to maintain NAEP trends while leveraging technology to improve how NAEP measures student achievement. The ADC members viewed secure NAEP reading and mathematics items during this presentation.

Following the briefing by Ms. Greer, the Assessment Development Committee (ADC) heard a presentation by Andreas Oranje of ETS. Mr. Oranje addressed TBA transition steps in detail, illustrated how a multistage testing design will function for NAEP mathematics, and included secure mathematics items to illustrate key points.

Greg Vafis of ETS continued the TBA presentation with additional examples of the tablet platform and secure reading and mathematics test questions, including functions available to students during the assessment. For example, students at grades 4, 8, and 12 will have a grade-specific equation editor to use during the mathematics TBA.

ADC members raised a number of questions about the TBA transition and the ease with which students will interact with the NAEP platform being developed for the TBA. It will be important that students know how to take the assessment on the tablets, and be comfortable with the icons and other functions provided on the tablet platform. Members requested a teleconference briefing in the near future on the TBA tutorial and help functions.

The ADC emphasized the importance of cognitive labs and small-scale try-outs as NAEP incorporates interactive tasks into its existing assessments such as reading. To ensure trend lines are maintained with the addition of new interactive tasks, the ADC expressed strong support for more cognitive lab work to determine how students, particularly younger children, perform on these tasks. Given scarce resources the ADC noted that non-essential special studies, such as the proposed Oral Fluency Study, should not be conducted. While such a study has been administered by NAEP twice in the past, the literature is now full of studies on this topic. NAEP resources should be focused on work that relates directly to the transition to technology based assessments and the maintenance of NAEP trend lines.

The ADC then addressed the terminology being used for the new tablet-based NAEP assessments. To ensure consistency between the definition of technology as used in the Technology and Engineering Literacy (TEL) assessment, ADC members recommended a change in the “TBA” label. Technology is more inclusive than computers, therefore the ADC agreed that these new assessments be labeled “digital based assessments” or DBA. This label will more accurately reflect the nature of the new assessments while adhering to the broad definition of technology that NAEP has endorsed.

Review of Mathematics Digital Based Assessments

Gloria Dion of NCEES presented secure mathematics task concept sketches at grades 4 and 8, for review by the ADC. These concept sketches are the first phase of review by the ADC for the new digital based assessment tasks in mathematics. The sketches are similar to an annotated outline for each task that describes the measurement goals, the specific mathematics objectives to be assessed, and an outline of the DBA task to be developed. ADC members discussed each task concept sketch in turn, and provided general and specific comments. Committee action on the math concept sketches will take place in open session on Friday, November 21.

Friday, November 21, 2014 – Open Session

Attendees: ADC – Shannon Garrison (Chair), Cary Sneider (Vice Chair), Frank Fernandes, Doris Hicks, Dale Nowlin, Susan Pimentel, Chasidy White; Governing Board Staff – Mary Crovo; NCEES – Holly Spurlock, Eunice Greer, Elvira Germino Hausken, William Ward; AIR – Teresa Neidorf, Kim Gattis; ETS – Jay Campbell, Ruth Isaia, Hilary Persky, Greg Vafis; Hager Sharp – Joann Lim; Pearson – Connie Smith; Optimal Solutions – Brian Kramer; Fulcrum IT – Scott Ferguson.

Action on NAEP Mathematics Concept Sketches

In open session, the ADC took the following action on the secure mathematics materials reviewed on Thursday, November 20 in closed session. This action was taken under the standing delegation of authority granted to the ADC by the Board for item review activities.

ACTION:

The Assessment Development Committee approves the NAEP mathematics concept sketches in grades 4 and 8 for the 2016 digital based pilot assessment, with changes to the concept sketches to be communicated in writing to NCES.

Update on 2014 NAEP Technology and Engineering Literacy (TEL) Assessment

William Ward of NCES provided an update on activities related to the 2014 TEL assessment, which was administered to a nationally representative sample of 8th graders in January – March 2014. Mr. Ward began his presentation by reviewing milestone activities in the TEL timeline. For example, in 2010 the Board adopted the TEL Framework and item development began soon after. In 2011 NCES and NAEP contractors conducted usability studies and small-scale try-outs followed by large-scale try-outs of the TEL items in 2012. Activities in 2013 included the national pilot test and outreach activities leading up to the 2014 operational administration. More than 22,000 students in public and private schools took part in the TEL assessment.

Currently the TEL analyses are underway and work is progressing on reporting cognitive process and contextual variable modules. The latter information is based on the student contextual variables administered with the TEL assessment. ADC members requested an information discussion in February to obtain more information on the TEL analyses. In addition, the ADC requested a joint meeting with the Reporting and Dissemination Committee at the March 2015 quarterly meeting. The purpose of this joint meeting is to discuss various issues related to TEL reporting. Finally, the ADC will need a conference call to finalize its review of the TEL discrete items in early December.

Update on NAEP and Next Generation Science Standards (NGSS) Comparison Study

Teresa Neidorf of AIR updated the ADC on the progress of the NAEP/NGSS comparison study. Since the previous briefing at the August 2014 Board meeting, AIR conducted the comparison ratings and analyses following review by content experts of the NAEP Frameworks in Science, TEL, and Mathematics as compared to the NGSS standards. Based on preliminary findings of the study, the ADC requested an opportunity to review the draft report. Given the fact that NAEP has separate Frameworks and assessments in Science, TEL, and Mathematics it is important to characterize the degree of alignment with the NGSS document.

NAEP Item Review Schedule

Mary Crovo of the Governing Board staff provided a brief overview on the ADC's new schedule for item review in the era of digital based assessments. The ADC will review the interactive tasks at three stages of development: 1) at the initial phase of concept sketches (or passage approval for reading); 2) at the alpha stage where the task design, items, rubrics, and screen shots

of graphics have been developed; and 3) at the final clearance stage after the task has been programmed and all interactive features can be viewed on the computer tablet. Ms. Crovo then outlined the types of decisions the ADC can make at each stage, ranging from stage 1 decisions (acceptance, revision, or rejection) to stage 3 decisions (correction of major errors, for example). ADC members confirmed their understanding of the review process and the different decision points. Ms. Crovo highlighted that this three-phase review is designed to maximize ADC input while adhering to an efficient item review schedule for the NAEP development team. The new review process will be examined after a period of months to determine if changes are needed.

ADC Comments Related to Chairman Mazany’s Opening Remarks

At the Chairman’s request, the ADC discussed implications for NAEP innovation. In his opening remarks at the November 21 Board plenary session, in-coming Board Chairman, Terry Mazany, noted that NAEP is at a critical point in terms of “innovation ambition” and the role of the Governing Board. Mr. Mazany requested that each standing Committee address this issue as it relates to the Board’s congressionally-mandated responsibilities—particularly those assigned to the respective Committees.

ADC members noted that the Board should acknowledge and document ways in which NAEP is already innovating in various areas of assessment. For example, using multi-stage testing to report in greater detail about certain subpopulations of students is an innovation for NAEP. Members also stated that using the observable data gathered via digital based assessments has great potential for innovative reporting strategies. Our challenge is to develop innovative ways to report NAEP findings that will reach more people and encourage them to make wider use of the information to inform education improvements. The ADC also acknowledged that the charge for innovation ambition while maintaining NAEP trend lines is going to be a very challenging set of issues. Finally, members commented on the importance of strategic thinking and planning as the Board moves forward with these new ideas for NAEP.

Friday, November 21, 2014 – Closed Session NAEP 2011 Writing Assessment Overview and Discussion

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 21, 2014 from 11:45 a.m. to 12:30 p.m. to review secure NAEP test questions.

Attendees: ADC – Shannon Garrison (Chair), Cary Sneider (Vice Chair), Frank Fernandes, Doris Hicks, Dale Nowlin, Susan Pimentel, Chasidy White; Governing Board Staff – Mary Crovo; NCES – Holly Spurlock, Eunice Greer, Elvira Germino Hausken, William Ward; AIR – Kim Gattis; ETS – Jay Campbell, Ruth Isaia, Greg Vafis; Hager Sharp – Joann Lim; Pearson – Connie Smith; Fulcrum IT – Scott Ferguson.

At its August 2014 meeting, the ADC had requested an overview of the current NAEP Writing Framework and the computer-based assessment. Elvira Germino Hausken of NCES and Mary Crovo briefed the ADC on the Writing Framework and the assessment, which included sharing secure prompts at the fourth, eighth, and twelfth grade. This presentation resulted from remarks provided by Michael Cohen of Achieve, to the full Board in August 2014. Mr. Cohen asked the Board to examine its current Writing Framework and assessment in light of the Common Core State Standards, which includes writing to sources as a key area of instruction. Mr. Cohen noted that the NAEP Writing assessment does not provide extended reading materials for students to use in their writing tasks.

Following the briefing on the NAEP Writing Framework and the assessment, the ADC acknowledged that writing based on multiple sources is an important skill in everyday life as well as a key instructional activity in the classroom. However, in the classroom this type of writing activity is typically done over a period of multiple days with teacher feedback on drafts of student writing. However, NAEP is an on-demand assessment of writing skills and each student is given two writing tasks, each of which must be completed in 30 minutes using a laptop and commonly available word processing tools. The ADC expressed concern that making a drastic change to the NAEP Writing assessment without careful study would disrupt the trend line and may confound the ability to measure reading vs. writing skills. As an outcome of this discussion, the ADC recommended that a special study of writing to sources (based on longer reading passages) could be done in the future, if resources permit. Such a study would be necessary before any decisions could be made to change the Writing Framework or assessment.

I certify the accuracy of these minutes.



Shannon Garrison, Chair

12/8/14

Date