National Assessment Governing Board Committee on Standards, Design and Methodology Report of March 4, 2016

Joint Session with Reporting and Dissemination Committee

Committee on Standards, Design, and Methodology Members: Andrew Ho (Chair), Fielding Rolston (Vice Chair), Mitchell Chester, Jim Geringer, Jim Popham, Linda Rosen, Joe Willhoft.

Reporting and Dissemination Committee Members: Rebecca Gagnon (Chair), Father Joseph O'Keefe (Vice Chair), Alberto Carvalho, Terry Mazany, Tonya Miles, Ronnie Musgrove, Ken Wagner.

Governing Board Staff: Michelle Blair, Bill Bushaw, Lily Clark, Stephaan Harris, Laura LoGerfo, Sharyn Rosenberg.

NCES Staff: Peggy Carr, Halima Adenegan, Gina Broxterman, Samantha Burg, Jing Chen, Jamie Deaton, Enis Dogan, Pat Etienne, Linda Hamilton, Lauren Herrell, Dana Kelly, Emmanuel Sikali, Bill Tirre, Brad Thayer, Ebony Walton, Bill Ward, Grady Wilburn, Amy Yamashiro.

Other Attendees: AIR: George Bohrnstedt, Markus Broer, Cadelle Hemphill, Young Yee Kim, Fran Stancavage. CCSSO: Fen Chou. CRP: Arnold Goldstein, Subin Hona, Andrew Kolstad. DCG: Karen Bell, Meredith Davis. ETS: Amy Dresher, Jonas Bertling, Andreas Oranje, Lisa Ward. Fulcrum: Vasanth Kutty. Hager Sharp: James Elias, David Hoff, Debra Silimeo. HumRRO: Monica Gribben, Lauress Wise. Optimal Solutions: Rukayat Akinbiyi, Sam Toriola. Pearson: Llana Hines. Westat: Chris Averett, Greg Binzer, Keith Rust, Dianne Walsh. Widmeyer: Jason Smith.

1. Collaboration on Infographics and Communicating NAEP Findings

Reporting and Dissemination (R&D) Committee Chair Rebecca Gagnon and Committee on Standards, Design, and Methodology (COSDAM) Chair Andrew Ho called to order the joint session of the two Committees. Ms. Gagnon explained the reason for the joint meeting: as R&D is accelerating its dissemination of NAEP data with infographics, R&D members want to ensure the technical accuracy of this public-facing work through collaboration with COSDAM members. The first question to address in the joint meeting solicited members' feedback on the questions people ask about the Board's efforts to disseminate results. In reply, R&D Committee Vice Chair, Father Joseph O'Keefe, noted two primary questions he fields whenever he presents: (1) How does NAEP sample students? and (2) Since NAEP data cannot be used for causal inferences, what then can be said about private schools?

Jim Popham and Jim Geringer raised a more fundamental question about the essential purpose of NAEP. Jim Popham averred that the purpose and the meaning of NAEP should drive what the Governing Board does with NAEP results. Jim Geringer pointed out that any review of any budget demands the question "for what purpose?" Tonya Miles concurred and added that parents want to know what NAEP means for their children. But the structure of NAEP requires the Board to transcend that question in its outreach and show how NAEP applies to the greater good.

In response to a question from Ronnie Musgrove, Jim Popham suggested that the Board produce a list of accomplishments as a catalyst for speaking about NAEP's purpose. Linda Rosen stated that the business community is more concerned with next steps than with all the caveats of NAEP results; relevance requires action.

Mr. Ho responded that the Governing Board is not well designed or even charged to answer those questions of action. Committee members acknowledged this limitation and agreed that perhaps the Governing Board should collaborate with external partners and researchers after any release of NAEP data. Partnering with organizations that conduct rigorous research can prompt action when the Board cannot.

Mitchell Chester encouraged the Board to become more deliberate in engaging the research community, such as funding sources to incentivize researchers' attention on NAEP data. Perhaps three or four studies could be released by external, independent partners and researchers at the same time as an initial NAEP release to enrich the conversation about the results from the very start. Several members from both Committees applauded this suggestion. The enthusiasm for this suggestion begged the follow-up question, "how do you protect the data embargo but have people dig into the data?"

Ken Wagner raised a concern about an over-emphasis on psychometric accuracy that may prevent the Board from entering policy conversations. Ms. Rosen highlighted the inherent contradiction in NAEP: the Board hosts public releases with media coverage to attract a broad audience, but NAEP may be of utmost value to researchers, a very narrow audience.

Alberto Carvalho addressed the tension between findings that are statistically significant versus practically meaningful. For example, small differences can lead to overinflated conclusions. What does a two-point decline actually mean? Ms. Gagnon pointed to the need for collaboration with COSDAM on issues that are both technical and practical.

COSDAM and R&D members agreed on the following next steps:

- 1. Anticipate questions that people will ask about NAEP, such as confusion about causality, whether significant differences are actually meaningful, and how students are sampled to participate and prepare easy-to-digest ready responses;
- 2. Ask "now what?" when planning communications and outreach. Which the Board may not answer but which should be addressed through external partners and researchers who can create a sense of urgency and galvanize others' pursuit of these answers;
- 3. Leverage external partnerships with organizations that conduct rigorous research to provide interpretations of NAEP data, perhaps at the same time as a release (or approximately);
- 4. Investigate the possibility of awarding grants or mini-grants to incentivize researchers to analyze NAEP data, which falls under the purview of NCES. The Board should determine the best approach to supporting such efforts;
- 5. Sustain an ongoing collaborative relationship between COSDAM and R&D chairs to keep each Committee apprised of their respective work and to elicit feedback from their respective Committees on the other's work products; and
- 6. Include reports from previous Governing Board work on the members' site to build institutional memory that can guide the Board's path forward.

With these steps forward mapped out, Ms. Gagnon thanked everyone for agreeing to the joint meeting and invited COSDAM to return for another joint session in the future.

CLOSED SESSION 11:20 am - 12:05 pm

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

Governing Board Staff: Sharyn Rosenberg and Michelle Blair.

NCES Staff: Jing Chen, Pat Etienne, Lauren Harrell, Dana Kelly, Emmanuel Sikali, Bill Tirre, and Amy Yamashiro.

Other Attendees: AIR: George Bohrnstedt, Markus Broer, Young Yee Kim, and Fran Stancavage. CRP: Arnold Goldstein, Subin Hona, and Andrew Kolstad. ETS: Amy Dresher and Andreas Oranje. Fulcrum: Vasanth Kutty. Hager Sharp: David Hoff. HumRRO: Lauress Wise. NISS: Enis Dogan. Optimal Solutions Group: Rukayat Akinbiyi. Pearson: Llana Hines. Westat: Keith Rust.

In accordance with the provisions of exemption (9)(B) of Section 552b(c) of Title 5 U.S.C., the Committee on Standards, Design and Methodology met in closed session on March 4, 2016 from 11:20 am to 12:05 pm in order to review and discuss reports including secure data and results of research conducted to maintain trends with the transition to digital-based assessments.

2. Update on Maintaining Trends with the Transition to Digital-Based Assessments (DBA)

In a closed session, Andreas Oranje of Educational Testing Service provided an update on plans and analyses related to maintaining trends with the transition to digital-based assessments in Reading and Mathematics. In 2015, the paper-based assessments in Reading and Mathematics were administered to approximately 2,200 students per state and used for reporting NAEP results. In addition, digital-based assessments were administered to approximately 10,000 students nationally as part of the DBA start-up process, for the purpose of conducting bridge studies (examining potential differences in student performance attributable to the mode of administration) and exploring how trends can be maintained. In 2017, digital-based assessments will be administered to approximately 2,200 students per state in Reading and Mathematics. In addition, paper-based assessments will be administered to approximately 500 students per state as part of additional bridge studies.

Mr. Oranje presented embargoed analyses from initial comparisons between the 2015 paperbased Reading and Mathematics results at grades 4 and 8 and the digital-based Reading results for grade 12. Mr. Oranje briefed the Committee on a design change for the Mathematics assessments in 2017. Initially the 2017 Mathematics assessments were intended to use multistage testing (where students would receive an easy, medium, or difficult second block depending on how well they performed on the first block). However, as a result of lessons learned from the 2015 bridge studies, the 2017 operational Mathematics assessments will be administered as linear tests (where students receive two blocks of items that span the difficulty range regardless of student performance). There will be a special study of a new mathematics multi-stage testing design in 2017 with the intention of implementing multi-stage testing in 2019.

COSDAM members discussed the preliminary results and potential implications for reporting in 2017 and 2019.

CLOSED SESSION 12:05 - 12:25 pm

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

Governing Board Staff: Sharyn Rosenberg and Munira Mwalimu.

NCES Staff: Pat Etienne, Lauren Harrell, Dana Kelly, Emmanuel Sikali, Bill Tirre, and Amy Yamashiro.

In accordance with the provisions of exemption (9)(B) of Section 552b(c) of Title 5 U.S.C., the Committee on Standards, Design and Methodology met in closed session on March 4, 2016 from 12:05 to 12:25 pm in order to discuss requirements for an upcoming procurement to set achievement levels on the 2017 grade 4 Writing assessment. Public disclosure of procurement sensitive data would provide an unfair advantage to potential offerors, and significantly impede implementation of the NAEP assessment program if conducted in open session.

3. Plans for 2017 Writing Grade 4 Achievement Levels Setting Procurement

In closed session, Sharyn Rosenberg of the Governing Board staff presented some key elements of an upcoming procurement to set achievement levels on the 2017 grade 4 Writing assessment. The 2017 NAEP writing assessment is the first administration of the grade 4 assessment under the current computer-based Writing Framework. Pursuant to the Governing Board's legislative mandate, achievement levels must be set for the grade 4 writing assessment.

On February 4, 2016, a pre-solicitation notice was issued on the Federal Business Opportunities website (www.fbo.gov). The procurement will include a field trial (to test logistics associated with any software used to conduct the process), a pilot study, and an operational achievement levels setting study. In addition, the design procedures will require the collection of multiple sources of validity evidence. The Request for Proposals (RFP) is expected to be issued by March 31, 2016 with an intended award date of summer 2016. The contract period of performance is anticipated to be 24 months.

COSDAM members asked questions and provided input on various aspects of the procurement plans.

OPEN SESSION 12:25 – 12:50 pm

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

Governing Board Staff: Sharyn Rosenberg.

NCES Staff: Jing Chen, Pat Etienne, Lauren Harrell, Dana Kelly, Emmanuel Sikali, Bill Tirre, and Amy Yamashiro.

Other Attendees: AIR: George Bohrnstedt, Young Yee Kim, and Fran Stancavage. CRP: Andrew Kolstad. ETS: Amy Dresher. HumRRO: Lauress Wise. Optimal Solutions Group: Rukayat Akinbiyi. Westat: Keith Rust.

4. Update on NAEP Linking Studies

COSDAM members had a brief discussion about previous and planned efforts to link NAEP to other assessments and data sources. Joe Willhoft noted that the NCES state mapping studies should also be included as examples of NAEP linking studies. Several committee members stressed the importance of looking at what is actionable from these linking studies. There was initial discussion of additional information that might be obtained from linking studies, such as putting items from other assessments on the NAEP item maps or exploring the meaning of a few NAEP scale score points.

5. Information Items

Sharyn Rosenberg referenced the two information items, the evaluation of NAEP achievement levels and the study on participant engagement in NAEP. Committee members did not have any questions about the information items.

Mr. Ho adjourned the COSDAM meeting at 12:50 p.m.

I certify the accuracy of these minutes.

March 21, 2016

Andrew Ho, Chair

Date