# **National Assessment Governing Board**

## **Assessment Development Committee**

### **Report of November 18 - 20, 2010**

**November 18, 2010** 

**Open Session** 

12:00 Noon – 1:00 pm

Attendees: ADC – Kathi King, (Chair), Alan Friedman (Vice Chair), Shannon Garrison, Doris Hicks, Brent Houston, Hector Ibarra, Henry Kranendonk, Susan Pimentel; Governing Board members – Tonya Miles, James Popham; Governing Board Staff – Mary Crovo, Michelle Blair; NCES – Jing Chen, Elvira Germino-Hausken, Bill Ward, Grady Wilborn; NAEP/ESSI – Teresa Neidorf, Sharyn Rosenberg; ETS – Malcolm Bauer, Jay Campbell, Andreas Oranje, Greg Vafis, David Williamson; HumRRO – Sheila Schultz; Hager Sharp – Siobhan Mueller; Westat – Bob Patchen; Measured Progress – Luz Bay; CRP – Shamai Carter.

Kathi King, Chair of the Assessment Development Committee (ADC), welcomed everyone to the meeting. Ms. King gave a special welcome to the new ADC members: Shannon Garrison, 4<sup>th</sup> grade teacher; Hector Ibarra, 8<sup>th</sup> grade teacher; and Brent Houston, middle school principal.

Mary Crovo of the Governing Board staff provided a brief introduction to the main topic for the ADC November 18 meeting—development of the 2014 Technology and Engineering Literacy (TEL) assessment. TEL will be a completely computer-based assessment, administered in 2014 to eighth graders at the national level. Earlier in 2010 the Governing Board approved the TEL Framework and Specifications, which were then transmitted to the National Center for Education Statistics (NCES) to begin the assessment development phase. Ms. Crovo noted that the open session presentation would address the evidence-centered design (ECD) approach for TEL development. In closed session, ADC members would receive a detailed briefing on initial steps for developing specific TEL assessment tasks.

Bill Ward of NCES provided an overview and timeline of the TEL development process. Mr. Ward then introduced David Williamson of ETS, who is the lead developer for the TEL project. During his presentation, Mr. Williamson reviewed the major components of the TEL Framework including the cognitive targets, practices, and contexts for the assessment. From those Framework components, ETS and its TEL Standing Committee are working on elements of the evidence-centered design (ECD) approach for TEL. The Standing Committee for this assessment is uniquely composed and includes test developers, psychometricians, subject matter experts, classroom teachers, researchers, game designers, engineers, and others.

In developing the assessment, the ECD process will address the relationship between the task design and reporting goals, inform the task design decisions, and incorporate evidence to support validity of the TEL findings. This iterative process is well suited to the TEL assessment, since TEL measures a new, cross-cutting content area for NAEP and is composed of dynamic computer-based assessment tasks.

ADC members raised a number of clarification questions related to the ECD approach including how this new process compares with previous development work for other NAEP subject areas. The ADC felt that ECD would offer unique and valuable development opportunities for this new assessment.

### November 18, 2010 Closed Session 1:00 p.m. – 4:15 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 November 18, 2010 from 1:00 p.m. to 4:15 p.m.

Attendees: ADC – Kathi King, (Chair), Alan Friedman (Vice Chair), Shannon Garrison, Doris Hicks, Brent Houston, Hector Ibarra, Henry Kranendonk, Susan Pimentel; Governing Board members – Tonya Miles, James Popham; Governing Board Staff – Mary Crovo, Michelle Blair; NCES – Peggy Carr, Suzanne Triplett, Jing Chen, Elvira Germino-Hausken, Bill Ward, Grady Wilborn; NAEP/ESSI – Teresa Neidorf, Sharyn Rosenberg; ETS – Malcolm Bauer, Jay Campbell, Andreas Oranje, Greg Vafis, David Williamson; HumRRO – Sheila Schultz; Hager Sharp – Siobhan Mueller; Westat – Bob Patchen; CRP – Shamai Carter.

The Assessment Development Committee (ADC) began its closed session with an informational presentation from Malcolm Bauer of ETS. Mr. Bauer provided a very detailed briefing on how the evidence-centered design (ECD) model is being used to develop tasks for the grade 8 TEL assessment. A number of secure task concepts were presented in the three TEL content areas: design and systems; information and communication technology; and technology and society. ADC members posed a number of questions throughout Mr. Bauer's presentation to seek clarification on the assessment development process for TEL, the rationale for choosing certain content and cognitive models, and other questions related to specific TEL task concepts.

November 19, 2010 Open Session 9:30 a.m. – 11:30 a.m.

Attendees: ADC – Kathi King, (Chair), Alan Friedman (Vice Chair), Shannon Garrison, Doris Hicks, Brent Houston, Hector Ibarra, Henry Kranendonk, Susan Pimentel; Governing Board Staff – Mary Crovo; NCES – Arnold Goldstein, Elvira Germino-Hausken, Emmanuel Sikali, Holly Spurlock, Suzanne Triplett, Sheida White, Grady Wilborn; NAEP/ESSI – Kim Gattis, Teresa Neidorf, Pip Peltola; ETS – Donnell Butler, Dave Freund, Greg Vafis; HumRRO – Sheila Schultz; Hager Sharp – Joanne Lin;

Westat – Nancy Caldwell; AIR – Fran Stancavage; CRP – Carina John; Fulcrum – Scott Ferguson.

#### 1. Student Non-response to NAEP Items

ADC Chair, Kathi King, welcomed the participants to the Friday ADC session and provided an overview of the Committee agenda. Due to a scheduling issue, it was announced that the agenda item on student non-response to NAEP items would be addressed first.

Dave Freund of ETS presented the fourth briefing in a series to ADC on student non-response to NAEP items. Because all of the data used in this new presentation have been publicly released, the briefing was conducted in open session. For this presentation Mr. Freund focused on state-level non-response data for grades 4 and 8 in reading and mathematics. He shared information on the types of student assessments currently used by states, in terms of the types of questions (multiple choice vs. open ended). While there did not seem to be a strong relationship between non-response on NAEP items of various types, and type of state assessment system, the data did show some outlier states and other patterns of interest. ADC members also noted that district assessments may include more item types than appear on state exams. Therefore students may be familiar with additional item types due to their experience in taking district assessments.

- 2. NAEP Technology and Engineering Literacy (TEL) Background Variables
  Mary Crovo gave a brief presentation on the draft TEL Background Variables document.
  At its August 2010 meeting, ADC members requested changes to the draft presented at that time. These changes included the addition of teacher background variables, more emphasis on out-of-school TEL learning experiences, and the use of PISA background variables in TEL-related content areas. The ADC was pleased with the quality of the Background Variables document and felt that the changes requested in August had been incorporated. Members expressed their eagerness to review the new TEL background variables in the near future. Everyone felt that this information will be extremely valuable to teachers, policymakers, and the public, since it is not readily available from other sources.
- 3. Interactive Framework for NAEP Technology and Engineering Literacy
  As part of its discussion on the future of the Governing Board and NAEP at the May
  2010 meeting, the Board recommended that NAEP frameworks be made more accessible
  to broader audiences. Mary Crovo provided an overview of work to develop a computerbased interactive version of the TEL Framework. The interactive Framework will have
  many features that enable a user to access the information more easily. Other interactive
  frameworks are planned for additional NAEP subject areas in the near future. Ms. Crovo
  introduced Michelle Blair of the Board staff, who has been working closely with WestEd,
  the TEL Framework contractor, to develop the interactive Framework.

Ms. Blair demonstrated an online, draft version of the TEL Framework and highlighted a number of unique features in this dynamic document. The Framework contains a drop

down table of contents, thumb nail navigation, numerous links, and other features to make the Framework more accessible. Additional links will be added to sample TEL items, the NAEP website, and other content. ADC members were very pleased with Ms. Blair's presentation and they expressed their excitement about the quality of the draft interactive Framework. Several recommendations for enhancing the interactive Framework included the addition of photographs of students engaged in TEL activities, a link to sample items from the Framework home page, and a section for users to provide feedback. ADC will receive a briefing on the final version of the TEL interactive framework in March 2011.

#### 4. Reporting 2009 Science HOTs and ICTs Results

Arnold Goldstein of NCES provided a briefing on plans to report results of the 2009 science hands-on tasks (HOTs) and interactive computer tasks (ICTs). At the present time the schedule calls for release of this information later in 2011, most likely as a webbased report. ADC members requested a secure briefing on HOTs and ICTs at their March 2011 meeting, since most new ADC members are not familiar with these innovative science tasks that were administered as part of a special study in 2009.

5. Reporting NAEP 2009 Vocabulary Results from the Reading Assessment Due to time limitations in the open session, Mr. Goldstein's presentation on this topic had to be abbreviated. The ADC will receive a more lengthy briefing in March 2011.

#### 6. NAEP Item Review Schedule

Mary Crovo, of the Governing Board staff, briefly highlighted item review activities for 2010 and 2011. At this point the item review schedule shows many upcoming item reviews including reading and math long-term trend, writing, TEL, and other subjects. Some item reviews will occur via teleconference in between quarterly Board meetings. At the March 2011 meeting, ADC members will receive more information about progress in transitioning to computer-based item review.

November 19, 2010 Closed Session 12:00 Noon – 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 November 19, 2010 from 12:00 Noon to 12:30 p.m.

Attendees: ADC – Kathi King, (Chair), Alan Friedman (Vice Chair), Shannon Garrison, Doris Hicks, Brent Houston, Hector Ibarra, Henry Kranendonk, Susan Pimentel; Governing Board Staff – Mary Crovo; NCES – Arnold Goldstein, Elvira Germino-Hausken, Emmanuel Sikali, Holly Spurlock, Suzanne Triplett, Sheida White, Grady Wilborn; NAEP/ESSI – Kim Gattis, Teresa Neidorf, Pip Peltola; ETS – Donnell Butler, Dave Freund, Greg Vafis, Hilary Persky; HumRRO – Sheila Schultz; Hager Sharp – Joanne Lin; Westat – Nancy Caldwell; AIR – Fran Stancavage; CRP – Carina John; Fulcrum – Scott Ferguson.

#### 7. Writing Computer-Based Assessment

Hilary Persky of ETS briefed the ADC on the 2010 Writing computer-based pilot test given to 8<sup>th</sup> and 12<sup>th</sup> graders in preparation for the 2011 operational assessment. This is the first fully computer-based assessment for NAEP. Ms. Persky's presentation included data on student use of word processing tools and other findings from the 2010 pilot test. The full Board will receive a closed session "Inside NAEP" briefing on November 20, 2010 on this new writing assessment.

I certify the accuracy of these minutes.

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Kathi King, Chair

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