National Assessment Governing Board

Committee on Standards, Design and Methodology

March 4, 2011

COSDAM Attendees: Lou Fabrizio (Chair), Tonya Miles (Vice Chair), Jack Markell, Steven Paine, James Popham, Andrew Porter, Leticia Van de Putte, and Blair Taylor. **Other Governing Board Members:** John Q. Easton (*Ex officio*), Director of the Institute of Education Sciences.

Governing Board Staff: Susan Loomis and Michelle Blair.

Other Attendees: NCES: Andrew Kolstad. AIR: Gary Phillips and Fran Stancavage. Delaware Governor's Office: Jennifer Ranji. ETS: David Freund, John Mazzeo and Andreas Oranje. Florida Bureau of Exceptional Education and Student Services: Suzanne Dalton. HumRRO: Lauress Wise. Miami Dade County Public Schools: Sally Shay. Measured Progress: Luz Bay. MetaMetrics: Heather Koons. Pearson: Connie Smith. Westat: Bob Patchen.

Lou Fabrizio, Chair of the Committee on Standards, Design and Methodology (COSDAM), called the meeting to order at 10:30 a.m. and welcomed members and guests. Mr. Fabrizio welcomed Governor Jack Markell and Blair Taylor to their first meeting of COSDAM. Mr. Fabrizio then asked each member and other attendees to introduce themselves.

1. Writing Achievement Levels Setting Project Update

Mr. Fabrizio asked Luz Bay, NAEP Writing Achievement Levels Setting (ALS) Project Director for Measured Progress to provide information to the Committee regarding the NAEP writing achievement levels work. Ms. Bay provided an overview of the plan to use the Body of Work (BoW) standard setting method for the writing NAEP achievement levels-setting (ALS) process. Susan Loomis noted that this is the first time that this methodology has been used for setting NAEP achievement levels. The writing assessment is the first fully computerized NAEP to be administered, and Measured Progress plans to implement a fully computerized achievement levels-setting process during the in-person panel meetings using the Body of Work Technological Integration and Enhancement (BoWTIE) system-the fully computerized Body of Work standard setting method developed by Measured Progress for this project. For the Body of Work method panelists will be required to classify a sample of student NAEP booklets into achievement levels categories, based on the NAEP achievement levels descriptions of performance at each achievement level. This first round of classification is called range finding. Next, panelists will be given additional booklets that are scored near the cut points set at the first round as part of the process of pinpointing the performance required of students at each achievement level.

James Popham had questions about the provision of impact data. He reiterated his position from previous meetings that these data should actually impact the judgments of panelists. Ms. Bay explained that impact data will be provided after round 2 and after round 3, and she described the instructions that will be given to panelists regarding the use of impact data. Mr. Popham asked Ms. Loomis how panelists would be instructed to assign weight to achievement levels descriptions (ALDs) relative to impact data, and she responded that the ALDs are to be *the* standard to be applied for judgments regarding the location of cut points. The impact data are provided to inform panelists about the consequences or impact of the cut points being recommended. If the impact data do not appear to be consistent with panelists' expectations, they will be instructed to review the ALDs and performances relative to the cut points to determine if adjustments need to be made in their individual cut points.

Ms. Loomis noted that when the final Writing ALS Design Document is delivered, she will send it to all members of COSDAM for their review and reference throughout the project.

2. Developing Writing Achievement Levels Descriptions

Ms. Loomis provided information on a contract to develop writing achievement levels descriptions (ALDs) that was awarded to Mid-Atlantic Psychometrics Services on March 1. She provided a general description of the steps that will be included in the process of developing the ALDs to include several iterations of review by content experts and a broad array of stakeholders followed by edits and modifications made by content experts in response to the recommendations. Ms. Loomis noted that the award had been made a bit later than planned so the schedule for delivery of finalized ALDs has been changed to June 2011. Ms. Loomis recommended that the finalized ALDs be shared with COSDAM members for review in June 2011, and that these ALDs be used in the writing ALS field trial scheduled for July 2011. She explained that the primary purpose of the field trial is to evaluate logistic plans and requirements rather than to collect data regarding the ratings relative to the ALDs. Ms. Loomis stated that a recommendation for action to provide provisional approval for the ALDs will be presented to COSDAM in August 2011. COSDAM members had no objection to this recommendation.

Governor Jack Markell suggested that the writing ALDs reflect the Common Core State Standards for language arts assessments to the extent feasible. Ms. Loomis responded that this recommendation will be presented to the content experts for implementation in the process of developing writing ALDs.

Andrew Porter stated that he had written several reports on the alignment of the Common Core State Standards (CCSS), including a report on NAEP alignment to CCSS. He will send copies of his report to members of COSDAM.

Mr. Popham asked about the plan to use the 1998 writing ALDs as the "starting point" for drafting the 2011 writing. Ms. Loomis explained that this step in the development of the 2011 writing ALDs was designed to help address the sorts of questions that arose during the Governing Board's considerations for setting science 2009 achievement levels. Comparisons of performance relative to the achievement levels for the 2009 science NAEP were made to performance relative to those for the 1996 science NAEP, although both the assessments and the ALSs were changed. The plan for having the 2011 writing ALDs aligned to the extent

appropriate and feasible with the 1998 writing ALDs was to minimize the change in performance requirements from one assessment framework to the other. Of course, the changes in the framework requirements and the change to computer-based writing are likely to impact both the ALDs and student performance relative to them. Mr. Popham suggested that two approaches be used for the development of 2011 writing ALDs: one group would use the 1998 ALDs as the starting point and the other group would not.

3. 12th Grade Preparedness Research Update

Mr. Fabrizio asked Ms. Loomis to present the update on 12th grade preparedness research. Mr. Popham noted that he will be involved in some of the outreach activities for grade 12 NAEP Grade 12 Preparedness Research, and he requested that Ms. Loomis include in the regular updates a statement of why the outcomes of the studies planned for this research would be of interest to anyone.

Ms. Loomis noted that the briefing materials (Attachment C-1) included more extensive information about the studies to set preparedness cut points for placement in credit-bearing, college-level courses and for entry into a job training course in each of five different occupational categories. Mr. Porter asked how preparedness for course placement in colleges with different levels of selectivity will be reported if there is only one "college preparedness" cut score. Ms. Loomis acknowledged that this has been an issue for considerable discussion over the years of planning the preparedness research work, and the decision had been to set a cut point to represent the minimal level of performance required for placement in a course of the type included in the Board's general description of "college preparedness." Panelists will be recruited from institutions with different levels of selectivity. Mr. Porter then summarized that the cut point will represent preparedness for placement in an "average" college course that satisfies a general education requirement.

Mr. Fabrizio suggested that the Committee members look at the pages in the briefing book describing these judgmental standard setting preparedness studies to see if there were additional questions.

Ms. Loomis noted that the survey of higher education institutions (2-year and 4-year) is under review for approval by the Office of Management and Budget. The Governing Board staff expects that the survey will be ready for implementation by early April 2011.

Andreas Oranjes of ETS presented a report on studies for the national NAEP sample, including the 11 states that participated in the grade 12 state pilot study, for the statistical relationship between NAEP and the SAT, as well as the statistical relationship studies for NAEP and several tests included for students and available through the Florida Data Warehouse. The analyses to establish the statistical relationships are still being finalized. At present, the relationships for NAEP math seem to be relatively strong, but the relationships for NAEP reading may not be strong enough to produce a clear concordance of scores. ETS will continue working on the analyses, in accordance with the recommendations of the Governing Board's Technical Advisors for 12th Grade Preparedness Research, and ETS plans to have the analyses finalized for reporting to COSDAM by May 2011.

4. NAEP-International Linking Studies Update and Design for Establishing a Statistical Relationship with PIRLS

Gary Phillips of the American Institutes for Research (AIR) presented information on his plans to link the 2011 grade 4 reading NAEP with the 2011 Progress in International Reading Literacy Study (PIRLS) for 2011. The National Center for Education Statistics (NCES) has asked Mr. Phillips to conduct this study and will provide the data from both assessments to him for this purpose. Mr. Phillips noted that the NAEP data will be available by late summer/early fall 2011, but the data for PIRLS will not be available until late fall 2012. NCES will provide the data to Mr. Phillips for this analysis as early as possible, and he hopes to have the results ready for reporting at the same time the international data are ready for release at the end of 2012.

Mr. Phillips noted that NAEP and PIRLS will not be administered to the same sample of 4th graders, although the sample of 4th graders taking NAEP and the sample taking PIRLS are randomly statistically equivalent. The fact that there are two separate samples of students taking the assessments at different times of the school year means that the type of data available for this linking study limits the analysis options and does not provide the opportunity for testing some assumptions needed for the analysis. Mr. Phillips plans to use a statistical moderation methodology for relating scores on NAEP and PIRLS. He noted that the NAEP and PIRLS assessments are similar in item type and format and that the technical properties of the assessments are similar. Mr. Phillips demonstrated innovative ways that he has used for presenting the data to compare performance of U.S. students to performance of students in other countries.

5. Future Topics for COSDAM Discussion

Mr. Fabrizio provided the opportunity for COSDAM members to suggest future agenda topics for the Committee. Mr. Popham noted that the Governing Board will meet in Portland, Oregon in May 2011. Because Oregon is a state leading the way in computer adaptive testing, he would recommend that we have a presentation on that program.

The Committee adjourned at 12:45 p.m.

I certify the accuracy of this report.

Louis M. Fabrizio

Lou Fabrizio, Chair

March 11, 2011

Date