

National Assessment Governing Board
Committee on Standards, Design and Methodology
Report of May 13, 2016

COSDAM Committee Members: Andrew Ho (Chair), Fielding Rolston (Vice Chair), Mitchell Chester, Lucille Davy, James Geringer, Jim Popham, Linda Rosen and Joe Willhoft.

Governing Board Staff: Michelle Blair, Lily Clark and Sharyn Rosenberg.

NCES Staff: Acting Commissioner Peggy Carr, Samantha Burg, Jing Chen, Pat Etienne, Linda Hamilton, Lauren Harrell, Dana Kelly, Emmanuel Sikali, Holly Spurlock, Bill Tirre and Amy Yamashiro.

Other Attendees: AIR: George Bohrnstedt, Young Yee Kim and Fran Stancavage. CRP: Arnold Goldstein. ETS: Jonas Bertling and Andreas Oranje. Hager Sharp: Elena Acuna and David Hoff. HumRRO: Laress Wise. NISS: Enis Dogan. Optimal Solutions Group: Rukayat Akinbiyi. Pearson: Scott Becker. P20 Strategies: Andrew Kolstad. Westat: Greg Binzer and Keith Rust.

1. Welcome and Review of Agenda

Chair Andrew Ho called the meeting to order at 10:04 am. All COSDAM members were present. Mr. Ho began by reminding everyone of his three priorities as COSDAM Chair: 1) maintain trends with the transition to digital based assessments; 2) increase linkages of NAEP and other assessments; and 3) increase partnerships, with the National Center for Education Statistics (NCES) in particular.

2. Computer Access and Familiarity Study

Mr. Ho introduced George Bohrnstedt of the American Institutes for Research (AIR) and asked the Committee to consider implications of his work on the maintenance of trends. Mr. Bohrnstedt gave a brief overview of the function of the NAEP Validity Studies (NVS) Panel, (for which he serves as Chair), a group of 15 psychometricians, content experts, and state representatives who conduct studies and write white papers for NCES on validity issues for the NAEP program.

Mr. Bohrnstedt described an ongoing NVS study that is investigating the extent to which students taking NAEP have access to and familiarity with digital technology. In 2015, a special study was conducted where additional contextual questions were administered to samples of

students in grades 4, 8, and 12 to measure access, familiarity, and self-efficacy with digital technology both in and out of school. An additional special study is being planned for 2017.

Analyses are currently underway, but preliminary results suggest one dimension for self-efficacy, four correlated dimensions for familiarity (familiarity through instruction in school; familiarity with computers; familiarity with laptops; and familiarity with digital concepts – grades 8 and 12 only), and relatively independent dimensions of access to technology at home and school.

COSDAM members asked questions about the preliminary results and planned analyses and suggested that the study also investigate teacher self-efficacy with technology. In addition, a question was raised about whether computer access and familiarity was best thought of as a continuum or whether there is a minimum amount that is needed in order for students to take digital based assessments without being hindered by the platform (i.e., should there be a “cut score” on computer access and familiarity?).

Finally, there was discussion about the implications of taking the NAEP assessments on the particular tablets used for the assessment administration, which may or may not be familiar to the students. In the future, NCES may investigate whether there is variation in student performance on the NAEP-supplied tablets as compared to other devices that the students use in their schools.

3. NAEP Validity Framework

Mr. Ho began by noting that Standard 1.1 in the *Standards for Educational and Psychological Testing* (AERA, APA, and NCME, 2014) calls for testing programs to explicitly articulate the intended uses and interpretations of test scores. In his view, the NAEP program does not currently do this but the NVS validity framework provides an opportunity to begin to address this gap.

Fran Stancavage of AIR, the project director for the NAEP Validity Studies (NVS) Panel, described the validity framework that was developed in response to the 2009 evaluation of the NAEP program. The validity framework identified five uses of NAEP according to the legislation and/or federal government: monitoring student performance at a given point in time; monitoring student performance over time; comparing achievement across states and districts as well as internationally; disaggregating achievement by subgroups; and using NAEP to inform and evaluate educational policies. The validity framework has been used by the NVS Panel to propose additional research but has not been disseminated externally.

COSDAM members discussed the importance of the Board developing its own statement of intended uses for NAEP that could guide the outreach efforts of the Board’s Strategic Plan. The list of “uses” as described in the NAEP validity framework does not fully capture the interpretation of “uses” as actions taken on the basis of assessment results. The authorizing legislation for NAEP does not provide information about the purposes and intended uses and interpretations of NAEP data. In addition, several members raised the question of whether NAEP should not just measure progress but drive progress (i.e., how can NAEP results be more

actionable)? Finally, COSDAM members discussed the importance of working with the Reporting and Dissemination Committee to articulate intended uses of NAEP as part of the Strategic Plan.

4. Key Findings and Actions from NAEP Linking Studies

Sharyn Rosenberg of the Governing Board staff and Bill Tirre of NCES gave a brief presentation summarizing findings from studies that have linked NAEP with other assessments. They described the following general uses of NAEP linking studies: estimating state-level performance on international assessments; informing the development of a new measure of socio-economic status; comparing state performance standards on a common scale; comparing NAEP achievement levels with external benchmarks; and estimating the percentage of students academically prepared for college.

COSDAM members were generally supportive of linking studies but expressed interest in pursuing additional links that could better inform instructional practices.

5. Information Items

Ms. Rosenberg gave a brief overview of the three information items: the evaluation of NAEP achievement levels; the critical review and synthesis of research on student engagement in NAEP; and the procurement to set achievement levels on the 2017 writing assessment at grade 4. COSDAM members did not have any questions about the information items.

Mr. Ho adjourned the COSDAM meeting at 12:15 p.m.

I certify the accuracy of these minutes.



Andrew Ho, Chair

June 10, 2016

Date