

National Assessment Governing Board

Committee on Standards, Design and Methodology

November 30, 2012

OPEN SESSION 9:30-10:45 a.m.

COSDAM Members: Lou Fabrizio (Chair), Fielding Rolston (Vice Chair), Andrew Ho, Terry Holliday, Tonya Miles, and Jim Popham.

Governing Board Staff: Cornelia Orr, Ray Fields, and Michelle Blair.

Other Attendees: John Q. Easton, Director of the Institute of Education Sciences and ex officio member of the Governing Board. NCES: Commissioner Jack Buckley, Janis Brown, Samantha Burg, Jing Chen, Patricia Etienne, Andrew Kolstad, and Taslima Rahman. AIR: Gary Phillips, Sharyn Rosenberg, and Fran Stancavage. ETS: Steve Lazer, John Mazzeo, and Andreas Oranje. Hager Sharp: Melissa Spade. HumRRO: Carrie Wiley and Laress Wise. McGraw-Hill Education: Larry Snowwhite. MetaMetrics: Heather Koons. Westat: Keith Rust. Widmeyer: Nebyat Ejigu.

Lou Fabrizio, Chair of the Committee on Standards, Design and Methodology (COSDAM), called the meeting to order at 9:35 a.m. He welcomed members and guests and extended a special welcome to the newest member of COSDAM, Andrew Ho.

NAEP 12th Grade Academic Preparedness Research

Mr. Fabrizio noted that COSDAM has discussed and received progress updates on the Board's academic preparedness initiative on an ongoing basis. He invited Cornelia Orr to give an overview of today's discussion of the initiative. Cornelia noted three main components to this discussion session: (1) receiving updates on academic preparedness research relative to the 2009 grade 12 NAEP results; (2) discussing plans for reporting these results including a review of draft text for the technical report website which will include a compilation of documents from the various studies completed to date; and (3) reviewing proposed plans for academic preparedness research using the 2013 NAEP grade 12 assessments in reading and mathematics. Some of the information that will be presented to the full Board later today overlaps with the content of this session, but COSDAM will have an opportunity to examine these pieces in more depth.

Updates from the 2009 Research: Higher Education Survey Ray Fields provided an overview of the survey study of higher education institutions in the United States which was conducted via a contract with Westat. Using a nationally representative sample of 2-year and 4-year postsecondary education institutions, respondents were asked to identify the standardized tests and cut scores used to place students in entry-level credit bearing non-remedial courses in Fall

2011. For 2-year institutions, the study focused on student placement in 4-year transfer programs. For 4-year institutions, the focus was on student placement in liberal arts and sciences. The unit of analysis was the college campus. After summarizing the methodology and some of the challenges confronted in the study, Mr. Fields discussed the key conclusion: variability in cut scores used for the same test was quite high.

Andrew Ho complimented the presentation's focus on variability; merely examining lower versus higher ranked institutions was seen as less informative. Terry Holliday commented that the study's focus on cut scores resonates with the performance descriptor language being prepared by the Common Core Assessment Consortia, which includes an emphasis on when students are "just academically prepared."

Mr. Fields outlined follow-up work to be conducted in relation to the study, such as comparing the means and medians from the survey study with the results from the linking studies in the Board's program of academic preparedness research. Next steps also include conducting additional analyses to examine other variables in the study. The Committee offered additional ideas:

- Develop a percentile distribution of cut scores and describe the institutions that fall at particular percentiles along the distribution.
- Examine the semi-interquartile range.
- Conduct regression analyses to examine other characteristics. However, it is important to avoid using these analysis results to explain why some institutions have higher cut scores than others.

Updates from the 2009 Research: Course Content Analyses Next, Michelle Blair provided an overview of the course content analyses being conducted for job training programs and college. These studies are being conducted to address two objectives: (1) Develop rich descriptions of the content of these courses; and (2) Compare these descriptions with various aspects of NAEP, including items and NAEP performance level descriptions. Panels of course instructors and content experts are being convened to review and code course artifacts—syllabi, text books, assignments, and exams. Work for the job training program coursework is largely complete—data analyses and report drafting are underway. It is anticipated that a report will be shared with COSDAM in spring 2013. Work for the college coursework is just getting started, and there will be ongoing updates provided to COSDAM as the work moves forward. Jim Popham asked about whether the studies had a replicability component as a validity and accuracy of coding check. Ms. Blair answered that this was not currently incorporated into the research design. Ms. Orr noted this as something that we could explore incorporating into these studies.

Plans for Reporting 2009 Research Studies Mr. Fabrizio and Ms. Orr invited the Committee to share feedback on how well the online technical report communicates to its intended audiences. Mr. Popham noted the lack of context provided to orient the audience to why the Board is conducting these analyses. He commented that the Board needs to ensure that the research objectives are conveyed clearly. In cases where study results match the planned outcomes, the report should explain the expected policy implications of the findings. Mr. Ho stated that we should clarify that we are describing a research agenda with various components, some of which

are more similar to white papers and very specific to the NAEP context, and some of which are more general with broader applicability. Currently, the way in which the sets of studies are connected is not entirely clear. We should also clarify that some of the findings are preliminary in nature. Ms. Orr said that incorporating more information from the Technical Panel that shaped the Board's research program would be a good way to respond to several of these clarity issues. Jack Buckley commented that we probably need a framework for academic preparedness rather than undertaking all of this research to essentially "retrofit" NAEP to academic preparedness. Tonya Miles responded to Mr. Buckley by saying we need a context statement to help audiences understand this general underpinning of the Board's academic preparedness research effort.

The Committee also commented that the key conclusions appear too isolated, and some effort should be made to help readers make appropriate connections between the research studies. For a policymaker audience, the Committee acknowledged the report would not be widely received. However, the target audience is the research community, and the Committee agreed that for researchers the tone of the report was appropriate.

Plans for 2013 Academic Preparedness Research Studies Cornelia Orr presented an overview of proposed study plans for Phase 2 of the academic preparedness research program. Two additional states have been added to the states participating in the assessment: Michigan and Tennessee. These two states and others of the original 11 will also participate in the longitudinal data analyses relative to grade 12 NAEP results. In addition for 2013, the Board will replicate the statistical linking of the grade 12 NAEP with the SAT and undertake a linking study with the ACT assessment. Consideration also is being given to a statistical linking study for grade 8 NAEP and the EXPLORE assessment.

There were positive comments about the grade 8 linking effort with EXPLORE as a new element of the Board's research program. However, several Committee members stated that continuing academic preparedness research in the career area did not appear to be a productive course. As Mr. Fabrizio summarized, the focus on academic preparedness for college is yielding some strong evidence, and this seems to be a more appropriate focus for NAEP. The initial objective was to explore if there was anything else grade 12 NAEP could report relative to academic preparedness. This exploration has yielded limited results for job training academic preparedness, with much more positive indications for college academic preparedness. The members did not think it was necessary to stop work on studies that are already funded and underway, but cautioned the staff (by consensus of the Committee members) about beginning new work in the area of academic preparedness for job training programs as it was unlikely to be of benefit to the Board. Mr. Ho noted that it was helpful for the Board and the field to know that NAEP was not as well suited to identifying entry into job training programs.

In terms of refining future research plans, one recommendation as noted earlier was to add a replicability component as a further validity check to make sure the course content descriptions developed through the Board's research appropriately capture the content of the courses.

CLOSED SESSION 10:45 a.m. –11:50 a.m.

COSDAM Members: Lou Fabrizio (Chair), Fielding Rolston (Vice Chair), Andrew Ho, Terry Holliday, Tonya Miles, and Jim Popham.

Governing Board Staff: Cornelia Orr, Ray Fields, and Michelle Blair.

Other Attendees: John Q. Easton, Director of the Institute of Education Sciences and ex officio member of the Governing Board. NCEs: Commissioner Jack Buckley, Samantha Burg, Jing Chen, Patricia Etienne, Dana Kelley, Andrew Kolstad, Kashka Kubzdele, Daniel McGrath, Taslima Rahman, and William Tirre. AIR: Gary Phillips, Sharyn Rosenberg, and Fran Stancavage. ETS: Steve Lazer, John Mazzeo, and Andreas Oranje. HumRRO: Carrie Wiley and Laress Wise. 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 November 30, 2012 from 10:45 a.m. to 11:50 a.m. to discuss information regarding a report including secure data and results of research conducted to establish a statistical link between NAEP and TIMSS. Premature disclosure of these results would significantly impede implementation of the NAEP and TIMSS assessment programs.

NAEP/TIMSS Linking Study

In November 2009, the Governing Board unanimously adopted a resolution in support of studies to statistically link NAEP mathematics and science assessments to international assessments in 2011, including the Trends in International Mathematics and Science Study (TIMSS). The Board noted that the timing of this assessment presented a unique opportunity to have U.S. students take both NAEP and one of the international assessments in the same grade and subject, enabling statistical linking of the two sets of results. Accordingly, the Governing Board added 8th grade science at the national and state levels to the NAEP schedule of assessments in 2011 and moved the state and national science assessments to a once every four year schedule in 2015 and thereafter, to provide opportunities for future linking studies between NAEP and TIMSS.

The goal of conducting the NAEP-TIMSS linking study is to enable states to interpret their NAEP results in an international context, with the possibility of translating the state's 8th grade NAEP scores in mathematics and science into TIMSS-equivalent scores. Laress Wise delivered a presentation on the methodology and challenges in the NAEP/TIMSS Linking Study.

After the presentation, Mr. Fabrizio asked about the final analysis and reporting option that NCEs is considering. Mr. Buckley reported that this is still being determined and that the main objective is to provide states with information regarding their "international neighborhood," that is, what are the international peers of each state in terms of student achievement.

Mr. Ho asked about whether the most appropriate direction of the linking effort was to place NAEP on the TIMSS scale or vice versa. The current NAEP-TIMSS linking study is based on

the former, but this seems problematic given that NAEP is a more precise estimate of U.S. student achievement than TIMSS with lower standard errors.

Ms. Miles asked about the expected policy implications for specific states. Mr Buckley responded that international comparisons are already being made with weaker data so the present study can potentially provide a firmer foundation for these ongoing conversations. Mr. Popham commented that the question of what to do with this information is an opportunity for the Board to take a leadership role by providing appropriate guidance on how the data can be used.

TIMSS results are soon to be released, and these results have already been shared confidentially with participating states. Ms. Blair asked about the timeline. Mr. Buckley responded that NCES anticipates a spring 2013 release with some follow-up reports shortly thereafter.

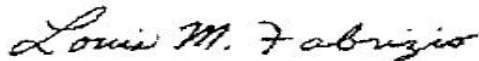
OPEN SESSION 11:50 a.m.

Future Agenda Topics

At 11:50 am, Mr. Fabrizio resumed the open session of the Committee meeting by asking for suggestions for future agenda topics. Mr. Popham reiterated his earlier suggestion to add instructional sensitivity to the COSDAM agenda. Mr. Fabrizio noted that this topic could warrant an eventual joint session with the Assessment Development Committee.

Mr. Ho suggested empirical standard setting as an information item for a future COSDAM agenda to keep the Committee up to date on the latest developments in the field.

I certify the accuracy of these minutes.



Lou Fabrizio, Chair

December 18, 2012

Date