National Assessment Governing Board
Assessment Development Committee

February 27 – 28, 2014

AGENDA

Thursday, February 27, 2014		
1:15 – 4:15 pm	**Closed Session** **ACTION:** 2015 Reading and Mathematics Operational Items	Secure material sent under separate cover
Friday, February 28, 2014		
10:00 – 10:05 am	Welcome, Introductions, and Agenda Overview *Shannon Garrison, Chair*	
10:05 – 10:30 am	Technology and Engineering Literacy (TEL) Assessment Update *William Ward, NCES*	Attachment A
10:30 am – 11:15 am	Transitioning to NAEP Technology-Based Assessments in Reading and Mathematics *Eunice Greer, NCES*	Attachment B Additional materials provided under separate cover
11:15 am – 12:00 pm	Results of the NAEP Read Aloud Study *Grady Wilburn, NCES*	Attachment C
12:00 – 12:15 pm	STEM Indicators Project *Cary Sneider, Vice Chair*	
Information Item	NAEP Item Review Schedule	Attachment D

Technology and Engineering (TEL) Assessment Update

The NAEP 2014 Technology and Engineering Literacy (TEL) assessment is designed to gauge how well students can apply their understanding of technology principles to real-life situations. TEL is currently being operationally administered for the first time to students across the United States at the eighth grade level. Information on the number of participating students and schools (both public and private) and how TEL is administered will be presented. During the 2013 pilot, in general, NCES received very positive feedback from both schools and students about their experiences with TEL. NCES, NAGB, and NAEP contractors observed how much students enjoyed taking the assessment and how engaged they were in the pilot testing. During this session, NCES will also provide observations from the 2014 administration including qualitative feedback from both field staff and NAEP State Coordinators.

Additionally, at the previous ADC session, information was provided on how the TEL information page (http://nces.ed.gov/nationsreportcard/tel/), currently hosted on the *Nation's Report Card* website, aims to increase overall awareness and inform and prepare the public for this assessment. One of the new features for this page includes a sample task, Wells. At the last session, potential additions to the Wells web-based materials were discussed including a description of the specific TEL skills targeted by the task, the kinds of decisions students make, the types of information collected from student performance (e.g., the path a student takes to navigate through the task), and how students' responses effect their task score. To continue this discussion, NCES will update the status of our web-based outreach efforts including the latest TEL timeline and next steps for TEL reporting.

**An Update on Transitioning to Technology-Based Assessments (TBA)
for NAEP Reading and Mathematics**

Transitioning reading and mathematics paper-and-pencil tests to technology-based assessments (TBA) is among the major challenges and opportunities facing the NAEP program. The intent is not to simply transfer the existing items to electronic delivery, but to more fully exploit new technologies and to introduce new types of items that can measure knowledge and skills that could not be tested—or could not be tested as well—on paper. Because trend is such a vital part of NAEP, there is a strong commitment to continue to measure progress within each subject area by maintaining NAEP trend lines despite the shift from paper-and-pencil to technology-based assessments.

In this session, NCES will provide a brief overview of the transition plan, followed by a discussion of key design challenges that will shape the reading and mathematics assessments. During the transition phase, from 2014 – 2017, NCES will work to balance the introduction of innovative TBA content with the desire to maintain trend. "TBA start-up" and development activities for reading and mathematics have begun in 2014 and the first round of special studies assessments will take place in 2015. This TBA start-up will be characterized by adaptation of current paper-and-pencil items for use on a tablet. This start-up phase will function as an early bridge study to evaluate the feasibility of maintaining trend across the change in delivery mode.

The individual TBA transitions for reading and mathematics in 2017 will include a shift in item types as the transition is under way and will present NCES and the Governing Board with new challenges. We will explore these challenges in this session. Topics will include issues related to the presentation of passages and items on tablets, changes in response formats, the use of equation editors for mathematics and new challenges to the assessment of some aspects of the Reading and Mathematics Frameworks. The presentation will close with a brief look at some of the item types NCES and the item development team are considering for use, following the TBA start-up phase.

NAEP Read Aloud Study

To accurately test the achievement of English language learners (ELL) and students with disabilities (SD), the National Assessment of Educational Progress (NAEP) uses an assortment of accommodations. These accommodations are integral to ensuring the assessment is accessible for students who otherwise would not be able to access the test material. Reading passages and items aloud, which consists of several different variants, is currently allowed in several jurisdictions but <u>not</u> allowed on NAEP. According to the NAEP Reading Framework, the assessment measures reading comprehension and "requires students to read passages of written English text" and to answer questions about what they have read. The exclusion of the read aloud provision is the primary reason some students are excluded from the NAEP reading assessment.

To examine the feasibility of including read aloud as part of NAEP as well as add to the literature on its validity and effectiveness, the National Center for Education Statistics sponsored a study by Jamal Abedi, a professor at the University of California at Davis. This study looked at two versions of read aloud. The first version was Read Aloud Everything, which includes reading the directions, reading passage, items, and answer choices. The second version was Read Aloud Everything <u>Except</u> the Passage. Fourth and eighth graders were given two, 25-minute NAEP reading blocks as well as some survey (contextual) questions.

The research questions examined in this study were as follows:

- Does Read Aloud Everything make the NAEP reading assessment more accessible to ELL and SD students?

- Does Read Aloud Everything <u>Except</u> the Passage make the NAEP reading assessment more accessible to ELL and SD students?

- Does the read aloud alter the reading construct?

- Does the read aloud differentially impact the performance of ELL and SD with different background characteristics?

The study results as well as implications will be discussed as part of the presentation.

Assessment Development Committee
Item Review Schedule
December 2013 – August 2014
(Updated 1/28/14)

Review Package to Board	Board Comments to NCES	Survey/ Cognitive	Review Task	Approx Number Items	Status
11/21/13	12/13/13	Survey	2015 Operational Reading (4, 8)	78	✓
11/21/13	12/13/13	Survey	2015 Operational Math (4, 8)	90	✓
1/31/14	2/26/14	Survey	Reading question pool* (4, 8)	78	✓
2/13/14	3/6/14	Cognitive	2015 Operational Reading (4, 8)	55	Review on Feb. 27
2/13/14	3/6/14	Cognitive	2015 Operational Math (4, 8)	91	Review on Feb. 27
5/1/14	5/22/14	Cognitive	Science ICT Beta Reviews (4, 8, 12)	9	
7/17/14	8/7/14	Cognitive	Science ICT Clearance Review (4, 8, 12)	18	
TBD		Survey	Civics question pool* (4, 8, 12)	111	
TBD		Survey	Economics question pool* (12)	21	
TBD		Survey	Geography question poo*l (4, 8, 12)	106	
TBD		Survey	US History question pool* (4, 8, 12)	105	

NOTE: Alpha builds will be presented to the ADC during their in-person and virtual meetings. These will not be submitted before the review. The ADC will receive outlines and beta builds prior to the ICT review meetings. (Alpha and beta builds are the first- and second-draft versions of the rendered task, respectively.)

*A survey question pool represents all the questions that have been administered in operational assessments.