

# **National Assessment Governing Board Committee on Standards, Design and Methodology**

**May 16, 2014**

**COSDAM Members:** Chair Lou Fabrizio, Vice Chair Fielding Rolston, Lucille Davy, James Geringer, Andrew Ho, Terry Holliday, James Popham, and Leticia Van de Putte.

**Governing Board Staff:** Michelle Blair and Sharyn Rosenberg.

**Other Attendees:** John Easton, Director of the Institute of Education Sciences and ex officio member of the Governing Board. NCES: Peggy Carr, Arnold Goldstein, Dana Kelly, Daniel McGrath, and Grady Wilburn. AIR: Fran Stancavage. CRP: Carolyn Rudd. ETS: Rochelle Michel and Andreas Oranje. HumRRO: Laress Wise. Optimal Solutions Group: Lipika Ahuja. Pearson: Brad Thayer. Westat: Keith Rust.

## **Introductions and Review of Agenda**

Lou Fabrizio, Chair of the Committee on Standards, Design and Methodology (COSDAM), called the meeting to order at 10:02 a.m. and welcomed members and guests. Mr. Fabrizio noted that the agenda was very full and included presentations on NAEP testing and reporting on students with disabilities, trends and the transition to technology-based assessments, academic preparedness research, and the development of achievement levels descriptions for Technology and Engineering Literacy. He welcomed former Wyoming Governor James Geringer to COSDAM and invited him to share some information about himself.

## **NAEP Testing and Reporting on Students with Disabilities**

Mr. Fabrizio noted that the session would focus on a particular challenge associated with the March 2010 Board policy on NAEP Testing and Reporting on Students with Disabilities (SDs) and English Language Learners (ELLs). The policy was intended to reduce exclusion rates and provide more consistency across jurisdictions in which students are tested on NAEP to promote sound reporting of comparisons and trends. The policy limits the grounds upon which schools can exclude students to two categories—for SDs, only those with the most significant cognitive disabilities, and for ELLs, only those who have been in U.S. schools for less than one year. Although schools cannot limit student participation on any other grounds, individual participation in NAEP is voluntary by law and parents may withdraw their children for any reason.

The policy states, “Students refusing to take the assessment because a particular accommodation is not allowed should not be classified as exclusions but placed in the category of refusals under NAEP data analysis procedures.” Under NAEP data analysis procedures, a weight class adjustment is used to account for students who refuse to take the assessment, but excluded

students have no impact on estimated scores. Contrary to the Board policy, NCES has continued to permit schools to exclude students whose Individualized Education Programs (IEPs) call for accommodations that NAEP does not allow. NCES asserts that it is technically incorrect to apply a weight class adjustment that combines students who did not participate due to receiving accommodations on their state tests that are not allowed on NAEP with students who refused for other reasons.

Grady Wilburn of the National Center for Education Statistics (NCES) and Rochelle Michel from Educational Testing Service (ETS) presented three alternative methods for adjusting scores for students who were excluded from NAEP, contrary to the Board policy. The first method, “*Expanded*” *population estimates*, would improve upon the methodology of the full population estimates (FPEs) and incorporate additional data from NAEP teacher and school contextual questionnaires and from school records (e.g., state test scores for individual students). The second method, *Modified participation A*, would involve administering only the contextual questionnaire to excluded students and using that additional information to predict how the students would have performed on the cognitive items. The third method, *Modified participation B*, would involve administering the contextual questionnaire in the selected subject (i.e., Reading) in conjunction with an assessment in a different subject (e.g., Mathematics) and using both sources of information to predict how the students would have done on the Reading assessment.

COSDAM members expressed serious reservations about implementing any of the three procedures due to the following reasons: current concerns about collecting student data; the potential for jeopardizing trend reporting; increased costs; and the threat of depressing scores due to a change in the population of tested students. There was general consensus that NCES’ current practices on this particular aspect of the policy—encouraging schools to include more students in NAEP even when they receive accommodations on their state tests that are not allowed on NAEP, but still allowing schools to exclude such students if they insist—was acceptable.

The committee asked whether it is possible to identify students who *do* take the NAEP Reading assessment despite receiving a read-aloud accommodation on their state tests. Peggy Carr, Associate Commissioner of NCES, noted that the SD questionnaire will be modified for 2015 to capture this information.

Andrew Ho suggested the following edit to the policy: “Students refusing to take the assessment because a particular accommodation is not allowed should not be classified as exclusions but ~~placed in the category of refusals under NAEP data analysis procedures~~ *be tracked and minimized to the extent possible.*” The committee agreed with Mr. Ho’s suggestion.

Mr. Fabrizio asked that this recommendation be shared with the Reporting and Dissemination Committee in joint session during the August 2014 meeting.

## **Trends and the Transition to Technology-Based Assessments**

Andreas Oranje of Educational Testing Service (ETS) began with the question, “How can NAEP continue to fulfill a mission as *the* nation’s trend assessment in a landscape of disruptive innovation?” Mr. Oranje noted that the challenge of maintaining trend during the shift to technology-based assessments (TBA) is not limited to 2017, when the operational Reading and Mathematics assessments are expected to be technology-based for the first time. Maintaining trend may also be challenging with long term changes that are continuous and more gradual, including: changes to hardware and software of technological platforms, eventual shifts to using school equipment for administering NAEP, and inclusion of new item types.

Mr. Oranje reviewed the current short term plans for NAEP to transition to TBA. In 2015, the paper-based assessments will continue to be administered and used for reporting NAEP results. In addition, technology-based assessments will be administered as part of the TBA start-up process, for the purpose of conducting a mode study (examining potential differences in student performance attributable to the mode of administration) and exploring whether and how the trend can be maintained. The 2015 TBA start-up activities will be based on existing paper-based items that have been “trans-adapted,” or transferred to a technology platform. In 2016, pilot tests will be conducted using new TBA items that do not have current paper-based equivalents, such as scenario-based tasks. Criteria for deciding whether trends can be maintained given the TBA transition include the following question: *Will substantially different conclusions be reached for major student groups when comparing modes?*

For 2016, Andrew Ho suggested that the pilot testing of the new computer tasks could also include some of the existing items that were “trans-adapted” from paper to tablet, which would provide further evidence about the feasibility of maintaining trend in terms of the scaling of both item types. He urged that the proportion of “trans-adapted” items and new scenario-based tasks for the 2017 operational assessments not be locked in until the results from the 2016 pilot study are known.

Mr. Oranje reported that the results from the 2015 bridge studies are expected to be available in August 2015 and will provide an initial indication of the ease of maintaining trend with the transition to TBA. If the 2015 bridge study and the 2016 pilot study conclude that there are serious threats to maintaining trend, it is possible to slow down the transition to TBA by maintaining some paper-based assessments along with TBA and conducting additional studies. However, Mr. Oranje pointed out that this would involve substantial cost.

Mr. Oranje noted that the long term plans to account for more gradual changes in technology is to conduct many small experiments (i.e., A/B testing) rather than repeatedly conducting expensive bridge studies.

## **Update on Academic Preparedness Research**

Governing Board staff Sharyn Rosenberg began by noting that the phase one academic preparedness research culminated in the May 14, 2014 release of the 2013 grade 12 Mathematics

and Reading results in terms of academic preparedness for college. In accordance with the August 2013 resolution on reporting 12<sup>th</sup> grade academic preparedness for college: inferences were made only for college, not for job training; there was an emphasis on the preliminary nature of the inferences, which were referred to as “initial preparedness estimates” rather than “cut scores” or “benchmarks”; reporting of academic preparedness for college was at the national level only, not by state or student groups; and there was an emphasis on the continued research being conducted to help inform the reporting of the 2015 grade 12 results in Reading and Mathematics.

Ms. Rosenberg described the studies that are currently underway with state partners and ACT. She noted that a new technical advisory group was being formed to advise the Board on interpreting the results from the second phase of academic preparedness research (which is currently underway) and the integration of those results with the completed research from phase one. Current considerations include the possibility of conducting a standard setting procedure (e.g., evidence-based standard setting) to establish a grade 12 academic preparedness standard based on the research findings from phases one and two, and exploring the feasibility of reporting future grade 8 NAEP results for Reading and Mathematics in terms of being on track for academic preparedness for college.

A discussion ensued about the purpose and value of continuing to undertake new studies of NAEP and academic preparedness, particularly in a time of limited resources. Some committee members expressed the importance of using NAEP (as the only nationally representative assessment at grade 12) for estimating the percentage of students academically prepared for college. Other committee members argued that this is outside of the scope of NAEP’s core mission.

The committee also engaged in some discussion about the purpose of the grade 8 research, in particular the linking studies between NAEP and EXPLORE. Mr. Ho stated that the grade 8 research should not be used to report on the extent to which students are “on track” for academic preparedness for college; he argued that the notion of being “on track” is useful for individuals but difficult to interpret for the aggregate. Some committee members noted that the grade 8 studies were a potential source of information to evaluate the appropriateness of the NAEP achievement levels.

Jim Popham asked Governing Board staff to provide more information about the current status and timing of each study in the phase two academic preparedness research.

### **Update on Development of TEL Achievement Levels Descriptions**

Ms. Rosenberg gave a brief update on the status of the Technology and Engineering Literacy (TEL) achievement levels descriptions (ALDs), which must be finalized before the achievement levels can be set. In April 2014, the contract to finalize the TEL ALDs at grade 8 was awarded to WestEd following a competitive bidding process. On May 1-2, a panel of TEL content experts was convened to review the preliminary TEL ALDs from the TEL Framework and revise the ALDs as necessary for the achievement levels setting process. Through May 30<sup>th</sup>, the revised

TEL ALDs are out for public comment via the Governing Board website, a website that has been set up by WestEd and was included in the Board materials ([www.naepaldreview.com](http://www.naepaldreview.com)), and a notice in the Federal Register. The TEL ALDs will be presented to COSDAM via teleconference in mid-July; they will be voted on by COSDAM and the full Board at the July 31 – August 2, 2014 meeting.

**Information Items**

Ms. Rosenberg gave a brief overview of the two information items. She noted that the Request for Proposals (RFP) for the Evaluation of NAEP Achievement Levels procurement was released on May 9<sup>th</sup>. Ms. Rosenberg reported that the proposal evaluation process is currently underway for the TEL Achievement Levels Setting procurement. The committee had no questions about either information item.

I certify the accuracy of these minutes.

*Louis M. Fabrizio*

June 5, 2014

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Lou Fabrizio, Chair

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Date