#### **National Assessment Governing Board**

#### Meeting of November 17–18, 2017 Washington, DC

#### OFFICIAL SUMMARY OF GOVERNING BOARD ACTIONS

#### **Complete Transcript Available**

#### **National Assessment Governing Board Members Present**

John Engler, Chairman

Tonya Matthews, Vice Chair

Alberto Carvalho

Gregory Cizek

Tyler Cramer

Frank Fernandes

Rebecca Gagnon

James E. Geringer

Andrew Ho

Carol Jago

Terry Mazany

Dale Nowlin

Joseph O'Keefe, S.J.

Alice Peisch

Beverly Perdue

Fielding Rolston

Linda Rosen

Cary Sneider

Ken Wagner

Chasidy White

Joseph Willhoft

#### **Governing Board Members Absent**

Dana Boyd

**Shannon Garrison** 

Jeanette Nuñez

Thomas Brock (ex-officio)

#### **National Assessment Governing Board Staff**

William Bushaw, Executive Director

Lisa Stooksberry, Deputy Executive Director

Michelle Blair

Lily Clark

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

Jing Chen

Mary Coleman

James Deaton

Alison Deagan

Enis Dogan

Patricia Etienne

**Eunice Greer** 

Linda Hamilton

Elvira Hausken

Dan McGrath

Nadia McLaughlin

Michael Moles

Taslima Rahman

Holly Spurlock

Sheila Thompson

**Ebony Walton Chester** 

William Ward

Grady Wilburn

Holly Xie

#### **American Institutes for Research (AIR)**

George Bohrnstedt

Markus Broer

Jack Buckley

Mary Ann Fox

Cadelle Hemphill

Young Yee Kim

Gabrielle Merken

Fran Stancavage

#### CRP, Inc.

Monica Duda

Arnold Goldstein

Renee Palmer

**Edward Wofford** 

#### **Educational Testing Service (ETS)**

Debby Almonte

Jay Campbell

Gloria Dion

Amy Dresher

Robert Finnegan

Yue Jia

John Mazzeo

**Emilie Pooler** 

Luis Saldivia

Lisa Ward

#### **Fulcrum IT**

Saira Brenner

**Anderson Davis** 

Scott Ferguson

**Kevin Price** 

#### **Hager Sharp**

James Elias

David Hoff

Joanne Lim

Debra Silimeo

#### **Human Resources Research Organization (HumRRO)**

Monica Gribben

Thanos Patelis

Anne Woods

#### **Optimal Solutions Group**

Rukayat Akinbiyi

Brian Cramer

Sarah Guile

#### **Pearson**

Jon Twing

Cathy White

Llana Williams

#### Reingold, Inc.

Mark Custer Valeria Marrapodi Shannon Razsadin

#### **The District Communications Group**

Varuna Bhatia Meredith Davis Amanda Horn

#### **The Hatcher Group**

Ann Bradley Mike Chirieleison Robert Johnston

#### Westat

Greg Binzer
Kavemuii Murangi
Lisa Rodriguez
Rick Rogers
Keith Rust
Jason Schuknecht
Dianne Walsh

#### **Speakers**

Betsy DeVos, Secretary, U.S. Department of Education

Marcella Goodridge-Keiller, Office of the General Counsel, U.S. Department of Education Dirk Hastedt, Executive Director, International Association for the Evaluation of Educational Achievement

Andreas Schleicher, Director for Education and Skills, and Special Advisor on Education Policy to the Secretary-General, Organization for Economic Cooperation and Development William H. Schmidt, Director, Center for the Study of Curriculum, Michigan State University Petra Stanat, Academic Director, Institute for Educational Quality Improvement, Humboldt-Universitat zu Berlin

#### Call to Order

The November 17, 2017, session of the National Assessment Governing Board meeting was called to order by Chair John Engler at 8:33 a.m.

#### **Opening Remarks**

Chair Engler noted the morning session was being webcast live. Following a brief introduction of the Governing Board's purpose and composition, members and Board staff introduced themselves.

Chair Engler requested a motion for approval of the November 2017 agenda. Jim Geringer moved for approval. The motion was seconded by Rebecca Gagnon and passed unanimously.

Chair Engler requested a motion for approval of the August 2017 minutes. Terry Mazany moved the motion. Joe Willhoft seconded the motion which then passed unanimously.

#### Oath of Office for New and Reappointed Board Members

Chair Engler introduced Secretary DeVos who administered the oath of office to new members Greg Cizek, Tyler Cramer, John Engler, and Beverly Perdue, and to reappointed member Jim Geringer.

#### **Secretary's Welcome Remarks**

Secretary DeVos welcomed the new members and thanked them for sharing their expertise with the Board. She noted the importance of the National Assessment of Educational Progress (NAEP) for allowing data comparisons by state, district, region, and subgroup. She praised the Governing Board's openness to innovation as evidenced by its Strategic Vision and inviting distinguished guests to share their thoughts on assessments in other countries.

Board members asked Secretary DeVos to comment on a variety of topics, for example, about innovation and personalized education in and outside of schools. Dale Nowlin commented on the need for qualified teachers, and Beverly Perdue noted a need to expand technology infrastructure. Andrew Ho asked Secretary DeVos to comment on the breadth of the NAEP portfolio. Chasidy White asked what common themes have emerged from states' Every Student Succeeds Act (ESSA) plans. Tonya Matthews asked for the Secretary's thoughts on the impact of informal learning and hands-on learning environments, such as science centers and zoos, in education, especially in math and science education.

In response, Secretary DeVos suggested that education needs to change to support the workforce of our changing world, particularly to keep pace with the rapid adoption of technology in all aspects of our lives. She supported personalized learning and school choice, as well as creativity in addressing teacher shortages. Governing Board Chair Engler indicated that there may be some barriers to taking full advantage of available data (e.g., using data from different assessments and surveys to provide context or using additional data for interpreting NAEP results). Finally, in responding to a question about what subjects NAEP should assess Secretary DeVos explained that it is the Board's role to determine the NAEP Assessment Schedule, although she noted a need for students to understand civics. The Secretary replied to Board member Chasidy White's question on the Every Student Succeeds Act (ESSA) by stating that many of the ESSA plans are still in review so it would be premature for her to identify commonalities.

#### Thinking Beyond Borders: The Future of Student Assessment

Chair Engler introduced panel members Peggy Carr, Andreas Schleicher, Dirk Hastedt, Petra Stanat, and William Schmidt and noted that the session was being webcast. The Chairman provided background on how the panel was conceived, referring to the late Mitchell Chester, former Governing Board member, who asked if NAEP could be better connected to international assessments. This idea was incorporated into the Board's Strategic Vision, specifically in the priority to "[r]esearch assessments used in other countries to identify new possibilities to innovate the content, design, and reporting of NAEP." The Chair suggested that the Board should be forward looking and learn from others to help all youth prepare for the future. He encouraged the Board to be innovative, particularly in this global economy where there is competition for talent.

**Peggy Carr, Acting Commissioner, National Center for Education Statistics (NCES)** opened her presentation by sharing American newspaper headlines announcing and interpreting international assessment results. She continued with examples of headlines from foreign newspapers highlighting international comparisons for other countries.

The headlines provided a springboard for a deeper dive regarding the United States' role in international assessments. Ms. Carr shared five main insights gained from studies over the years.

- American students struggle more with mathematics than reading and science. Ms. Carr
  presented a slide showing Progress in International Reading Literacy Study (PIRLS),
  Trends in Mathematics and Science Study (TIMSS), Program for International Student
  Assessment (PISA), and the Program for International Assessment of Adult
  Competencies (PIAAC), and depicted the United States performance ranking on each
  assessment.
- 2. Younger students perform better than older students. Again, Ms. Carr highlighted results for U.S. fourth-graders in mathematics, reading, and science in comparison with students in leading economies of the world.
- 3. While other countries improve, the United States is losing ground. The United States is not declining, but other countries are improving at a greater rate.

- 4. Top performing states are among the best education systems in the world, while the lowest performing states struggle to be competitive globally. In 2011, NCES conducted a special study linking NAEP results with TIMSS results. Data from the study were used to project scores from the eight participating states on TIMSS to all states in reading and mathematics. The results showed that some of the top states in the country score comparably to some of the best education systems in the world. Massachusetts outperformed 42 of 47 countries in eighth grade mathematics, similar to Japan. However, on the opposite side of the continuum, the lowest performing state, Alabama, performed similarly to Turkey and Romania, outperforming only 19 countries.
- 5. Despite being the most highly educated generation (i.e., greatest percentage with bachelor's degree) than any other previous generation, millennials in the United States have very weak workforce skills in literacy, in problem-solving in a technologically-rich environment, and in numeracy. Ms. Carr presented slides on PIAAC results. In functional literacy, U.S. millennials performed below the Organization for Economic Cooperation and Development (OECD) average. In problem solving, U.S. millennials ranked near the bottom of results, only outperforming Poland. They were last in numeracy.

Ms. Carr described the collaboration between the United States and the international education community; she sits on the boards of the OECD and the International Association for the Evaluation of Educational Achievement (IEA). These boards make decisions about what to test, how to test it, and what the rules are. Then, countries administer assessments, score the results, and validate the findings.

Ms. Carr's presentation concluded with a desire to share information and learn more from colleagues. She noted upcoming test result releases from PIRLS and ePIRLS, TIMSS, PISA, the International Computer and Information Literacy Study (ICILS), and a new international assessment in early learning (International Early Learning Study [IELS]).

## Andreas Schleicher, Director for Education and Skills, and Special Advisor on Education Policy to the Secretary-General, Organization for Economic Cooperation and

**Development**, thanked Ms. Carr for her support of PISA, noting that when starting PISA in the early 1990s, researchers borrowed many psychometric techniques from NAEP. Mr. Schleicher used PISA to illustrate the state of education in the United States through the prism of international education systems. PISA tests about half a million 15-year-old students every three years across more than 80 countries. PISA includes traditional subjects—mathematics, science, and reading—as well as more innovative domains, such as problem solving. PISA researchers are working on measuring workplace skills through collaborative problem solving.

PISA emphasizes the collection of rich contextual data from students, teachers, schools, and parents. This allows the triangulation of data to contextualize results and understand performance differences by country. The theme of using contextual data to inform interpretation of student achievement was evident throughout the presentation.

Mr. Schleicher presented a series of slides illustrating science trends in PISA from the first assessment in 2006 to the most recent in 2015. Student performance in science in the United

States improved from 2006 to 2009, but remained flat from 2009 to 2015. Rapid changes and major leaps in technology and scientific developments have not translated to increases in student achievement in science or math among 15-year-olds in the United States. In general, this is true across industrialized nations, but there are specific exceptions, such as Portugal and Singapore which have made progress.

Mr. Schleicher addressed the question of whether it is fair to compare countries with such varied circumstances and educational systems. PISA uses contextual data about students to standardize the measurements of achievement and allow comparisons among students from similar family backgrounds across countries. These data show that educational quality varies, even after controlling for family background.

The most disadvantaged students in Estonia or Vietnam (the lowest 10 percent) do as well on PISA as the average student in the industrialized world and better than the 10-percent of the most advantaged students in Latin American countries. The U.S. data show that most students are in the top echelons of the global talent pool, but that is because the U.S. is large, not due to the density of scientific excellence. In contrast, four small provinces in China comprise nearly as much as the American global talent pool at the top end, not because they have lots of students but because students there do really well, in other words, show a high density of strong performance.

PISA included questions that asked students to what extent they enjoy science and wish to become scientists. Researchers examined the combinations of students who enjoy/do not enjoy science and want/do not want to become scientists, and whether they are prepared for careers in the sciences. Many students in the U.S. indicated both enjoyment of science and aspirations of becoming scientists, but were not well prepared for jobs in the sciences.

PISA collects information about education funding, students' learning time, teachers' time spent on professional collaboration or learning, and class size. Countries spend their funds in very different ways, and PISA data show how resources are being used and which spending approaches appear more effective in boosting student achievement.

Learning outcomes stem from the quantity of learning and the quality of the learning environment. In the United States, teachers participating in PISA say that their role is to facilitate in the classroom and that student reasoning is more important than content knowledge. However, most students in the United States are good at questions that require rote learning and memorization, but lag on complex items that require making connections and using reasoning, as assessed by PISA. Thus, how teachers in the United States believe they instruct is disconnected from what actually seems to occur in their classrooms.

In conclusion, PISA's investment in collecting rich sources of contextual data allows not only comparisons of achievement, but also exploration of how different education systems and features relate to student achievement. PISA has adopted matrix sampling, adaptive testing, and digital assessments, all borrowed from NAEP, to optimize the time allotted for student testing.

The trade-offs between testing time and depth of questions has led PISA to rotate the focus among the core subjects every three years to offer in-depth questions as well as one innovative domain such as problem solving. Some assessments are optional, such as financial literacy. Contextual questions are modular so that countries can select the elements most relevant for them. Finally, PISA revises their frameworks every three years and conducts bridging studies and validation studies to update content but maintain trend lines. The content of PISA is informed but not constrained by national standards in curriculum.

Dirk Hastedt, Executive Director, International Association for the Evaluation of Educational Achievement (IEA) opened with a brief overview of IEA, a non-government research organization with 60 member countries. He stressed that IEA tests and studies enable countries to measure student achievement in an international context. However, while these studies are important for noting achievement differences among the countries, it is important to use care in drawing comparisons because countries have different education systems. For example, Japan spends as much on out-of-school education as school-based education, so comparisons that do not account for the extra instructional time outside school hours can create misperceptions and misinterpretations.

In 2015, 600,000 students in nearly 60 countries in grades four, eight, and twelve participated in TIMSS. The test has been given every four years for the last 20 years and continually innovates to keep up with trends and changing curricula. New for 2021, TIMSS will be administered electronically, feature scenario-based problem-solving inquiry tasks, and assess knowledge application and reasoning. It will follow the current design of 50 percent multiple choice and 50 percent constructed response, similar to PISA.

PIRLS covers 50 countries and includes 11 benchmarks; it has been administered every 5 years for the last 15 years. In 2015, PIRLS was administered in both paper-pencil and electronic formats. More than 300,000 fourth graders participated in ePIRLS. Mr. Hastedt presented a video that highlighted how ePIRLS is not a traditional standardized test; it is more collaborative, and uses animation, hyperlinks, teacher avatars, and interactive passages. He indicated that ePIRLS is an example of how the landscape of education is changing, and assessments need to adapt.

The IEA noticed that in all countries, student civics knowledge was related to greater community involvement and less participation in illegal activities.

Mr. Hastedt emphasized the importance of computer based learning and how students use (or do not use) technology. Although computers are prolific in schools, teachers and students are not using them to their full capacity because teachers do not feel confident teaching computer literacy. Although students play with phones and computers often, they are not necessarily technologically savvy. An IEA study, the International Computer and Information Literacy Study (ICILS), found that students are rarely taught to use computers and navigate the internet environment in a safe manner. Females outperformed males, but most students are not prepared

to use computers for more than simple tasks (e.g., word processing, internet searching). The United States did not participate in ICILS in 2013, but has agreed to participate in 2018.

The Governing Board and invited guests recessed for a break at 10:24 a.m. and reconvened at 10:41 a.m.

Petra Stanat, Academic Director, Institute for Educational Quality Improvement (IQB), Humboldt-Universitat zu Berlin, presented on the National Assessment System of Germany. She began with background information on Germany's system. Although Germany had very detailed curricula and well-trained teachers, Germany did not have a national assessment until 2006.

When TIMSS and PISA results were released in the late 1990s and 2001, respectively, achievement of German students was lower than expected and revealed severe achievement gaps indicating equity issues in their schools. The German media called it "PISA shock." This led to the development of a comprehensive strategy for educational monitoring at the state level, initiated by the Standing Conference of the Ministers of Education and Cultural Affairs. The initial strategic plan passed in 2006 and was revised slightly in 2015. The plan is based on four pillars: (i) participation in large-scale international assessment studies; (ii) testing and implementation of educational standards for primary and secondary levels; (iii) tools for school level quality assurance (e.g., comparison state-level tests); and (iv) biennial comprehensive educational reporting.

Ms. Stanat's work at the IQB, which was founded in 2004 and funded by the German states, is to develop assessments to measure student achievement on Germany's national standards in language arts, mathematics, foreign language (English, French), and science (biology, chemistry, physics). Germany's standards consist of "can-do" statements to describe concretely what students are expected to be able to do. Teachers develop the test items with support from the multidisciplinary team of the IQB. There are five proficiency levels from *below minimal* to *optimal*. Germany currently uses paper-pencil testing, but may be transitioning to digital mode. A feasibility study on digital assessment using English as a foreign language will be conducted.

The focus of the German national assessment at the subject and grade level changes with each administration. For example, the first national assessment was administered in 2009 to a sample of grade 9 students in each German state. It focused on German and English language skills. In 2011, the focus was on German language arts and mathematics in grade 4. In 2012, grade 9 students were tested in mathematics and in each of the science domains.

Ms. Stanat presented results from the most recent report issued in 2016, showing the proportion of grade 4 students at the national and state levels who reached at least the norm standard (proficiency level 3) in mathematics. Although Germany saw improvement in PISA results, their national assessment showed decreases over time.

Germany also administers annual low-stakes school-level assessments for all students in grades 3 and 8. These tests provide schools and teachers with feedback to make data-based decisions on strategies for improvement and serve as an early alert system. Schools receive feedback from the tests, analyze the results within schools—discuss potential explanations for different patterns of results—develop strategies for improvement, and implement the strategies. The school level assessment takes place one year before the system level assessment which is one to two years before the students are expected to meet the standards. Each state receives the test booklets, but individually determines how to administer the assessment and how to present and use their results.

Ms. Stanat is using the richness of data from Germany's assessments as well as the international assessments to provide policy makers at the state level with the information they need to formulate policy for Germany's education system.

William H. Schmidt, Director, Center for the Study of Curriculum, Michigan State University, noted that much of his professional career has focused on international data sets and that he is privileged to have worked with Mr. Schleicher on PISA and Mr. Hastedt on TIMSS. Mr. Schmidt urged NAEP to collect more information about what students actually study in the grades assessed. Not knowing what content students learn in fourth and eighth grade limits what interpretations can be drawn from NAEP data.

Mr. Schmidt explained that the first TIMSS study included a curriculum study to examine standards and what teachers taught in the classroom. The findings revealed that the United States grade 8 mathematics curriculum was neither focused on a few key ideas nor particularly reflective of the logic of mathematics. While the rest of the top performing countries were educating students in algebra and geometry, the U.S was teaching arithmetic to eighth-graders, thus making it hard for students in the United States to perform well on a test that covered algebra and geometry.

To determine what students are expected to know, the OECD is starting a new study called 2030. Specifically, the study is designed to answer two questions: (1) What *are* current curricular standards?; and (2) What *should* they be in the year 2030? He encouraged the U.S. to join this study to create an opportunity to compare standards.

China is gradually participating in the international assessment arena, including PISA; however, there is skepticism about whether the scores from Shanghai, Macau, and Hong Kong represent China as a whole. Mr. Schmidt described a PISA study that involved ten provinces, including one of the largest and one of the smallest, which gave a broader indication of the performance level of Chinese students in grades 4 and 8. Full results will be shared at the upcoming American Educational Research Association (AERA) meeting, but Mr. Schmidt presented an overview of the findings for the Board.

Mr. Schmidt then shifted to describing the Chinese education system. It has been 40 years since China embarked on the development of a comprehensive education system that includes 9 years

of compulsory education for all students. Chinese education focuses on the holistic development of its students and considers equity of critical importance.

When building its assessment system, China pulled from experiences with TIMSS, PISA, and U.S.-based assessments such as NAEP. For 8 years, beginning in 2007, China pilot tested different combinations of tests, pairing two subjects each year, to learn what to change to avoid any misunderstandings of the testing instructions and procedures.

Mr. Schmidt presented test results from 2015 and 2016, which included data from China's 31 provinces. He spoke of the challenge of gathering representative samples. In China, the wealthiest people live in cities, with socioeconomic status (SES) decreasing as the landscape becomes more rural.

China administers two different assessments on three-year cycles in the following six subjects: mathematics, Chinese, science, physical education, arts, and moral education. Currently, Chinese students are taking assessments in physical education and arts together, and science and moral education together. Pairings will be different in the next three-year cycle. The tests collect three types of information: (1) content knowledge; (2) problem-solving; and (3) contextual information. The contextual information changes with each study and is specific to the subject matter.

To illustrate an example of this contextual information, Mr. Schmidt showed how students are assessed on their emotions and attitudes regarding math in the math assessment, and on the physical education assessment students respond to questions about their physical activity. Mr. Schmidt then presented on China's arts assessment, which focuses on three elements in arts education: *knowledge*, *appreciation*, *and performance*. The *knowledge* aspect is broad, with students tested on national and international works of art and music. To demonstrate *appreciation*, students evaluate different genres of music and discuss the emotions elicited from listening. And in *performance*, students are expected to sing or create a melody.

Next, Mr. Schmidt discussed the sampling design. First, counties are determined. He indicated that counties in China are like counties in the United States and that provinces are like states. To get a representative sample, six counties are chosen within each province and the overall sample represents about ten percent of the counties. Within each county, twelve elementary and eight secondary schools are selected, and from the schools, more than thirty students in grades 4 and 8 are selected, approximately 3,600 students per province. Data can be broken out by province and by city. However, China is very concerned about the known socioeconomic differences among various locations and thus does not share results publicly.

Mr. Schmidt's closing comments noted that although China is restricted by its political system, they are slowly becoming more open to sharing results beyond their borders.

Chair Engler opened the floor to questions and comments from Board members regarding the presentations. Questions and responses are summarized below:

- How can we go beyond reporting results to actually causing change that leads to student improvement?
  - o Mr. Schleicher:
    - Use contextual data to understand patterns of results.
    - Open up the data, triangulate with other types of studies, and share the research to find a deeper answer.
  - o Ms. Stanat:
    - Between assessments, Germany evaluates whatever changes are implemented within the system to understand what has helped or not.
    - Schools receive data, share with supervisors and teachers, and determine what professional development and other interventions can improve weaknesses.
  - o Mr. Hastedt:
    - Need more analysis and support.
    - Conduct routine research, especially qualitative studies to support and elaborate findings from quantitative data.
    - Translate research results for policy makers and educators.
  - o Mr. Schmidt:
    - Need data to link to what students actually learn in the classroom.
- Why does PISA report on cities and countries side by side?
  - o Mr. Schleicher agreed with the questioner's summary of the presentations—quality of teaching matters over quantity. Mr. Schleicher also issued a caveat about testing programs: most high performing education systems have high stakes exams, but the stakes are typically high for the students and low for schools and teachers.
  - o In response to the specific query: It is difficult to get high quality data from the whole of China. PISA must proceed only gradually in places; PISA started with Shanghai and now is in four provinces. It will take time to cover the whole country.
  - O Do not dismiss the results from Shanghai so easily; it is not just a city, but a province, with much socioeconomic diversity. What we learn from the province of Shanghai is that even the poorest children can receive an excellent education.
- Is it possible for TIMSS, PISA, and NAEP to share tasks and link the assessments?
  - o Ms. Carr, Mr. Schleicher, and Mr. Hastedt all agreed that this is an important and beneficial task to undertake, the feasibility of which may vary by assessment program; the digital platform facilitates the prospect of success.
  - o Mr. Schleicher noted that for PISA, many OECD countries are already doing this; PISA tasks are embedded in their national assessments.
  - o Ms. Carr explained that NAEP already conducts alignment studies at the content level to explain to constituents why there are differences in the findings when the constructs are, at least on the surface, purported to measure the same thing.
- How does Germany handle immigration and mobility in interpretation of results?
  - o Ms. Stanat: Germany looks at immigrant and non-immigrant group results, but does not have data on student mobility.

- o Mr. Schmidt: China collects mobility data of students and is able to report results by subgroups.
- o Mr. Schleicher: PISA reports results by time in country. Effects vary a great deal across educational systems. In a special study, PISA looked at the countries of origin and immigration. The effect of the destination country is much larger than the effect of the original home country.
- What is the rationale for the conservative reporting of NAEP results, in other words, for not including correlations which could lead to a conversation about patterns in the results? How do you balance the limits of the data? How do you address calls for clear answers on improving education from assessment results?
  - Ms. Carr: NCES avoids modeling data to provide answers about improving education because NCES must adhere to what a federal statistical agency can legitimately defend. NCES' role is to support evidence-based policy and give practitioners good, solid, rigorous data.
  - o Ms. Stanat clarified that Germany takes a similar approach. They discuss the results and potential causes of why these changes may have occurred, but clearly communicate that these potential causes are merely hypotheses and definitely not explanations.
  - Mr. Schleicher acknowledged the tension between policy-relevant interpretations of student data and robust findings. Contextual data play a role in using data to improve education.
- What can we do to bring more improvement to students in deep poverty?
  - Mr. Schmidt described a study of social class inequality using PISA data. Across OECD countries, about a third of inequality is due to schooling. In the United States, it is even greater at almost 40 percent.
- How has inclusion of students with disabilities changed over time in the countries participating in the international assessments?
  - o Mr. Hastedt: Through surveys, teachers reported the need for help in reaching students with special needs. The digital-based assessments allow for more students with special needs to be accommodated, which should help highlight where to improve their instruction.
  - o Ms. Carr noted that NAEP is ahead of its assessment peers in including students with disabilities in the assessment program.
  - o Mr. Schleicher agreed that NAEP has pioneered inclusion and accommodation, and PISA has learned from NAEP's expertise in this area. He also made the point that what countries classify as special needs can vary radically. In Finland, nearly every student is diagnosed with a special need. It is not a label or a stigma, but it is about determining how to individualize student support based on need.
- Is it possible for NAEP to provide the kinds of data that PISA provides on a state level?
  - Ms. Carr: NAEP is now including more contextual measures and turning these variables into constructs, as well as rotating modules of contextual questions.
     NCES can learn from PISA about including more contextual variables.

- What advice can you give the Governing Board for using data to inform the public about the state of education in the United States and to help stop what seems like a downward spiral?
  - o Mr. Hastedt suggested looking at what others are doing better by comparing states, especially those with similar demographics.
  - o Mr. Schleicher noted the gap between self-efficacy and student performance using PISA data. Students in the United States believe math ability is an innate talent; in Singapore, students believe they can succeed if they try really hard.
  - Mr. Schmidt described comparisons of Italian cities to states and found similar student performance, illustrating the inequality of schooling by socioeconomic status.
- Is the large variety of curricular materials unique to the United States, or is it common in other countries?
  - Mr. Schleicher noted that curriculum decisions in the United States are typically at a lower level than in many countries. Additionally, there are differences between intended and implemented curriculum.
  - Ms. Stanat described Germany moving from a restrictive system to one allowing freedom to teach to the standards. High quality materials aligned to the standards are best.
  - o Mr. Hastedt discussed the need for improvement between intended and actual instruction. In addition, early childhood education focuses on preparing students for school, which is positively associated with later academic performance.
  - o Mr. Schmidt stated that there is not much variation in curriculum in China. In contrast, there is little consistency across the United States.

Chair Engler opened the floor to questions from the public. Participants asked:

- Can large scale tests assess three-dimensional learning as is found in the Next Generation Science Standards?
  - o Mr. Schmidt responded affirmatively, referring to a colleague who worked on the standards and is developing test items to reflect this type of learning.
- Is there a correlation with improvement in closing the academic skills gap and improving the economy of a country?
  - Mr. Schleicher provided two examples of strong relationships between the economy and student performance when looking at historical growth regressions in the United States and Korea.

Chair Engler asked if the new IELS (International Early Learning Study) will be used to validate early childhood spending and school readiness.

 Mr. Schleicher: Now 70% of three-year-olds are enrolled in early childhood education, but the value of this education is less known. It is a challenge to assess children as young as five-years-old—creating play-based items that they can take and emphasizing social and emotional skills—but it is important to do. The IELS will be the first to show early learning outcomes. • Ms. Carr: Congress definitely wants the U.S. to participate in this study and is willing to fund that participation.

#### **Recess for Committee Meetings**

The first session of the November 17, 2017 Governing Board meeting recessed at 12:39 p.m. for committee meetings.

#### **Meeting Reconvened**

The Governing Board reconvened in open session at 3:39 p.m.

#### **Remarks from New Board Members**

Chair Engler invited new board members to introduce themselves.

Greg Cizek noted that when he served in the Michigan Senate Programs and Policies Office he worked for Chair Engler who was the Senate Majority Leader at the time. He previously served on the Governing Board for a very short time filling an unexpired term and is pleased to be serving on the Board again. Mr. Cizek noted that in his work with states setting standards on their state assessments, NAEP is seen as a leader in standard setting and it is important to maintain that position of leadership. He suggested looking for new roles for how NAEP can serve policy makers, teachers, and parents in improving student achievement.

Tyler Cramer represents the San Diego business community as liaison with the education community. He described his path to that position. He studied analytics and statistics in college, then worked for the Assembly Elections Reapportionment Committee for the state of California. Then, he changed direction and went to law school. He was elected Chair of the School Site Council and Governance Team at his children's school. He became involved with and chaired the San Diego Chamber of Commerce Business Roundtable for Education. He was then appointed to work on the California Longitudinal Pupil Achievement Data System (CALPADS), which provided unique identifiers that allow tracking of students and their growth through California schools. Mr. Cramer has been a lawyer for 40 years and recently stepped down as general counsel and took over as chairman of workforce housing.

Beverly Perdue expressed that she both admired the Board yet often hated NAEP when her state received its test scores. She noted that she started her career as a kindergarten teacher but left after three years. After earning a PhD in healthcare and aging, she moved to North Carolina where she pursued politics, eventually focusing on education policy. She currently serves as Senior Educational Advisor for two private companies that focus on digital innovation in education so that every child has access to technology at home and school. Ms. Perdue founded DigiLearn, a foundation focused around connectivity and personalized learning. Ms. Perdue stated that Jim Geringer serves on the Board of DigiLearn.

Mr. Geringer was one of the founding governors of Western Governors University (WGU) which uses a competency-based approach to education. He reiterated Wyoming's Superintendent of Education's question: "how do we know what we say they know?" WGU holds learning constant and lets students work at their own pace to mastery. Similarly, he noted it is the Board's responsibility to ensure that NAEP measures the knowledge it is purported to and allows students to demonstrate their mastery of that knowledge. Mr. Geringer chairs the Board of Complete College America, which is striving to help states improve the rate of college completion and close the achievement gap of several demographic subgroups. He has also been instrumental in providing equity of opportunity in Wyoming public schools through technology. During his service on the Governing Board he focuses on we want to happen as a result of NAEP.

John Engler reiterated that he was excited to be working with his fellow Board members and noted that he had made some introductory remarks the previous day during the Executive Committee meeting. The Nation's Report Card provides the country with information about how its \$650 billion investment in public education is working out. NAEP results indicate that there is room for improvement in public education, and Mr. Engler hopes that improvement can happen quickly.

#### **Annual Ethics Briefing for Governing Board Members**

Chair Engler introduced Marcella Goodridge-Keiller, an attorney with the U.S. Department of Education's Office of the General Counsel, to lead the annual Ethics Briefing for Governing Board members.

Ms. Goodridge-Keiller explained that Governing Board members serve on the Board as "special government employees" and therefore federal ethics rules and regulations apply to them to a limited degree. She highlighted key aspects of the ethics regulations that apply to the Board members, including those regarding compensation for Board members teaching, speaking, and writing in their professional capacities on topics related to their Board duties. She further explained that it is generally prohibited for government employees to receive compensation for travel, lodging, and expenses from a foreign government.

Following her presentation, Ms. Goodridge-Keiller answered questions from Board members. She encouraged members to contact her with any questions or concerns regarding ethics rules and regulations.

#### **Meeting Adjourned**

The November 17, 2017 Governing Board meeting adjourned at 4:20 p.m.

#### **Meeting Convened: OPEN SESSION**

The November 18, 2017 Governing Board meeting convened at 8:36 a.m. in open session.

#### Reflections on International Assessment (SV #8)

Chair Engler opened the session by asking Bill Bushaw, Executive Director of the Governing Board, to identify what would be most helpful for Board staff. Mr. Bushaw commented that Strategic Vision number 9 (SV #9)—Develop policy approaches to revise the NAEP assessment subjects and schedule based on the nation's evolving needs, the Board's priorities, and NAEP funding—is the priority that would impact the NAEP assessment schedule, especially in the long term. He explained that experts from around the world were invited to share what others are planning to help guide the Board in thinking about where it wants to go.

Chair Engler started the discussion by suggesting a need to address the challenge of making NAEP results more than a "one-day story" by making them more meaningful and actionable. Board members engaged in discussion about actionable results.

- Linda Rosen asked how other countries make actionable policy using comparisons from the international assessments.
- Tonya Matthews emphasized the importance of being able to answer "why" questions related to NAEP results rather than "where do we rank" questions. She suggested not only thinking about what data to collect, but also how to mine the different kinds of data that already exist and present data for interpretation. NAEP data currently are not being presented in ways that make them actionable without additional effort and time.
- Alberto Carvalho reiterated the importance of better utilization, dissemination, and engagement of stakeholders, and highlighting best practices.
- Andrew Ho suggested creating a catalog of contextual and curricular measures that are included in international assessments that are not part of NAEP. He also suggested the need for more immediate analyses by third-party researchers to make the release of data more actionable.
- Joe Willhoft expressed the need for applying some structure to additional research, through a governing body that sets policies and rules to ensure the integrity of the work.
- Ken Wagner reflected on the tension between being bold—which he sees as making NAEP more actionable—and staying neutral, which he described as boring. Added to this is a need to be savvier with media so that the public hears the story and its relevance to their lives.
- Cary Sneider referenced the Institute of Education Sciences (IES) grant program as a source of funding for a dedicated third-party analysis group.
- Chair Engler recommended including foundations and philanthropists in education as part of discussions to understand their need for and use of NAEP data.

The discussion on actionable results highlighted the need for increased use of contextual variables. Additional information about teacher context and curriculum context would make a

big impact, according to Mr. Wagner. He said the Board should pay attention to leading versus lagging indicators, such as what is being done to support the workforce. He recommended applying a theoretical basis to conversations on contextual variables.

Tyler Cramer suggested incorporating measures to address student mobility so that a state or district could look at data for students that they have educated within their system to assess the impact of their programs and initiatives. Additionally, comparisons would be possible across regions with similar mobility.

Peggy Carr discussed leveraging the use of other data collected by NCES and linking it to NAEP data. Ms. Carr approved of the idea of allowing access to NAEP data more quickly to trusted independent researchers on a larger scale than the current secondary analysis grant program.

#### **Draft Resolution on Board Priorities (SV #9)**

Bill Bushaw explained that the Governing Board's goal is to set priorities that, once adopted, will be used to help guide future Board decisions to extend the NAEP Assessment Schedule. Therefore, the purpose of this session was to discuss the draft priorities, with Board action on the resolution planned for the March 2018 Board meeting. He summarized the Governing Board's draft priorities of comparability, frequency, and efficiency.

In reference to the efficiency priority, Board members expressed interest in combining assessments and noted that the topic had been discussed in several committee meetings. However, numerous Board members expressed a desire to better understand the technical, political and operational feasibility of such potential changes. Members requested that future Board meetings include more detailed information about the different approaches to "combining" assessments to be more efficient, an analysis of the associated pros and cons associated with each combination, and more information about the likely timelines to consider and implement any potential changes to NAEP assessments.

Cary Sneider noted that at the March 2018 meeting the Board will be taking action on its NAEP Framework Policy to formalize the procedure to revise NAEP frameworks, which is integral to the process and timeline considerations for consolidating frameworks (consolidating frameworks being one approach to combining assessments). He commented on the importance of approaching these policy changes in a thoughtful way that includes the various stakeholders, but also moves expeditiously.

Tonya Matthews observed that efficiency is not the goal in itself, but rather the beneficial byproduct of the Board's work to revise NAEP assessment to be the most relevant and useful.

Ken Wagner urged the Board to be bold in its decisions and create more actionable data by emphasizing NAEP's contextual data to provide leading indicators on what school systems are

doing to support teachers and provide equitable access to high-quality and aligned curriculum resources.

Greg Cizek referenced the importance of actionable data as evidenced by the Board's discussion on reflections on international assessments. He noted that a call for actionable results is not explicitly included in the priorities. He suggested that it be made more explicit rather than included as part of comparability. Several other members agreed. Andrew Ho expressed concern with the ability to operationalize actionability. He added that "actionable" might be an overarching priority rather than adding it to the three draft priorities.

Board members supported the inclusion of the frequency priority in the draft resolution. Several members commented on the importance of assessing subjects at least every four years for the results to be actionable. There was concern with the impact of the schedule on budget and the need to make decisions because of the time needed to develop assessments.

#### **Recess for Break**

The November 18, 2017 Governing Board meeting recessed at 10:40 a.m.

#### **Meeting Reconvened**

The Governing Board reconvened in open session at 10:59 a.m.

#### **Committee Reports**

Chair Engler asked the committee leadership to report on their meeting outcomes. The committee reports were then accepted unanimously by the Board and are appended to these minutes.

## ACTION: Release Plan for the 2017 NAEP Reading and Mathematics Report Cards at Grades 4 and 8

Rebecca Gagnon, Chair of the Reporting and Dissemination Committee, discussed the release plan for the 2017 NAEP Reading and Mathematics Reports Cards at grades 4 and 8. She then moved approval of the release plan (as appended to the Reporting and Dissemination Committee minutes). Fielding Rolston seconded the motion which then passed unanimously.

## ACTION: Delegation of Board Authority to the Nominations Committee to Approve the Chief State School Officer Slate of Candidates

Fielding Rolston, Chair of the Nominations Committee, described the need for expedited review and action in January 2018 on a final recommended slate of candidates for Board membership in the category of Chief State School Officer for submission to the Secretary of Education in order to fill the vacancy prior to the March 2018 Board meeting. He then moved for a Board delegation of authority to the Nominations Committee to do so. Rebecca Gagnon seconded the motion which passed unanimously.

#### Framework Policy Revision (SV #5)

Vice Chair of the Assessment Development Committee (ADC), Cary Sneider, led a discussion on revising the Governing Board Framework Development Policy, in ADC Chair Shannon Garrison's absence. He began with an overview of how the Board conducts framework development, which culminates in Board action on three documents for each NAEP assessment: a framework, specifications, and recommendations for subject-related contextual variables.

Earlier this year, a working group comprised of ADC and COSDAM members noted that the current policy's focus should be expanded with more guidance on updating processes for existing NAEP frameworks. The current policy focuses on developing new frameworks either for a new subject area or to replace an existing framework. In Summer 2017, the ADC began revising the policy to add information related to updates and clarifications that do not require a new framework. The revised policy also adds emphasis on monitoring frameworks, prompting the Board to affirm when no updates are needed, or when minor clarifications or substantive updates are needed.

Development of NAEP frameworks will remain inclusive. In the revised policy, stakeholders from the field will be convened as Visioning and Framework Development Panels, replacing the current policy's Steering and Planning Committees, respectively. Approximately half of the Visioning Panel members will also be members of the Framework Development Panel, strengthening the bridge between the initial conversations to set the direction of the effort and drafting the framework documents. Mr. Sneider noted that the ADC will determine whether a Visioning Panel should be convened to begin a framework update by hosting a panel discussion with external content experts. The ADC will bring its recommendations and supporting evidence and arguments concerning whether or not a framework should be revised to the full Board for its approval. Studies and additional outreach will be pursued, as needed, to inform the ADC's recommendation about the type of framework update that is needed.

Mr. Sneider requested Board feedback on the draft revision. Board members discussed ensuring that the policy addresses the aspirational nature of frameworks, including what is on the horizon in a given subject area. Mr. Sneider summarized written comments from Andrew Ho, who suggested additional language on the importance of NAEP trends as well as some reorganization

of the document. Joe Willhoft requested a comparison between the old and new policies to see what has been added and deleted.

Mr. Sneider concluded by inviting Board members to continue submitting recommended changes to the draft policy. The ADC will consider edits before submitting an updated draft for Board action at the March 2018 meeting.

#### **Meeting Adjourned**

The November 18, 2017 session of the meeting adjourned at 12:03 p.m.

A certify to the accuracy of the minutes.	
M. h. Marthus	February 7, 2018
Vice Chair Tonya Matthews	Date

## National Assessment Governing Board Executive Committee

### Report of Thursday, November 16, 2017

**Executive Committee Members:** John Engler (Chair), Rebecca Gagnon, Andrew Ho, Tonya Matthews, Terry Mazany, Joseph O'Keefe, Fielding Rolston, Cary Sneider, Joseph Willhoft.

**Other Board Members:** Alberto Carvalho, Tyler Cramer, Frank Fernandes, Carol Jago, Dale Nowlin, Alice Peisch, Bev Perdue, Linda Rosen, Chasidy White.

Governing Board Staff: Bill Bushaw (Executive Director), Lisa Stooksberry (Deputy Executive Director), Michelle Blair, Lily Clark, Dora Drumgold, Stephaan Harris, Laura LoGerfo, Munira Mwalimu, Tessa Regis, Sharyn Rosenberg, Angela Scott, Tony White.

**NCES Staff:** Peggy Carr (Acting Commissioner), Enis Dogan, Pat Etienne, Eunice Greer, Dan McGrath, Michael Moles, Holly Spurlock, Bill Tirre.

U.S. Department of Education Budget Service Staff: Hillary Tabor, Vanessa Tesoriero.

Other Attendees: P20 Strategies, LLC: Andrew Kolstad. AIR: Cadelle Hemphill, George Bohrnstedt. Child Trends: Natalia Pane. CRP, Inc.: Arnold Goldstein. ETS: Jay Campbell, Gloria Dion, Amy Dresher, Emelie Podor, Kellè Wyatt, Karen Wixson. Hager Sharp: David Hoff, Debra Silimeo. Optimal Solutions Group: Brian Cramer. Pearson: Llana Williams, Cathy White. Other: Eileen Weiser.

#### 1. Welcome and Agenda Overview

Chair Engler called the meeting to order at 4:30 p.m. He welcomed to the committee Tonya Matthews in her new role as Vice Chair, Fielding Rolston in his new role as Chair of the Nominations Committee, and Terry Mazany as the Board's immediate past chair. Chair Engler provided an overview of the agenda, noting that an hour of the Executive Committee meeting would be conducted in closed session for a briefing on the Governing Board and NAEP budgets.

#### 2. Executive Director's Report

Bill Bushaw provided the Executive Committee with an overview of the Governing Board staff's efforts to document progress and plans to implement the Strategic Vision using Microsoft Project. He explained that the Board's meeting materials included summary reports to provide transparency and accountability on the activities underway. The overall implementation report provides a high-level summary of current initiatives and will be used to help identify and manage projects with implications for multiple committees. More detailed and personalized progress reports were also included in each of the three standing committee's meeting materials. Mr. Bushaw noted that these reports are living drafts and will continue to be updated over time. He extended an open invitation for Board members to provide feedback on the Strategic Vision reporting approach.

Mr. Bushaw provided brief highlights of the Board's quarterly outreach efforts, which included staff meetings with stakeholder groups focused primarily on the Board nominations effort and numerous Board member presentations.

#### 3. NCES Update

Peggy Carr provided the Executive Committee with a briefing on the Commission on Evidence-Based Policymaking, which was established by Congress to develop a strategy for increasing the availability and use of data in order to build evidence about government programs, while protecting privacy and confidentiality. The Commission released its final report and recommendations, "The Promise of Evidence-Based Policymaking", on September 7, 2017. Ms. Carr highlighted the report's recommendations and noted that it featured the NCES's restricted-use data system as an exemplar of how statistical agencies can provide researchers with secure access to confidential data.

Executive Committee members expressed an interest in understanding the legal challenges that currently prevent NAEP from being linked to federal labor statistics. Chair Engler noted that the extended timeline for releasing federal data sets is often too long for it to be practically useful; he suggested that perhaps linking NAEP to state datasets would be more useful.

#### 4. NAEP Budget and Assessment Schedule

#### **CLOSED SESSION**

**Executive Committee Members:** John Engler (Chair), Rebecca Gagnon, Andrew Ho, Tonya Matthews, Terry Mazany, Joseph O'Keefe, Fielding Rolston, Cary Sneider, Joseph Willhoft.

**Other Board Members:** Alberto Carvalho, Tyler Cramer, Frank Fernandes, Carol Jago, Dale Nowlin, Alice Peisch, Bev Perdue, Linda Rosen, Chasidy White.

Governing Board Staff: Bill Bushaw (Executive Director), Lisa Stooksberry (Deputy Executive Director), Michelle Blair, Lily Clark, Dora Drumgold, Stephaan Harris, Laura LoGerfo, Munira Mwalimu, Tessa Regis, Sharyn Rosenberg, Angela Scott, Tony White.

**NCES Staff:** Peggy Carr (Acting Commissioner), Enis Dogan, Pat Etienne, Eunice Greer, Dan McGrath, Michael Moles, Holly Spurlock, Bill Tirre.

U.S. Department of Education Budget Service Staff: Hillary Tabor, Vanessa Tesoriero.

The Executive Committee met in closed session from 5:00 p.m. to 6:00 p.m. The Executive Committee schedule and budget discussion was conducted in closed session because the disclosure of technical and cost data would significantly impede implementation of the contract awards and negotiations for awards. Therefore this discussion is protected by exemption 9(B) of section 552b(C) of Title 5 U.S.C.

Mr. Bill Bushaw presented the Executive Committee with a brief overview of the appropriations status. The federal government is operating under a continuing resolution for fiscal year 2018; this provides NAEP and the Governing Board with essentially flat funding

until Congress passes a final budget. The fiscal year 2017 funding levels were \$149 million for NAEP and \$7.745 million for the Governing Board. He noted that the Strategic Vision priority to consider the future of the Long-Term Trend assessment and the Governing Board's draft resolution on policy priorities both have budget implications for the Governing Board to consider.

Peggy Carr, NCES Acting Commissioner, briefed the Executive Committee on the actual and estimated costs for the NAEP Assessment Schedule. The presentation identified the assumptions used to project future costs, including the budgetary impacts of NAEP continuing to provide the technology for the digital-based assessments versus some reliance on school equipment. Ms. Carr noted that the actual costs will be affected by the new NAEP contracts to be awarded in fiscal year 2018 and by Governing Board decisions.

Ms. Carr presented the costs estimates associated with several different options for proceeding with the Long-Term Trend assessment's transition to a digitally-based assessment. She also introduced several operational approaches and corresponding resource implications for NAEP to inform the Governing Board's consideration of its draft policy priorities.

Chair Engler adjourned the Executive Committee meeting at 6:00 p.m.

I certify the accuracy of these minutes.	
John Ender	January 2, 2018
	- January 2, 2016
John Engler, Chair	Date

# National Assessment Governing Board Ad Hoc Committee on Measures of Postsecondary Preparedness

### Report of Thursday, November 16, 2017

**Ad Hoc Committee Members:** Terry Mazany (Chair), Alberto Carvalho, Carol Jago, Tonya Matthews, Dale Nowlin, Alice Peisch, Fielding Rolston, Linda Rosen, Ken Wagner, Chasidy White.

Ad Hoc Committee Member Absent: Jim Geringer.

**Other Board Members:** Tyler Cramer, John Engler (Chair), Frank Fernandes, Rebecca Gagnon, Andrew Ho, Joseph O'Keefe, Bev Perdue, Joseph Willhoft.

**Governing Board Staff:** Bill Bushaw (Executive Director), Lisa Stooksberry (Deputy Executive Director), Michelle Blair, Lily Clark, Stephaan Harris, Laura LoGerfo, Sharyn Rosenberg.

NCES Staff: Peggy Carr (Acting Commissioner), Enis Dogan, Pat Etienne, Elvira Germino Haasken, Eunice Greer, Dan McGrath, Nadia McLaughlin, Michael Moles, Holly Spurlock, Bill Tirre.

Other Attendees: U.S. Department of Education Budget Service Staff: Hillary Tabor, Vanessa Tesoriero. AIR: George Bohrnstedt, Fran Stancavage. Child Trends: Natalia Pane. CRP, Inc.: Arnold Goldstein. ETS: Gloria Dion, Emilie Poller, Luis Saldivia, Kellè Wyatt, Karen Wixson. HumRRO: Sunny Becker, Emily Dickinson, Monica Gribben, Thanos Patelis. Optimal Solutions Group: Rukayat Akinbiyi, Brian Cramer. Pearson: Cathy White. Other: Terry Holliday, Eileen Weiser.

#### 1. Welcome and Agenda Overview

Chair Mazany called the inaugural meeting of the Ad Hoc Committee on Measures of Postsecondary Preparedness to order at 1:45 p.m. He referenced the proliferation of national attention on how technology is changing the economy and the dramatic implications for work and education, indicating the imperative for the Governing Board to explore postsecondary preparedness through this committee.

Bill Bushaw briefly introduced the staff to support the ad hoc committee: Lily Clark of the Governing Board staff, Bill Tirre of NCES, and Thanos Patelis of HumRRO providing technical support to the committee through a Governing Board contract.

## 2. Discussion of the Proposed Approach for the Ad Hoc Committee on Measures of Postsecondary Preparedness

The ad hoc committee was created to address the Governing Board's Strategic Vision priority to "[d]evelop new approaches to measure the complex skills required for transition to postsecondary education and career." Chair Mazany reviewed the charge to the ad hoc committee to collect expert testimony and gather existing research, with the goal of developing recommendations within one year. He noted the Board's process to create the NAEP Technology and Engineering Literacy (TEL) assessment took over a decade from inception to being operational, and expressed his desire for the Governing Board to make a difference in this arena in a shorter timeframe than TEL.

Chair Mazany highlighted the three proposed research questions to organize the committee's work for the next year and invited feedback:

- 1. Workforce of the future (readiness for what?)
- 2. Requisite skills for future work (skills for what?)
- 3. Measures of preparedness (measures for what?)

Committee members offered resounding support for the three research questions and discussed the importance of defining "future," "skills," and "measures." The committee decided to modify the first question to be "work of the future," rather than workforce, as workforce includes an older demographic that would not be pertinent to NAEP's grade 12 measures.

The committee emphasized the importance of consulting experts in industry, higher education, and the study of the future to inform its work. These experts should be innovators in their fields.

Chair Mazany led the group's discussion to define success for the ad hoc committee. He encouraged the committee to be ambitious. The group expressed its belief that the Governing Board is uniquely positioned to convene disparate interests and NAEP provides the platform to change the nation's valuation of what is important in student learning; therefore the Board must have the courage to create a paradigm shift in what matters and gets measured.

The group brainstormed the long-term outcomes of the Board's work to potentially include:

- Shifting the knowledge and skills that NAEP measures to better align with economic demands—challenging the assumption that the K-12 education system produces graduates with the skills employers need;
- Providing a voluntary credentialing service and/or brokering data from various sources beyond NAEP to capture a wider range of achievement measures that are more reflective of and customizable to students' learning ecosystems (including apprenticeships, etc.);
- Changing the national narrative on what is important in student achievement by increasing the focus on contextual variables in reporting NAEP results; and/or
- Replacing the current NAEP grade 12 assessments with a single assessment to report a postsecondary preparedness measure at the state level.

#### 3. Discussion on the Workforce of the Future

The group determined that it was important for the Governing Board to target its efforts on a future that is relatively near, so as to be relevant and useful. The committee decided to aim its research and efforts to impact the class of 2030, noting that this cohort has just entered the K-12 education system, and yet dramatic differences are anticipated for what skills and knowledge they will need to be prepared for life after high school.

Committee members cautioned against referencing this broader range of skills as diminutive to traditional cognitive measures (i.e. "soft" skills) or innate abilities that cannot be taught or learned (i.e. "talent").

In a discussion of how to define skills for future work, the committee considered the importance of defining a universal set of requisite skills that youth need to be prepared for anything, with the acknowledgement that the class of 2030 must be prepared for jobs that do not currently exist and that we cannot fully anticipate. Committee members emphasized the importance of pursuing this effort, despite the unknowns of the future.

January 13, 2018

Chair Mazany adjourned the ad hoc committee meeting at 3:45 p.m.

I certify the accuracy of these minutes.

Terry Mazany, Chair Date

# National Assessment Governing Board Assessment Development Committee Report of November 16-17, 2017

#### **November 16, 2017**

**Assessment Development Committee (ADC) Members:** Cary Sneider (Vice Chair), Frank Fernandes, Carol Jago, and Dale Nowlin.

**Governing Board Members:** Tyler Cramer.

**Governing Board Staff:** Bill Bushaw (Executive Director), Lisa Stooksberry, Michelle Blair, Lily Clark, and Sharyn Rosenberg.

**National Center for Education Statistics (NCES) Staff:** Enis Dogan, Eunice Greer, Elvira Germino-Hausken, Nadia McLaughlin, and Holly Spurlock.

**Other Attendees:** AIR: George Bohrnstedt, Gabrielle Merken, Fran Stancavage. Child Trends: Natalia Pane. ETS: Jay Campbell, Gloria Dion, Emily Pooler, Luis Saldiva, and Karen Wixson. Hager Sharp: Cailin Jason. HumRRO: Monica Gribben. Pearson: Cathy White. U.S. Department of Education Budget Service: Hillary Tabor, Vanessa Tesoriero.

#### **Welcome and Introductions**

ADC Vice Chair Cary Sneider called the meeting to order at 11:15 a.m. and welcomed attendees.

#### Framework Development Policy (SV #5)

Mr. Sneider noted the status of the Framework Development Policy revision. The ADC started revising the policy in July 2017, discussed initial ideas with the full Board in August 2017, and refined the policy based on these discussions and feedback from partners, including NCES. On Saturday, November 18, the feedback will be collected from the full Board on the draft policy revision, as a first reading. The policy is slated for action at the March 2017 Board meeting. In the interim, comments and revisions will be collected.

#### Framework Activities: Issues and Milestones (SV #5)

Several focus areas in the Board's Strategic Vision center on NAEP content recommendations from ADC, culminating in various framework projects. Mr. Sneider reviewed four areas of the Strategic Vision that call for ADC leadership: identifying resources for educators, increasing the meaningful insights available from contextual variables, identifying innovation opportunities

from reviews of assessments used in other countries, and updating frameworks and improving related proceses. He noted that recent ADC discussions have noted priorities in each of these areas, such as maintaining NAEP's ability to report student performance trends. The Committee has also set a goal to take advantage of areas of content overlap between NAEP assessments, where they exist, as opportunities to streamline NAEP assessments.

Having fewer NAEP frameworks could enable more frequent reporting for several subject areas, while also providing state-level results and district-level results for NAEP Trial Urban District Assessment (TUDA) districts. Mr. Sneider noted that opportunities for such reporting is a principal rationale for determining whether certain NAEP frameworks or assessments can be consolidated. Across the different subjects, the Committee considered the history and outreach that generated separate NAEP frameworks for 11 subject areas areas.

The ADC engaged in a series of sessions to determine key questions and issues that need to be addressed, in view of the full portfolio of ADC activities anticipated over the next few years. The majority of these activities focus on NAEP frameworks.

Michelle Blair of the Governing Board staff shared a tentative timeline for upcoming ADC projects and gave brief overviews of each framework in order to inform the committee's discussions about framework-specific projects. Mr. Sneider noted that several factors can be used to evaluate the tentative timelines, such as the frequency of the assessment, when the framework was last revised, innovations that need to be explored, and capacity for concurrent projects. These factors, for instance, will inform decisions on the NAEP frameworks for Arts and Foreign Language – projects not yet reflected in the tentative timeline.

Holly Spurlock of NCES briefed the ADC on the item and assessment development timelines for developing digital-based assessments (DBA) in three contexts: digital transitions for NAEP Mathematics and Reading assessments, as well as development for a new framework and assessment – 2014 NAEP Technology and Engineering Literacy (TEL). Ms. Spurlock provided an in-depth review of the procedures involved for developing and administering the first-ever TEL assessment and noted how this process was parallel for the first wave of development for digital scenario-based tasks (SBTs) in the mathematics and reading assessments at grades 4 and 8.

Each digital assessment presented different issues and challenges. In all cases, iterative refinement of SBTs and discrete items required reprogramming, which is more labor-intensive than revisions in a paper-pencil context. Large mid-stream course corrections are costly, and Ms. Spurlock noted that early ADC approvals of concept sketches and draft tasks ensured that development proceeded in a direction likely to obtain final Board approved. Compared with SBTs, development of discrete items followed a less elaborate but parallel process.

When developing items for a new framework, a longer assessment design planning phase is needed. Innovations, such as new stimuli or item types, also require more development. In some

cases, there may be subcontent areas between old and new frameworks that align well with each other, which can reduce lead times because some items from the previous framework can be carried over to the assessment of the new framework.

Ms. Spurlock reviewed that TEL development spanned 2 years and 7 months and involved development of 30 scenario-based tasks to ensure a sufficient number of tasks would perform well enough in the pilot to be advanced to the operational assessment and produce required subscores for the TEL sub-areas. TEL also used large-scale item tryouts to further ensure a successful pilot administration. This was done in addition to smaller scale cognitive laboratory studies, which help to confirm whether items are being interpreted correctly. Meanwhile, development for grades 4 and 8 reading and mathematics involved fewer scenario-based tasks, but were each completed over 3 years and 6 months. Mathematics development tackled complexities related to prototyping and digital tools that must work in concert. Early Governing Board approvals and copyright clearances of passages extend timelines for reading SBT development. However, grade 12 mathematics was completed in 2 years and 4 months, capitalizing on lessons learned from previous SBT development.

The ADC applauded NCES in the thorough approach to ensuring that assessments are administered to meet the NAEP gold standard. A readily available overview of the NAEP development process would be a useful resource for Board deliberations and the field.

The Committee expressed some concern about whether the long development time means that a framework will need to be considered for update around the time the revised assessment is administered. To support NAEP's relevance, the Committee wants to explore with NCES what might be possible to shorten these timelines.

Ms. Spurlock and her team responded that NAEP refreshes content on an ongoing basis, every time a set of items is released. With staggered timelines for each subject area, developers take advantage of this timeline overlap as an opportunity for ongoing integration of lessons learned. Further, NAEP frameworks are robust – different scaffolding and presentation of the content, for example, does not necessarily change the construct outlined in the framework. The ADC noted that a key question for the Committee in conducting framework reviews will be to determine whether the current framework is flexible enough to adapt as needed.

Several briefings were provided in connection with different NAEP assessment areas:

• NAEP Mathematics Assessment. Ms. Blair provided an update on the review of NAEP Mathematics Standards, which began in August 2018 when the American Instistutes for Research (AIR) was awarded the contract. The final report will be presented to the ADC in May 2018. As part of the Committee's framework review, the ADC also plans to engage external mathematics experts in May 2018 to discuss the scope of revisions that may be needed for the NAEP Mathematics Framework.

• NAEP Civics, U.S. History, and Geography Assessments. Eunice Greer of NCES presented three ways to administer the NAEP Civics, Geography, and U.S. History assessments in a combined format: (1) spiraling items from different frameworks together in the same block, i.e., full integration; (2) spiraling blocks for different frameworks into the same sitting; and (3) administering items in cross-subject scenario-based tasks. Ms. Greer noted that each option presents different issues and challenges that would need to be explored carefully. For instance, full integration and cross-subject scenario-based tasks pose greater risks that trend reporting cannot be maintained.

The session was adjourned at 1:30 p.m.

#### **November 17, 2017**

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

Governing Board Staff: Michelle Blair.

National Center for Education Statistics (NCES) Staff: Eunice Greer, Elvira Germino-Hausken, Nadia McLaughlin, and Bill Ward.

**Other Attendees:** AIR: Gabrielle Merken. ETS: Gloria Dion, Emily Pooler, Luis Saldiva, and Karen Wixson. Hager Sharp: Elena Acuna and Joanne Lim. HumRRO: Monica Gribben, Ann Woods. IEA: Dirk Hastedt. Optimal Solutions Group: Sarah Guile. Pearson: Cathy White. Connecticut State Department of Education: Abe Krisst. District of Columbia Public Schools: Monet Phillips.

#### Framework Activities: Issues and Milestones – continued (SV # 5)

The ADC continued discussions to identify key questions and issues for ADC activities to be undertaken in the coming years with briefings focused on specific NAEP assessment areas:

• NAEP Reading and Writing Assessments. Eunice Greer of NCES presented on integrating reading and writing assessment and instruction by noting directions of the field and research. She provided an overview of the related research conducted within the Institute for Education Sciences (IES) over the last 10 years. This research examines various aspects of integrating reading and writing in purpose-driven contexts, such as writing to convey information to a specified audience based on one or more reading passages. The majority of this research has focused on instruction, rather than assessment. Research and development along these lines has not yet begun for NAEP. The ADC acknowledged that the field seems to be moving in the direction of this type of integrated assessment of integrated reading and writing, which provides some

- encouragement for NAEP to pursue it. Karen Wixson of ETS noted that purpose-driven writing could be viewed as a possible expansion of the NAEP Writing Framework.
- NAEP Science and Technology and Engineering Literacy (TEL) Assessments. Mr. Sneider presented an overview of the Next Generation Science Standards (NGSS). Two-thirds of the nation's students are in states that have adopted the standards directly or have adopted closely related frameworks. He noted several advantages and disadvantages to merging the Science and TEL frameworks. One advantage of the merger is alignment with the majority of states. One disadvantage is possibly risking trend maintenance for both the NAEP Science and TEL assessments. Mr. Sneider suggested that one helpful resource for the ADC's deliberations would be to have insights from the content reviewers who participated in the recent NAEP-NGSS alignment study regarding the changes that could be pursued.

#### **Priorities and Next Steps**

Mr. Sneider asked for the Committee's priorities and questions, in light of the issueshighlighted across the different NAEP assessments. A first and foremost focus for the ADC is how to determine what content is most important to assess. These determinations will suggest which assessments may be candidates for some form of consolidation. Consolidation could involve framework changes or joint administrations of assessments for enhanced reporting. A key challenge will be to determine how the ADC should incorporate ideas for integrating assessments in early phases of the ADC framework activities. Plans should not proceed too far in the direction of separate frameworks, when integrated assessments may be a goal for some assessment areas. Discussions are also needed on the different implications for frameworks, e.g., integrated assessments may require integrated frameworks.

The Committee noted that an important guiding question for every policy decision involves articulating: what are the expected gains and losses for each possible path forward. Some rationales for policy decisions could be classified as both a gain and a loss. For example, changing frameworks to reflect what the majority of states are focusing on could be considered an advantage. At the same time, if the majority of states have adopted a controversial stance, the framework change could be viewed more as an endorsement of the stance. In any case, being clear about expected gains and losses will assist in the Board's outreach efforts. For determining the best paths forward, these issues will involve all Board committees.

The ADC noted several opportunities in DBA to explore, including adding more time to blocks and how machine scoring may facilitate changes being considered, particularly with machine learning and artificial intelligence advancements becoming more commonplace aspects of everyday life.

Staff will update the draft timelines to incorporate the issues raised by the Committee. Over the next year, the ADC will start engaging experts to begin framework reviews in reading, writing, and mathematics, starting with reading in March 2018.

#### **November 17, 2017**

# Joint Session of the Assessment Development Committee and the Reporting and Dissemination Committee

**Assessment Development Committee Members:** Cary Sneider (Vice Chair), Frank Fernandes, Dale Nowlin, Chasidy White.

**Reporting and Dissemination Committee Members:** Rebecca Gagnon (Chair), Father Joseph O'Keefe (Vice Chair), Alberto Carvalho, Tyler Cramer, Governor John Engler, Fielding Rolston.

Governing Board Staff: Michelle Blair, Stephaan Harris, Laura LoGerfo, Lisa Stooksberry.

**NCES Staff:** Halima Adenegan, Gina Broxterman, Jamie Deaton, Alison Deegan, Elvira Germino Hausken, Eunice Greer, Linda Hamilton, Dan McGrath, Nadia McLaughlin, Taslima Rahman, Holly Spurlock, Ebony Walton, Bill Ward, Grady Wilburn.

Other Attendees: AIR: Cadille Hemphill, Gabrielle Merken, Fran Stancavage. CRP, Inc.: Arnold Goldstein, Edward Wofford. ETS: Debby Almonte, Jay Campbell, Robert Finnegan, Emilie Pooler, Lisa Ward, Karen Wixson. Hager Sharp: James Elias, Joanne Lim, Elena Okuna, Ashley Parker, Debra Silimeo. Hatcher Group: Ann Bradley, Robert Johnston. HumRRO: Monica Gribben, Anne Woods. Optimal Solutions: Sarah Guile. Pearson: Cathy White.Westat: Lisa Rodriguez, Rick Rogers, Jason Schuknecht. Connecticut State Department of Education: Abe Krisst. CCSSO: Jocelyn Salguer. District of Columbia Public Schools: Monet Phillips. U.S. Department of Education Budget Service: Hillary Tabor.

#### Contextual Data on the 2017 NAEP Reading and Mathematics Report Cards (SV#3)

The Vice Chair of the Assessment Development Committee (ADC) Cary Sneider started the meeting by noting that ADC welcomed the opportunity to learn more about reporting and dissemination efforts and to help increase the impact of NAEP reporting. Similarly, Reporting and Dissemination (R&D) Committee Chair Rebecca Gagnon welcomed the opportunity to learn from the NAEP content experts about key subject-specific contextual data to highlight in messaging for the 2017 NAEP results.

Jamie Deaton from NCES provided a brief and useful overview of the contextual data, explaining the new indices and distinguishing variables and indices under R&D's responsibility from ADC's responsibility. The new questionnaire indices summarize responses from multiple questions focused on the same theme to tap complex topics that cannot be captured with a single item. From empirical analyses of pilot data, about four to six items fit an index well, so each index will comprise responses from at least four individual items. Indices from the core

contextual questionnaire, i.e., not tethered to a specific subject, include perseverance, academic self-discipline, and enjoyment of difficult problems. Indices from the subject-specific contextual questionnaire cover, for example, students' views about reading, fourth-graders' confidence in mathematics, and eighth-graders' mathematics-specific interest.

Ebony Walton of NCES then presented new visualizations of the contextual data that will be featured in upcoming reporting. Some of these visualizations may look familiar from the release of the 2014 NAEP Technology and Engineering Literacy assessment. The reports offer quick snapshots of the data with many opportunities to delve more deeply as user interest and need dictate. Members from both committees expressed strong support for the new indices and new graphics.

As for the purpose of the joint meeting—eliciting recommendations from ADC of actionable, policy-relevant, subject-specific contextual data to highlight—much of the conversation focused on measures of teachers' expertise, i.e., preparation, certification, professional development. ADC member Dale Nowlin asked how NAEP reporting can relate teacher and school responses to scores, and whether these data can be triangulated with data from students to present a more complete picture of what students are encountering in classrooms.

ADC members noted similar issues with extant data as have R&D, such as a lack of variables on teachers' perceived self-efficacy in subject-specific instruction and the lack of distinction as to whether professional development was sought by teachers or compulsory. That level of detail may seem superficially unimportant but in fact offers keen insights into teachers' skills and motivation to improve their practice. For example, R&D Chair Rebecca Gagnon pointed out that 2015 NAEP findings suggest that teachers need and want training in how to implement technology, which, if paired with understanding how teachers use professional development opportunities, can lead to actionable data and the potential for improvement in states, districts, and schools.

Linking NAEP to the NCES' National Teacher and Principal Survey could glean more information on teacher backgrounds without increasing the response burden of teachers. Terry Mazany, formerly of R&D and currently a member of ADC, recommended linking NAEP not only to other NCES data but also to data across institutions and agencies. With the conclusion of the Ryan Commission, the Board should learn what data exist, what barriers prevent potential linkages, and if and how such barriers can be removed. This call echoed the discussion in the earlier R&D meeting, revealing an important convergence of ideas across committees.

Members from both committees asked questions about whether the NAEP program collects any information about the circumstances surrounding the assessment administration, e.g., whether NAEP is administered before recess or after lunch, and about students' engagement in the assessment, e.g., if students' minds wander or if they complete the test by marking all the same answer options.

To conclude the productive joint meeting, the R&D chair and ADC vice chair agreed that moving forward, collaboration should continue. In the future, after the Governing Board's initial receipt of reporting from NCES, R&D will host a conference call with ADC to focus on what messages have emerged and invite ADC input on what may be most meaningful to highlight. The joint committee meeting concluded at 3:18 pm.

I certify the accuracy of these minutes.

Can Smide

December 20, 2017

Cary Sneider, Vice Chair Date

# National Assessment Governing Board Committee on Standards, Design and Methodology Report of November 17, 2017

**COSDAM Members:** Andrew Ho (Chair), Joe Willhoft (Vice Chair), Greg Cizek, Jim Geringer, Alice Peisch, Bev Perdue, Linda Rosen, and Ken Wagner.

Governing Board Staff: Bill Bushaw, Lily Clark, and Sharyn Rosenberg.

**NCES Staff:** Acting Commissioner Peggy Carr, Jing Chen, Enis Dogan, Pat Etienne, Taslima Rahman, and Bill Tirre.

Other Attendees: American Institutes for Research: George Bohrnstedt, Markus Broer, and Young Yee Kim. Department of Education: Vanessa Tesoriero. Educational Testing Service: Amy Dresher, Yue Helena Jia, and John Mazzeo. Hager Sharp: David Hoff and Emily Martin. HumRRO: Thanos Patelis. Optimal Solutions Group: Rukayat Akinbiyi. P20 Strategies: Andrew Kolstad. Pearson: Llana Williams. Westat: Keith Rust and Dianne Walsh.

#### Welcome, Introductions, Review of Agenda, and Overview of COSDAM Priorities

Chair Andrew Ho called the meeting to order at 12:55 p.m. by welcoming three new members to COSDAM: Greg Cizek, Bev Perdue, and Ken Wagner, who transferred from the Reporting and Dissemination Committee. Mr. Ho began by reviewing COSDAM's charge. According to the Governing Board By Laws, "the areas this committee shall address include but are not limited to: (1) technical issues dealing with NAEP assessments; (2) overall issues related to the design, methodology, and structure of NAEP assessments; (3) maintaining the integrity of trend lines while encouraging reasonable experimentation and trials of new approaches; (4) maximizing utility of NAEP data; (5) receiving and reviewing NAEP evaluation and validity studies; and (6) developing a process for review of the technical quality of the assessment."

Mr. Ho also noted several recent activities and Board actions led by COSDAM, including research on academic preparedness for college and job training programs; adopting achievement levels for the 2009 Science, 2011 Writing, and 2014 Technology and Engineering Literacy assessments; a resolution on maintaining trends with the transition to digital-based assessments; the Board's response to the 2016 evaluation of NAEP achievement levels; and the NAEP Long-Term Trend Symposium.

## Overview of Technical Support Contract and Discussion of Research Study on Uses of NAEP

Thanos Patelis of the Human Resources Research Organization (HumRRO), the project director for the recently awarded Technical Support contract, provided a brief overview of the tasks to be performed under the base year of this contract: (1) project management; (2) research, including one research study, four literature reviews, and four technical memos; (3) meeting support; (4) expert panels and white papers; and (5) ad hoc requests. He requested feedback from committee members on plans for a research study that catalogs the uses of NAEP by various audiences. The ultimate goal is for this research study to serve as a resource for the Board in developing a statement on the intended uses and interpretations of NAEP scores, in accordance with standards of the assessment field.

Committee members suggested greater focus on interviews and focus groups and expressed interest in learning more about how people understand the achievement level labels (Basic, Proficient, and Advanced). A concern was raised that the proposed review of state education department press releases may not fully capture how the NAEP results are being used by states, and that speaking with staff of state legislators and communication directors in state departments of education could be helpful.

#### **Initial Considerations for Combining Assessments**

Enis Dogan of the National Center for Education Statistics (NCES) used a metaphor of floral arrangements to provide an initial review of methods for combining assessments. Mr. Dogan noted that there are at least four different ways in which NAEP could define "combining assessments": (1) integrating items within each block; (2) spiraling blocks; (3) creating cross-subject items/tasks; and (4) adding extra block(s). Each potential definition is associated with different implications for administration, analysis, trends, and achievement levels.

COSDAM members noted some cautions and concerns with the idea of combining assessments, particularly with the definitions that include integrating items within each block or creating cross-subject items/tasks. Some committee members suggested that this approach might better serve the measurement of new constructs rather than trying to reconfigure the current NAEP subject areas. There was also discussion about the importance of starting with what the Board would like to report, and then making sure that the assessment is designed to support the intended claims. Finally, a future plenary session was requested in which each definition of combining assessments would be accompanied by a description of potential benefits and risks.

#### **Closed Session 2:30 – 3:15 p.m.**

**COSDAM Members:** Andrew Ho (Chair), Joe Willhoft (Vice Chair), Greg Cizek, Jim Geringer, Alice Peisch, Bev Perdue, Linda Rosen, and Ken Wagner.

Governing Board Staff: Bill Bushaw, Lily Clark, and Sharyn Rosenberg.

**NCES Staff:** Acting Commissioner Peggy Carr, Jing Chen, Enis Dogan, Pat Etienne, and Bill Tirre.

**Other Attendees:** American Institutes for Research: George Bohrnstedt, Markus Broer, and Young Yee Kim. Department of Education: Vanessa Tesoriero. Educational Testing Service: Gloria Dion, Amy Dresher, Yue Helena Jia, and John Mazzeo. Hager Sharp: David Hoff and Emily Martin. Optimal Solutions Group: Rukayat Akinbiyi. Westat: Dianne Walsh.

#### **Update on Maintaining Trends with Transition to Digital-Based Assessments**

In closed session, John Mazzeo of Educational Testing Service (ETS) presented results from 2017 bridge studies that were conducted to determine whether trend lines could be continued in grades 4 and 8 reading and mathematics with NAEP's transition from paper-and-pencil to digital-based assessments. Bridge studies were initially conducted in 2015 at the national level, and a similar design was used in 2017 but was expanded to include state- and urban-district-level results in both the paper and digital modes. The presentation reviewed results of the 2017 within-year mode evaluation analyses, including both observed item statistics and the equated group scale score comparisons between the two modes.

Mr. Ho adjourned the COSDAM meeting at 3:15 pm.

I certify the accuracy of these minutes.

Andrew Ho, Chair

December 14, 2017

Date

# **National Assessment Governing Board Reporting and Dissemination Committee**

### Report of November 17, 2017 12:45 – 3:15 pm Washington Marriott Georgetown

<u>Reporting and Dissemination Committee Members</u>: Rebecca Gagnon (Chair), Father Joseph O'Keefe (Vice Chair), Alberto Carvalho, Tyler Cramer, Governor John Engler, Fielding Rolston

Governing Board Staff: Stephaan Harris, Laura LoGerfo

<u>National Center for Education Statistics Staff</u>: Halima Adenegan, Gina Broxterman, Jamie Deaton, Linda Hamilton, Dan McGrath, Taslima Rahman, Ebony Walton

<u>Contractors</u>: Cadille Hemphill (AIR); Arnold Goldstein, Edward Wofford (CRP, Inc.); Robert Finnegan, Lisa Ward (ETS); Kelle Wyatt, Debra Silimeo (Hager Sharp); Ann Bradley, Robert Johnston (Hatcher Group); Kavemuii Murang, Lisa Rodriguez, Jason Schuknecht (Westat)

Other: Andreas Schleicher (OECD); Hillary Tabor (U.S. Department of Education Budget Service)

Chair Rebecca Gagnon convened the Reporting and Dissemination (R&D) Committee at 1:05 pm and welcomed two new Board members: Tyler Cramer and Governor John Engler. After their introductions, the committee shared initial thoughts on memorable lessons from the international panel.

The committee then shifted to robust conversations on (1) the timing of data processing and reporting; and (2) the roles and responsibilities of R&D to highlight and disseminate actionable and policy-relevant data. Governor Engler suggested that NCES should investigate any potential inefficiency in the process to clean, prepare, and analyze data from the 2017 NAEP administration in reading and mathematics. He urged NCES to determine the minimal amount of time required to release data, along with general estimates of that cost and any other impacts.

The overall impact of NAEP results to the public depends less on the timing of the results and more on how the Governing Board and NCES present the results. The committee reviewed together R&D's mission to communicate NAEP results more broadly, more effectively, and more strategically. For example, linking NAEP results to district and/or state expenditures on education may point to next steps for districts and/or states in search of effective policies to enact.

Dan McGrath of NCES shared a new approach to visualizing state NAEP data: a motion graphic that shows changes over time in score differences by subgroup. The size of the circles reflects the size of the population in a given state, and the circles move up and down on the graph by how the score difference between black students and white students has changed over time. The committee members debated the advantages and potential challenges to displaying data in this way but concluded that this seems like a valuable tactic to present a lot of rich information succinctly.

#### **Strategic Vision Update**

The committee met Robert Johnston and Ann Bradley from The Hatcher Group, the Board's new communications contractor. Mr. Johnston outlined the major projects the firm is tackling first for the Governing Board: (a) auditing the Board's social media and website; and (b) building a customer relations management system that will serve as the foundation of the Board's outreach and partnership efforts. Mr. Johnston will share plans to disseminate the 2017 NAEP reading and mathematics results with the R&D committee members at the March 2018 meeting.

Laura LoGerfo, Assistant Director for Reporting and Analysis, encouraged feedback on the table outlining the Strategic Vision activities that fall to R&D's primary responsibility. Ms. LoGerfo will send an email to committee members with NCES' responses to the feedback provided by R&D on the 2021 NAEP core contextual questions.

With the conclusion of the Ryan Commission on Evidence-Based Decision-Making, R&D is motivated to seek out data from other agencies or institutions, such as from the Bureau of Labor Statistics, as possible links to NAEP. The first step is to consider what data NCES has which could be linked to NAEP data. The next step is to learn what relevant data exist beyond NCES but which are not available due to various barriers. The Committee requested a follow-up discussion with Acting NCES Commissioner Peggy Carr to learn what those barriers are and initial steps to remove them.

#### Release Plan for the 2017 Reading and Mathematics Results

Stephaan Harris, Assistant Director for Communications, sketched the proposed plans to release the results from the 2017 NAEP Reading and Mathematics assessments. The proposed plan calls for two major events as part of one "NAEP Day." Part I involves a morning discussion of state and national data with a panel in Washington, D.C. Part II will occur the same day in the afternoon and focus on Trial Urban District Assessment (TUDA) results through a town hall style event, bringing in remote feeds from four TUDA cities. At each location, a board member, local leaders, educators, parents, and others would discuss how TUDA has informed their practices, along with relevant trends in their district that relate to the findings. Both events would be webcast live.

The plan also calls for post-release efforts to extend the life of the report beyond "NAEP Day" with social media campaigns and multimedia presentations that will promote interesting contextual variables actionable for the public.

Mr. Carvalho recommended that districts should present the practices that they perceive as critical to their strong performance on NAEP—essentially, case studies in best practices—on the same day as the initial release of NAEP results. The Governing Board must remain impartial, objective, and independent, and as such, cannot even hint at causal relationships in the NAEP data, instead highlighting both significant gains and significant losses. Districts are better positioned to know what they are undertaking to improve performance and how to highlight their own efforts.

Vice Chair Father Joseph O'Keefe moved that the release plan be moved to the full Governing Board for action, which Fielding Rolston seconded. The committee unanimously approved the plan, with the clarification that NCES will coordinate media embargo access and arrange the media conference call that precedes the public release.

ACTION: The Reporting and Dissemination Committee unanimously moved the release plan for the 2017 National Assessment of Educational Progress in Reading and Mathematics for action by the full Governing Board on Saturday, November 18, 2017. The full text of the release plan is appended to these minutes.

# Joint Meeting with the Assessment Development Committee on Reporting of the Contextual Data on the 2017 NAEP Reading and Mathematics Report Cards 2:20 – 3:15 pm

<u>Assessment Development Committee Members</u>: Cary Sneider (Vice Chair), Frank Fernandes, Dale Nowlin, Chasidy White

Reporting and Dissemination Committee Members: Rebecca Gagnon (Chair), Father Joseph O'Keefe (Vice Chair), Alberto Carvalho, Tyler Cramer, Governor John Engler, Fielding Rolston

Governing Board Staff: Michelle Blair, Stephaan Harris, Laura LoGerfo, Lisa Stooksberry

NCES Staff: Halima Adenegan, Gina Broxterman, Jamie Deaton, Alison Deegan, Elvira Germino Hausken, Eunice Greer, Linda Hamilton, Dan McGrath, Nadia McLaughlin, Taslima Rahman, Holly Spurlock, Ebony Walton, Bill Ward, Grady Wilburn

Other Attendees: Cadille Hemphill, Gabrielle Merken, Fran Stancavage, (AIR); Arnold Goldstein, Edward Wofford (CRP, Inc.); Debby Almonte, Jay Campbell, Robert Finnegan, Emilie Pooler, Lisa Ward, Karen Wixson (ETS); James Elias, Joanne Lim, Elena Okuna, Ashley Parker, Debra Silimeo (Hager Sharp); Ann Bradley, Robert Johnston (Hatcher Group); Monica Gribben, Anne Woods

(HumRRO); Sarah Guile (Optimal Solutions); Cathy White (Pearson); Lisa Rodriguez, Rick Rogers, Jason Schuknecht (Westat)

<u>Other</u>: Abe Krisst (Connecticut State Department of Education); Jocelyn Salguer (CCSSO); Monet Phillips (District of Columbia Public Schools); Hillary Tabor (U.S. Department of Education Budget Service)

The Vice Chair of the Assessment Development Committee (ADC) Cary Sneider started the meeting by noting that ADC welcomed the opportunity to learn more about reporting and dissemination efforts and to help increase the impact of NAEP reporting. Similarly, Reporting and Dissemination (R&D) Committee Chair Rebecca Gagnon welcomed the opportunity to learn from the NAEP content experts about key subject-specific contextual data to highlight in messaging for the 2017 NAEP results.

Jamie Deaton from NCES provided a brief and useful overview of the contextual data, explaining the new indices and distinguishing variables and indices under R&D's responsibility from ADC's responsibility. The new questionnaire indices summarize responses from multiple questions focused on the same theme to tap complex topics that cannot be captured with a single item. From empirical analyses of pilot data, about four to six items fit an index well, so each index will comprise responses from at least four individual items. Indices from the core contextual questionnaire, i.e., not tethered to a specific subject, include perseverance, academic self-discipline, and enjoyment of difficult problems. Indices from the subject-specific contextual questionnaire cover, for example, students' views about reading, fourth-graders' confidence in mathematics, and eighth-graders' mathematics-specific interest.

Ebony Walton of NCES then presented new visualizations of the contextual data that will be featured in upcoming reporting. Some of these visualizations may look familiar from the release of the 2014 NAEP Technology and Engineering Literacy assessment. The reports offer quick snapshots of the data with many opportunities to delve more deeply as user interest and need dictate. Members from both committees expressed strong support for the new indices and new graphics.

As for the purpose of the joint meeting—eliciting recommendations from ADC of actionable, policy-relevant, subject-specific contextual data to highlight—much of the conversation focused on measures of teachers' expertise, i.e., preparation, certification, professional development. ADC member Dale Nowlin asked how NAEP reporting can relate teacher and school responses to scores, and whether these data can be triangulated with data from students to present a more complete picture of what students are encountering in classrooms.

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motivation to improve their practice. For example, R&D Chair Rebecca Gagnon pointed out that 2015 NAEP findings suggest that teachers need and want training in how to implement technology, which, if paired with understanding how teachers use professional development opportunities, can lead to actionable data and the potential for improvement in states, districts, and schools.

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To conclude the productive joint meeting, the R&D chair and ADC vice chair agreed that moving forward, collaboration should continue. In the future, after the Governing Board's initial receipt of reporting from NCES, R&D will host a conference call with ADC to focus on what messages have emerged and invite ADC input on what may be most meaningful to highlight. The joint committee meeting concluded at 3:18 pm.

I certify the accuracy of these minutes.

Rebecca Gagnon

Chair

January 10, 2018

Date



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

#### The Nation's Report Card: 2017 Reading and Mathematics

The national, state, and urban district results of the 2017 National Assessment of Educational Progress (NAEP) Reading and Mathematics Report Card will be released to the general public in early 2018 through an interactive, "virtual town hall meeting"-style release event that will be based in Washington, D.C. but incorporate several cities across the country via live video simulcast.

The event, to be webcast for a national audience, will involve two separate programs on the same day. The first program will take place that morning and involve the findings of national and state results at an appropriate venue in Washington, D.C. It will include a data presentation 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 other panelists knowledgeable in the reading and mathematics assessments on a national and state level. This program, slated to be no longer than 90 minutes, will also include a conversational Q&A session that would include questions from in-person attendees and those submitted via livestream.

Later the same day, the second program will also be held at a Washington, D.C. venue as a base location and involve the Trial Urban District Assessment (TUDA), a program where 27 large urban school districts from around the country voluntarily participate in NAEP. The event will include a data presentation and comments from experts in urban district assessment. Additionally, there will be town halls convened at up to four other venues in TUDA cities that will be simultaneously broadcast. Leaders from those cities as well as Board members will discuss findings and the local impact of NAEP. The live video and creative use of technology would allow representation and engagement from different parts of the country. The program, slated to be 90 minutes, will also involve a conversational Q&A session that would include questions submitted via livestream. Full accompanying data for all assessment results will be posted on the Internet at the scheduled time of release.

The 2017 NAEP Reading and Mathematics Report Card represents the move from paperand-pencil to digitally-based assessments, and will present findings from a representative sample of 4<sup>th</sup> and 8<sup>th</sup>-graders by nation, state and 27 large urban districts that participate in TUDA. The report will also include student and school survey responses about students' experiences and their opportunities to learn in these subjects.

#### DATE AND LOCATION

The release events will occur in early 2018. 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 THE RELEASE**

In the weeks and months before the release event, the Governing Board will work to inform various audiences and stakeholder groups about digitally-based assessments (DBA) to provide important context and information before results are public. To explain DBA and the timing of the results, NCES has created a video, a statement from the NCES Acting Commissioner, and a frequently asked questions (FAQ) document, and the Board has created a one-pager that will be public October 2017. Those resources will be posted online, shared on social media, and disseminated to stakeholders through other means to assist in promotional efforts of the release.

In the days preceding the release, NCES will offer a conference call for appropriate media; and there will be an embargoed data website available to 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—<a href="http://nationsreportcard.gov">http://nationsreportcard.gov</a>—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. The Governing Board press release, the full and abridged versions of the Reading and Mathematics Frameworks, and related materials will be posted on the Board's web site at <a href="www.nagb.gov">www.nagb.gov</a>. The site will also feature links to social networking sites and multimedia 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 a social media chat, major presentation, webinar, multimedia product or social media campaign—to target communities and audiences with an interest in reading and mathematics and assessment in general. The goal of these activities is to extend the life of the results and provide value and relevance to stakeholders.

## **National Assessment Governing Board**

# Nominations Committee (Closed Session)

#### Report of November 18, 2017

**Nominations Committee Members:** Fielding Rolston (Chair), Governor. Jim Geringer, Andrew Ho, Tonya Matthews, Terry Mazany, Father Joseph O'Keefe, Cary Sneider.

**Board member:** Governor John Engler.

Board Staff: Bill Bushaw, Munira Mwalimu, Tessa Regis, Lisa Stooksberry.

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 November 18, 2017 from 7:30 to 8:15 a.m.

Nominations Committee Chair Fielding Rolston called the meeting to order at 7:30 a.m. He welcomed new committee members Jim Geringer, Tonya Matthews, and Terry Mazany and noted Shannon Garrison's absence. He then provided an overview of the agenda.

The Governing Board's annual "call for nominations" ended on October 31, 2017. The Board has five positions open for 2018: secondary school principal, 4<sup>th</sup> grade teacher, 8th grade teacher, general public representative, and chief state school officer. The Committee discussed the nominations process and timeline for the 2018 cycle, which proceeds with evaluations taking place in December; a virtual meeting in January to identify finalists; and action by the Governing Board at its March meeting. Finalists will be delivered to the Secretary in early spring.

Members discussed the vacant position of Chief State School Officer and the critical need to expedite the search to fill the one-year term that is remaining for the position held by the late Mitchell Chester. If the Board delegates authority, the committee will take action on finalists in this category in January and then forward recommendations to the Secretary immediately.

The Committee previewed the new online submission and ratings system. Committee members inquired about the option to access all documents in each category via a single PDF file and to be able to download all notes together. The committee discussed the value of using three raters, which Mr. Ho clarified was appropriate given the diminishing returns on investment when using more than three.

Mr. Rolston thanked the Nominations Committee members for their work and commended staff for facilitating the Committee's efforts.

Fielding Robson	01/17/2018
Fielding Rolston, Chair	Date

I certify the accuracy of these minutes.