National Assessment Governing Board

Assessment Development Committee

Report of December 1-2, 2011

December 1, 2011 Closed Session 11:30 a.m. – 2:30 p.m.

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 December 1, 2011 from 1130 a.m. to 2:30 p.m.

Attendees: ADC – Alan Friedman (Chair), Susan Pimentel (Vice Chair), Shannon Garrison, Doris Hicks, Brent Houston, Hector Ibarra, Dale Nowlin, Cary Sneider; Other Governing Board Members – Tonya Miles; Governing Board Staff – Mary Crovo, Cornelia Orr, Michelle, Blair; NCES – Bill Ward, Holly Spurlock, Elvira Germino-Hauske; NAEP/ESSI – Teresa Neidorf, Kim Gattis; ETS – Greg Vafis, Jay Campbell, Lonnie Smith; HumRRO – Sheila Schulz; Fulcrum IT – Lori Rokus, Scott Ferguson, Jud Cole; Pearson – Connie Smith; Westat – Chris Averett, Bob Patchen.

NAEP Technology and Engineering Literacy (TEL) Task Sketches

The Assessment Development Committee (ADC) began its closed session with an update on development work for the 2014 grade 8 Technology and Engineering Literacy (TEL) assessment. Lonnie Smith of ETS presented the current development timeline and a summary of revisions to secure TEL task sketches, on which the ADC had provided comments at its August 2011 meeting. The task sketches are being developed for the 2013 pilot.

ADC members noted that NCES and NAEP contractors had made excellent changes to improve the task sketches, and that the tasks should be very engaging to students. The next portion of the closed session involved demonstration of the secure TEL computerbased task sketches followed by ADC review and discussion of each task. During this discussion ADC members commented on the interesting range of topics that covered historic, current, and future scenarios related to the three TEL content areas. Committee members had a number of comments and revisions on the TEL task sketches, which will be communicated to the National Center for Education Statistics (NCES) in writing.

In addition ADC members discussed the possibility of having a TEL task that could be available prior to the 2014 assessment. This would be a task that was not planned for use in the TEL operational administration. The task would not be fully developed, but would be complete enough to provide some context on the type of computer-based task students would encounter on the TEL assessment. Board staff will work with NCES and its contractors to pursue this idea.

December 1, 2011 Open Session 2:30 p.m. – 4:00 p.m.

Attendees: ADC – Alan Friedman (Chair), Susan Pimentel (Vice Chair), Shannon Garrison, Doris Hicks, Brent Houston, Hector Ibarra, Dale Nowlin, Cary Sneider; Other Governing Board Members – Tonya Miles; Governing Board Staff – Mary Crovo, Michelle, Blair; NCES – Bill Ward, Holly Spurlock, Elvira Germino-Hausken, Jamie Deaton; ETS – Greg Vafis, Jay Campbell, Lonnie Smith, Donnell Butler; HumRRO – Sheila Schulz; Fulcrum IT – Lori Rokus, Scott Ferguson, Jud Cole; Pearson – Connie Smith; Westat – Chris Averett, Bob Patchen.

NAEP Technology and Engineering Literacy (TEL) Background Questions

ADC members met in open session to review student and school background questions for the TEL assessment. The ADC had a number of comments on these background questions to clarify definitions of terms used, to delete questions that were not important, and to reclassify questions in terms of the three TEL content areas. In addition the ADC asked NCES and NAEP contractors to propose a strategy for collecting at least a small portion of information about TEL from classroom teachers. While the Committee understands the issues that preclude using a separate teacher questionnaire for TEL, members felt there was important information about school-based TEL content that could only be provided by teachers. Comments on the TEL student and school background questions will be provided to NCES in writing.

December 2, 2011 Open Session 10:15 a.m. – 11:45 a.m.

Attendees: ADC – Alan Friedman (Chair), Susan Pimentel (Vice Chair), Shannon Garrison, Doris Hicks, Brent Houston, Hector Ibarra, Dale Nowlin, Cary Sneider; Governing Board Staff – Mary Crovo; NCES – Bill Ward, Holly Spurlock; ETS – Greg Vafis, Jay Campbell, Lonnie Smith, Hilary Persky, Madeleine Keehner; HumRRO – Sheila Schulz; NAEP ESSI – Kim Gattis, Teresa Neidorf; Fulcrum IT – Lori Rokus, Scott Ferguson, Jud Cole; Pearson – Connie Smith; Westat – Nancy Caldwell, Bob Patchen; Hager Sharp – Siobhan Mueller.

In open session the ADC took action on the task sketches and background questions for the Technology and Engineering Literacy (TEL) assessment. This material was reviewed by the ADC during its meeting on December 1, 2011.

ACTION: The Assessment Development Committee approves the task sketches and background questions for the NAEP Technology and Engineering Literacy assessment, with changes to be communicated to NCES in writing by December 8, 2011.

Overview of Framework Development

Mary Crovo of the Governing Board staff provided an overview of the ADC's schedule for upcoming item review. The review schedule in the December 2011 briefing materials covers a period from September 2011 to August 2012 in eight subject areas. ADC members will meet via teleconference as well as in conjunction with quarterly Board meetings. ADC members also received an overview of NAEP development work in the various subject areas. Board staff provided an updated version of the timeline showing framework and specifications development, pilot testing, operational testing, and related activities in all 12 NAEP subjects. The timeline also indicates where NAEP has been able to maintain trend, as in reading, and where trendlines have been broken, as with the new computer-based writing assessment.

Update on 2009 NAEP Science Report on Interactive Computer Tasks (ICTs) Compared to Reporting for the 2014 Technology and Engineering Literacy (TEL) Assessment

Jay Campbell of ETS presented a Power Point showing the similarities and differences between reporting of the Science ICTs, compared to reporting for the 2012 TEL assessment. Science ICTs were new for the 2009 assessment. ICTs were not included in the main NAEP science scale, but will be reported as a special report scheduled for release in spring 2012. The ICTs are fully computer based and involved students responding to test questions related to short and long scenarios, such as simulations and experiments. Sample sizes for the ICTs were relatively small. The national sample for ICTs, for example, was 2,000 students at each grade (4, 8, and 12).

TEL is a separate assessment that will be administered at the national level in grade 8 only, but with larger samples of students than the Science ICTs component. TEL is also fully computer-based and is being developed using an evidence-centered design approach that incorporates reporting strategies into the earliest stages of test development.

Mr. Campbell summarized the major similarities and differences in reporting ICTs compared to TEL. While both assessments will provide national results, TEL reporting will be far more extensive. For example, NAEP will report scale scores in terms of a composite and subscales, as well as achievement levels for TEL. Both ICTs and TEL reports will provide sample tasks and performance information and descriptions of investigative paths taken by students in working on the tasks. ICTs reporting will include partial information on student subgroups and contextual factors. However this information will be more extensive in TEL reporting due to the larger student sample size. ADC members engaged in a question and answer session with Mr. Campbell and commented on various types of valuable information that both ICTs and TEL reporting will provide for the public, educators, and policymakers.

Making a Difference Initiatives

ADC Chair, Alan Friedman, facilitated a lengthy Committee discussion of the nine initiatives proposed in response to Board Chair David Driscoll's Making a Difference initiative. Each initiative was discussed in turn by the Committee. Members raised issues related to connections with the Common Core State Standards assessment consortia, how NAEP can be made more useful for parents and teachers, how Governing Board resources would be allocated to certain initiatives, and how the Board can make effective use of its contractors to assist in carrying out some of these initiatives. Members also added their own suggestions for improving some of the initiatives, such as reaching out to the general public via radio for the Item a Day idea and using "crowd sourcing" to invite others to develop apps for NAEP.

At the conclusion of the discussion, the Committee expressed its preference for the following initiatives: Item a Day, NAEP Speaker's Tool Kit, Resources for Teachers, and Focus Reports. Several initiatives were rated in a "second tier" in terms of preferences: Tell about TEL and NAEP Apps (applications). The ADC was fully supportive of Resources for Parents, but considered this initiative well underway due to the progress being made by the Board's Ad Hoc Committee on NAEP Parent Engagement.

December 2, 2011 Closed Session 11:45 a.m. – 12:30 p.m.

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 December 2, 2011 from 11:45 a.m. to 12:30 p.m.

Attendees: ADC – Alan Friedman (Chair), Susan Pimentel (Vice Chair), Shannon Garrison, Doris Hicks, Brent Houston, Hector Ibarra, Dale Nowlin, Cary Sneider; Governing Board Staff – Mary Crovo; NCES – Bill Ward, Holly Spurlock; ETS – Greg Vafis, Jay Campbell, Lonnie Smith, Hilary Persky, Madeleine Keehner; HumRRO – Sheila Schulz; NAEP ESSI – Kim Gattis, Teresa Neidorf; Fulcrum IT – Lori Rokus, Scott Ferguson, Jud Cole; Pearson – Connie Smith; Westat – Nancy Caldwell, Bob Patchen; Hager Sharp – Siobhan Mueller.

Update on 2011 Writing Assessment and Grade 4 Cognitive Labs

Holly Spurlock of NCES presented a closed session briefing to the ADC on some preliminary findings from the NAEP computer-based Writing assessment. The assessment was administered to national samples of students in grades 8 and 12 in early 2011. Ms. Spurlock described the Writing assessment and noted that it was designed according to the Board-adopted 2011 Writing Framework to measure how well students write on the computer using commonly available word processing tools. In addition to the writing achievement scores, the assessment also captures information on student participation and engagement, use of student accommodations, and students' use of the

word processing tools. The ADC received preliminary data related to all of this information from the 2011 Writing assessment. Ms. Spurlock summarized this portion of the closed briefing by stating that student engagement was high across the grades and that the use of separate accommodation sessions was reduced due to accommodations being built into the computer platform. Ms. Spurlock also summarized findings from the data on student use of word processing tools during the assessment.

The second portion of the closed Writing assessment briefing focused on information learned from the grade 4 cognitive labs. These one-on-one sessions use a "think aloud" protocol to explore how students respond to pilot writing tasks on the computer. These cognitive labs were conducted to see how well students understood the writing tasks and accompanying stimulus material and whether there were any obstacles in the tasks that may interfere with their performance. NCES and its contractors used the cognitive labs to revise the grade 4 writing tasks in preparation for the 2012 pilot assessment. This pilot will be the first of its kind using a national sample of elementary students engaged in a computer-based writing assessment. Ms. Spurlock shared some findings from the cognitive labs and then showed several 4th grade writing prompts. She pointed out how the tasks will be revised based on results of the cognitive labs. The ADC members engaged in a discussion of the cognitive lab results and commented on the value of these findings for further Writing assessment development work. Committee members also noted that 4th graders seemed generally to understand the writing tasks and how to respond using the NAEP-provided computers.

I certify the accuracy of these minutes.

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12-12-11

Alan Friedman, Chair

Date