National Assessment Governing Board Meeting of May 13–14, 2016 Tysons Corner, VA

OFFICIAL SUMMARY OF BOARD ACTIONS

Complete Transcript Available

National Assessment Governing Board Members Present

Terry Mazany, Chair

Lucille Davy, Vice Chair

Alberto Carvalho

Mitchell Chester

Frank Fernandes

Anitere Flores

Rebecca Gagnon

Shannon Garrison

Jim Geringer

Andrew Ho

Carol Jago

Tonya Matthews

Ronnie Musgrove

Dale Nowlin

Joseph O'Keefe

Jim Popham

Fielding Rolston

Linda Rosen

Cary Sneider

Chasidy White

Joe Willhoft

Board Members Absent

Doris Hicks

Tonya Miles

Ken Wagner

Ruth Neild (Ex-Officio)

National Assessment Governing Board Staff

Bill Bushaw, Executive Director

Mary Crovo, Deputy Executive Director

Michelle Blair

Lily Clark

Dora Drumgold

Stephaan Harris

Laura LoGerfo

Munira Mwalimu

Tessa Regis

Sharyn Rosenberg

Angela Scott

Anthony White

National Center for Education Statistics (NCES) Peggy Carr, Acting Commissioner

Halima Adenegan

Gina Broxterman

Samantha Burg

Jing Chen

Jamie Deaton

Enis Dogan

Patricia Etienne

Elvira Germino Hausken

Eunice Greer

Linda Hamilton

Lauren Harrell

Dana Kelly

Shawn Kline

Dan McGrath

Michael Moles

Emmanuel Sikali

Holly Spurlock

William Tirre

Ebony Walton Chester

Grady Wilburn

Aimee Winchester

Amy Yamashiro

American Institutes for Research (AIR)

George Bohrnstedt

Kim Gattis

Cadelle Hemphill

Young Yee Kim

Fran Stancavage

CRP, Inc.

Shamai Carter

Arnie Goldstein

Subin Hona

Andrew Kolstad

Carolyn Rudd

Kathy Smoot

Edward Wofford

District Communications Group (DCG)

Meredith Davis Chelsea Radler

Educational Testing Service (ETS)

Jonas Bertling

Jay Campbell

Amy Dresher

Robert Finnegan

Rebecca Moran

Andreas Oranje

Lisa Ward

Karen Wixson

Fulcrum IT

Scott Ferguson

Hager Sharp

Elana Acuna

David Hoff

Joanne Lim

Debra Silimeo

Kelle Wyatt

Human Resources Research Organization (HumRRO)

Hillary Michaels

Sheila Schultz

Lauress Wise

7

Optimal Solutions

Rukayat Akinbiyi

Brian Cramer

Sam Toriola

Pearson Educational Measurement

Scott Becker

Cathy White

Llana Williams

Reingold

Greg Orrison

Westat

Chris Averett

Greg Binzer

Keith Rust

Widmeyer Communications

Siobhan Mueller

Attending Speakers

Ramón Barthelemy, American Association for the Advancement of Science (AAAS) Fellow U.S. Department of Education

Melissa Moritz, Deputy Director of STEM, U.S. Department of Education

Other Attendees

Brad Thayer

Call to Order

The May 13, 2016, session of the National Assessment Governing Board was called to order by Chair Terry Mazany at 8:30 a.m.

Approval of May 2016 Agenda and March 2016 Board Meeting Minutes

Chair Terry Mazany reviewed the May 2016 meeting agenda and requested a motion for approval. Rebecca Gagnon moved for Board approval. The motion was seconded by Ronnie Musgrove and passed unanimously.

Chair Mazany requested a motion for approval of the March 2016 meeting minutes. Ms. Gagnon moved for Board approval. The motion was seconded by Joseph O'Keefe and passed unanimously.

Opening Remarks

Chair Mazany recounted his On the Table experience in Chicago on Tuesday, May 10, where 55,000 people gathered around 3,500 tables for a day of civic dialogue on how to create a more unified Chicago. "Acting Up" grants will be awarded to help turn the ideas from these table conversations into action.

Recently, Chicago hosted "WE Day," which is a celebration of youth participating in the WE Schools program who are making a difference in their local and global communities. The WE Schools program is delivered by educational partners in more than 10,000 schools in North America and the U.K. It challenges young people to identify the local and global issues that spark their passion and then empowers them with the tools to take action. WE measures the positive impact of its program on youth, such as increased success in school, belief that they can make the world a better place; leadership skills, likelihood to volunteer and be agents of social change. Chair Mazany shared some videos capturing the energy and magnitude of the WE Day events. He then invited Shannon Garrison and Rebecca Gagnon to share their personal

experiences participating in the WE Days in their cities of Los Angeles and Minneapolis, respectively.

Ms. Garrison explained the project her fourth and fifth grader students did to raise money for a windmill in a small African village, noting that it was somewhat controversial within her school that she was asking low-income students to raise money for another community. The project was a great success, empowering and inspiring the students to help change the world. The school plans to continue the project. Ms. Garrison described it as one of the highlights of her 19 year teaching career and noted that she also had the honor of speaking at the Los Angeles WE Day celebration.

Ms. Gagnon attends the Minneapolis WE Day celebration every year. She commented on the power of having thousands of kids in the same room who all have earned their invitation through their service activities. Despite the numerous celebrities who participate in WE Day, the true focus of the event is celebrating the kids and motivating them to continue their efforts.

Chair Mazany commented that WE has implications for what is thought to constitute learning and achievement. WE recently partnered with the College Board's Advanced Placement program to integrate its substantial service-based learning framework into six AP courses. The program appears to be an antidote to concerns about disengaged youth and disenchantment with learning and education. It is important that the Board and others involved in improving student performance are aware of WE's work.

Executive Director's Report

Executive Director Bill Bushaw began by acknowledging Brad Thayer's service, who is retiring after 30 years of service to the NAEP program through his work at Pearson and NCES.

Mr. Bushaw updated the Governing Board on activities that have taken place since the March 2016 Board meeting.

- He noted the success of the 2015 Trial Urban District Assessment (TUDA) release which
 was cohosted with the Council of the Great City Schools and featured representatives
 from five TUDA districts
- The release of the Nation's Report Card in Mathematics and Reading for 12th grade and the estimate of academic preparedness, which received substantial media coverage.
- He highlighted efforts to build excitement for the upcoming NAEP Technology and Engineering Literacy (TEL) release through webinar events with the Council of Chief State School Officers (CCSSO), the Learning First Alliance, the Alliance for Excellent Education, and Change the Equation.
- Board staff continue to conduct outreach to a broad set of stakeholders. In addition to the CCSSO Policy Task Force meeting, staff met with the Council for American Private

Education (CAPE) Board members to increase support for private schools' participation in NAEP and the National Endowment for the Arts to discuss the 2016 NAEP Arts assessment. Board staff also met with the dean and faculty from East China Normal University to answer their questions about NAEP.

• Mr. Bushaw described upcoming events to extend the release of the NAEP TEL Report Card. TEL will be released on Tuesday, May 17 at the Michigan Science Center in Detroit and the Board is hosting a TEL contextual variable workshop on the following day. A TEL briefing for congressional staff is planned for Thursday, June 16; it is sponsored by the Congressional STEM Caucus and co-hosted with the National Center for Technological Literacy at the Museum of Science, Boston. In additional several presentations are planned at upcoming conferences to increase awareness of TEL.

Mr. Bushaw thanked Board members who have been integral to the success of these aforementioned events. He also acknowledged the hard work of Board and NCES staff in planning and executing the events.

Chair Mazany noted that Mary Lyn Bourque, the Board's first Assistant Director of Psychometrics, had passed away. In recognition of her service and work, Chairman Mazany presented and read a resolution honoring her. The resolution is detailed on the last page of the minutes. Jim Geringer moved to adopt the motion. Joe Willhoft seconded the motion, adding personal remarks about Ms. Bourque who was a long-time mentor and dear friend. The motion was approved unanimously.

National Center for Education Statistics (NCES) Update

Holly Spurlock, Program Director of the Assessment Division at NCES, informed the Board that she was presenting the NCES update on behalf of Acting Commissioner Peggy Carr who was meeting with the Secretary during this time. Ms. Spurlock provided the following updates:

- Due to a budget increase in fiscal year 2016, NCES was able to undertake several research projects and participate in new initiatives and studies, including two international comparative studies ——the International Early Learning Study and the International Computer and Information Literacy Study computer-based assessment of 8th grade students.
- The Every Student Succeeds Act (ESSA) requires IES and NCES to conduct several studies and reports, including a study on how Title I money is distributed based on geographic and poverty factors. In light of the new reporting requirements regarding homeless students, students in foster care, and children of active-duty personnel, ESSA also requires NCES to provide states with best practices for determining a valid, reliable, and statistically significant minimum number of students for subgroups.
- In 2017, NCES expects to complete a study of student access to digital learning resources outside of the classroom and the impact on education. Data for this study will come

primarily from existing NCES assessment surveys, including NAEP, the Trends in International Mathematics and Science Study (TIMSS), the Program for International Student Assessment (PISA), and the Program for the International Assessment of Adult Competencies (PIAAC).

• Recent NCES releases include the 50th issue of the Digest of Education Statistics (2015), Indicators on School Crime and Safety conducted in collaboration with the Bureau of Justice Statistics, and a free web-based school climate survey tool for schools to collect input from students, parents, teachers, and non-instructional staff. Ms. Spurlock reported that the TIMSS and PISA results are expected to be released towards the end of 2016.

Board members engaged in discussions. Chair Mazany noted the paradigm shift in how young people engage in digital learning and connectivity and cited Chicago's Connected City effort that provided over 250 computer sites for youth to access outside of school. He suggested that NCES consider partnering with groups such as the Council of the Great City Schools to emphasize that access to digital learning is more an issue of civic infrastructure rather than education. Board members thanked Ms. Spurlock for the update.

Recess for Committee Meetings

The first session of the May 13, 2016 Board meeting recessed at 9:51 a.m. for committee meetings.

Meeting Reconvened: CLOSED SESSSION

The Board reconvened in closed session at 12:30 p.m.

Closed Working Lunch Briefing and Discussion: 2015 NAEP Science Report Card

Under the provisions of exemption 9(B) of §552b of Title 5 U.S.C., the Governing Board met in closed session to receive a briefing and discuss the 2015 NAEP Science Report Card. Grady Wilburn, of NCES, provided an overview of the 2015 NAEP science results for the nation, 46 states, and the Department of Defense school system.

Mr. Wilburn noted that the assessment was administered between January and March 2015 to national samples of 115,400 4th graders, 110,900 8th graders and 11,000 12th graders. State-level sampling was conducted in 4th and 8th grades. Performance is reported as average scale scores (0-300 scale) and by NAEP achievement levels of basic, proficient and advanced.

A new science framework was introduced in 2009 which started a new trend line, as a result of which results cannot be compared with previous science assessments. In 2011, NAEP conducted a special administration of science at grade 8. Results are available for 2015 and 2009 and grades 4 and 12; grade 8 results are available for 2015, 2011, and 2009.

Mr. Wilburn provided an overview of the 2015 NAEP science assessment. The percentage distribution of assessment time in NAEP science was provided by content area and grade—physical science, earth and space sciences, and life science.

Mr. Wilburn highlighted student group scores at each grade by race/ethnicity and gender, school location, level of parental education, eligibility for national school lunch program, status as students with disabilities, and status as English language learners. Score changes from prior assessments and by content area at each grade were highlighted. Science results were presented by achievement level for basic, proficient, and advanced at each grade. Score changes in states and jurisdictions from earlier assessments were highlighted by grade level and student experiences at each grade.

Mr. Wilburn concluded his presentation by summarizing score changes from prior NAEP science assessment results. Changes in scores by race/ethnicity were also described.

Following presentation of the science results, Board members engaged in a question and answer session with Mr. Wilburn.

<u>Closed Working Lunch Briefing and Discussion: 2015 NAEP Mathematics Results for Puerto Rico</u>

Under the provisions of exemption 9(B) of §552b of Title 5 U.S.C., the Governing Board met in closed session to receive a briefing and discuss the 2015 NAEP Mathematics Results for Puerto Rico. Ms. Gina Broxterman, of NCES, provided the overview.

Ms. Broxterman noted that the Commissioner of Education Statistics is mandated to conduct biennial state academic assessments in reading and mathematics at grades 4 and 8, in all states, the District of Columbia, and the Commonwealth of Puerto Rico. However, the Department of Education has granted Puerto Rico an exemption from participating in the reading assessment because their language of instruction is Spanish. Therefore, NAEP only administers and reports on mathematics for Puerto Rico in grades 4 and 8.

The 2015 NAEP mathematics assessment was administered between January and March 2015 to 4,700 4th graders and 5,100 8th graders. Performance is reported as average scale scores (0-500 scale) and by NAEP achievement levels of basic, proficient and advanced. Changes in average scale scores for grades 4 and 8 from 2013 by assessment year beginning in 2000 were highlighted. Results of student performance by achievement levels for the nation and for the Commonwealth were also highlighted at each grade.

Ms. Broxterman highlighted findings from the 2016 digitally-based assessment (DBA) transition study for Puerto Rico. The goals of the study were as follows:

- Understand feasibility of assessment administration as part of the transition to DBA;
- Examine how students interact with technology; and
- Understand internet access and ability to complete questionnaires online.

Following the presentation, Board members engaged in a question and answer session with Ms. Broxterman.

The May 13, 2016 closed sessions concluded at 2:00 p.m.

Meeting Reconvened: OPEN SESSSION

The Board reconvened in open session at 2:30 p.m.

Equity, Evidence, and Innovation in STEM Education

Chair Mazany introduced the session by referring to the Department of Education Office of STEM's "Dear Colleague" letter that called for maximizing federal funds to enhance innovative STEM education for all students. He introduced the Office of STEM presenters, Melissa Moritz, Deputy Director of STEM, and Ramón Barthelemy, a Fellow from the American Association for the Advancement of Science, sponsored by the American Physical Society in American Institute of Physics.

Ms. Moritz began the presentation by providing a brief overview of the Office of STEM, which was formed by the Department of Education in 2014. She noted that the office's priorities include improving pre-kindergarten through postsecondary (P-20) STEM education for all children and working with as many programs as possible across the Department of Education and the federal government (including the National Science Foundation (NSF), the National Aeronautics and Space Administration (NASA), the National Oceanic and Atmospheric Administration (NOAA), and others) through the Committee on STEM Education. The STEM office focuses on improving equity in P-20 STEM education in urban and rural communities and provides additional support to students typically underrepresented in STEM. The office also supports educators who teach STEM subjects through different grant programs and by identifying and promoting innovative approaches and strategies to achieve these goals.

Mr. Barthelemy commented that STEM equity and civil rights are both a focus of the Department of Education. Across the country, African-Americans, Hispanics, and Native Americans have less access to STEM courses and there is a wide gap in access to informal STEM learning opportunities. The STEM office's goal is to bridge these gaps so that everyone has access to STEM education. The goal is not to make every student a scientist, but to provide them with critical STEM skills.

The presenters highlighted numerous initiatives conducted by the Office of STEM.

Board members then engaged in a discussion with the presenters, offering their insights on how the Office of STEM could support NAEP and promote STEM education in the field.

Strategic Plan: Overview and Breakout Session Goals

Chair Mazany noted the power of social media to build engagement and connect people. To illustrate the types of virtual connections and communications that can be fostered through social media, he highlighted examples of the Twitter feed from Chicago's On the Table event which engaged 55,000 people for a day on civic issues. He emphasized the value and impact of the Board making connections to the millions of parents, educators, schools, and education leaders across the country and the importance of including outreach activities in the draft Strategic Plan.

Lucille Davy, Vice Chair, explained that the Board would spend the remainder of the afternoon meeting in three small, cross-committee groups. The purpose of the breakout sessions was to provide Board members with an opportunity to talk through the draft Strategic Plan in small groups. She described the small group assignments and thanked Frank Fernandes, Anitere Flores, and Joe Willhoft for serving as the group facilitators.

Ms. Davy explained that the draft Strategic Plan reflects the Board's discussions to date, and incorporates input from external stakeholders and feedback from NCES. She noted that while the Board has spent a great deal of time discussing the high-level goals, more focused attention is needed on the actions identified to support those goals. The goal is to adopt the Strategic Plan at the August 2016 Board meeting; therefore the challenge for the Board members was to identify if they are ready to approve the Strategic Plan as currently drafted, and if not, what changes are needed to adopt the initiative.

Finally, Ms. Davy noted that the full Board will have the opportunity to reflect on the small group conversations overnight and further discuss their reactions and recommendations during the plenary session on Saturday morning.

Meeting Recessed for Breakout Sessions

The May 13, 2016, Board meeting recessed at 3:40 p.m. for the Governing Board members to participate in the cross-committee breakout groups to discuss the draft Strategic Plan.

Meeting Adjourned

The May 13, 2016, Board meeting adjourned at 5:00 p.m. upon the conclusion of the breakout sessions.

Meeting Convened: OPEN SESSION

The May 14, 2016, Board meeting convened at 8:32 a.m. in open session.

Briefing and Discussion: Governing Board's Preparedness Research Program

Chair Mazany opened the meeting with a video introduction to Hatsune Miku, a vocaloid representing the future of digital technology, robotics, and engineering. He remarked that technology has made today's world different, and the Governing Board's draft Strategic Plan begins to touch on these differences. The question is whether the Strategic Plan's approach is bold enough to address the future NAEP and the Governing Board. He lauded the Board's foresight over a decade ago to develop TEL and conduct preparedness research, noting that these investments are now coming into fruition and have provided great impact on the current relevance and value of the Nation's Report Card.

Ronnie Musgrove provided a historical overview of the Board's Preparedness Research Program which began nearly 15 years ago. He served as the Chair of the Board's NAEP 12th Grade Preparedness Commission (hereafter Commission).

After playing a short video produced by the Governing Board to set the context for the Board's preparedness research program, Mr. Musgrove spoke of the critical transition point students face in 12th grade. The high remediation rate in college shows the gap between what is being taught in high school and what is needed to be prepared for college, the workforce, and the military.

The Governing Board tasked the Commission on NAEP 12th Grade Assessment and Reporting (Blue Ribbon Panel) to review the purpose of the 12th grade NAEP assessments. In 2004, the Commission recommended that NAEP report on the preparedness of 12th graders for college, job training, and entrance into the military. It was an innovative concept at the time. The NAEP reading and math frameworks for grade 12 were reviewed and revised for this purpose. Upon the recommendation of the Technical Panel on 12th Grade Preparedness Research, the Governing Board began a validity research program. The first phase of studies was conducted and the 12th Grade Preparedness Commission was convened in 2011. In 2013, the 12th Grade Preparedness Commission submitted its report to the Governing Board. The second phase of studies is currently underway.

Mr. Musgrove summarized the Commission's work. One of the Commission's goals was to study and organize the research and develop a communication strategy to reach leaders in elementary, secondary, and higher education, the business community, and the civil rights and legislative policy arenas. The Commission convened seven symposia across the county with over 600 diverse stakeholders.

Mr. Musgrove invited several Board members who participated in the symposia to comment.

Mitchell Chester noted the importance of the work then and now, given the high remediation rates for college entrants. Fielding Rolston observed strong interest in developing a measure of preparedness during the symposia; he emphasized the value of NAEP reporting state-level results at grade 12 with the preparedness measure.

Andrew Ho provided an overview of the Board's 12th grade preparedness research conducted over the last decade. The Board first followed the 2004 Blue Ribbon Panel's recommendations to

view preparedness as academic preparedness for college, job training, and entrance to the military, but eventually focused on academic preparedness for college. This was defined as reading and math knowledge and skills needed to qualify for placement into entry-level college credit courses that meet general education requirements without the need for remedial coursework.

The Board gathered evidence from different sources to estimate the percentage of students academically prepared for college by triangulating the NAEP assessment with other tests that had established benchmarks. The Board's multi-method approach to this research fell into the following five categories:

- Content alignment to show how NAEP content relates to other tests of college readiness (such as the ACT, the SAT, and the ACCUPLACER which is used to determine whether a student needs to take remedial courses in college).
- Statistical relationships to show how performance on NAEP correlates with performance on these other tests (i.e., where benchmarks or cut scores on other assessments map to the NAEP score scales) and help determine what information should be derived if the cut scores were commensurate.
- The higher education survey to help answer questions such as which tests and cut scores are used for placement in higher education, and how that varies across colleges and states.
- Judgmental standard setting, which involved bringing together experts and stakeholders to figure out the point on the NAEP scale, the cut score, that experts judge as just "academically prepared" for college.
- Benchmarking to determine if it was possible for NAEP to distinguish between people who had college remediation and those that did not.

The purpose of this multipronged approach was to provide evidence to support a claim about the percentage of students in grade 12 who were academically prepared for college. Mr. Ho described some of the obstacles to conducting this full breadth of research that was originally called for by the Blue Ribbon Panel. The Commission was not able to explore a preparedness measure for the military because it could not find the necessary partners with access to the data. Though several research studies explored the use of NAEP for academic preparedness for job training, the Committee on Standards, Design and Methodology (COSDAM) determined that the extent to which NAEP could inform academic preparedness for job training was limited and not promising. The Board ultimately decided to focus the validity argument on academic preparedness for college using the statistical relationships between NAEP and other tests, including the SAT, ACT, and data from Florida.

Mr. Ho noted that the benchmarking study was unsuccessful due to a low response rate from college freshmen in Texas who were recruited to take NAEP. The results from the standard setting panels were mixed because there was no consensus on what the minimum cut score should be for determining just academically prepared for job training or college. These results

reflect the general confusion in the field about what college preparedness is. The postsecondary survey conducted on behalf of the Governing Board found that tests and cut scores for placement into non-remedial courses vary considerably from state to state and school to school. This finding was a valuable contribution to the field.

In 2013, the Board published a summary report and a validity argument to support the use of NAEP grade 12 reading and mathematics results for estimating the percentage of students academically prepared for college. The validity argument supported claims on a national level but not at the state level or by different subgroups. The validity argument was reviewed positively by many experts and approved by the Board. When the 2015 Grade 12 results were recently released, Mr. Ho remarked that the claim that 37 percent of grade 12 students in reading and math were academically prepared for college was of great interest to the media.

Mr. Ho explained that the Board's 12th grade preparedness research program is not complete. Currently underway are longitudinal research studies of students who took NAEP in grade 8 or grade 12 in a few states to help answer questions, such as "How does NAEP relate to future outcomes?" A NAEP and ACT national linking study is planned. However, no research is underway to determine academic preparedness for job training or for entrance into the military.

Mr. Ho noted that the Board needs to decide what further research should be conducted on the topic of 12th grade preparedness, to include the possibility of reporting at the state and subgroup level; if additional 8th grade research should be conducted; whether the Board wants to pursue job training and/or the military preparedness research in spite of COSDAM's concerns, etc. He noted that the Board should also consider the related policy decisions, such as restoring grade 12 state-level assessments on the NAEP Assessment Schedule to support this work, and how this relates to the Board's Strategic Plan and mission.

Board members provided their perspectives on the questions and issues.

Jim Popham observed that the academic preparedness estimate provides the Board with the possibility of truly making a difference through its reporting, especially with the power of state data, to influence action.

Mitchell Chester observed that there have been numerous robust studies on this topic to support states' developments of college and career ready standards and assessments and there is tremendous convergence around the estimate of approximately 40 percent of students who are college ready, including NAEP's 2015 grade 12 results.

Mr. Chester urged the Board to consider exploring what the 8th grade NAEP results, and possibly 4th grade results, can signal about 12th grade performance and college readiness both because 12th grade is too late for elementary and secondary interventions and also because NAEP conducts state level testing in those grades every two years.

Joe Willhoft commended the Board for its seminal work on college readiness which heavily informed development of assessments by the Smarter Balanced and PARCC. As a result, states have adopted more rigorous standards for all grades. Children in the majority of states are taking

assessments that are concretely tied to the work of the Governing Board. He suggested the Board consider partnering with these two consortia to further the validity evidence for academic preparedness for NAEP, Smarter Balanced and PARCC.

In response to Mr. Willhoft's comments, Ms. Carr noted that NCES approved the NAEP Validity Panel's proposal to conduct linking studies with two Smarter Balanced states, two PARCC states, and two other non-consortia states.

Carol Jago remarked that she participated in one of the job training studies, and agreed with the recommendations of the report to abandon this aspect of preparedness assessment. She agreed with Mr. Chester that there is opportunity to explore preparedness in grade 8 and that state results have the potential to drive schools to do more to address the issue of college preparedness.

Dale Nowlin said that the challenge for the Board is to educate parents about what the "college ready" score means and NAEP needs state level assessments to garner public interest in the results and their implications.

Tonya Matthews noted that the skills students need for workforce readiness and college readiness are becoming identical, and it may be time to think about student preparedness in a different way. Ms. Matthews asked if the NAEP assessments were predictive, so that the Board could use 4th and 8th grade results to estimate how 12th graders will perform.

Mr. Ho responded that there is an opportunity for the Board to think more strategically about partnerships with states and making grade 4 and grade 8 longitudinal linkages so long-term predictive statements can be made.

Linda Rosen voiced her support for exploring academic preparedness estimates in 8th grade, She referenced her work on the American Diploma Project in early 2000, where she was surprised to learn that students needed the same things for a career as for college. She noted there is a need to better articulate what it is high school students should be able to do so that when they graduate, they are prepared to perform living wage jobs.

Cary Sneider suggested the Board consider conducting qualitative studies to explore how NAEP's achievement levels descriptions are aligned with experts' notions of college and career readiness.

Mr. Ho noted that the panel reviewed more qualitative data than quantitative data when it concluded that claims about career readiness based on NAEP data could not be substantiated. If the Board determines that more evidence should be collected in regards to career readiness, COSDAM would be happy to reevaluate its recommendation.

Mr. Geringer stated that while NAEP at 12th grade is an indicator of preparedness, it is not well validated as a predictor of success. A better predictor of success is students' enrollment in at least 15 credit hours of college courses or equivalent. He suggested that in addition to

longitudinal studies, the Board should identify partners and alternative ways to improve the nation's ability to predict if students will succeed after high school to benefit students sooner.

Joseph O'Keefe noted that there is skepticism around how higher education institutions assess academic performance and the Board should keep this in mind as it explores this body of work. He added that the high school transcript studies should be included as a way to look at college preparedness, in addition to the stream of research now being conducted.

Mr. Willhoft remarked that the diversity of careers makes it extremely difficult to determine the level of proficiency. For example, David Conley, from the University of Oregon's EPIC Center, found that high school graduates typically only needed 8th grade math to enter a licensure program.

Mr. Musgrove acknowledged the disconnect between academia and the real-world, and the two important but often conflicting goals to decrease high school dropout rates while also increasing expectations for students to graduate high school prepared. Ultimately students need to be prepared. He referred to the Strategic Plan draft and the Board's internal debates about how NAEP can be used appropriately and better understood by the public. He advised the Board to always have clear and understandable explanations of our work to the public, to explain why we are cautious or limited in our reporting messages.

Chair Mazany remarked that in Chicago there are 50,000 disconnected, out-of-school youth, who, if trained, could fill thousands of currently open jobs. This would add over a billion dollars to the local economy and reduce the need for a billion dollars of required services and supports. There is a compelling interest to close this gap.

Frank Fernandes noted that in schools, readiness discussions focus on promotion to the next grade level, which involves not only academic skills but also other qualities, such as motivation, hard work, and perseverance. Academics, separate from personal traits, are just half of what should be considered. As the Board develops its Strategic Plan, he suggested the Board consider what is in the Board's purview to assess, and how linking studies may help the Board develop a more complete answer of readiness.

Chair Mazany closed the session by noting that the discussion was the perfect segue to the Strategic Planning session later in the morning.

Meeting Recessed

The May 14, 2016 Board meeting recessed at 9:53 a.m.

Meeting Reconvened

The May 14, 2016, meeting reconvened at 10:00 a.m.

Committee Reports and Board Actions

The standing committee leaders summarized the discussions of their respective committees, and their reports were accepted unanimously by the Board.

Executive Committee

Lucille Davy, Vice Chair, reported that in the Executive Committee meeting, Chair Mazany announced that Anitere Flores would be polling Board members about the annual Vice Chair nominations for the term starting October 1, 2016, through September 30, 2017. The committee was briefed on the history of the Board's achievement level setting work, and given an update on the current evaluation of the NAEP achievement levels. The Committee discussed the Strategic Plan and had an enthusiastic discussion in support of Ms. Carr's proposal for new NAEP research grants.

Assessment Development Committee (ADC)

Cary Sneider, Vice Chair of the ADC, reported that the committee met in closed session all day on Thursday, May 12, and in a partially closed session on May 13.

The committee discussed the issues raised in the Governing Board hosted session at the National Council on Measurement and Education (NCME)— debating if changes are needed to the NAEP mathematics framework, and the related paper by Achieve on the topic. ADC decided to explore commissioning a comprehensive study of all state mathematics standards, the Common Core, and state science standards (recognizing that skills are being taught in multiple subject areas), and comparing them with the NAEP mathematics framework. The use of dynamic frameworks also will be explored.

The committee reviewed 700 NAEP items in U.S. history, civics, geography, reading, and mathematics, along with a number of reading passages, and voted unanimously to approve the items with changes to be communicated in writing to NCES, under ADC's delegated authority.

Committee on Standards, Design, and Methodology (COSDAM)

Andrew Ho, Chair of COSDAM, highlighted the three presentations made to the committee.

- 1) George Bohrnstedt of American Institutes for Research (AIR) reviewed an ongoing study on computer access and familiarity with digital technology that may affect NAEP results with the transition to digital-based assessments.
- 2) Fran Stancavage, from AIR, gave a presentation on the NAEP validity framework report developed in response to the 2009 evaluation of the NAEP program. The report

- highlighted the gap between where NAEP currently is and where the standards for the field are with respect to validity.
- 3) Sharyn Rosenberg, Board staff, and Bill Tirre, NCES, summarized findings and actions from studies that linked NAEP with other assessments. COSDAM members were generally supportive of these linking studies, and expressed interest in pursuing links that could better inform instructional practices.

COSDAM members discussed the Board developing its own statement of intended uses for NAEP that could be used to guide the outreach efforts of the Strategic Plan.

Reporting and Dissemination Committee (R&D)

Rebecca Gagnon, Chair of the R&D Committee, reported that the committee considered revising the reporting, release, and dissemination policy statement and guidelines to represent current practices and result in predictable releases so media and stakeholders know well in advance when to expect NAEP results.

The Committee reviewed national research conducted by the Board's communications contractor, which found 35 major assessment literacy campaigns. The Committee decided to utilize the findings of the Board's Assessment Literacy Initiative effort and insights from the FrameWorks Institute to craft more effective and targeted outreach to various stakeholder groups.

NCES and ETS staff described the development and review process for the 2017 core contextual variables. After reviewing a release plan proposed by Governing Board staff for the 2015 NAEP Science Report Card, the committee unanimously recommended its approval for the Board's consideration.

ACTION: Approval of the NAEP 2015 Science Report Card Release Plan

Ms. Gagnon moved for approval of the release plan for the NAEP 2015 Science Report Card. The motion was seconded by Ms. Davy and was passed unanimously by the Board. The release plan is appended to the Committee Report.

Nominations Committee

Fielding Rolston reported on the status of the nominations for Board terms beginning October 1, 2016, noting that the nominations are on track for timely appointment by the Secretary and two of the six open positions do not have incumbents (e.g. the two state legislator positions). The committee reviewed plans to advertise and promote openings for the next nominations cycle for terms beginning in October 2017.

Update and Discussion on the Governing Board's Strategic Planning Initiative

Lucille Davy noted that the breakout sessions on Friday had substantive discussions which have evolved the Board's thinking on the Strategic Plan. She thanked the facilitators Frank Fernandes, Anitere Flores, and Joe Willhoft and the staff notetakers Michelle Blair, Lily Clark, and Laura LoGerfo for their work during the breakout sessions. She asked each of the groups to summarize the big takeaways from their discussions.

Group Participants: Joe Willhoft - facilitator, Alberto Carvalho, Rebecca Gagnon, Jim Geringer, Carol Jago, and Chasidy White.

The group's discussion initially centered on the original reasons why the Strategic Plan was developed. These included the budget deficit, uncertainty about NAEP's relevance compared to Common Core, and the lack of awareness of NAEP. Today the Governing Board is working vigilantly to increase awareness of NAEP; it knows that NAEP is relevant, and there is more stability due to a larger budget, so the context in which the Strategic Planning Initiative was conceived has changed. This realization challenged the group to question what in the Strategic Plan is innovative and will focus the Governing Board on the work it wants to do. The group recommended that the vision statement be revisited and made bolder. The plan needs to reflect the Board's conversations today related to career and college readiness, the expectations of 12th grade assessments, and NAEP's impact on progress.. The group pointed out that NAEP's current focus on assessing and reporting is not bold enough; members urged the Board to consider how it will impact progress of students, and if advocacy is appropriate. The group members suggested that at a minimum, the Board conduct research to demonstrate how NAEP has been instrumental in moving the quality of education and achievement forward. If the Board decides that this is the path it wants to take, the Strategic Plan needs to be substantially revised. If not, the plan as written is sufficient, but unfulfilling.

Group Participants: Anitere Flores – facilitator, Mitchell Chester, Shannon Garrison, Ronnie Musgrove, Jim Popham, Fielding Rolston, and Cary Sneider.

This group shared similar views to those of the previous group. The members expressed concern about whether the goals in the Strategic Plan were the right goals and if they spelled out what the Board wants to accomplish. The members appreciated the opportunity to work together on the plan. The group had crafted some suggested edits to the plan, including the deletion of one goal, and reordering and rewriting others, which were documented by the notetaker. Although the Board is now focused on the Strategic Plan in a deeply thoughtful way, the group felt that August would be too soon to approve the Strategic Plan given the extent of changes still desired in the plan.

Group Participants: Frank Fernandes - facilitator, Andrew Ho, Tonya Matthews, Dale Nowlin, Joe O'Keefe, and Linda Rosen.

This group found the Strategic Plan as drafted to be overwhelming; they suggested the Board have a much shorter Strategic Plan and then a separate, longer document for the actions and metrics. The Board members thought the plan needed to present a bigger picture vision. It was

noted that the Board has not conducted an overall assessment of the infiltration and impact of all of its assessments, and this should be done to create a baseline to inform the Strategic Plan. Although the Board is constrained in what it can do in several areas, this should not limit its vision of what can be done. The group also thought the theory of action should be more clearly spelled out and the goals need to be connected to the strategies. This will provide a good, clear rationale for the strategies and objectives, and will determine whether or not the action accomplished is what was intended. The group also suggested the need for more time to develop the plan and a task force with fewer Board members to help with drafting a plan in the interim.

Ms. Davy noted that the sessions provided an opportunity for constructive and thoughtful feedback allowing members to refocus and view the Strategic Plan in a different way. She suggested that the timeline for approving the Strategic Plan in August 2016 be extended, but not beyond 2016. She also recommended keeping the small cross-committee format for discussion as it was very effective and widely praised by Board members.

Chair Mazany noted that the world has shifted since the seeds of the Strategic Plan were planted. The process of developing the Strategic Plan has enabled the Board to get connected to the work Ms. Carr has been leading and to give context to the Board's work. He suggested that the Executive Committee work between now and August to set the stage for version 2.0 and deliver a final plan that could be adopted in November 2016. Mr. Mazany noted that this extension of time is well timed for the start of the Board's next term.

Meeting Adjourned

Chair Terry Mazany adjourned the meeting at 12:00 p.m.

July 25, 2016

Terry Mazany, Board Chairman

July 25, 2016

Date

Resolution in Memory of Mary Lyn Bourque

Approved Unanimously May 13, 2016

Whereas Mary Lyn Bourque served as the first Assistant Director for Psychometrics of the National Assessment Governing Board;

Whereas during her years of service, 1989 to 2000, Dr. Bourque was the Board's chief advisor on the technical soundness and design of the National Assessment of Educational Progress (NAEP); led the conceptualization and development of achievement levels, which have become widely referenced standards of academic performance; played a key role in the long-term redesign of the National Assessment, assembling a team of experts and making major contributions to its work; published in major academic journals; and held key posts in national educational measurement organizations;

Whereas Dr. Bourque led the Governing Board's pioneering work in setting achievement levels to provide information on what students should know and be able to do; and managed the national panels comprised of teachers, other educators, and members of the public that recommended seven sets of achievement levels to the Governing Board—in mathematics, reading, science, writing, civics, U.S. history, and geography;

Whereas she was thoughtful and clear-spoken in developing and explaining policy recommendations, ardent and effective in defending Board decisions, and adept and creative in developing solutions;

Whereas Dr. Bourque provided her technical expertise as a testing and measurement expert in her consulting career after leaving the Governing Board, to include work as principal drafter of the NAEP Background Information Framework, which continues to guide the use of contextual variables in NAEP; and was always well organized, detail oriented, warm to colleagues and friends, generous and patient with those asking her opinion or advice—she accomplished much and will be greatly missed;

Therefore, be it resolved that the National Assessment Governing Board expresses grateful recognition of the important contributions made by Mary Lyn Bourque and conveys its deep sorrow and sincere sympathy to her family and friends upon her death; and

Be it further resolved that a copy of this resolution be entered permanently into the minutes of the National Assessment Governing Board.

National Assessment Governing Board Executive Committee Report of May 12, 2016

Executive Committee Members: Terry Mazany (Chair), Lucille Davy, Shannon Garrison, Rebecca Gagnon, Andrew Ho, Joseph O'Keefe, Fielding Rolston, Cary Sneider.

Other Board Members: Mitchell Chester, Frank Fernandes, Jim Geringer, Jim Popham, Linda Rosen, Joe Willhoft.

Governing Board Staff: Bill Bushaw (Executive Director), Mary Crovo (Deputy Executive Director), Michelle Blair, Lily Clark, Laura LoGerfo, Tessa Regis, Sharyn Rosenberg.

NCES Staff: Peggy Carr (Acting Commissioner), Pat Etienne, Eunice Greer, Lauren Harrell, Dan McGrath, Michael Moles.

Other Attendees: AIR: George Bohrnstedt, Kim Gattis, Fran Stancavage, Kyle Stickles. ETS: Jay Campbell, Amy Dresher, Karen Wixson. HumRRO: Hillary Michaels, Lauress Wise. Pearson: Scott Becker. Westat: Chris Averett.

1. Welcome and Agenda Overview

Chair Mazany called the meeting to order at 4:30 p.m. Mr. Mazany provided an overview of the agenda. He observed that the entire Executive Committee meeting would occur in open session, as the recent NAEP appropriations increase relieved the Committee from needing a closed session to review the NAEP budget and Assessment Schedule at this meeting. He noted that the next quarterly Board meeting will occur in Chicago and commented on the value of the Board meeting in locations throughout the country to achieve the Board's outreach vision identified in the draft Strategic Plan.

2. Nomination Process for Board Vice Chair

Mr. Mazany began the Governing Board's nomination process for its Vice Chair for the term extending from October 1, 2016 – September 30, 2017. He praised Vice Chair Lucille Davy for her substantive role in guiding the Board's Strategic Planning Initiative over the past year.

Chair Mazany provided the Committee with an overview of the Vice Chair nomination process, which is conducted annually. Per Board tradition, he recused himself from the selection process and appointed outgoing Board member Anitere Flores to poll members individually to determine the nominee. Mr. Mazany requested that this informal polling be completed in time for the Governing Board to vote on the nominee at the August 2015 Board meeting.

3. Governing Board Updates

Educational Policy Updates

Lily Clark provided the Executive Committee with education policy updates since the last meeting. She noted that while Secretary John King was confirmed by the Senate faster than expected on March 14, 2016, it was looking unlikely for passage of the NAEP reauthorization bill (i.e. the Strengthening Education Through Research Act) during this Congress. Federal education policy discussions have focused on the Department of Education's regulations for the Every Student Succeeds Act, which Secretary King anticipates finalizing in the fall even with the ongoing scrutiny from Congress.

Evaluation of NAEP Achievement Levels

Mary Crovo and Sharyn Rosenberg provided the Committee with an overview of the Governing Board's 26-year history of achievement levels setting. They noted the initial controversy of what now has become commonplace in educational assessment: using multiple achievement levels to report student performance. Over the years the Board has modified its methodology to determine NAEP achievement levels. By statute, the NAEP achievement levels are considered "trial" until the Commissioner of the National Center for Education Statistics removes the trial status, upon consideration of an independent evaluation of the achievement levels commissioned by the Institute of Education Sciences (IES). Multiple evaluations have been conducted since the achievement levels were put in place, and the trial status has remained.

In 2014, IES's National Center for Education Evaluation contracted with the National Academy of Sciences (NAS) to conduct an independent evaluation of the NAEP achievement levels for reading and mathematics in grades 4, 8, and 12. The Governing Board and NCES presented factual information and historical documents to NAS to inform their evaluation but otherwise were not involved in the evaluation process. The Governing Board is statutorily required to provide a response to the report's recommendations within 90 days to the Secretary, the Senate Committee on Health, Education, Labor and Pensions and the House Committee on Education and the Workforce.

Once the NAS evaluation is published, the Governing Board will develop its required response to Congress with leadership from the Committee on Standards, Design and Methodology. Ms. Crovo noted that the Board should anticipate more discussion on this topic at its August 2016 quarterly meeting.

4. Strategic Planning Initiative

Vice Chair Lucille Davy provided an overview of the Strategic Plan discussions scheduled for this May Board meeting, noting the cross-committee breakout sessions on Friday to be followed by a plenary discussion on Saturday. She emphasized the importance of Board members engaging in the substance of the draft Strategic Plan to determine if the Board will be ready to approve the plan in August and, if not, what changes the Board desires for the document.

Chair Mazany underscored the intention to focus on the goals, strategies, and actions in the draft Strategic Plan and identify any points that need to be clarified (as opposed to wordsmithing the document).

Shannon Garrison commented that she remained confused about the categories of Goals, Strategies, and Actions used in the draft Strategic Plan. She recommended defining those levels to distinguish them and ensure that the labels are being applied consistently in the document.

The Executive Committee engaged in a brief discussion of Ms. Garrison's comment and noted that all Board members will have the opportunity to discuss this feedback in depth during Friday's breakout group sessions.

5. NAEP Research Grants

Acting NCES Commissioner Peggy Carr provided the Executive Committee with an overview of her draft proposal to reinstate a NAEP research grants program. For 20 years, NAEP had secondary research grants and one full-time employee to run the program. The research resulting from these grants has offered successful new strategies for the NAEP program (e.g. one study resulted in a method to reduce measurement error that is still in use by NAEP) and important findings to improve education (e.g. the Council of the Great City Schools' first analyses of the Trial Urban District Assessment data). Following the model of IES, NCES is hoping to develop training programs on using NAEP data.

Ms. Carr proposed three components of the program: 1) *NAEP Secondary Analysis Grants* to do advanced research with NAEP data; 2) *Pre-Doctoral Fellowship Grants* to conduct exploratory analyses to improve NAEP methods; and 3) *NAEP Internship Program* to support short-term studies linking NAEP to other administrative data sets.

In response to a question from Joseph O'Keefe, Ms. Carr explained that these research grant programs would be funded through the NAEP program to ensure relevance of the research activities and likelihood of benefit to improve the NAEP program. She noted that the program would be administered through the National Center for Education Research, a separate component of IES, though NCES would have a Grants Director involved.

The Executive Committee and Board members present were enthusiastic about Ms. Carr's proposal and offered several points for her consideration. Board members expressed a desire to have a role in identifying research topics for the grants. They recommended structuring the grants to ensure there is a final reporting/feedback loop for the Department and the public. The Committee discussed the benefit of the grants promoting awareness and use of the public and restricted NAEP datasets by education researchers.

Chair Mazany identified the potential opportunity to use the grants program to diversify the field of education research by exploring how other fields, such as data analytics, could inform NAEP.

Ms. Garrison suggested that the NAEP Research Grants be branded as a prestigious and distinguished awards program. She noted that the internship program might appeal to a broader audience than students, as teachers may also be interested in a summer program to develop new skills.

Ms. Carr was receptive to the Board member feedback, noting that she would continue to consult with the Board on the design of the NAEP research grants program, including providing input on the Requests for Applications (RFA) and the grant priorities.

I certify the accuracy of these minutes.	
Leng Mayay)	
Leny/ Mayay/	June 15, 2016
Terry Mazany, Chair	Date

Mr. Mazany adjourned the Executive Committee meeting at 6:00 p.m.

National Assessment Governing Board Assessment Development Committee

Report of May 12, 2016

Closed Session 8:30 a.m. to 3:30 p.m.

Assessment Development Committee (ADC) Members: Shannon Garrison (Chair), Cary Sneider (Vice Chair), Frank Fernandes, Carol Jago, Dale Nowlin, Chasidy White

Governing Board Staff: Mary Crovo and Michelle Blair

National Center for Education Statistics (NCES) Staff: Elvira Germino Hausken and Eunice Greer

Other Attendees: AIR: Kim Gattis, Kyle Stickler. ETS: Jay Campbell, Rebecca Moran, Luis Saldivia, Karen Wixson. HumRRO: Hilary Michaels. Pearson: Scott Becker. Joined via teleconference from ETS: Dave Lopez, Brent Sandene, Alexandra Walrath

In accordance with the provisions of exemption (9)(B) of Section 552b(c) of Title 5 U.S.C., the Assessment Development Committee (ADC) met in closed session on May 12, 2016 from 8:30 a.m. to 3:30 p.m. to review secure NAEP test questions in reading, mathematics, civics, U.S. history, and geography. This session included review and discussion of secure NAEP test items that have not yet been publicly released.

Review of NAEP Items

The ADC reviewed secure NAEP test items in the following content areas and grade levels:

- Reading items for grades 4 and 8
- Mathematics items for grades 4 and 8
- Civics, Geography, and U.S. History items for grade 8

During this closed session, the ADC reviewed approximately 700 NAEP items between 8:30 a.m. and 3:30 p.m. ADC members had a number of comments on these items in terms of changes, deletions, and items the Committee felt represented high-quality measures of the targeted content objectives. Throughout the review session, NCES staff and NAEP contractors provided clarification in response to ADC comments and questions. Governing Board staff recorded the detailed ADC comments in each subject area. [Note: See the ADC action on this item review in the Friday, May 13, 2016 report.]

Report of May 13, 2016

Assessment Development Committee (ADC) Members: Shannon Garrison (Chair), Cary Sneider (Vice Chair), Frank Fernandes, Carol Jago, Dale Nowlin, Chasidy White

Governing Board Staff: Mary Crovo

National Center for Education Statistics (NCES) Staff: Elvira Germino Hausken, Eunice Greer, Holly Spurlock

Other Attendees: AIR: Kim Gattis. CCSSO: Scott Norton. CRP: Subin Hona. ETS: Jay Campbell, Rebecca Moran, Karen Wixson. Fulcrum: Scott Ferguson. Hager Sharp: Joanne Lim. HumRRO: Sheila Schultz. Optimal Solutions: Brian Cramer. Pearson: Cathy White. Westat: Chris Averett

ADC Chair Shannon Garrison called the meeting to order at 10:05 a.m. Ms. Garrison reviewed the agenda and asked participants to introduce themselves.

The Committee then passed a motion, under its delegated authority from the Board, on the NAEP items and passages reviewed during the ADC's Thursday, May 12, 2016 closed session.

ACTION: The Assessment Development Committee approves NAEP items in reading and mathematics at grades 4 and 8; and civics, geography, and U.S. history items at grade 8 with changes to be communicated in writing to NCES.

Update on NAEP Topics

• Technology and Engineering Literacy (TEL) Report Release Activities

ADC Vice Chair Cary Sneider presented an update on various activities planned for the NAEP Technology and Engineering Literacy (TEL) Report Card release. The release will occur on May 17 in Detroit, Michigan. Governing Board member Tonya Matthews is CEO of the Michigan Science Center, which is hosting the May 17th release events. There will be several panels of experts who will comment on the TEL results including representatives from the research, policy, higher education, media, and business communities. A panel of students will also provide their insights after having taken one of the TEL tasks the previous day. All of the events on May 17 will be webcast live, and this recording will be archived on the Governing Board's website.

Mr. Sneider then described the May 18th TEL event that he will coordinate at Wayne State University. During that event teachers, curriculum experts, policymakers, researchers, and business representatives will meet in four break-out groups to engage in hands-on exploration of TEL data on the NAEP website. Participants will then convene in a plenary session to discuss implications for instruction, policy, and out-of-school learning contexts. The break-out and plenary discussions will be recorded to produce a highlights video of key findings.

NAEP Mathematics Framework and the Common Core State Standards

The ADC reviewed and discussed a meeting summary developed by Governing Board staff about a session at the April 2016 annual meeting of the National Council on Measurement and Education (NCME). The session featured two prominent panelists with differing views on the issue of whether the NAEP Mathematics Framework should be changed to align with the Common Core State Standards in Mathematics.

Michael Cohen of Achieve and Chester Finn of the Fordham Institute engaged in the debate, which was introduced by the Board's Executive Director Bill Bushaw and moderated by Board Chair Terry Mazany. Following remarks by Mr. Finn and Mr. Cohen, there was an extended question and answer session with the audience. In addition, Mr. Cohen recently provided a paper on the alignment between NAEP's Math Framework and mathematics standards adopted by nine states.

The ADC engaged in a discussion of the Mathematics Framework topic, noting that there were many important and challenging issues raised in the NCME session. Members reiterated that mathematics is a priority for NAEP. The Committee expressed interest in learning more about studies being planned by the NAEP Validity Studies Panel related to the NAEP Math Framework and state math standards. ADC members felt that these studies will help inform the Board's decision regarding the NAEP Math Framework.

ADC members concluded that the Board should not make a decision to change the NAEP Math Framework based solely on the Common Core State Math Standards. The Committee also discussed how the issue differs at grade 4 since the curriculum in that grade is so integrated. For example, collecting data and developing and interpreting graphs are important skills taught in science and social studies instructional units. These data and statistics topics are also taught as part of English/language arts when students read informational texts that contain data displays of various types. Studies that compare only state math standards to NAEP at grade 4 do not present the full instructional picture at this grade level.

ADC members noted that while the Achieve study of nine states was interesting, a detailed study is needed comparing all state mathematics standards to NAEP's Math Framework. State science standards should also be examined, with a focus on the data and statistics area. The Committee discussed the concept of "dynamic frameworks," which has been raised by COSDAM Chair Andrew Ho. Having dynamic frameworks may allow for more frequent updates to NAEP frameworks while maintaining trend. The ADC looks forward to further updates and discussion of this mathematics topic at their August 2016 meeting.

• NAEP Item Review Schedule

Mary Crovo provided an update on the NAEP item review schedule provided in the Board materials, which covers a period from January to August 2016. There are numerous cognitive and contextual items in various subjects and grades scheduled for ADC review this summer. The ADC will be engaged in teleconference and in-person reviews in the next several months.

Closed Session: 10:45 a.m. - 12:10 p.m.

Assessment Development Committee (ADC) Members: Shannon Garrison (Chair), Cary Sneider (Vice Chair), Frank Fernandes, Carol Jago, Dale Nowlin, Chasidy White

Governing Board Staff: Mary Crovo

National Center for Education Statistics (NCES) Staff: Elvira Germino Hausken, Eunice Greer, Holly Spurlock

Other Attendees: AIR: Kim Gattis. CRP: Subin Hona. ETS: Jay Campbell, Rebecca Moran, Karen Wixson. Fulcrum: Scott Ferguson. Hager Sharp: Joanne Lim. HumRRO: Sheila Schultz. Optimal Solutions: Brian Cramer. Pearson: Cathy White. Westat: Chris Averett

In accordance with the provisions of exemption (9)(B) of Section 552b(c) of Title 5 U.S.C., the Assessment Development Committee (ADC) met in closed session on May 13, 2016 from 10:45 a.m. to 12:10 p.m. to review secure NAEP reading passages. This session included review and discussion of secure NAEP reading passages that have not yet been publicly released.

Review of NAEP Reading Passages for Grade 12

The ADC met in closed session to review secure NAEP 12th grade reading passages for pilot testing in 2019.

Open Session: 12:10 -12:15 p.m.

I certify the accuracy of these minutes.

Open Session Action: The Assessment Development Committee approves the NAEP reading passages at grade 12 with changes to be communicated in writing to NCES.

Shannon Garrison, Chair June 3, 2016
Date

National Assessment Governing Board

Reporting and Dissemination Committee

Report of May 13, 2016

Reporting and Dissemination Committee Members: Rebecca Gagnon (Chair), Father Joseph O'Keefe (Vice Chair), Alberto Carvalho, Anitere Flores, Terry Mazany, Tonya Matthews, Ronnie Musgrove

Governing Board Staff: Bill Bushaw, Lily Clark, Stephaan Harris, Laura LoGerfo

NCES Staff: Halima Adenegan, Jamie Deaton, Dan McGrath, Holly Spurlock, Amiee Winchester

Other Attendees: AIR: Cadelle Hemphill. CCSSO: Nathan Olson. CRP: Edward Wofford. DCG: Meredith Davis, Chelsea Radler. ETS: Jonas Bertling, Robert Finnegan, Lisa Ward. Hager Sharp: Debra Silimeo, Kelle Wyatt. HumRRO: Hillary Michaels. Optimal Solutions: Sam Toriola. Pearson: Llana Williams. Reingold: Greg Orrison. Westat: Chris Averett. Widmeyer: Siobhan Mueller

Reporting and Dissemination Chair Rebecca Gagnon called the R&D Committee to order at 10:15 am and turned to the Committee's meeting agenda.

Release Plan for NAEP Science Report Card

The Committee reviewed a release plan proposed by staff for the 2015 NAEP Science Report Card, which will have results nationwide and for 47 states for grades 4 and 8, and nationwide results for grade 12.

Stephaan Harris, Board staff, discussed highlights of the plan, which includes having an in-person release event in a venue that complements the subject matter, either in or out of the Washington, DC area. The plan also calls for efforts to use strategies such as in-person meetings with partner organizations far in advance to build excitement for and interest in the report. The plan also calls for post-event activities such as infographics and online chats to extend the life of the report.

Mr. Harris said that staff is open to suggestions from Committee members on venues for the release. Committee members Sen. Anitere Flores and Alberto Carvalho both mentioned a science museum that was being built in Miami and slated to finish in the fall as a possibility.

ACTION: R&D Vice Chair Father Joseph O'Keefe moved the release plan for the 2015 National Assessment of Educational Progress in Science for action by the full Governing Board, which Ronnie Musgrove seconded. The Committee unanimously approved the motion and recommended approval to the full Board on Saturday, May 14, 2016.

Revisiting Board Reporting Policy and Guidelines

Laura LoGerfo, Board staff, invited Dan McGrath of NCES to launch a 'blue sky, green field' conversation among the Committee about revising the 2006 *Reporting, Release, and Dissemination of NAEP Results Policy Statement*. Questions to prompt the conversation were included in the Board materials and offered a wide range of options from which to brainstorm big, bold, broad changes to the reporting policy.

One of these questions asked about the value of curating the overwhelming amount of data typically released to focus people's attention on the most important NAEP results. This may improve user-friendliness of the Report Card site but sacrifice transparency. Posting all the data may be easier to accomplish than selecting results to highlight, but may mean that less is understood by the audience.

Another question considered the potential of linking to other data on a NAEP Report Card release site. Currently, each Report Card release site includes data from only the specific subject in the specific year that is being released. Instead, linking Report Card data by topic or across years may provide a new perspective on old data and enrich the reporting of new data. For example, the NAEP grade 12 results, released at the end of April, could have been displayed as part of a "Class of 2015" presentation—adjacent to results from NAEP grade 8 four years ago and NAEP grade 4 eight years ago. That presentation would have suggested that this Class of '15, as eighth-grade students four years ago had posted the highest scores for NAEP grade 8, as had fourth-grade students eight years ago (again, today's twelfth-graders). Such an aligned presentation may have sparked new questions about high school and what factors may be driving these results.

In addition, there are other federal education data sets that collect data from nationally representative groups of students which could provide depth and breadth to the NAEP results, as long as such data sets proved relevant to NAEP and reflected best practices of data collection and analysis.

Committee member Tonya Matthews inquired how, when, and why would NAEP link to other data? She explained that these other data may not be as "Teflon" as NAEP is, which might hurt the reputation of NAEP. Ms. Matthews supported the idea of releasing other findings at the same time as a NAEP release to develop a deeper, broader conversation with stakeholders.

R&D Committee Vice Chair Father Joseph O'Keefe warned that linking NAEP to the Trends in International Mathematics and Science Study is no facile task and involves many complexities, which were outlined to Committee on Standards, Design and Methodology in a report. Harking back to Holly Spurlock's NCES update at the Friday morning plenary session, Father O'Keefe asked how NAEP can disseminate information coincidental to NCES' annual *Digest of Education Statistics* release, especially among the reports published in the Digest that use NAEP data.

Tonya Matthews returned to the issue of selecting results to highlight—any curation of results means that the presentation necessarily rejects neutrality. Thus, the Governing Board must ask itself what level of policy setting and recommending by the Board is acceptable. A dump of all the data on a release site means that there is no agenda behind the release of those data. Highlighting some of the data, but not all the data, means that the presentation is not neutral. She suggested that the Board seek organizations,

such as Change the Equation, who are expert in how to package data thoughtfully and concisely, as a path to move forward.

Governor Musgrove asked why dates for releasing reports are not predictable. The media need to anticipate when to dedicate attention and space to NAEP results, similar to when Labor Statistics are released each month and to Program for International Student Assessment (PISA) Day, a day—known years in advance—when PISA results are released. Tonya Matthews agreed and elaborated that stakeholder feedback indicates that the Governing Board's impact is diminished by ad hoc scheduling of releases.

R&D Committee Chair Rebecca Gagnon concurred and suggested that staff can set dates for Report Card releases and back map from that point to determine what R&D must do by when to meet those established dates. Laura LoGerfo and Dan McGrath agreed to collaborate on building a list of recommended dates based on the NAEP data collection schedule.

Governing Board Chair and R&D Committee member, Terry Mazany, cautioned that a static portal with more data will not be useful. Instead, a portal that uses natural language so people know what data they need to access and how would facilitate decision-making and planning.

Governing Board staff explained that there is a procurement underway to hire experts in social media to help the Board reach audiences through Twitter and Facebook. Committee member Alberto Carvalho demurred and explained that an in-house expert who knows the Governing Board well should be used to infuse the Board more fully into the ongoing conversation and attract audiences. There are two primary means through which social media consultants suggest enhancing an organization's profile: (1) Boost – a pay-to-play approach, in which the organization pays to appear on relevant feeds (and that sponsorship is evident); and (2) Tagging – tagging other relevant platforms through hashtags and @s. Mr. Carvalho advised against relying on these approaches to enhance the Board's outreach.

Committee member Anitere Flores expressed concern that the Board should not push messages simply for the sake of outreach. Ms. Matthews explained that word-of-mouth remains the primary way of disseminating information, and the Board needs to give people the language to converse about NAEP, its results, and its potential impact. Social media should amplify this word-of-mouth.

To conclude the conversation, R&D Chair Gagnon reminded the Committee that the Guidelines and Policy Statement still need revision. The statement and guidelines should avoid operational concerns but clarify what each report should include. She also acknowledged that the bigger picture is distinguishing and cementing R&D's purview in conversations about reporting once the Policy Statement and Guidelines cover the basic requirements. In summary,

- The Committee wholeheartedly agreed to pursue setting predictable dates for each release, so that media and stakeholders can know well in advance when to expect and disseminate results. Board staff and NCES staff will collaborate on tracing back the timeline to create a set calendar.
- Committee members also endorsed the idea of drawing in other approved, valid, well-considered, relevant data for a given Report Card release site. The Committee will explore the feasibility and potential liabilities of this approach at their next meeting in August.

- There was a unanimous call among the Committee to invite external experts in analyzing, presenting, and disseminating data in meaningful, accessible ways to share their lessons learned with the Committee. Names floated include Nate Silver from 538, Jim Clifton, the CEO of Gallup, and Amy Webb of the WebbMedia Group (now known as The Future Today Institute). This may become a plenary session for the August Board meeting.
- R&D Committee members also recommended following up with ideas to stagger and/or curate the release, given the caveats discussed throughout the conversation.
- Updating the Policy Statement and Guidelines will continue along with pursuing these bigger
 ideas, because any current document that refers to activities that no longer exist—such as paper
 reports—should be revised.

Review of Assessment Literacy Work

Committee members reviewed research conducted by the Board's communication contractor DCG on 35 major assessment literacy campaigns conducted by a variety of groups, including assessment consortia, education organizations and agencies, universities, and private companies.

Although the full Board's official assessment literacy initiative was tabled, ongoing assessment literacy work informing audiences about NAEP in the context of other assessments remains a goal that R&D should pursue among the Board's overall outreach and dissemination goals.

The research conducted by DCG, which focused only on assessment literacy campaigns specifically, found scant mentions of NAEP. Most assessment literacy campaigns were directed toward teachers and used a diverse range of strategies from policy reports to infographics and videos. Common messages included distinguishing between different types and uses of assessments (especially formative vs. summative).

Committee members reviewed and discussed DCG's findings. Some members were not surprised that NAEP did not appear in these campaigns, because it is perceived as unique and differs in scope and intent from state assessments, which garner much interest. Overall, the DCG summary chart led to a conversation about which audiences should be the focus of the Governing Board's efforts to optimize its influence. Members agreed to consider this research alongside both the findings of the assessment literacy working group as well as the lessons learned from the Frameworks Institute on translating education issues to the general public to discern how the Governing Board can inform stakeholders more strategically and effectively.

Core Contextual Variables Review Process

Jamie Deaton of NCES and Jonas Bertling of ETS described the development and review process for the 2017 core contextual variables. In early June, the R&D Committee will review results from the 2016 core contextual questionnaire pilot. Committee members expressed eager anticipation for the new socioeconomic status variables and noted potential challenges in reporting an index variable entitled "self-control". The Committee suggested that a general plenary session on these new variables and indices would prove valuable.

<u>Information Items</u>

Stephaan Harris and Laura LoGerfo updated the Committee on the Focused Reporting and Social Media contracts and shared updates on the plans to release results from the 2014 NAEP Technology and Engineering Literacy Assessment on May 17.

Adjourn

R&D Chair Rebecca Gagnon thanked everyone for their participation in a full meeting and adjourned the Committee at 12:15 pm.

I certify the accuracy of these minutes.

5/31/16

Rebecca Gagnon, Chair

Date



RELEASE PLAN FOR THE NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS (NAEP)

The Nation's Report Card: 2015 Science

The 2015 National Assessment of Educational Progress (NAEP) Science Report Card will be released to the general public through an in-person event, scheduled for September or October 2016. Following a review and approval of the report's results, the event will be arranged in Washington, DC or another major city in a venue that complements the subject matter.

The event, to be simultaneously webcast for a national audience, will involve the initial release of report results by the Acting Commissioner of the National Center for Education Statistics (NCES); moderation and comments by at least one Governing Board member; and comments from at least one expert in science education and assessment. The event, slated to be 60-90 minutes, will also include a conversational Q&A session that would include questions submitted via livestream. Full accompanying data will be posted on the Internet at the scheduled time of release.

The 2015 Science Report Card will present findings from a representative sample of about 115,400 4th-graders, 110,900 8th-graders, and 11,000 12th-graders nationwide. Results will be presented in terms of average scores, subscales in each content area (physical science, life science, and earth and space science), and NAEP achievement levels. Results for grades 4 and 8 will be available for the nation, 47 states and one jurisdiction (Department of Defense Schools); results for grade 12 will be for the nation only. Data will be presented for all students and by demographic and socioeconomic groups, such as race/ethnicity and gender. Contextual information (i.e., student and school survey data) with findings of interest will also be reported.

DATE AND LOCATION

The release event is scheduled to occur in September or October 2016. The release date will be determined by the Chair of the Reporting and Dissemination Committee, in accordance with Governing Board policy, following acceptance of the final report.

ACTIVITIES BEFORE RELEASE

In the weeks before the release event, the Governing Board will work to inform various audiences and stakeholder groups about the science assessment through a range of efforts that could include production and distribution of materials such as one-pagers, one-on-one meetings with partner organizations in the field, social media campaigns, and webinars.

In the days preceding the release, the Governing Board and NCES will offer a conference call for appropriate media as defined by the Governing Board's Embargo Policy; and an embargoed data website available to U.S. Congressional staff, approved senior representatives of the National Governors Association and the Council of Chief State School Officers, and approved media. The goal of these activities is to provide these stakeholders with a comprehensive overview of findings and data to help ensure accurate reporting to the public and deeper understanding of results.

REPORT RELEASE

The Acting Commissioner of Education Statistics will publicly release the report at the NAEP website—http://nationsreportcard.gov—and at the scheduled time of the release event. An online copy of the report, along with data tools, questions, and other resources, will also be available at the time of release on the NAEP site. An interactive version of the release a Governing Board press release, the NAEP Science Framework, and related materials will be posted on the Board's web site at www.nagb.org. The site will also feature links to social networking sites and audio and/or video material related to the event.

ACTIVITIES AFTER THE RELEASE

The Governing Board's communications contractor will work with Board staff to coordinate additional post-release communications efforts—which could include such strategies as the production of infographics, online social media chats, and presentations—that would target communities and audiences with an interest in science as well as the general field of STEM (science, technology, engineering, and mathematics). The goal of these activities is to further extend the life of the results and provide value and relevance to stakeholders with an interest in student achievement and assessment in these areas.

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: Lauress 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

National Assessment Governing Board

Nominations Committee (Closed Session)

Report of May 14, 2016

Nominations Committee Members: Fielding Rolston (Acting Chair), Andrew Ho, Joseph O'Keefe, Cary Sneider.

Governing Board Staff: Mary Crovo, Deputy Executive Director.

In accordance with the provisions of exemptions 2 and 6 of Section 552b (c) of Title 5 U.S.C., the National Assessment Governing Board's Nominations Committee met in closed session on May 14, 2016 from 7:30 a.m. to 8:15 a.m.

Nominations Committee Acting Chair, Fielding Rolston, called the meeting to order and reviewed the agenda. Mr. Rolston noted that Nominations Committee Chair, Tonya Miles, was attending her son's graduation this weekend and could not participate in the May Board meeting. Several other Committee members were also unable to attend the Nominations Committee meeting.

Mr. Rolston asked Board staff to review the status of the 2016 nominations. Deputy Executive Director, Mary Crovo, reported that letters and resumes of all finalists for the six Board positions were delivered to the Secretary's senior staff in early May. The six openings for terms beginning on October 1, 2016 are: local school board member, testing and measurement expert, state legislator (Democrat), state legislator (Republican), general public representative, and non-public school policymaker. It is anticipated that Secretary King will make a public announcement of reappointed and new Board members in late summer or early fall of 2016.

The Committee then discussed the 2017 nominations timeline. The Governing Board's annual "call for nominations" will be issued in early September 2016, with nominations due in late October 2016. The Nominations Committee reviewed a draft 2017 Nominations Outreach Plan developed by the Board's communications contractors, DCG and Reingold. The plan outlines current, expanded, and new outreach initiatives to seek nominations for Board terms beginning in October 2017. For this cycle, there are three categories for which the Board will be seeking nominations: general public representative (two positions), testing and measurement expert, and elementary school principal. The two governor positions are also open, but the Board works closely with the National Governors Association for those positions.

Members discussed the outreach plan and expressed their agreement with the comprehensive approach and the continued requirement of a personal statement from each nominee. This brief personal statement is very helpful in rating nominees. Members reinforced the idea that the

Nominations outreach, because it is so extensive, serves to increase awareness of the Board, its mission, and its important policy initiatives. Members also provided additional organizations for outreach for the 2017 nomination categories.

I certify the accuracy of these minutes.

Fielding Robston, Acting Chair May 28, 2016 Date