

**National Assessment Governing Board**

**Meeting of August 5 - 6, 2021**

**McLean, VA and Virtual**

**OFFICIAL SUMMARY OF GOVERNING BOARD MEETING**

**Complete Transcript Available**

**National Assessment Governing Board Members Present**

Haley Barbour, Chair

Alice Peisch, Vice Chair

Dana Boyd

Alberto Carvalho

Gregory Cizek

Tyler Cramer

Christine Cunningham

Frank Edelblut

Paul Gasparini

Jim Geringer

Eric Hanushek

Patrick Kelly

Suzanne Lane

Tonya Matthews

Reginald McGregor

Mark Miller

Beverly Perdue

Julia Rafal-Baer

Ron Reynolds

Nardi Routten

Martin West

Mark White

Grover (Russ) Whitehurst

Carey Wright

Mark Schneider (ex-officio)

**National Assessment Governing Board Staff**

Lesley Muldoon, Executive Director  
Lisa Stooksberry, Deputy Executive Director  
Stephaan Harris  
Donnetta Kennedy  
Laura LoGerfo  
Munira Mwalimu  
Tessa Regis  
Sharyn Rosenberg  
Angela Scott  
Matt Stern  
Anthony White

**National Center for Education Statistics (NCES)**

Peggy Carr, Acting Commissioner  
Tammie Adams  
Samantha Burg  
Jing Chen  
Brian Cramer  
James Deaton  
Alison Deigan  
Enis Dogan  
Veda Edwards  
Pat Etienne  
Eunice Greer  
Linda Hamilton  
Shawn Kline  
Tina Love  
Holly Martin  
Daniel McGrath  
Nadia McLaughlin  
Stephen Provasnik  
Taslina Rahman  
Eddie Rivers  
Holly Spurlock  
William Tirre  
Ebony Walton  
William Ward  
Grady Wilburn

**American Institutes for Research (AIR)**

Brittany Boyd  
Markus Broer  
Kim Gattis  
Courtney Gross  
Cadelle Hemphill  
Young Kim  
Christy Talbot  
Yan Wang

**Council of Chief State School Officers, CCSSO**

Fen Chou  
Scott Norton

**CRP, Inc.**

Shamai Carter  
Monica Duda  
Subin Hona  
Edward Wofford  
Anthony Velez

**Educational Testing Service (ETS)**

Marc Berger  
Jay Campbell  
Carmen Dahlberg  
Gloria Dion  
Patricia Donahue  
Amy Dresher  
Kadriye Ercikan  
Gary Feng  
Robert Finnegan  
Janel Gill  
Yue Jia  
Ranu Palta-Upreti  
Rupal Patel  
David Pelovitz  
Hilary Persky  
Emilie Pooler  
Bobby Rampey  
Shannon Richards

Sarah Rodgers  
Simone Todd  
Lisa Ward  
Karen Wixson

**Hager Sharp**

James Elias  
David Hoff  
Cailin Jason  
Joanne Lim  
Debra Silimeo

**The Hatcher Group**

Jenny Beard  
Sami Ghani  
Robert Johnston  
Zoey Lichtenheld  
David Loewenberg  
Michael Mershon  
Melissa Rogers  
Alexandra Sanfuentes  
Devin Simpson  
Nandini Singh  
Jenna Tomasello

**Optimal Solutions Group**

Imer Arnautovic  
Peter Simmons

**Pearson**

Joy Heitland  
Eric Moyer  
Pat Stearns  
Llana Williams

**Westat**

Chris Averett  
Greg Binzer  
Lauren Byrne  
Zully Hilton

Kavemuii Murangi  
Jason Nicholas  
Robert Perkins  
Lisa Rodriguez  
Rick Rogers  
Keith Rust

**WestEd**

Georgia Garcia  
Mira-Lisa Katz  
Mark Loveland  
Sonya Powers  
Megan Schneider  
Steve Schneider  
Sarah Warner

**Other Attendees**

Diana Arya, University of California, Santa Barbara  
Michelle Blair, Duke University  
Nancy Brynelson, California State University, Chancellor's Office  
Gina Cervetti, University of Michigan  
Julie Coiro, University of Rhode Island  
Susan Cramer, Remarc Group  
Kelly Crowley, (Closed Captioner)  
Brandon Dart, Management Strategies  
Andrea Faulkner, North Carolina Department of Public Instruction  
James Forester, U.S. Department of Education, Office of Legislation and Congressional Affairs  
John Galisky, University of California, Santa Barbara  
Joseph Garry, Neal Gross (Court Reporter)  
Laura Goadrich, Arkansas Department of Education  
Aleah Guthrie, SCORE  
Ray Hart, Council of the Great City Schools  
Andrew Ho, Harvard University  
Christy Hovanetz, ExcelinEd  
Linda Jacobson, The 74  
Carol Jago, UCLA  
Jon Kemp, DCI Group  
Andrew Kolstad, P20 Strategies LLC  
Beth LaDuca, Oregon Department of Education  
Jason Lautenbacher, U.S. Department of Education, Office of the Chief Information Officer

Somer Levine, Pepperdine University  
Cheryl Little, (Closed Captioner)  
Brian Lloyd, Michigan Department of Education  
Shelley Loving-Ryder, Virginia Department of Education  
Raina Moulian, Alaska Department of Education & Early Development  
Christian Myers  
Alexa Patrick, Intern, U.S. Department of Education  
P. David Pearson, University of California, Berkeley  
Christine Pitts, Center on Reinventing Public Education  
John Richard, Ohio Department of Education  
Alexa Patrick Rodriguez, U.S. Department of Education, Office of Legislation and  
Congressional Affairs  
Marco Sanchez, U.S. Department of Education, Office of Legislation and Congressional Affairs  
Renee Savoie, Connecticut State Department of Education  
Sarah Schwartz, Education Week  
Sydney Smith, U.S. Department of Education, Office of Legislation and Congressional Affairs  
Sheila Valencia, University of Washington  
Valerie Walton, Public School  
Natalie Wexler  
Julie Williams, California Department of Education

## **Opening Remarks**

Haley Barbour, Chair, called the session to order at 1:18 pm and welcomed attendees to the August 2021 National Assessment Governing Board (Governing Board) meeting held by webinar and in-person at the Ritz-Carlton in McLean, Virginia.

## **Approval of August 2021 Agenda**

Barbour requested a motion for approval of the August 2021 agenda. A motion to accept the proposed agenda was made by Tyler Cramer and seconded by Martin West. No discussion ensued and the motion passed unanimously.

## **Approval of May 2021 Board Meeting Minutes**

Barbour requested a motion for approval of the minutes of the May 2021 Governing Board meeting. Frank Edelblut made a motion to approve the May 2021 minutes and Mark White seconded the motion. There was no discussion and the motion passed unanimously.

## **Executive Director's Update**

Governing Board Executive Director Lesley Muldoon provided a quarterly update. Muldoon welcomed Board members by expressing her gratitude to see them, as they convened for the August 2021 Board session. Prior to delivering her update, Muldoon explained best practices for hybrid meetings with attendees both online and in-person.

Muldoon began by stating that much had changed, among the Board and in the nation, since the Board had last met in person, 17 months ago. Muldoon pointed to two specific issues that had dominated the Board's agenda since March 2020. The first, Muldoon explained, was shifting the National Assessment of Educational Progress (NAEP) reading and math assessments from 2021 to 2022 due to the COVID-19 pandemic. She noted the ongoing need for NAEP to help inform the nation about the impact of the pandemic on student learning.

The second issue was the 2026 NAEP Reading Framework update, which has consumed significant Board attention over the past four Board meetings. Urgency around the Reading Framework grew, she added, due to noticeable declines in NAEP reading scores, particularly among eighth grade students, and due to the pandemic's impact. Muldoon stated that the Board strives to reach consensus on significant policy matters and applauded the Board's hard work on the Framework over the past few months. Muldoon congratulated the Board on crafting a Framework that is broadly representative of education stakeholders across the country.

Next, Muldoon outlined activities for the fall and highlighted two developments in Congress: First, the House Appropriations Committee recommended a \$40 million increase for the NAEP program in the coming budget. This sum would fund general programmatic expenses to ensure that NAEP could administer the full assessment schedule. The Appropriations Committee also proposed an additional \$25 million to conduct a NAEP civics assessment in 2024, since civics has played an important role in education this past year. Congress has expressed interest in understanding and measuring students' civics proficiency. The House passed this proposal, but it awaits approval from the Senate.

The second is the Senate Health Education Labor and Pensions (HELP) Committee's interest in reauthorizing the law that governs NAEP, known as the Education Sciences Reform Act, or ESRA. The Senate last took action to reauthorize ESRA in 2015, but the reauthorization never passed the House. The Senate HELP Committee is considering reintroducing an updated proposal in 2021. The Institute of Education Sciences (IES) and the National Center for Education Statistics (NCES) are slated to discuss this reauthorization with the Committee. Muldoon clarified that some legislation may be introduced after Congress resumes in August. If everything stays on schedule, action could be taken by the Senate in the fall.

Muldoon urged the Board to refocus their strategic priorities. Since the Reading Framework update consumed the Board's time over the past year, other efforts require attention. This coming November marks the first anniversary of the adoption of Strategic Vision 2025. Staff will deliver its first annual report on their progress toward the Vision's goals.

Muldoon elaborated on initiatives underway: The Committee on Standards, Design and Methodology (COSDAM) is overseeing work to review and revise the achievement level descriptors for the NAEP reading and math assessments. The Assessment Development Committee (ADC) is launching an update to the NAEP Science Framework. The ADC intends to seek public comment on the NAEP Science Framework before the Board begins the update process later this fall. The Reporting and Dissemination (R&D) Committee has discussed ways to improve socioeconomic status measures on NAEP, which will be shared with the full board in coming months.

Muldoon concluded by bidding farewell to Board members Gregory Cizek and Jim Geringer. Muldoon mentioned that new Board members will be appointed in the fall. Barbour thanked Muldoon then introduced Peggy Carr, Acting Commissioner for Assessment, NCES.

### **National Center for Education Statistics Update**

Carr thanked Barbour and began by discussing the recently implemented NAEP Monthly School Survey and dashboard. This monthly survey allows NCES to be nimbler in its collection of



relevant, high-quality data. Carr added that this method will be considered for future use since it allows NCES to connect with stakeholders more efficiently.

Carr provided an overview of the survey and initial observations. The monthly survey asks nine questions, including about the demographic composition of in-person and virtual students; instructional mode offered; the implementation of in-school learning, remote learning, or hybrid instruction; attendance; and teachers' vaccination status. Carr expressed surprise that some remote instruction did not involve live-teacher instruction at all, relying heavily on pre-recorded instruction. Carr also highlighted declines in attendance, as well as findings that private schools across the nation know more about their teachers' vaccination status than public schools. The results are available on an interactive online dashboard.

Carr then presented enrollment data, focusing specifically on grades 4 and 8. One primary finding was that Black, Asian, and Hispanic students were less likely to attend in-person instruction, a trend Carr said may continue during the 2021-22 school year.

Next, Carr reminded Board members about NCES' "School Pulse Panel" survey, which will collect and report data in a matter of weeks, as was done for the monthly survey. Carr stated that NCES intends to rotate through different indicators, in a module format, over the year. Survey administration will begin in September, with data released within six weeks on a dashboard. Currently, about 1,000 schools contribute to the survey. Involving more schools would help NCES report data at the regional and national levels.

Carr described the first-ever IES Reading Summit, held in June 2021. More than 1,000 attendees and 70 speakers participated in the virtual event. Participants learned about NAEP data as well as data collected by many of the grantees out of the IES research centers. Based on the success of the reading summit, the Council of Great City Schools and IES agreed to partner again to plan a similar summit on math.

Carr then shifted to the National Academies of Sciences (NAS) efforts to examine what NCES does and to consider how NCES should evolve in the future. This work will push NCES to reflect on its current practices and identify new practices. Carr stated that another effort led by NAS will investigate how the National Center for Education Research (another center within IES) develops and prioritizes research topics for grants.

Carr concluded by discussing the Evidence Act, which was implemented in 2018, changing how federal agencies manage, use, collect, and share data. Carr explained that the Act focuses on four pillars of evidence: (1) performance management, (2) policy analysis, (3) program evaluation, and (4) foundational fact finding (FFF). For NCES, the cornerstone is FFF, which is operationalized in three ways: surveys, assessments, and administrative data. Carr clarified the

roles of each person supporting these efforts: Carr, herself, is currently acting as the Statistical Officer; Gregory Fortelny is the current Chief Data Officer; and Matthew Soldner is the current Evaluation Officer. Carr stated that the Act gives the Chief Data Officer activities and scope to be accomplished across the four pillars. Carr added that the Act also requires IES to convene a governance council with the statistical official, who serves as ex-officio member. Carr noted her interest in these upcoming opportunities and looked forward to the Board's participation.

Barbour thanked Carr and opened the floor for questions. Alberto Carvalho asked Carr about the close partnership between NCES and the Governing Board, and if there was any further consideration, associated with the future release of NAEP data, for analyses and/or reports of the environmental or socioeconomic conditions students face? Carr stated that she had just received a congressional request for information about schools' physical environments. She stated that more data would be required from NCES and other departments. Carr noted the many privacy and confidentiality laws governing this requirement, but NCES looks forward to adding this information to their portfolio.

Carvalho stated that this collaboration would help measure district effects, through regression analysis, which could help equalize conditions specific to levels of poverty, education level of families, and family income. Carvalho said such data could help the Board identify states and districts where best practices are being implemented. Carvalho stated that, at some point, with the Chair's agreement, NCES could present those data points to the Board.

Jim Geringer referenced a previous slide that highlighted the racial backgrounds of students who attended school in-person and remotely. He was surprised to find that minority groups had higher rates of remote participation, as the Board had heard that there was a lack of access to broadband and remote capabilities among those groups. Carr said that although some of these students were learning remotely, it did not mean they had access to a live teacher. She stated that when NCES evaluated those data points, and disaggregated the data by race, they could see that those with infrequent access to live teachers were primarily Hispanic. Carr added that, based on a recently published NWEA report, achievement gaps would likely widen. Carr clarified that NCES cannot explain this trend, but students and parents chose differently—and had access to different choices—by race.

IES Director Mark Schneider expressed agreement with Carr's statement about administrative data, but believed it was incomplete. He stated that there were greater concerns with measurement and suggested that more contextual data could address those concerns. The Evidence Act, Schneider clarified, increases the opportunity and the actual obligations of statistical agencies like NCES to gather data from multiple sources and merge the data. This would fall into Carr's purview as Statistical Officer and the Chief Data Officer's as well. Schneider added that someday, if the College Transparency Act is passed, the NCES

Commissioner would be in a higher position of authority to gather data from multiple sources and merge those data points together. In the meantime, IES is working with Census data and a geospatial program, which would help Carvalho understand the contextual measures he suggested.

Schneider pointed to another program: the Statewide Longitudinal Data Systems (SLDS) program. First administered in 2005, the SLDS serves as the backbone of states' student-level data. Schneider said SLDS elementary and secondary data can be merged with post-secondary data and labor market outcomes. Schneider stated that he wanted to see more administrative data merged into other data sets, from NCES, to help decision makers. Many states now contribute social justice and health care data to the SLDS program. Schneider underscored IES' commitment to translating complicated data into data that are more useful, usable, and used. Recent NAEP reports exemplify this aim.

Carr responded to Schneider's comments by adding that the Edge program to which Schneider referred includes geospatial work that helps NCES develop a better understanding of socioeconomic status (SES) and validate school-provided information on SES with data on neighborhood socioeconomic poverty. Carr stated that it would be beneficial if large school districts partnered with NCES to improve the validity and reliability of these estimates. Currently, 15 states work with the Edge program.

Christine Cunningham then asked, based on the chart that showed the racial and ethnic breakdown of students by learning mode, if the data had been disaggregated by rural and suburban students. Carr replied that NCES had found that a slight interaction with race and region of the country, specifically that students learning remotely were more likely in the Great Plains and in-person learning occurred more often in the South and the Midwest. Cunningham stated that rural students are 80% white and are often more likely to attend school in-person. She then asked if there was an interaction between school size and school location. Carr stated that NCES tried to disentangle race from different locale variables, but the pattern was still there, though not as strong.

### **Committee Updates**

Barbour opened the session with an update on the Executive Committee. He shared that he and Alice Peisch sent a letter to U.S. Education Secretary Miguel Cardona in March advocating for increased funding for NAEP to maintain civics, U.S. History, and science on the assessment schedule. Barbour stated that President Biden's request included a \$15 million increase. The House Appropriations Committee included this increase and an additional \$25 million for the civics assessment in 2024. Barbour said the Executive Committee would continue to monitor the appropriations process.

Barbour summarized recent Executive Committee activities, two of which the Board will take action on shortly. The Committee approved a motion to change the assessment schedule, swapping out the Long-Term Trend (LTT) assessment for 17-year-olds with the LTT for nine-year-olds, who were tested immediately prior to the COVID-19 pandemic. The Committee also approved the nomination of Alice Peisch for the Board Vice Chair position. Barbour recounted that the Executive Committee talked with representatives from the National Academies who are studying NAEP, as Commissioner Carr mentioned. The NAS representatives asked Board members to recommend how NAEP processes could be modernized and more efficient.

Assessment Development Committee Chair Dana Boyd then provided an update on the ADC, noting that the Committee had remained focused on the Reading Framework and had reviewed the Chair's draft of the framework. She also mentioned that ADC recently reviewed the 2022 subject-specific NAEP student questionnaires in math, reading, U.S. History, and civics to approve the questions that will capture information about learning during the pandemic. Boyd also shared that ADC is developing recommendations for revising the framework process in preparation for a joint meeting with COSDAM in September and a full Board discussion in November. The recommendations will seek to improve the process to update frameworks in the future, beginning with the upcoming Science Framework update.

ADC also approved a motion to move the 2026 NAEP Reading Framework forward to full Board action. Boyd said the Committee also discussed upcoming activities, including a review of the Reading Assessment and Item Specifications. Boyd noted that Mark Miller suggested ADC prioritize the creation of abridged frameworks for math and reading. Boyd concluded by noting that Cunningham suggested that the Committee ask researchers to identify the contextual variables that would be most useful in their analyses of NAEP data.

Next COSDAM Chair Cizek discussed the Committee's work, including their evaluation of the need to develop a greater number of easier items on some NAEP assessments to measure students scoring below *NAEP Basic*. He added that in some subjects where there are greater numbers of items available, the challenge of administering an adequate number of items to students to align with their abilities is complex. Cizek proposed that this may involve a modification of content standards, test delivery mode, and other factors. Cizek said that COSDAM heard presentations on papers related to measurement and reporting for students performing below *NAEP Basic*. Cizek noted that additional research and Board discussion is needed to explore feasible, appropriate options to describe student knowledge and ability below the *NAEP Basic* level and urged further discussions with ADC and NCES.

Cizek reported that COSDAM also discussed the ongoing study to review and revise the achievement level descriptions for NAEP reading and math. Cizek explained that if the NAEP

achievement level descriptions claim students can accomplish a task, then it is necessary to provide evidence that those students can perform those tasks effectively.

Nominations Committee Chair Jim Geringer reported that plans for new Board members whose appointments will begin in October were on schedule and that the Committee has already formulated an outreach strategy for the 2022 nominations campaign. Geringer stated that the outreach campaign will include a campaign website, social media videos, a webinar, and an outreach toolkit. Geringer listed the available positions the Board planned to fill in 2022: a fourth grade teacher, an eighth grade teacher, a secondary school principal, and a general public representative–Parent Leader. He encouraged Board members to share the campaign so the Nominations Committee could reach as many interested applicants as possible. Geringer praised Tessa Regis for her outstanding work on the nominations campaign.

R&D Chair Tonya Matthews then offered news from her committee. She reported that the virtual release of the 2019 NAEP Science results drew nearly 600 attendees. The release featured stakeholders from the National Science Teachers Association (NSTA), the National Association of Elementary School Principals (NAESP), and the National Association for Research in Science Teaching (NARST). In June, the Board partnered with NSTA and the Southern Regional Education Board (SREB) for a Twitter chat. She also stated that the R&D Committee discussed new approaches to improve the measure of SES within NAEP. Matthews stated that the R&D Committee also reviewed the communications and outreach plan, the Strategic Vision, as well as core contextual items. In July, the Committee reviewed the draft release plans for the Long-Term Trend Assessment and High School Transcript Study. Matthews requested a motion and second to approve the release plans.

Barbour accepted Matthews’ motion and asked if anyone would second the motion. The motion was seconded by Beverly Perdue. The motion passed unanimously.

Returning to the Executive Committee’s actions, Barbour acknowledged a recommendation by Jim Geringer, based on member feedback, to elect Alice Peisch as the Board’s Vice Chair for the coming year. A motion was made by Wright and seconded by Cizek. The motion passed unanimously. Next, Barbour called on West, who made the motion to change the 2022 Long-Term Trend administration. Seconded by Matthews, the motion passed unanimously.

### **Recess**

The meeting recessed at 2:41 p.m. and reconvened at 3:02 p.m.

## **ACTION: NAEP Reading Assessment Framework**

Barbour opened this session by explaining that updating the 2026 Reading Framework fulfills one of the Board's primary legislative responsibilities. Barbour noted that members of the Chair's working group and ADC worked tirelessly over the past two months to reach a draft on which the Governing Board could reach consensus approval. Barbour clarified that the Board's Framework Development policy ensures a comprehensive process that accounts for professional standards, current research, and national needs for the NAEP Reading assessment. He added that the framework benefitted from the input of many experts and stakeholders, both internal to the Board and external. Barbour expressed his gratitude, on behalf of the Board, to the Visioning Panel and Development Panel who, under the leadership of David Pearson, devoted two years of expertise to update the Reading Framework. Barbour thanked the Technical Advisory Committee, stakeholders, and Board members. Barbour asked Board members Patrick Kelly and Carey Wright to provide context for the proposed framework.

Kelly explained that the Board is legislatively mandated to identify the content for each NAEP assessment. Congress does not indicate when frameworks must be updated, however, frameworks should maintain relevance in what is measured and reported. Kelly explained that in 2019 the Board determined an update was needed for the Reading Framework, which was last updated in 2004. This framework update was necessary due to changes made in the field of reading as well as NAEP's transition to a digital-based assessment.

Kelly referred to advances since the Board last adopted updates in 2004 in text comprehension research and societal changes that impact the ways students engage with text, especially digital text. Kelly stated that the updated version of the framework had a modestly updated definition of reading comprehension to include factors that influence student comprehension including social and cultural experiences. The updated version of the framework has also expanded the definition of text in response to the proliferation of digital media. It elevates the importance of disciplinary reading by creating sub-scales in science and social studies in addition to literature. The updated framework also employs principles of universal assessment design to support valid measurement of all students' reading comprehension, consistent with other large-scale assessments. Kelly stated that the updated framework aims to increase the relevance and usefulness of NAEP to the nation by prioritizing deeper levels of disaggregation in NAEP Report Cards, by disciplinary context, by looking at SES within race and ethnicity, and by increasing the amount of reporting around former and current English language learners who take the assessment.

Kelly added that the Development and the Visioning Panels spent two years developing a robust framework aligned to current practices and research. A public comment process invited interested parties to submit responses to the framework. Kelly said he felt confident the Board had reached consensus and that no member believed that the final product represented any one

member's personal views. He asserted that the framework must be neutral on curriculum to fulfill NAEP's purpose as established by Congress.

Wright reminded Board members that, as a nonpartisan body, the Board strives for consensus on major decisions. The path to consensus for the 2026 NAEP Reading Framework involved many stakeholders whose key recommendations were focused on how to assess reading – not on reading instruction. The framework was crafted to clarify the Board's commitment to maintain NAEP's trend lines and a commitment to rigorous, inclusive, and unbiased assessment. Wright stated that the Board's discussions had led to a final version that reflects these expectations. She emphasized that, guided by the Board's Strategic Vision, the framework will support the Board's efforts to inform, innovate, and engage. Wright stated that recent NAEP results have shown that a crisis in early literacy and the COVID-19 pandemic will have only made it worse, leaving students further behind in their learning. Wright concluded by saying that the framework update reflects NAEP's emphasis on rigor, quality, and ability to chart trend; she expressed pride in the Board's work.

Barbour thanked Wright and paused for comments or questions. Upon hearing none, Boyd moved the 2026 NAEP Reading Framework for adoption by the full Board. Miller seconded the motion. Barbour thanked Miller and asked if anyone was inclined to engage in further discussion. Miller thanked everyone involved in the Reading Framework process, including Board staff, former staff member Michelle Blair, CCSSO, the Chair's working group, and others, without whom, he said, the Board would not have reached consensus. Kelly added to Miller's commendations, expressing his thanks to Blair as well as to Sharyn Rosenberg.

The motion passed unanimously. Barbour thanked and congratulated the Board. He then recognized Cunningham to provide an overview of the Technology and Engineering Literacy (TEL) Assessment.

### **Overview of the Technology and Engineering Literacy Assessment**

Cunningham provided a brief history of the TEL assessment. She stated that the impetus for this assessment came from National Academy of Engineering and from National Research Council reports. In 2002, the Technically Speaking report outlined why all Americans needed to know more about technology. Cunningham explained that this was followed by the Tech Tally report in 2006, which provided steps to address this technological knowledge gap via assessment. The report recommended, specifically, that the Governing Board develop a framework for a NAEP assessment on technology and engineering literacy. Cunningham stated that TEL debuted in 2014 and was administered again in 2018. A third administration is currently planned for 2024.

Cunningham stated that TEL assesses technology and engineering literacy, which is defined as the capacity to use, understand, and evaluate technology, as well as to understand technological principles and strategies needed to develop solutions and achieve goals. She said that technology, according to the TEL Framework, is any modification of the natural world that is done to fulfill human needs or desires such as a toothbrush or bandage or a water or waste system. She stated that the one thing these technologies have in common is that they are created and refined through an engineering process. Cunningham clarified that the TEL Framework defines engineering as a systematic and often iterative approach to designing objects, processes, and systems that meet human needs and wants. She added that TEL is an assessment for all students, not just those pursuing a STEM education or occupation.

Cunningham stated that the current TEL Framework includes three assessment areas. The first assessment area, technology and society, encapsulates the effects that technology has on society and the natural world. It also allows students to explore ethical questions that can arise from the use of those technologies. The three subareas that exist under the technology and society section are the interaction of technology and humans; the effects of technology on the natural world; and effects of technology on the world of information and knowledge. The second major area of TEL focuses on design and systems. This section gauges students' understanding of how important the design process is in comprehending and accessing technologies. She said that four subareas in this section are outlined in detail in the assessment framework.

Cunningham said the third major area is information and communication (ICT) technologies. She clarified that this area covers computer and software learning tools, networking systems and protocols, handheld digital devices, and other technologies for accessing, creating and communicating information, and for facilitating creative expression. She said that the ICT domain was made up of five subareas: the construction and exchange of ideas and solutions, information research, investigation of problems, acknowledgment of ideas and information, and selection and use of digital tools.

Cunningham described the three cross-cutting practices in the TEL assessment: understanding technological principles; developing solutions and achieving goals; and communicating and collaborating. Cunningham turned the presentation over to Bill Ward of NCES, to provide Board members with a brief overview of the TEL operational assessment and to describe current challenges.

Ward clarified that the purpose of the TEL assessment is to measure students' knowledge and abilities in the areas of technology and engineering. Ward outlined the assessment's three content areas: technology and society; design and systems; and information and communication technology. Ward provided an overview of the item types on the TEL



assessment. The TEL assessment has discrete items of various lengths, all of which are interactive and one to three minutes long. The assessment also features interactive scenario-based tasks, also of varying lengths, between 10 and 30 minutes. Ward stated that the framework calls for 80% of overall student testing time to be spent on scenario-based tasks and 20% to be spent on discrete items and shared examples of each item type. Scenario-based tasks proved to be labor-intensive in design and development. The 2014 assessment was device- and operating-system- dependent and was only able to run on Windows XP. Similar challenges remain in advance of 2024.

As 2024 nears, Ward said, TEL needs to transition to the NextGen eNAEP delivery platform. This next generation platform supports online delivery of multiple NAEP subjects, and can support the reading, math, civics, and U.S. history assessments. This platform is online and would be device- and operating system-independent. He added that platforms must be simple, sustainable, and easy to maintain so as to meet evolving technological changes. Right now, however, operations for TEL suffer from outdated laptops, older versions of web browsers, and development platforms.

Ward then outlined preliminary plans for 2024. He stated that NCES has preliminary plans to reprogram the TEL tasks within the NextGen eNAEP platform, since all other subjects, such as reading or math, would be delivered on this platform. Ward stated that they planned to reprogram only a portion of the assessment for 2024 due to budgetary constraints. This would allow for a special one-time reporting of scores for one subscale, but no composite scores.

Cunningham stressed that many educators view the TEL assessment as the gold standard for providing data about what students can do. She also stated that the Next Generation Science Standards (NGSS) were released in 2013, after much of the TEL work had been completed. She noted that these science standards were the first to include engineering explicitly. She added that many states now have technology and engineering as part of their state science standards, regardless of whether they have officially adopted the NGSS. Across the country, teachers are engaging students in engineering and technology concepts and practices. Cunningham said that the Board needs to consider whether to incorporate technology and engineering into the 2028 NAEP Science Framework update more directly. Ideally, the Board would delay decisions about TEL on the assessment schedule until the Board decides whether the TEL content will be incorporated into the Science Framework update. Cunningham opened the floor for questions and comments.

Kelly sought greater understanding of the type of knowledge the Board wanted high school graduates to know. Kelly applauded the TEL assessment for its creativity but asked how the assessment would test for soft skills.

Geringer stated that TEL initially had pushback and should remain a stand-alone assessment. Edelblut agreed with Geringer. He said it is necessary to separate knowledge from applied knowledge. TEL, from Edelblut's perspective, reflects only applied knowledge. Edelblut asked if it was possible to determine if a poor performance on an assessment item derives from a lack of core knowledge or logical thinking or from an inability to apply that knowledge.

Cunningham explained that the many fields within engineering means that the assessment challenges students to approach a problem from many different angles. Cunningham stated that there was not a substantial amount of underlying knowledge required for the TEL assessment. Most of the information needed for students to engage in deductive reasoning is provided on the assessment. Ward added there is no assumption that students have extensive math or science knowledge when they take the assessment. If anything, the assessment is used to understand the ways students wield knowledge and information to solve problems. Any information students may need to arrive at their individual conclusions is provided to them. Ward stated that, at present, they do not currently have a way of discerning logical thinking and applied knowledge.

West asked about whether any research has examined the predictive validity of students' performance on the TEL assessment. West also asked for clarification on the need for mastery of the underlying content knowledge that students have to draw on and apply. Cunningham deferred to Carr, who made two points. First, both item types on the assessment were developed with an evidence-centered design (ECD) approach. Part of that approach is to collect evidence of validity as the task is developed. NCES has some validity evidence about those tasks that may be informative. Carr's second point was that NCES participated in an international assessment that was similar to TEL and the distribution of scores lined up very well. NCES plans on participating in that assessment again.

Wright was particularly struck by the scenario-based task example that was provided. She stated that the metrics associated with student responses to this assessment item, especially the drop off of six percent, indicated that students had difficulty explaining their reasoning. Wright emphasized that this would be important to observe across assessments, not just in TEL. She urged the Board to think of the best ways to support students in this area. Cunningham stated that explanation and justification was just one of the eight practices in the science standards.

Nardi Routten asked if the assessment was administered only to eighth grade students. Routten then wondered if the Board merged the science and TEL assessments, would fourth- graders have to answer grade 8 questions? Cunningham stated that the Framework covers fourth, eighth, and twelfth grades but, thus far, an assessment exists only for eighth grade. Ward clarified that the eighth grade assessment would not be given to fourth graders.

Gasparini stated that the TEL assessment should not be distributed through old technology. He also stated that assessing twelfth graders would not provide much actionable information.

Matthews drew from her experiences leading a student focus group on the TEL assessment during a release event. Some of the highest performers on TEL were not the students who wanted to pursue careers in engineering. Matthews reminded the Board not to interpret TEL as only representing STEM-bound students. Instead, there are multiple ways to arrive at the correct answer and that this assessment is more representative of process data. Matthews said some students may have taken a science-based approach to arrive at an answer while other students may have leaned into civics.

Eric Hanushek asked if the TEL assessment was more expensive compared to other assessments. Ward divulged that the TEL assessment was relatively expensive to develop and administer. Hanushek responded saying this could lead to a budget issue.

McGregor stated that when talking about engineering design and principles, there are multiple ways of getting to the right answer. He also responded to Gasparini's comments, stating that it was more imperative for educators to bring fourth graders into the fold. McGregor also addressed comments made by Ward, stating that everyone is somewhat familiar with technology. If anything, it is more important to acknowledge this familiarity within the assessment so students are aware of their competence.

Cizek recommended that NCES research if measuring how students arrive at solutions through written responses, as TEL does, is valid. He questioned if, by only retrieving written responses, some students would be disadvantaged, because they were tasked with writing instead of expressing their solutions through an alternative medium.

Reynolds stated that he found the TEL-specific definitions of technology and engineering to be beneficial. He added that if the assessment were to ask grade 8 students about technologies, the participants would point to real-life examples. He then asked if the TEL assessment is designed to gauge students' knowledge of underlying concepts of engineering and technology. He believed this would strongly correlate with achievement.

Carr replied to several of these comments. First, NCES and the Board need to look at the twelfth-grade framework since TEL was administered only to eighth graders and has not been operationalized for other grades. Carr interpreted Cizek's question as one that addressed issues surrounding equity. Carr cautioned that although NCES now has process data, the TEL assessment may not capture as much process data as other assessments.

Cunningham closed with responses to other Board members' remarks. She said that Cizek's comment about TEL and writing reflects what she often hears from teachers – that doing engineering in the classroom gives them insight into how students think, especially English language learners and others who have difficulty expressing themselves in English. She said it is important for the Governing Board to think about how students' skills can be assessed through process data and other methods that are not reliant on students' verbal abilities. Cunningham then addressed Reynolds' question on how students define technology and engineering. She referenced multiple studies which found that students relate the terms to digital technologies, not simple technologies such as Band-Aids, bicycles, etc. She said that students are not asked to define technology and engineering on the TEL assessment, but the examples in the assessment inspire students to think beyond digital technologies.

The meeting adjourned for the day at 4:42 p.m.

### **NAEP Budget And Assessment Schedule (CLOSED)**

Under the provisions of exemption 9(B) of §552b(c) of Title 5 U.S.C. and exemption 9(b) of §552b(c) of Title 5 U.S.C., the National Assessment Governing Board (Governing Board) met in closed session on Friday, August 6, 2021, from 10:00 a.m. to 11:33 a.m. to receive a briefing from Peggy Carr, Acting Commissioner, NCEC, on the NAEP budget and Assessment Schedule. Chair Barbour announced that the session was closed to the public and that online participation would be monitored to assure only approved attendees participated in the session.

Lesley Muldoon, the Governing Board's Executive Director, referenced the prior day's Executive Committee meeting, where members received an update on NAEP appropriations. Muldoon stated that the House bill included an additional \$40 million, and the Senate was working on the legislation. She noted that the legislation may include provision for additional annual NAEP appropriations to administer the NAEP Schedule of Assessments as adopted by the Board. Muldoon noted the appropriations update as the context for the Board's discussion of the NAEP budget.

Next, Carr provided a briefing on the NAEP budget and its impact on the NAEP Assessment Schedule. The briefing covered three areas: anticipated implications of COVID in the 2022 administration; budget implications through FY 2024, and costs of upcoming assessments. To the latter, Carr provided budget information for 2022 Long-Term Trend, 2024 Civics, and 2024 TEL.

Carr addressed the Board's questions throughout her presentation.

## **Recess**

The meeting recessed at 11:33 a.m. and reconvened at 11:47 a.m.

### **Briefing on Upcoming NAEP Releases (CLOSED)**

Under the provisions of exemption 9(B) of §552b(c) of Title 5 U.S.C., the Governing Board met in the second closed session on Friday, August 6, 2021, from 11:47 a.m. to 1:15 p.m. to receive briefings on upcoming NAEP Report Card releases of Long-Term Trend (LTT) Reading and Mathematics (9- and 13-year olds) and the High School Transcript Study (HSTS). The briefings were conducted by Grady Wilburn and Linda Hamilton, respectively, both of NCES.

After providing a brief background on the LTT assessments, Wilburn reported that the LTT assessment national sample was drawn for 9- and 13-year-old students. The assessment was administered on paper during the 2019-2020 school year with age 9 students in January-March 2020 and age 13 students in October-December 2019. The 2020 reading and mathematics performance metrics are reported as national average scores (0-500 scale), percentile scores, student group scores, and LTT performance levels scores (300, 250, 200 and 150) in both reading and math at different age groups.

Wilburn then shared highlights from the 2020 LTT results. Results were reported by race, ethnicity and gender, performance levels, achievement gaps, percentages of students reading for fun at ages 13 and 9, and course taking patterns in math compared to prior years.

Members asked questions during and after the presentation, which Wilburn addressed.

Next, Linda Hamilton previewed the 2019 NAEP HSTS results. She noted that the study is an administrative data collection of transcripts linked to the NAEP 12th grade mathematics and science assessments. Transcript data are collected from a nationally representative sample of graduating seniors in public and private high schools, about 47,000 high school graduates in 1,400 public and private schools. HSTS captures the types of courses that graduates take, covering grades 9 through 12, the number of credits they earn, and grade point averages earned along with the students' NAEP performance.

As in prior years, the inclusion criteria for the 2019 HSTS are that students must have graduated with a regular or honors diploma; completed at least three years of coursework that includes the 12<sup>th</sup> grade assessment year (i.e., 2018-2019 school year); earned at last 16 Carnegie credits; and earned a positive number of Carnegie credits in English courses.

Results were reported by gender, high school graduation rates, English learners, race/ethnicity, school locale, and student disability status as tracked by individualized education plans. Courses reviewed covered three major categories: Academic (English, mathematics, science, social

studies, visual and performing arts, world languages); Career/Technical Education (computer-related studies, Other CTE courses); and Other (Physical and health education, religion, military science, and all other courses).

Hamilton shared preliminary results describing core measures—(1) average course credits earned, (2) Grade Point Average (GPA), and (3) curriculum levels (standard, midlevel and rigorous). GPA results were reported overall and by course type, student gender, student race and ethnicity as well as compared to GPAs of high school graduates in previous rounds of HSTS – 1990, 2000, 2009, and 2019.

Members asked questions after the presentation, which Hamilton addressed.

### **Records Management Briefing and Discussion (CLOSED)**

Under the provisions of exemption 9(B) of §552b(c) of Title 5 U.S.C., the National Assessment Governing Board (Governing Board) met in closed session from 1:15 p.m. to 2:01 p.m. to receive an administrative briefing on federal records management requirements. Jason Lautenbacher, Chief, Information Branch at the Department of Education, presented the briefing for Governing Board members, who are considered Special Government Employees (SGEs).

Lautenbacher defined federal information, stating that it is any information that is created or received in conjunction with work related to the transaction of Department of Education business. Lautenbacher highlighted the responsibilities and obligations of members in preserving and protecting federal records. He recommended that SGEs avoid creating paper information as much as possible in accordance with OMB directive M-19-21; ensure all work-related information not publicly available is always encrypted or protected; and ensure all work-related information is forwarded to a department point of contact during member's tenure. Further, he indicated that members cannot retain any work-related information after their tenure expires. He provided members contact information for any questions.

Lesley Muldoon recommended a process for identifying and forwarding records, noting that members and staff have responsibilities in categorizing and preserving permanent records or temporary records. Muldoon explained that records created during the course of Governing Board business are already managed and preserved by staff. This includes records such as meeting minutes, Governing Board actions, and formal communications related to Controlled Unclassified Information (CUI).

Board members engaged in a question-and-answer session that referred to encrypting drives and files, forwarding documents, marking controlled unclassified information, and redacting personal information.

## **Recess**

The meeting recessed at 2:01 p.m. and reconvened at 2:17 p.m.

## **Across the Board: Understanding Recent NAEP Results**

The Board reconvened in open session, at which time Barbour introduced Ebony Walton of NCES. Walton was invited to share insights from an analysis of NAEP reading, mathematics, and science data.

Before summarizing the NAEP reporting team's findings, Walton stated that Carr wanted to bring the Board's attention to two studies: The first is the math curricula study. That study included an analysis that showed labels for algebra and geometry courses can be deceiving. In some cases, courses labeled honors do not cover advanced content. Walton stated that NCES's Daniel McGrath would send Board members a link to the study. The second study compared long-term trend to main NAEP. The study controlled for demographic changes since the 1990s to analyze score changes. Walton stated that McGrath would also share this study with the Board.

After these preliminaries, Walton began her presentation, "A Decade of Monitoring Study Progress (or Lack Thereof) Through the Lens of NAEP." To establish context, Walton listed the high-profile education topics from 10 years ago such as the adoption of the Common Core, demographic changes, and the educational impacts of the Great Recession. Walton gave an overview of NAEP data collected from 2009 to 2019 at grades 4, 8, and 12. Walton posed four key questions: (1) How have eighth graders performed across multiple subjects? (2) Looking at grades 4, 8, and 12, how has student performance changed? (3) Which states or TUDA districts stand out for having made gains or declines on NAEP mathematics and reading over the last decade? And, (4) Who are the lower-performing students?

Walton stated that, on average between 2014 and 2019, eighth graders' scores improved in TEL, declined in geography, reading, and U.S. History, and did not change significantly in math, science, and civics. Walton asked Board members to ponder what may explain this trend. Miller posited that engagement in the assessments may be a factor, since TEL goes beyond asking students basic questions and presents them with opportunities to elaborate. Matthews added that geography, reading, and U.S. history were seemingly related, which may have something to do with information recall or comprehension. Carr added that TEL is a literacy assessment while the others are not.

Walton pointed out that there are TEL components integrated in other subjects such as U.S. History, science, and geography. She then delved beyond the overall averages and showed that scores declined for lower-performers, while higher-performers either held steady or improved. A

similar divergence appeared in comparisons between 2009 and 2019. In science, grade 8 students showed an improvement overall and at both ends of the score distribution. Walton noted, however, that while science results had improved over the decade, lower-performing students' scores have declined in more recent years.

Walton then addressed her second question: "Looking at grades 4, 8, and 12, how has student performance changed?" Walton summarized score changes and patterns across all three grades from 2009 to 2019 in math, reading, and science. Lower-performing students' scores declined across the board, except in grade 8 science. At the same time, higher-performing students' scores improved or stayed the same across grades and subjects, with the exception of grade 12 scores.

Next, Walton disaggregated the data by student race/ethnicity: white students in the 10<sup>th</sup> percentile saw scores declining, except in grade 8 science, but white students in the 90<sup>th</sup> percentile saw overall improvements in their scores. A similar trend is observed among Black students. Walton stated that Hispanic students in the 10<sup>th</sup> percentile have held steady, with some improvements in science. She also noted that Hispanic students at the 90<sup>th</sup> percentile scores have improved. For Asian students, there was no significant change at either the 10<sup>th</sup> or 90<sup>th</sup> percentiles in most grades and subject areas. And, there is little change in scores among Native Americans, Alaskan natives, students of two or more races.

Walton summarized the overall pattern of divergence between higher- and lower-performing students across races, grades, and subject areas. She added that reporting overall scores for student groups by race/ethnicity can obscure the changes happening *within* the groups. For example, over the course of the decade, average scores for white students did not change. However, scores within the group did change as higher- and lower-performing students' scores diverged. Walton also noted that lower-performing students' scores declined in all subjects and grades except grades 4 and 8 science. Higher-performing students' scores improved in grades 4 and 8 math, reading, and science. And lower- and middle-performing students' scores declined in grade 12 math and reading.

Walton moved on to the third question: "Which states or TUDA districts stood out for making gains or declining on NAEP mathematics and reading over the last decade?" Walton stated that four jurisdictions had overall score increases between 2009 and 2019 – California, the District of Columbia, the Department of Defense Schools, and Mississippi. Five jurisdictions had overall score decreases in the same time period– Arkansas, Kansas, Montana, North Dakota, and Vermont. Walton invited reactions from Board members.

Cunningham and Kelly observed that the jurisdictions with overall score decreases seemed highly rural, with the exception of Mississippi. Walton stated that scores have increased among students at the 90<sup>th</sup> percentiles in all jurisdictions with overall score increases. By contrast, the



states that experienced a decline in overall scores all showed declines among students at the 10<sup>th</sup> percentile. Walton distilled these findings to support that jurisdictions' overall score increases are generally driven by increases in higher-performing students' scores and jurisdictions' score decreases are generally driven by declines in lower-performing students' scores.

Walton then showed how scores have changed at the 90<sup>th</sup> and 10<sup>th</sup> percentiles among TUDA districts. Overall, students in TUDA districts have made gains in grade 4 math and grade 8 math and reading. Grade 4 reading scores have not changed significantly. Gains are particularly strong among higher-performing students. No TUDA districts had overall score declines across grades and subjects. D.C. made gains across all subjects, and three TUDA districts made gains in three of four subject/grade combinations: Atlanta, Chicago, and Miami-Dade.

Walton closed by sharing insights with the Board on lower-performing students. In both math and reading in grades 4, 8, and 12, scores have dropped for students at the 10<sup>th</sup> percentile over the past decade. The percentage of students scoring below *NAEP Basic* has also increased in most grades and subject areas. Students scoring at or below the 25<sup>th</sup> percentile comprise about a third white students, a quarter Black students, a third Hispanic students, and 3% Asian students, 1% Native American and Alaskan Native students; and 3% students of two or more races. Slightly more than two-thirds of these lower-performing students are eligible for the National School Lunch Program; 41% had parents who did not graduate from college; 31% were classified as having a disability; and 19% are English learners.

Walton cited an article from the Organization of Economic Cooperation and Development (OECD) discussing lower-performing students and why they fall behind. She quoted the article, stating, "Poor performance is not the result of a single risk factor, but rather a combination and accumulation of barriers that affect students throughout their lives." Walton stated that she hoped, moving forward, the reporting team would have the opportunity to analyze the complexities of lower-performing students, especially in the wake of the COVID-19 pandemic.

Looking ahead, Walton outlined the assessment schedule for grades 4, 8, and 12 between 2022 and 2030. Walton left members of the Board with questions about the future: Will eighth graders make progress in subjects? Will lower-performing students' scores continue to decline? Will higher-performing students' scores continue improving? Will higher-performing students continue to drive overall score improvements? And, how will COVID-19 affect this?

Walton reported on additional NCES activities related to this topic. An expert panel provided recommendations on how to better measure and report on the skills of students who perform below *NAEP Basic*. Walton mentioned survey efforts like the NAEP 2021 School Survey, the upcoming monthly IES School Pulse Panel, and NAEP reporting efforts, which will examine

skills of students across the score distribution. Walton thanked the Board and concluded her presentation, opening the floor for questions and comments.

Suzanne Lane asked, among states and cities with score declines, were demographics of students in 2009 similar to those in 2019? Walton stated that shifts in demographics would be picked up more at the state level than the national level. She continued, saying much of her analysis was done at the national level, but the reporting team would investigate Lane's question further. Walton stated that D.C. stood out, noting that its populations of white and Hispanic students had increased, and perhaps this shift could be observed in other cities as well.

Hanushek stated that it seemed as though the data were primarily focused on the two end points of the distribution and that there could be sampling errors since students below *NAEP Basic* may only be able to answer two or three questions on the test. He suggested a more reliable gauge of change over time would be to draw a regression line through all data points rather than relying so much on two end points of the distribution.

Cramer expressed concerns that educational inputs, at any level, take time to work. He stated that he was particularly concerned that these assessments did not seem to measure the length of a time a student was enrolled in a state or TUDA district. NAEP should measure this in order to evaluate student ability more accurately, which will provide more insights about the 10th percentile.

Rafal-Baer said she took issue with the bluntness of the NCES socioeconomic status (SES) data, saying that she felt greater insights into SES could be achieved with better data, especially regarding student access (or lack thereof) to necessary technology.

Carr asked to respond to Hanushek's comments. She restated that Hanushek's concern was a dearth of questions that students at the low end of the distribution are able to answer. She agreed that this was a legitimate concern. In terms of modeling the results, the reporting team is less concerned, because the sampling error is the predominant component of the standard error and just 20% of the error is measurement error.

West thanked Walton for her presentation, stating that it was of great value and this type of analysis needed to be shared more widely. West asked if the divergent score pattern was reflective of certain regions improving and others declining, or if the divergence was happening within regions. Walton said there is a mixed bag when it comes to distributions of scores within the states and stated that the range of average scores among states has narrowed. However, within states and districts, there are examples in which the divergent score pattern has not been observed.

Matthews reflected on a pertinent question: Who are we (members of the Board) assuming are on the bottom? Matthews stated that Walton's presentation challenges assumptions about the makeup of students at different ends of the performance distribution, and the potential impacts of the COVID-19 pandemic on student learning and achievement. Walton replied that a challenge for the reporting team is finding effective ways to describe lower-performing students.

Barbour asked about the degree to which a child being read to at home affected their achievement. Walton referred to contextual data about students reading for fun and the positive relationship that exists with reading scores.

Barbour then transitioned into the final segment of the meeting, farewell remarks from Geringer and Cizek.

### **Farewell Remarks**

Barbour first expressed appreciation to Alice Peisch, whom he looks forward to seeing in-person at their next meeting. He then invited Geringer and Cizek to provide any parting remarks as they conclude their service on the Board.

Geringer expressed gratitude for Barbour's statement and thanked all those in attendance, particularly those facilitating the event. Geringer expressed appreciation for Carr, specifically, stating that he admired her ability to present data and answer any and every question asked by Board members. He concluded by thanking the Board staff. Barbour thanked Geringer and called upon Cizek for his farewell remarks.

Cizek said he wished to address three things: gratitude, admission of personal failures, and policy advice for the future. Cizek acknowledged his COSDAM colleagues: He expressed appreciation for Peisch for her leadership, especially in her masterful management of achieving framework consensus; Rafal-Baer for her engagement in framework development, her commitment to getting broader input for consensus, her friendship, and her encouragement; Hanushek for pushing the Committee members to widen their perspectives; Whitehurst and Wright for their service on the Chair's working group; and Lane for her insightful advice. Cizek reiterated his appreciation for every member of COSDAM, stating that they are a group of low multitudes, high aptitudes, and stellar attitudes (a reference to Geringer).

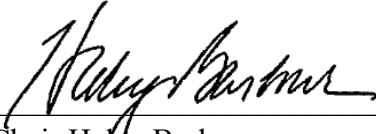
Cizek then outlined three main regrets. The first was that he should have listened more to Sharyn Rosenberg. He stated that her knowledge of psychometrics and of NAEP is extremely beneficial to the Board and that she will be an asset to ADC in her new role. His second regret was his lack of progress in pushing forward a new process for framework development. Cizek urged the Board to revisit the composition of framework panels. He asserted that membership on the panels should include greater representation by people who teach the subjects discussed and

insisted that those doing the work – teachers – must be given the platform to amplify their voices. Cizek’s final regret was that the labels of *NAEP Proficient*, *NAEP Basic*, and *NAEP Advanced* were still in trial status. He described the NAEP achievement levels as the signature reporting and interpretation mechanism for NAEP results, relied on by policymakers, and the standard by which states judge their own achievement levels. He added that it would be unwise to consider adding new levels such as below basic before the trial status is resolved. In conclusion, Cizek advised members of the Board to speak up immediately as Board terms pass quickly and time waiting to learn the fundamentals is wasted. Cizek stated it had been an honor to serve on the Board.

Barbour concluded the meeting by offering thanks to the staff for their work in organizing the Board meeting. Barbour concluded his remarks, stating the next meeting was scheduled for November.

The meeting adjourned at 3:29 p.m.

I certify the accuracy of these minutes.

  
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Chair Haley Barbour

11/4/2021  
Date

**National Assessment Governing Board**  
**Executive Committee Meeting**  
**Report of August 5, 2021**

**OPEN SESSION**

**Executive Committee Members:** Haley Barbour (Chair), Alice Peisch (Vice Chair), Dana Boyd, Gregory Cizek, Jim Geringer, Tonya Matthews, Mark Miller, Beverly Perdue, Martin West, Carey Wright.

**National Assessment Governing Board Members:** Alberto Carvalho, Tyler Cramer, Christine Cunningham, Frank Edelbut, Paul Gasparini, Eric Hanushek, Patrick Kelly, Suzanne Lane, Reginald McGregor, Julia Rafal-Baer, Ron Reynolds, Nardi Routten, Mark White, Russ Whitehurst.

**National Assessment Governing Board Staff:** Stephaan Harris, Donnetta Kennedy, Laura LoGerfo, Lesley Muldoon, Munira Mwalimu, Tessa Regis, Sharyn Rosenberg, Angela Scott, Matthew Stern, Lisa Stooksberry, Anthony White.

**National Center for Education Statistics Staff:** Tammi Adams, Samantha Burg, Jing Chen, Brian Cramer, James Deaton, Enis Dogan, Pat Etienne, Eunice Greer, Shawn Kline, Taslima Rahman, Holly Spurlock, Ebony Walton, Grady Wilburn, William Tirre.

**U.S. Department of Education Staff:** None.

**Other attendees:** Chris Averett, Vickie Baker, Greg Binzer, Brittany Boyd, Lauren Byrne, Jay Campbell, Randon Dart, Gloria Dion, Amy Dresher, Stuart Elliot, Gary Feng, Kim Gattis, Joy Heitland, Andrew Ho, Subin Hona, David Huff, Young Kim, Sami Kitmitto, Judith Koenig, Andrew Kolstad, Beth LaDuca, Joanne Lim, Richard Luecht, Nadia McLaughlin, Jon Noble, Ranu Palta-Upreti, Emilie Pooler, Sonya Powers, Shannon Richards, Lisa Rodriguez, Rick Rogers, Keith Rust, Renee Savoie, Debra Silimeo, Peter Simmons, Anthony Velez, Llana Williams, Karen Wixson, Edward Wofford.

The Executive Committee met in open session from 10:30 a.m. to 11:10 a.m. to consider a change to the assessment schedule, to take action on the nomination for Vice Chair of the Governing Board, as well as to meet with representatives from the National Academies of Science, Engineering, and Medicine.

The session was called to order by Chair Haley Barbour at 10:30 a.m.

Barbour reminded everyone in attendance that the meeting is being conducted in a hybrid environment and set the rules and procedures for participating.

Barbour proceeded to two actions.

First, the Executive Committee considered a modification to the assessment schedule, replacing Long-Term Trend (LTT) Administration for age group 17-year-olds in 2022 with age group 9-year-olds. Having raised the idea at the May Board Meeting, Marty West expressed the need for the change in schedule because LTT 9-year-olds were the last age group assessed before the COVID pandemic. West noted this moment in time as a unique opportunity to better understand student progress and the impact of the COVID pandemic. Barbour called for a motion. Tonya Matthews made the motion to accept the proposed change to the assessment schedule, and it was seconded by West. The Executive Committee voted unanimously in favor of this assessment schedule change.

Second, the Executive Committee took up the nomination of Board Vice Chair to serve the next annual term in 2021-2022. Barbour asked Jim Geringer, who is completing his second and final term on the Board, to lead the discussion. Geringer had reached out individually to Board members to gauge interest in who should serve as Vice Chair. Geringer reported back overwhelming support for Alice Peisch to be renominated and elected as Vice Chair. Barbour asked for a motion. Marty West moved to nominate Alice Peisch as Board Vice Chair for 2021-2022, and it was seconded by Mark Miller. The Executive Committee voted unanimously in support of Peisch continuing to serve as Vice Chair for the next term. Barbour thanked Peisch for her incredible partnership and service over the last year.

Barbour then invited several representatives from the National Academies of Science, Engineering, and Medicine to discuss a study they are conducting of the National Assessment of Educational Progress program titled “Opportunities For NAEP In An Age of AI And Pervasive Computation: A Pragmatic Vision.” The presentation was led by Stuart Elliot, Study Director, and Karen Mitchell, Study Panel Chair, who shared details about the study and asked for advice on how to make the recommendations clear and actionable. They also asked the Board for ideas on how to achieve cost-efficiencies for the NAEP program.

Several members offered suggestions. Barbour shared his support for maintaining two-year periodicity of reading and mathematics assessments, arguing that changing periodicity to every four years should not be the mechanism for reducing the program’s costs. Tonya Matthews expressed an interest in learning more about the study’s recommendations as educational assessment technology is developed and increases efficiency. Reminding everyone of the importance of motivating and engaging students taking NAEP, Mark Miller noted that students have gone from fill-in-the-bubbles to scenario-based tasks.

Greg Cizek commended the National Academies on the work they are conducting. Cizek continued that sometimes improvements cost more money but can lead to efficiencies longer term. Cizek gave the example of technological advancements like automated scoring which can be more efficient than human scoring of assessments. Cizek suggested that the National Academies keep in mind the scale of innovations or improvements and shared that sometimes it is difficult to know how much or how little these changes are going to cost.

Lesley Muldoon, Executive Director, shared that Governing Board staff met with the representatives from the National Academies several weeks ago to also discuss this study. During that meeting, Board staff discussed topics such as automated scoring and updating frameworks.

Reginald McGregor noted the importance of keeping in mind the needs of industry and the workforce when developing assessments. In addition, McGregor talked about the need to increase efficiency and that NAEP needs to be updated to keep up with technological advancements.

At 11:10 a.m. Chair Barbour ended the open session.

## **CLOSED SESSION**

**Executive Committee Members:** Haley Barbour (Chair), Alice Peisch (Vice Chair), Dana Boyd, Gregory Cizek, Tonya Matthews, Mark Miller, Beverly Perdue, Jim Geringer, Martin West, Carey Wright.

**National Assessment Governing Board Members:** Tyler Cramer, Christine Cunningham, Frank Edelbut, Paul Gasparini, Eric Hanushek, Patrick Kelly, Reginald McGregor, Ron Reynolds, Nardi Routten, Mark White.

**National Assessment Governing Board Staff:** Stephaan Harris, Donnetta Kennedy, Laura LoGerfo, Lesley Muldoon, Munira Mwalimu, Sharyn Rosenberg, Angela Scott, Matthew Stern, Lisa Stooksberry, Anthony White.

**National Center for Education Statistics Staff:** Peggy Carr, Enis Dogan, Veda Edwards, Pat Etienne, Enuice Greer, Shawn Kline, Dan McGrath. Nadia McLaughlin, Holly Spurlock, William Tirre, Ebony Walton.

**U.S. Department of Education Staff:** None.

The Executive Committee met in closed session from 11:30 a.m. to 12:00 p.m. to discuss the NAEP budget and assessment schedule, in addition to other Governing Board priorities.

These discussions were conducted in closed session because the disclosure of cost data would significantly impede implementation of contract awards. Therefore, this discussion is protected by exemption 9(B) of section 552b(C) of Title 5 U.S.C.

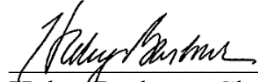
Barbour reminded members of the confidential nature of the discussions.

Barbour introduced Lesley Muldoon, Executive Director, who provided an overview of the assessment schedule and an update on the Fiscal Year 2022 congressional appropriations process.

Barbour then introduced Peggy Carr, Acting Commissioner, National Center for Education Statistics (NCES). Carr led a presentation on the Budget and Assessment Schedule. Carr provided information about projected costs for the program, the impact of COVID and school closures on the costs, the projected budget implications for the assessment schedule, an update on the congressional appropriations process, and projected costs for research and development.

At 12:00 p.m. Chair Barbour adjourned the meeting.

I certify the accuracy of these minutes.

  
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Haley Barbour, Chair

10/21/2021  
Date



# **National Assessment Governing Board**

## **Assessment Development Committee**

### **Report of August 5, 2021**

**ADC Members:** Dana Boyd (Chair), Mark Miller (Vice Chair), Christine Cunningham, Frank Edelblut, Patrick Kelly, Reginald McGregor and Nardi Routten.

**Governing Board Staff:** Executive Director Lesley Muldoon, Deputy Executive Director Lisa Stooksberry, Stephaan Harris, Sharyn Rosenberg and Angela Scott.

**NCES Staff:** Tammie Adams, Enis Dogan, Eunice Greer, Shawn Kline, Nadia McLaughlin, Taslima Rahman and Ebony Walton.

**Other Attendees:** American Institutes for Research: Brittany Boyd, Markus Broer, Kim Gattis, Cadelle Hemphill and Xiaying Zheng. CRP: Shamai Carter, Subin Hona, Anthony Velez and Edward Wooford. Educational Testing Service: Jay Campbell, Gloria Dion, Kadriye Ercikan, Hilary Persky, Emilie Pooler and Karen Wixson. Hager Sharp: David Hoff and Joanne Lim. The Hatcher Group: Jenny Beard and Jenna Tomasello. Management Strategies: Brandon Dart. Pearson: Joy Heitland and Eric Moyer. Westat: Greg Binzer, Lauren Bryne, Lisa Rodriguez and Rick Rogers. WestEd: Mark Loveland and Sonya Powers. Other: Vickie Baker (West Virginia Department of Education), Laura Goadrich (Arkansas Department of Education), Renee Savoie (Connecticut Department of Education) and Sarah Schwartz (Education Week).

#### **Welcome and Review of Agenda**

Chair Dana Boyd called the meeting to order at 9:05 a.m. ET and noted that this was the first hybrid Governing Board meeting; all ADC members were present in person but there were many audience members attending via zoom. Boyd welcomed Sharyn Rosenberg, Assistant Director for Assessment Development, to her new role supporting the ADC. Boyd asked each ADC member to share a recent highlight from their life.

#### **ACTION: 2026 NAEP Reading Framework**

Vice Chair Mark Miller noted that the Governing Board has the responsibility of determining what should be tested on NAEP, and the ADC leads and oversees NAEP framework development. Board action on the NAEP Reading Framework at this meeting allows NCES to implement the new assessment for the 2026 NAEP administration.

Miller described recent events that took place since the May Governing Board meeting, including the small group of Board members convened by Chair Haley Barbour and Vice Chair Alice Peisch to serve as the “Chair’s Working Group” with a goal of making additional edits to the framework to achieve greater consensus. This was a cross-committee effort and ADC was represented by Patrick Kelly and Reginald McGregor. The full ADC also reviewed and provided feedback on the Chair’s draft of the framework before it was finalized.

Miller asked whether there were any questions or comments; upon hearing none, Miller requested a motion from an ADC member to reflect the Committee’s recommendation that the 2026 NAEP Reading Framework be approved and adopted by the Governing Board. The motion was made by McGregor and seconded by Nardi Routten; it was unanimously approved. Miller noted that this was an important milestone; he thanked everyone who contributed to this effort, including ADC members; Panel Chair David Pearson; the Visioning and Development Panels and the Technical Advisory Committee; WestEd staff; Governing Board staff; and NCES staff and contractors.

### **Upcoming ADC Activities and Priorities**

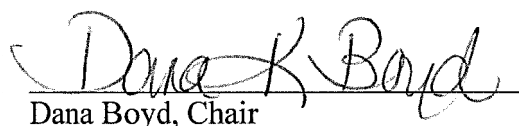
Boyd stated that this was an opportunity to briefly discuss what is on the horizon for the ADC over the next year now that the NAEP Reading Framework is nearing completion. She encouraged ADC members to ask questions and provide feedback.

Rosenberg described the following upcoming activities: reviewing the NAEP Reading Assessment and Item Specifications; reviewing cognitive items and contextual variables; reviewing and revising framework processes; creating a framework development procedures manual; launching the Science Framework updates; implementing the Strategic Vision; and reviewing and revising the Board policy on item development and review.

Given the large number of upcoming activities, Frank Edelblut identified a need to establish priorities. Miller suggested prioritizing an additional activity to create abridged versions of the 2026 NAEP Mathematics and Reading Frameworks for use in dissemination. Christine Cunningham suggested asking researchers for feedback on what additional contextual variables would be most useful in secondary analyses of NAEP data.

Boyd adjourned the meeting at 9:35 a.m. ET.

I certify the accuracy of these minutes.

  
Dana Boyd, Chair

September 23, 2021  
Date

**National Assessment Governing Board**  
**Committee on Standards, Design, and Methodology**  
**Report of August 3, 2021**

**Closed Session 1:00 – 1:40 p.m.**

COSDAM Members: Gregory Cizek (Chair), Jim Geringer, Eric Hanushek, Suzanne Lane, Julia Rafal-Baer, and Russ Whitehurst.

Governing Board Staff: Executive Director Lesley Muldoon, Deputy Executive Director Lisa Stooksberry, Sharyn Rosenberg, and Angela Scott.

NCES Staff: Tammie Adams, Jing Chen, Brian Cramer, Enis Dogan, Veda Edwards, Pat Etienne, Eunice Greer, Daniel McGrath, Nadia McLaughlin, Taslima Rahman, Holly Spurlock, Bill Tirre, and Ebony Walton.

Other Attendees: American Institutes for Research: Brittany Boyd, Markus Broer, Kim Gattis, Cadelle Hemphill, Saki Ikoma, Young Yee Kim, Sami Kitmitto, Ting Zhang, and James Zheng. CRP: Shamai Carter, Subin Hona, and Anthony Velez. Educational Testing Service: Jay Campbell, Amy Drescher, Robert Finnegan, Helena Jia, Hilary Persky, Luis Saldivia, Karen Wixson, and Meng Wu. Hager Sharp: David Hoff. Pearson: Scott Becker and Pat Stearns. Optimal Solutions: Imer Arnautovic. The Hatcher Group: Jenny Beard, Alex Sanfuentes, Jenna Tomasello.

**Item Difficulty and Student Ability Distributions (Closed)**

Under the provisions of exemption 9(B) of 552b of Title 5 U.S.C., COSDAM met in closed session from 1:00 p.m. to 1:40 p.m. to receive a briefing and discuss information related to secure NAEP item pools.

Chair Gregory Cizek called the meeting to order at 1:02 pm ET, noting the Committee would begin in closed session and then transition to open session. Cizek indicated the first agenda item would focus on concerns around measuring and reporting at the lower end of the NAEP scale. Cizek introduced Enis Dogan from the National Center for Education Statistics (NCES).

Dogan opened with the general observation that there are large groups of students performing at the lower end of the NAEP scale. However, because fewer test items exist in this low-performing range and because measurement error is larger, it is challenging to measure and report what

students know and can do at this level. For instance, in 2019 NAEP Reading at Grade 4 the proportion of students performing below *NAEP Basic* reaches as high as 34 percent. Across the four mandated national assessments in some subgroups and urban districts those percentages are over 50 percent and, in a few cases, reach as high as 70 percent. Dogan described the difficulty level of the item pool as largely a function of NAEP frameworks, which reflect the rigor and cognitive complexity associated with particular objectives.

Dogan then turned to four examples across Grades 4 and 8 Reading and Mathematics to demonstrate the alignment between student score distributions and the difficulty level of test items. Although there was variation by grade and subject, in general the item-person maps showed that there were more students than items at the lower end of the scale and more items than students at the upper end of the scale.

Dogan described a special effort that NCES had undertaken to increase the number of NAEP Mathematics items targeting the lower end of the scale; these items are known as “KaSA items,” or Knowledge and Skills Appropriate items. This effort involved providing additional clarifications to the Mathematics Assessment and Item Specifications to describe how some of the framework objectives could be further constrained to produce easier items. Dogan ended by describing continued efforts to create items in the lower score range, and additional possibilities provided by adaptive testing.

Suzanne Lane asked about the number of multiple-choice items versus lower-level constructed response items, wondering about the extent to which constructed response items allow students to engage at the lowest levels. Dogan promised to follow up with a response after the meeting.

A discussion ensued regarding how items are developed and approved for the assessment. Committee members noted that the frameworks per se do not necessarily constrain the difficulty of items to a narrow range and expressed interest in better understanding and exploring additional efforts for producing more items targeted at the lower end of the scale.

Cizek thanked the Committee for taking the first step in better understanding what students in the lower-performing range might need from NAEP. He identified a need for further discussion on this topic, in conjunction with the Assessment Development Committee and NCES.

Cizek concluded the closed session at 1:40 p.m. and the Committee recessed for five minutes to transition to open session.

## **Open Session 1:45 – 3:00 p.m.**

COSDAM Members: Gregory Cizek (Chair), Jim Geringer, Eric Hanushek, Suzanne Lane, Julia Rafal-Baer, and Russ Whitehurst.

Governing Board Staff: Executive Director Lesley Muldoon, Deputy Executive Director Lisa Stooksberry, Sharyn Rosenberg, Angela Scott, and Matthew Stern.

NCES Staff: Tammie Adams, Jing Chen, Brian Cramer, Alison Deigan, Enis Dogan, Veda Edwards, Eunice Greer, Daniel McGrath, Nadia McLaughlin, Taslima Rahman, Holly Spurlock, Bill Tirre, and Ebony Walton.

Other Attendees: American Institutes for Research: Brittany Boyd, Markus Broer, Mary Ann Fox, Kim Gattis, Cadelle Hemphill, Saki Ikoma, Young Yee Kim, Sami Kitmitto, and Xiaying Zheng. CRP: Subin Hona, Anthony Velez, and Edward Wofford. Educational Testing Service: Jay Campbell, Amy Drescher, Kadriye Ercikan, Helena Jia, and Karen Wixson. Hager Sharp: David Hoff and Joanne Lim. Pearson: Joy Heitland and Eric Moyer. Optimal Solutions: Imer Arnautovic. The Hatcher Group: Jenny Beard, Alex Sanfuentes, Devin Simpson, Nandini Singh, and Jenna Tomasello. WestEd: Sonya Powers. Westat: Chris Averett, Greg Binzer, Lauren Byrne, Rick Rogers, and Leslie Wallace. Other: Karla Egan (EdMetric), Beth LaDuca (Oregon Department of Education), Andrew Kolstad (P20 Strategies LLC), and Jill Hendrickson Lohmeier (University of Massachusetts, Lowell).

## **Improving Information about Students Scoring Below the NAEP Basic Achievement Level**

Chair Cizek opened the session at 1:45 p.m. ET. Cizek offered additional thanks to Enis Dogan of NCES for the presentation in closed session and noted the Committee will continue its discussion of below *NAEP Basic* performance with three background presentations to be followed by discussion. Cizek introduced Karla Egan of EdMetric.

Egan opened by characterizing the landscape of lowest-performing achievement levels, indicating there are a lot of opinions but little literature on the subject. Egan noted that of 46 states that have lowest-level achievement descriptors 43 of those could be located by searching publicly available information and following up with state departments of Education. TIMSS and PISA also use descriptors for lowest levels of performance. Egan noted that NAEP may not have sufficient items at the lowest end of the score range, which can result in a lack of measurement precision alongside the large population of students that fall below *NAEP Basic*. Egan raised the concern that of the 31 percent of students below *NAEP Basic* in 2019, high percentages are students of color and those who participate in the federal free or reduced-price lunch program.

Cizek asked about the qualitative differences in descriptors for the lowest category among the states that use them. For example, it seems the lowest level descriptors often shift from what students can do to what they cannot do or what they can do minimally. Egan observed that many states parse the language more in the lowest level but did not locate an extensive use of what students cannot do. Cizek noted from the earlier presentation, when we talk about a student at Basic, Proficient, or Advanced, we are saying they have a 67 percent probability after guessing that they can do these sorts of things, whereas at the lowest level we are saying some students may be able to do this.

Suzanne Lane expressed surprise at the detail in Grade 8 descriptors in Minnesota and Virginia, asking if Egan obtained any background on how those states wrote their descriptors and how their items banks provide information for the lowest levels. Egan does not know the strategies those or other states employed in writing their descriptors, reiterating the difficulty generally of locating states' item maps. Lane suggested it might be useful to follow up with Minnesota and Virginia to seek additional information about how they are able to provide this level of detail in reporting the lowest category of performance.

As Cizek thanked Egan and prepared to transition to the next presenter, he noted that Egan referenced Computer Adaptive Testing (CAT), which also came up in the closed session. Cizek mentioned that there is no guarantee the lower-performing students would receive lowest-level items unless NAEP moves to a different test administration paradigm—one that would preferentially administer items targeted to students' ability levels. Cizek suggested that CAT may be part of a solution that also includes more item development at the lower end of the range. Julia Rafal-Baer sought clarification about the purpose of adding more items at the lower end of the scale. Is the purpose of adding these items to motivate and encourage students who might otherwise give up because the items were too difficult from the start? Moreover, Rafal-Baer raised a concern that if items are added at the lower end of the scale but not the higher, is there a risk of overcorrecting? Cizek explained that the reason for including more items for lower performing students is to get a more accurate measurement of their level of performance; building students' confidence by introducing more difficulty is unlikely to have much of an effect on their performance. Further, moving to adaptive testing will provide as much information about higher performing students as lower performing students.

Next, Taslima Rahman presented results from the NCES-hosted Below NAEP Basic Panel Meeting in December 2020. The purpose of the panel was to share data and seek recommendations from experts about what NAEP can do to help the public and policymakers understand performance below the *NAEP Basic* achievement level. The panel expressed concern at the large proportion of students below the *NAEP Basic* level, particularly among some subgroups and districts. Rahman noted the increase in the population of students performing below *NAEP Basic* between 2013 and 2019. The panel gave four recommendations: to create a

label and description for below *NAEP Basic*, increase the number of items at this level, gather additional data about how students below the *NAEP Basic* level approach items compared to students performing at other achievement levels, and increase reporting on the lowest performing students.

Hanushek asked why NAEP insists on having only three achievement level categories, noting that PISA has six categories and subdivides the lowest category into three parts. Cizek responded from the policy perspective rather than a measurement one, saying there is a lot of value in understanding what students below *NAEP Basic* know and can do. There are many ways to do that without creating new labels and categories including changing performance by improving policies. The Governing Board has a voice and a responsibility to report on the nation's educational progress, including pointing out that more needs to be done and illustrating what students at the lowest levels know and can do without requiring a new label.

Referencing the earlier presentation, Lane indicated that based on Grade 8 reading it might be possible to provide a descriptor based on existing items below *NAEP Basic*. For instance, a future study using an anchor-based method in mathematics would lend itself to looking at the items below *NAEP Basic* for Grades 4 and 8 to determine the extent to which some valuable achievement level descriptors could be obtained. For Grade 4 reading, additional efforts would have to be made to develop more items that are providing information for students below the NAEP Basic achievement level. Lane indicated that it might be useful to hear more about these methods to determine the extent to which achievement level descriptors can be obtained. Cizek asked about the need to bound the lowest level above zero in order to describe confidently what students know or can do. Lane agreed and noted the need to limit the range of students described in the lowest category, for example, by saying that the average student below *NAEP Basic* (which does not include everyone) may be able to do the things noted in the description.

Whitehurst agreed with Lane about the challenges in Grade 4 reading, noting that there are many fourth graders who cannot read single words fluently at a reasonable rate. Whitehurst argued the Board has to address the question of whether NAEP should be measuring those complex pre-requisite skills. Given the usefulness of such information, Whitehurst hopes the Board will take up this topic in the near future.

Cizek then introduced Jing Chen for the final presentation on the topic. Jing described NCES' 2018 study on oral reading fluency, which focused on students performing below *NAEP Basic*. Involving 180 public schools, 1800 grade four students were sampled. The study revealed that students performing at the lowest end of below *NAEP Basic*: read connected text with difficulty at half the words per minute of a fourth grader performing at the *NAEP Proficient* level; misread one out of every six words; focused on individual words, phrases, or clauses instead of meaning; read aloud in a manner than indicated lack of comprehension; recognized with difficulty words

they were likely to know when listening or speaking; and showed limited knowledge of spelling-sound correspondence. Whitehurst cited frustration with these results, expressing the belief that with few exceptions a child could have been taught what they were being asked to do. Without the data and these kinds of examples, we could end up with an assessment that is not useful. Whitehurst urged the Committee and the Board to do a better job of assessing those students, inquiring if that might require NAEP to assess pre-reading skills in some cases (not just the ability to comprehend printed text) and noted the importance of getting this at the top of the Board's agenda in the year ahead.

Cizek cited the need for COSDAM to take a leadership role in this endeavor. While appreciating the outcomes from the NCES panel on below *NAEP Basic*, Cizek stated that it should have been the Governing Board that hosted such a panel and expressed hope for doing so in the future. Further, the Board needs to investigate and make policy recommendations around CAT, the pre-requisite skills NAEP might measure, and how to increase item coverage.

### **Update: Review and Revision of Mathematics and Reading Achievement Level Descriptions**

Cizek introduced Eric Moyer of Pearson and described Moyer's update as an important part of the Board's work that focuses on understanding what students at various achievement levels know and can do and helps build public confidence in NAEP's claims about what students know and can do.

Moyer noted the study's goal to look at the NAEP achievement level descriptors based on NAEP framework definitions of what students should know. Using 2019 NAEP items, the aim is to classify students into achievement levels and create statements of what students can demonstrate within each achievement level. Part of the study involves alignment, comparing what the frameworks claim that students are able to do at each achievement level with what students actually demonstrate they can do based on their performance on the assessment.

Since the last report to COSDAM Pearson has taken steps to ensure a representative panel of participants, continued developing and reviewing materials for the meetings, and is reevaluating the possibility of holding meetings virtually due to ongoing health and safety concerns in the United States related to COVID-19.

Lane asked about the purpose of having only one panel per grade level rather than two. Moyer noted that Pearson is creating eight-person groups with replicate groups of four within the panels. Hanushek requested a description of the ideal panelist, to which Moyer noted the aim of identifying current or former educators with at least five years of classroom experience at the



grade level and in the subject area. It is highly desirable to secure panelists who have experience in item review or standard setting as well as familiarity with NAEP and its sampling methodology. When Hanushek asked how teachers' effectiveness would be judged, Moyer noted the desire to identify panelists who hold National Board Certification or are leaders in their state or district. Jim Geringer noted the importance of teacher effectiveness and the value add a teacher can bring to students' learning and success.

In follow up from earlier, Lane asked about the rationale for eight panelists at each grade level, suggesting that increasing the size of the panel would make for better representation. Moyer noted the Technical Advisory Committee had spent a lot of time on this topic, having started with the plan of a six-person group that evolved into eight when it was decided that replicate groups would be needed.

Cizek thanked Moyer and referenced the expectation of another update at the next meeting.

### **Next Steps**

In his final meeting as COSDAM Chair, Cizek offered thanks to Board staff, especially Sharyn Rosenberg, who is deeply valued by Cizek and all members of the Committee for her expertise. Cizek then turned to current and future examples where COSDAM and its members can and should play a leading role, from potential changes to board policy on achievement levels to the recent involvement of Whitehurst, Alice Peisch, and Carey Wright in the Reading Framework working group. Cizek acknowledged Peisch's leadership in the working group and the deep expertise in reading that Whitehurst and Wright brought to those discussions. Cizek recognized Rafal-Baer for leadership in calling for public comment to promote consensus on the Reading Framework and for her encouragement of his leadership of COSDAM and its role in the framework. Cizek concluded that COSDAM has been represented well in the reading endeavor and the framework will serve students well for many years to come.

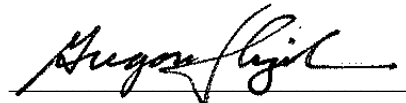
Cizek noted the importance of forthcoming joint discussions with the Assessment Development Committee (ADC) to use lessons learned in reading to improve upon the framework update process. Cizek recommended improvements to the vetting of panelists panels and bringing more diverse perspectives to the table, including increasing the number of teachers who serve on panels. Cizek recognized the value of frameworks standing the test of time but recommended a more timely, incremental approach when revising frameworks in the future. Cizek expressed the need to have the full Board engaged earlier in the revision process and applauded the role that COSDAM can and should play based on the call in the by-laws that the committee oversees NAEP design and methodology. Cizek concluded with his appreciation of such great colleagues, citing the exceptional leadership, contributions, and attitudes among the COSDAM members.

Geringer thanked Cizek for his expertise and leadership, noting Cizek's ability to articulate and summarize complicated issues. Rafal-Baer praised Cizek's welcoming disposition and expectation from day one that each member of the Board and this Committee make their voices heard.

Cizek acknowledged the absence of COSDAM Vice Chair Carey Wright and Committee member and Board Vice Chair Alice Peisch, noting the opportunity to see them in-person or virtually at the full Board meeting later in the week.

Cizek adjourned the meeting at 2:57 p.m. ET.

I certify the accuracy of these minutes.



Gregory Cizek, Chair

09/27/2021

Date

# National Assessment Governing Board

## Reporting and Dissemination Committee

### Report of July 22, 2021

3:00 - 5:00 pm

**Reporting and Dissemination Committee Members:** Chair Tonya Matthews, Vice Chair Marty West, Tyler Cramer, Paul Gasparini, Governor Bev Perdue, Ron Reynolds, Mark White

**Governing Board Staff:** Stephaan Harris, Laura LoGerfo, Lesley Muldoon, Munira Mwalimu, Angela Scott

**National Center for Education Statistics Staff:** Peggy Carr, Jing Chen, Enis Dogan, Veda Edwards, Patricia Etienne, Eunice Greer, Linda Hamilton, Daniel McGrath, Nadia McLaughlin, Taslima Rahman, Holly Spurlock, William Tirre, Ebony Walton, William Ward, Grady Wilburn

**Department of Education:** Tammie Adams

**Contractors:** AIR: George Bohrnstedt, Brittany Boyd, Markus Broer, Mary Ann Fox, Kim Gattis, Martin Hooper, Cadelle Hemphill, Young Kim, Sami Kitmitto, Yan Wang, Darrick Yee; CRP: Shama Carter, Jasmine Fletcher, Anthony Velez, Edward Wofford; ETS: Jonas Bertling, Gloria Dion, Patricia Donahue, Amy Drescher, Gloria Dion, Robert Finnegan, Kate Faherty, Sami Kitmitto, Courtney Sibley, Karen Wixson; Hager Sharp: James Elias, David Hoff, Joanne Lim; HII-TSD: Michael Slattery. The Hatcher Group: Jenny Beard, Robert Johnston, Zoey Lichtenheld, David Loewenberg, Alex Sanfuentes, Nandini Singh, Jenna Tomasello; Management Strategies: Brandon Dart. P20 Strategies: Andrew Kolstad. Pearson: Scott Becker, Joy Heitland, Eric Moyer, Stanley Rabinowitz, Pat Stearns; Silimeo Group: Debra Silimeo; Westat: Lauren Byrne, Kavemui Murangi, Jason Nicholas

**Other:** Rebecca Bennett (Massachusetts Department of Education), Vickie Baker (West Virginia Department of Education), Kathilia Delp, Donna Dubey (New Hampshire Department of Education), Jeremy Ellis (Missouri Department of Education), Jasmine Fletcher-For, Laura Goadrich (Arkansas Department of Education), Lynn Hardy (TBG), Beth LaDuca (Oregon Department of Education), Regina Lewis (Maine Department of Education), Rebecca Logan (Oklahoma Department of Education), Raina Moulia (Alaska Department of Education), Renee Savoie (Connecticut Department of Education)

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Vice Chair Marty West called the Reporting and Dissemination Committee meeting to order at 3:01 pm on Thursday, July 22, 2021. West welcomed everyone and provided an overview of the agenda and the goals for the meeting.

### **Release Plan for 2020 NAEP Long-Term Trend**

The national results of the 2020 National Assessment of Educational Progress (NAEP) Long-Term Trend (LTT) assessment for 9-year-olds and 13-year-olds will be released to the public in September 2021. The LTT assessment for which data will be reported this September occurred in 2020 and marked the last national assessment before schools were closed due to the COVID-19 crisis.

Typically, this assessment includes data for 17-year-olds, however, school closures to prevent the spread of COVID-19 in 2020 prevented the administration of the assessment to that age cohort. Originally, the Governing Board expected that NCES would administer the LTT to 17-year-olds in spring 2022, to resume assessing the 17-year-old cohort who could not participate when schools closed.

However, at the August 2021 quarterly meeting of the National Assessment Governing Board, the Board amended the assessment schedule to administer the 9-year-old LTT assessment in the 2021-2022 school year instead. By assessing 9-year-olds immediately prior to school closures in 2020 and again this upcoming school year when the vast majority of schools will reopen with full-time schedules, NAEP will capture student performance at two timepoints at the narrowest temporal boundaries of the COVID-19 potential impacts.

Laura LoGerfo, assistant director for reporting and analysis, described the release plan for the LTT results. The Board will introduce the LTT report and create one or two videos sharing and explaining the data. The video(s) will use graphics and simple animation to help introduce and explain the data. Excerpts from interviews with Lesley Muldoon, the Governing Board's Executive Director, and Dr. Peggy Carr (acting Commissioner of the National Center for Education Statistics) will provide context and highlight key findings. Committee members supported this plan.

In addition, Tyler Cramer urged his fellow committee members to read more about the NAEP Long-Term Trend program to learn its past and future. He promised to distribute various PowerPoint presentations and papers produced when the Board was deciding the fate of the Long-Term Trend assessment several years ago. Cramer asked about the intended audience for the LTT release and encouraged Board staff to consider who in Congress supports the LTT so strongly as to allocate funds for its administration. Marty West replied that the Board could host a special briefing for those LTT advocates in Congress.

Paul Gasparini suggested that the Board host a follow-up event to the LTT release featuring researchers who delve deep into LTT data, spotlighting the most ardent LTT fans and offering a preview of how the 2022 LTT administration to nine-year-olds will inform the nation about the impact of the pandemic.

Mark White posed an existential question, wondering what goals the Board has for this release. In response, Marty West connected these release events to the Strategic Vision which promotes the spotlighting of NAEP's value and utility to stakeholders and broader audiences. In general, release events encourage analysts to delve more deeply into NAEP resources and show the potential impact of NAEP data on informing education. In this specific case, West likened NAEP LTT to studying the climate (long-term), not weather (short-term), because LTT's periodicity is less frequent and its historical timeline longer than main NAEP's.

Bev Perdue summarized her disappointment in the fifty years of LTT results which show little improvement in performance despite billions of federal, state, and local funds allotted to schools. Despite all these investments, the nation ostensibly remains impotent in helping students learn what they should know. One caveat to this inference is the immense demographic shift in the population who took the LTT assessment in the 1970s and those who participated in 2020. The LTT sample now represents more minority students, more English learners, and more economically disadvantaged students, who often score lower on assessments. Thus a lack of apparent change overall belies relatively strong performances by subgroups.

### **Release Plan for High School Transcript Study**

With agreement on the approach to releasing the LTT results, attention turned to the proposal for the release of findings from the NAEP High School Transcript Study (HSTS). In 2019, a nationally representative sample of grade 12 students took the NAEP Reading and Mathematics assessments in a nationally representative sample of America's high schools. In that year, the NAEP team requested that the sampled high schools provide transcripts for sampled students with complete transcripts, i.e., high school graduates.

The High School Transcript Study collects and reports data on the high school graduates' course-taking patterns and rigor, credit accumulation, and grade point averages. The transcript data include demographic information on sampled graduates and can be linked to NAEP scores from 2019. The release will focus on sharing results, stimulating conversation around high school coursework, and expanding the audience for these data.

This release will occur at approximately the same time when the Nation's Report Card is released biennially to cement the idea of NAEP Day in the last week of October. The release will combine a town hall approach with the feel of a moderated news talk show, e.g., C-SPAN, with

an in-person component for speakers and a livestream for virtual attendees. The Board will tap its social media channels to crowdsource questions NAEP stakeholders have about high school graduates' schoolwork. Questions may cover high school course-taking trends, equitable access to rigorous courses, and concerns about academic preparations for postsecondary life.

The questions will be posed in a one-hour facilitated conversation that would 1) summarize HSTS results generally and 2) respond to specific questions from the field. The approach will be interactive and not static. A dynamic facilitator will foster a robust conversation based on the selected questions and provide an opportunity for the NCES Acting Commissioner Peggy Carr to share highlights from the data. Shining a spotlight on a few themes emerging from the complex data may help the audience grasp important findings more easily.

A Governing Board member or two will introduce the event; secondary school principal representative Paul Gasparini has graciously agreed to participate in the release. The Board may consider inviting a few questioners to submit their queries via video. In support of the release, the Board will produce and promote a video involving clips from interviews of high school seniors about their course-taking choices, to build interest in HSTS findings and connect the data to real life, not causally, but topically.

Marty West strongly supported this plan but cautioned that the release event and any promotional materials should emphasize that transcripts come from high school graduates only, not from seniors who did not graduate. The committee members appreciated the release of these data as an opportunity to reconsider what high school graduation means and how this meaning has evolved over time. Ron Reynolds commended the plan for making the transcript data more accessible and humanizing it through the video of high school students.

Tyler Cramer moved to approve both release plans for action by the full Governing Board at the upcoming August quarterly meeting, which Mark White seconded. The committee approved the plans unanimously.

### **Review of Core Contextual Variables**

A primary responsibility of the Reporting and Dissemination Committee is to review and approve the core contextual variables on the NAEP student, teacher, and school administrator questionnaires. At this meeting, the committee reviewed items related to education during the COVID-19 pandemic added both to main NAEP and to LTT NAEP questionnaires. Holly Spurlock of the National Center for Education Statistics presented useful background information for the committee review. In response to a question from Tyler Cramer, Spurlock explained that contextual items emerge from research, prior surveys, R&D recommendations and reviews, suggestions from experts on the NAEP program's Questionnaire Standing Committee, and feedback from both the government (e.g., Office of Management and Budget) and stakeholders.

Tonya Matthews asked if different modifiers of the word computer, i.e., desktop, laptop, tablet, may produce inconsistent responses. She wondered if modifications could help clarify what information each of these technology items seek or if these items appear sufficiently general to cover most instances of technology. Spurlock responded that in pilot tests, the items seemed general enough and sufficiently inclusive to facilitate interpretation and reporting. The word computer did not evoke thoughts about tablets, and students do not equate the various hardware.

Tyler Cramer wondered why some of the items present responses in negative to positive order (e.g., never to always left to right) but other items are presented as positive to negative, such as yes before no. Jonas Bertling, survey lead for the NAEP contractor, ETS, shared that survey researchers construct responses in terms of yes/no, then offer different nuances of no (i.e., never, not once, not all the time), so the yes must appear first. However, items that range in frequency, such as never to always or 0 for not very likely to 5 for very likely, the reply options show the intuitive left-to-right increase as participants may expect to see in a number line. Outliers to this behavior are long-standing items, preserved in the exact same way over decades for trend analyses.

Next, committee members cautioned that if schools closed again in the fall due to the next wave of COVID-19, the items would require additional revision. Tyler Cramer noted that item #7 on page 16 of the review package should be clarified to determine if that does or does not include the teacher. Cramer also wanted to know why there are no LTT questions for school administrators to report on the percentage of students who are new to the school.

Ron Reynolds conveyed disappointment in the dropping of the teacher sex variable, which means that the NAEP surveys cannot detect any gender or sex discrimination. Currently, the teacher sex variable includes only binary responses (male or female), but federal statistical agencies are examining how future surveys address questions of sex and gender. New instructions for surveys may indicate that additional response options must be included, which NCES awaits. Elaborating on Reynolds' query, Matthews asked if the approval process for items such as teacher sex, which is optional, compels as rigorous a review process as the rest of the items. Spurlock noted that all questionnaire items are optional, thus the same review process applies. Considering some states' reactions to particular questionnaire items, ensuring that the items reflect purpose and federal policy becomes especially critical.

Paul Gasparini enthusiastically endorsed the items about grading policies and practices. He also noted that items about instruction mode during the pandemic (e.g., hybrid, in-person, distance) omit several important options. He expressed concern that the survey will miss vitally informative data. Bertling replied that the survey team developed these items last year, when the presented options captured the most frequent modes of instruction. Last year's development process left no paths to revise the survey. Thus, the NAEP team cannot add new sub-items. Bertling acknowledged this substantial limitation, but hopes the options may be meaningful,

pointing out the option for respondents to check ‘not applicable (N/A)’ and noting the connection between these items and those included on the special COVID-19 school study. Gasparini recommended that the Board flag these items as needing supplemental guidance for interpretation, with which Matthews agreed and added that NAEP should find items where N/A is selected often, implying that these questions deserve revision.

LoGerfo thanked everyone for their diligent and thoughtful reviews of the items and encouraged committee members to send additional comments by July 25th at midnight. She will compile and send all feedback to the NAEP team by their deadline on July 26th.

### **State Mapping Study Briefing**

Marty West introduced the session on the State Mapping Study by proclaiming this report’s remarkable impact on policy, showing the “honesty gap” between what states purport is their educational standards’ rigor and what NAEP shows is their rigor. Taslima Rahman, the lead author for this report at the National Center for Education Statistics, thanked West and proceeded to provide an in-depth, detailed, comprehensive look at the report’s results.

The [entire report](#) merits reading, however headlines shared by Rahman include news that state math standards may be interpreted as more rigorous than their reading standards, i.e., more state standards mapped at the *NAEP Proficient* level in mathematics than in reading. Across both grades and both subjects, most state standards aligned at the *NAEP Basic* achievement level. And, compared to the previous decade, more state standards mapped at the *NAEP Proficient* level in 2019 than in 2009.

At the conclusion of Rahman’s presentation, Matthews noted that this report always elicits universal acclaim at its release. Marty West echoed Matthews’ praise, commending the study for its profound impact on education policy. The report allows for comparisons across states, which in earlier iterations, showed enormous variation in what states call grade-level work. West underscored a finding from the report that this variation has narrowed over time, calling attention to Tennessee’s evolution. Mark White, one of the two state legislators on the Governing Board and a representative from Tennessee, remarked how findings from previous editions of the state mapping study motivated Tennessee to revise their state standards, which has resulted in improved NAEP scores.

### **General Updates**

In the remaining minutes of the committee meeting, Marty West reminded committee members of their prior deliberations on improving the measure of socioeconomic status (SES) on NAEP. The NAEP team is making progress on providing income estimates that can be added to state administrative data systems which could in theory be reported back to NAEP. This progress is



exciting, but only happening in states with active Statewide Longitudinal Data System (SLDS) grants and the timeline for the project's fruition is unclear. Realistically, a comprehensive solution to the issue will take a substantial amount of time, and even then, income represents only one component of socioeconomic status.

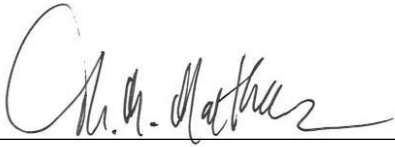
Thus the committee should encourage and monitor this work but also contemplate potential next steps or options:

1. Continue to gather relevant information in contextual questionnaires that researchers can use to construct SES proxies;
2. Revise contextual questionnaires to improve the quality of relevant information; and
3. Develop a recommended index of SES to be included in NAEP.

There was no time to discuss these possible options, but the conversation shall continue at the next committee meeting in November.

In conclusion, Perdue expressed kudos for a rich and productive meeting, and Tonya Matthews adjourned the meeting at 5:01 pm.

I certify the accuracy of these minutes.



Tonya Matthews, Chair

10/27/2021

Date

# National Assessment Governing Board

## Nominations Committee

### Closed Session

July 28, 2021

**Nominations Committee Members:** Governor Jim Geringer (Chair), Dana Boyd, Tyler Cramer, Tonya Matthews, Mark Miller, Reginald McGregor.

**Board Member:** Suzanne Lane

**Members Absent:**

Alice Peisch and Paul Gasparini

**Board Staff:** Stephaan Harris, Donnetta Kennedy, Lesley Muldoon, Munira Mwalimu, Tessa Regis, and Lisa Stooksberry.

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Under the provisions of exemptions 2 and 6 of § 552b (c) of Title 5 U.S.C., the Nominations Committee met in a closed session on Tuesday, July 28, 2021 from 5:30 p.m. to 6:30 p.m. Eastern time to discuss the following agenda topics:

- An update on the nominations for board terms that begin on October 1, 2021
- Board vacancies for terms beginning October 1, 2022
- 2022 campaign plans and a proposed timeline
- Next steps in work plans

Governor Geringer called the meeting to order at 5:30 p.m. ET. After welcoming members, Geringer previewed the agenda topics for discussion.

### **Nominations for Board Terms Beginning October 1, 2021**

Lisa Stooksberry, Deputy Executive Director, updated the committee on the status of 2021 appointments and recent communications with the Secretary's office. It is anticipated that appointments are on schedule for terms beginning October 1, 2021.

### **Board Vacancies for Terms Beginning October 1, 2022**

Governor Geringer reported that the following four vacancies will need to be filled for terms that would begin on October 1, 2022:

1. Eighth-Grade Teacher
2. Fourth-Grade Teacher
3. General Public Representative – Parent Leader
4. Secondary School Principal

### **Outreach Strategy for 2022 Nominations Campaign**

Stephan Harris, Assistant Director of Communications, briefed the committee on outreach strategies for the 2022 nominations campaign. Harris noted the dual purposes of the outreach campaign—to promote Board vacancies and building partnerships with targeted groups. The outreach efforts reflect priorities of Strategic Vision 2025.

The 2022 campaign will be launched via a website splash page this summer. A tool kit will be developed, and a webinar will be convened to attract candidates for all open categories with a focus on the General Public Representative–Parent Leader category.

Members discussed the need to clarify the General Public Representative slot as shown on the Board membership chart to clarify the two generalists and two parent leaders.

### **2022 Nominations Timeline**

Tessa Regis briefed the committee on the 2022 nominations campaign timeline. She reported that the campaign will be launched on September 8, 2021 and will conclude with action on the slate of finalists at the March 2022 Quarterly Board meeting. Members discussed and concurred with the proposed timeline.

Looking ahead, Tonya Matthews noted that a large number of vacancies would occur in the 2023 cycle. Matthews suggested initiating recruitment strategies earlier than usual next year to allow adequate time to solicit nominations. She noted that the workload for the Nominations Committee would be very heavy and should take into account the needs of new members to familiarize themselves with the work plans. She suggested that a possible need for an additional Board member on the Nominations Committee to support rating work for the 2023 cycle.

### **Farewell Remarks**

Matthews noted that this meeting of the Nominations Committee would be Chair Geiringer's last meeting as his term of office would conclude on September 30, 2021. Matthews read a poem she wrote commending Geiringer for his contributions to the Board's work and thanking him for hosting a Board meeting in Wyoming. She then called on each member to provide remarks, following which Dana Boyd, Tyler Cramer, Mark Miller, and Reginald McGregor thanked Geiringer for his leadership, insights, collegiality, and mentoring.

Geiringer provided remarks on his service and thanked members for their contributions to the Board's work. He then turned to next steps in the work of the Nominations Committee and

provided closing remarks. Geringer thanked Suzanne Lane for attending the meeting and noted that she would bring much-needed testing and measurement expertise to the Nominations Committee in the future.

The meeting adjourned at 6:30 p.m.

I certify the accuracy of these minutes.

  
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Jim Geringer, Chair

October 14, 2021  
Date