# National Assessment Governing Board  
## Assessment Development Committee  
### August 2 - 3, 2018  
## AGENDA

### Thursday, August 2

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>9:00 - 9:15 am</td>
<td>Welcome and Introductions</td>
<td>Shannon Garrison, ADC Chair</td>
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<td>Remarks from Outgoing Board Members</td>
<td>Frank Fernandes and Chasidy White, ADC Members</td>
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<tr>
<td>9:15 - 10:05 am</td>
<td>Closed Session</td>
<td>Gloria Dion, ETS</td>
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<td></td>
<td>Overview of NAEP Mathematics Item Pool (SV #5)</td>
<td>Kim Gattis, AIR</td>
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<tr>
<td>10:05 am - 12:05 pm</td>
<td>Closed Session</td>
<td>Shannon Garrison</td>
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<td>Review of Cognitive Items:</td>
<td>NAEP Mathematics, Reading, and Science Assessments</td>
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<tr>
<td>12:05 -12:30 pm</td>
<td>Goals for Revision of the Governing Board Item Development and Review Policy (SV #5)</td>
<td>Shannon Garrison</td>
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### Friday, August 3

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>9:30 - 10:40 am</td>
<td>Closed Session</td>
<td>Shannon Garrison</td>
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<td>Review of Cognitive Items:</td>
<td>NAEP Science and Writing Assessments</td>
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<tr>
<td>10:40 –11:20 am</td>
<td>Closed Session</td>
<td>Andy Weiss, ETS</td>
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<td>NAEP Civics, Geography, and U.S. History Assessments:</td>
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<td></td>
<td>Overview (SV #5)</td>
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<td>11:20 am – 12:00 pm</td>
<td>ADC Activities in the Strategic Vision</td>
<td>Shannon Garrison</td>
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<td>Information Items</td>
<td>Long-Term Trend Content Descriptions: Next Steps</td>
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<td>NCES Content Comparison Studies:</td>
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<td>NAEP Reading &amp; Mathematics</td>
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<td>Item Review Schedule</td>
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OVERVIEW OF THE NAEP MATHEMATICS ITEM POOL

The recent Framework Review for the NAEP Mathematics has resulted in an Assessment Development Committee (ADC) recommendation to update the NAEP Mathematics Framework. This recommendation is reflected in a Charge to the Visioning Panel to be convened for the framework update process, and represents comments raised in the May 2018 ADC and plenary sessions relating to the NAEP Mathematics Framework.

The recommendation articulates: the scope of anticipated framework updates; and the Board’s priorities in pursuing this framework update. In June and July 2018, the ADC finalized the NAEP Mathematics Framework Recommendation. (See NAEP Mathematics Framework tab in Board materials.)

On Friday August 3, 2018, Chair Garrison will introduce the Committee’s recommendation to the full Board and invite discussion. Board action on the Charge is slated for the Saturday session.

To inform the detailed Committee discussions regarding the NAEP Mathematics Framework in the coming months, NCES will provide an overview of item development for the NAEP Mathematics Assessment relative to the current NAEP Mathematics Framework. The presentation will begin with a summary of NCES’s rigorous processes for developing NAEP items – a process that begins when the Board adopts a new or updated assessment framework. The briefing will center on how the item pool has evolved over time, noting the research and strategies NCES has conducted to address various aspects of the current framework, such as the framework’s definition of mathematical complexity and the content overlap between the current and previous framework.
GOALS FOR REVISION OF THE GOVERNING BOARD

ITEM DEVELOPMENT AND REVIEW POLICY

Before embarking on a revision of the Governing Board Policy for Item Development and Review (attached), the August 2018 Board meeting is opportune for considering the goals of this policy revision. For example, overarching questions include: What should be the emphasis of ADC item reviews? And to what extent can there be more connections between ADC item reviews and framework reviews?
National Assessment Governing Board

Item Development and Review

Policy Statement

It is the policy of the National Assessment Governing Board to require the highest standards of fairness, accuracy, and technical quality in the design, construction, and final approval of all test questions and assessments developed and administered under the National Assessment of Educational Progress (NAEP). All NAEP test questions or items must be designed and constructed to reflect carefully the assessment objectives approved by the Governing Board. The final assessments shall adhere to the requirements outlined in the following Guiding Principles, Policies, and Procedures for NAEP Item Development and Review.

The Governing Board’s Assessment Development Committee, with assistance from other Governing Board members as needed, shall be responsible for reviewing and approving NAEP test questions at several stages during the development cycle. In so doing, the Guiding Principles, Policies, and Procedures must be adhered to rigorously.

Introduction

The National Assessment of Educational Progress Authorization Act of 2002 (P.L. 107-279) contains a number of important provisions regarding item development and review for NAEP. The legislation requires that:

- “the purpose [of NAEP] is to provide…a fair and accurate measurement of student academic achievement;”
- “[NAEP shall]…use widely accepted professional testing standards, objectively measure academic achievement, knowledge, and skills, and ensure that any academic assessment authorized….be tests that do not evaluate or assess personal or family beliefs and attitudes or publicly disclose personally identifiable information;”
• “[NAEP shall]…only collect information that is directly related to the appraisal of academic achievement, and to the fair and accurate presentation of such information;”
• “the Governing Board shall develop assessment objectives consistent with the requirements of this section and test specifications that produce an assessment that is valid and reliable, and are based on relevant widely accepted professional standards;”
• “the Governing Board shall have final authority on the appropriateness of all assessment items;”
• “the Governing Board shall take steps to ensure that all items selected for use in NAEP are free from racial, cultural, gender, or regional bias and are secular, neutral, and non-ideological;” and
• “the Governing Board shall develop a process for review of the assessment which includes the active participation of teachers, curriculum specialists, local school administrators, parents, and concerned members of the public.”

Given the importance of these mandates, it is incumbent upon the Governing Board to ensure that the highest standards of test fairness and technical quality are employed in the design, construction, and final approval of all test questions for NAEP. The validity of educational inferences made using NAEP data could be seriously impaired without high standards and rigorous procedures for test item development, review, and selection.

Test questions used in the NAEP must yield assessment data that are both valid and reliable in order to be appropriate. Consequently, technical acceptability is a necessary, but not a sufficient condition, for judging the appropriateness of items. In addition, the process for item development must be thorough and accurate, with sufficient reviews and checkpoints to ensure that accuracy. The Guiding Principles, Policies, and Procedures governing item development, if fully implemented throughout the development cycle, will result in items that are fair and of the highest technical quality, and which will yield valid and reliable assessment data.

Each of the following Guiding Principles is accompanied by Policies and Procedures. Full implementation of this policy will require supporting documentation from the National Center for Education Statistics (NCES) regarding all aspects of the Policies and Procedures for which they are responsible.

This policy complies with the documents listed below which express widely accepted technical and professional standards for item development and use. These standards reflect the current agreement of recognized experts in the field, as well as the policy positions of major professional and technical associations concerned with educational testing.


Guiding Principles – Item Development and Review

**Principle 1**
NAEP test questions selected for a given content area shall be representative of the content domain to which inferences will be made and shall match the NAEP assessment framework and specifications for a particular assessment.

**Principle 2**
The achievement level descriptions for basic, proficient, and advanced performance shall be an important consideration in all phases of NAEP development and review.

**Principle 3**
The Governing Board shall have final authority over all NAEP test questions. This authority includes, but is not limited to, the development of items, establishing the criteria for reviewing items, and the process for review.

**Principle 4**
The Governing Board shall review all test questions that are to be administered in conjunction with any pilot test, field test, operational assessment, or special study administered as part of NAEP.

**Principle 5**
NAEP test questions shall be accurate in their presentation and free from error. Scoring criteria shall be accurate, clear, and explicit.

**Principle 6**
All NAEP test questions shall be free from racial, cultural, gender, or regional bias, and shall be secular, neutral, and non-ideological. NAEP shall not evaluate or assess personal or family beliefs, feelings, and attitudes, nor publicly disclose personally identifiable information.
Policies and Procedures for Guiding Principles

Principle 1

NAEP test questions selected for a given content area shall be representative of the content domain to which inferences will be made and shall match the NAEP assessment framework and specifications for a particular assessment.

Policies and Procedures

1. Under the direction of the Governing Board, the framework for each assessment shall be developed in a manner that defines the content to be assessed, consistent with NAEP’s purpose and the context of a large-scale assessment. The framework development process shall result in a rationale for each NAEP assessment that delineates the scope of the assessment relative to the content domain. The framework shall consist of a statement of purpose, assessment objectives, format requirements, and other guidelines for developing the assessment and items.

2. In addition to the framework, the Governing Board shall develop assessment and item specifications to define the: a) content and process dimensions for the assessment; b) distribution of items across content and process dimensions at each grade level; c) stimulus and response attributes (or what the test question provides to students and the format for answering the item); d) types of scoring procedures; e) test administration conditions; and f) other specifications pertaining to the particular subject area assessment.

3. The Governing Board will forward the framework and specifications to NCES, in accordance with an appropriate timeline, so that NCES may carry out its responsibilities for assessment development and administration.

4. In order to ensure that valid inferences can be made from the assessment, the pool of test questions shall measure the construct as defined in the framework. Demonstrating that the items selected for the assessment are representative of the subject matter to which inferences will be made is a major type of validity evidence needed to establish the appropriateness of items.

5. A second type of validity evidence is needed to ensure that NAEP test items match the specific objectives of a given assessment. The items shall reflect the objectives, and the item pool shall match the percentage distribution for the content and cognitive dimensions at each grade level, as stated in the framework. Minor deviations, if any, from the content domain as defined by the framework shall be explained in supporting materials.

6. Supporting material submitted with the NAEP items shall provide a description of procedures followed by item writers during development of NAEP test questions. This description shall include the expertise, training, and demographic characteristics of the groups. This supporting material must show that all item writing and review groups have
the required expertise and training in the subject matter, bias and fairness reviews, and assessment development.

7. In submitting items for review by the Governing Board, NCES shall provide information on the relationship of the specifications and the content/process elements of the pool of NAEP items. This shall include procedures used in classifying each item.

8. The item types used in an assessment shall match the content requirements as stated in the framework and specifications, to the extent possible. The match between an objective and the item format shall be informed by specifications pertaining to the content, knowledge, or skill to be measured; cognitive complexity; overall appropriateness; and efficiency of the item type. NAEP assessments shall use a variety of item types as best fit the requirements stated in the framework and specifications.

9. In order to ensure consistency between the framework and specifications documents and the item pools, NCES shall ensure that the development contractor engages a minimum of 20 percent of the membership of the framework project committees in each subject area to serve on the item writing and review groups as the NAEP test questions are being developed. This overlap between the framework development committees and the item developers will provide stability throughout the NAEP development process, and ensure that the framework and specifications approved by the Governing Board have been faithfully executed in developing NAEP test questions.

Principle 2
The achievement level descriptions for basic, proficient, and advanced performance shall be an important consideration in all phases of NAEP development and review.

Policies and Procedures
1. During the framework development process, the project committees shall draft preliminary descriptions of the achievement levels for each grade to be assessed. These preliminary descriptions shall define what students should know and be able to do at each grade, in terms of the content and process dimensions of the framework at the basic, proficient, and advanced levels. Subsequent to Governing Board adoption, the final achievement level descriptions shall be an important consideration in all future test item development for a given subject area framework.

2. The achievement level descriptions shall be used to ensure a match between the descriptions and the resulting NAEP items. The achievement level descriptions shall be examined, and appropriate instruction provided to item writers to ensure that the items represent the stated descriptions, while adhering to the content and process requirements of the framework and specifications. The descriptions shall be used to evaluate the test questions to make certain that the pool of questions encompasses the range of content and
process demands specified in the achievement level descriptions, including items within each achievement level interval, and items that scale below basic.

3. As the NAEP item pool is being constructed, additional questions may need to be written for certain content/skill areas if there appear to be any gaps in the pool, relative to the achievement level descriptions.

4. Supporting materials shall show the relationship between the achievement levels descriptions and the pool of NAEP test questions.

**Principle 3**

The Governing Board shall have final authority over all NAEP test questions. This authority includes, but is not limited to, the development of items, establishing the criteria for reviewing items, and the process for review.

**Policies and Procedures**

1. Under the guiding statute, a primary duty of the Governing Board pertains to “All Cognitive and Noncognitive Assessment Items.” Specifically, the statute states that, “The Governing Board shall have final authority on the appropriateness of all assessment items.” Under the law, the Governing Board is therefore responsible for all NAEP test questions as well as all NAEP background questions administered as part of the assessment.

2. To meet this statutory requirement, the Governing Board’s Policy on NAEP Item Development and Review shall be adhered to during all phases of NAEP item writing, reviewing, editing, and assessment construction. The National Center for Education Statistics (NCES), which oversees the operational aspects of NAEP, shall ensure that all internal and external groups involved in NAEP item development activities follow the Guiding Principles, Policies, and Procedures as set forth in this Governing Board policy.

3. Final review of all NAEP test questions for bias and appropriateness shall be performed by the Governing Board, after all other review procedures have been completed, and prior to administration of the items to students.

**Principle 4**

The Governing Board shall review all NAEP test questions that are to be administered in conjunction with any pilot test, field test, operational assessment, or special study administered as part of NAEP.

**Policies and Procedures**

1. To fulfill its statutory responsibility for NAEP item review, the Governing Board shall receive, in a timely manner and with appropriate documentation, all test
questions that will be administered to students under the auspices of NAEP. These items include those slated for pilot testing, field testing, and operational administration.

2. The Governing Board shall review all test items developed for special studies, where the purpose of the special study is to investigate alternate item formats or new technologies for possible future inclusion as part of main NAEP, or as part of a special study to augment main NAEP data collection.

3. The Governing Board shall not review items being administered as part of test development activities, such as small-scale, informal tryouts with limited groups of students designed to refine items prior to large-scale pilot, field, or operational assessment.

4. NCES shall submit NAEP items to the Governing Board for review in accordance with a mutually agreeable timeline. Items shall be accompanied by appropriate documentation as required in this policy. Such information shall consist of procedures and personnel involved in item development and review, the match between the item pool and the framework content and process dimensions, and other related information.

5. For its first review, the Governing Board shall examine all items prior to the special study, pilot test, or field test stage. In the case of the NAEP reading assessment, all reading passages shall be reviewed by the Governing Board prior to item development. For each reading passage, NCES shall provide the source, author, publication date, passage length, rationale for minor editing to the passage (if any), and notation of such editing applied to the original passage. NCES shall provide information and explanatory material on passages deleted in its fairness review procedures.

6. For its second review, the Governing Board shall examine items following pilot or field testing. The items shall be accompanied by statistics obtained during the pilot test or field test stage. These statistics shall be provided in a clear format, with definitions for each item analysis statistic collected. Such statistics shall include, but shall not be limited to: p-values for multiple-choice items, number and percentage of students selecting each option for a multiple-choice item, number and percentage not reaching or omitting the item (for multiple-choice and open-ended), number and percentage of students receiving various score points for open-ended questions, mean score point value for open-ended items, appropriate biserial statistics, and other relevant data.

7. At a third stage, for some assessments, the Governing Board shall receive a report from the calibration field test stage, which occurs prior to the operational administration. This “exceptions report” shall contain information pertaining to any items that were dropped due to differential item functioning (DIF) analysis for bias, other items to be deleted from the operational assessment and the rationale for this decision, and the final match between the framework distribution and the item pool. If the technology becomes available to perform statistically sound item-level substitutions at this point in
the cycle (from the initial field test pool), the Governing Board shall be informed of this process as well.

8. All NAEP test items shall be reviewed by the Governing Board in a secure manner via in-person meetings, teleconference or videoconference settings, or online via a password-protected Internet site. The Governing Board’s Assessment Development Committee shall have primary responsibility for item review and approval. However, the Assessment Development Committee, in consultation with the Governing Board Chair, may involve other Governing Board members in the item review process on an ad hoc basis. The Governing Board may also submit items to external experts, identified by the Governing Board for their subject area expertise, to assist in various duties related to item review. Such experts shall follow strict procedures to maintain item security, including signing a Nondisclosure Agreement.

9. Items that are edited between assessments by NCES and/or its item review committees, for potential use in a subsequent assessment, shall be re-examined by the Governing Board prior to a second round of pilot or field testing.

10. Documentation of the Governing Board’s final written decision on editing and deleting NAEP items shall be provided to NCES within 10 business days following completion of Governing Board review at each stage in the process.

Principle 5

NAEP test questions shall be accurate in their presentation, and free from error. Scoring criteria shall be accurate, clear, and explicit.

Policies and Procedures

1. NCES, through its subject area content experts, trained item writers, and item review panels, shall examine each item carefully to ensure its accuracy. All materials taken from published sources shall be carefully documented by the item writer. Graphics that accompany test items shall be clear, correctly labeled, and include the data source where appropriate. Items shall be clear, grammatically correct, succinct, and unambiguous, using language appropriate to the grade level being assessed. Item writers shall adhere to the specifications document regarding appropriate and inappropriate stimulus materials, terminology, answer choices or distractors, and other requirements for a given subject area. Items shall not contain extraneous or irrelevant information that may differentially distract or disadvantage various subgroups of students from the main task of the item.

2. Scoring criteria shall accompany each constructed-response item. Such criteria shall be clear, accurate, and explicit. Carefully constructed scoring criteria will ensure valid and reliable use of those criteria to evaluate student responses to maximize the accuracy and efficiency of scoring.
3. Constructed-response scoring criteria shall be developed initially by the item writers, refined during item review, and finalized during pilot or field test scoring. During pilot or field test scoring, the scoring guides shall be expanded to include examples of actual student responses to illustrate each score point. Actual student responses shall be used as well, to inform scorers of unacceptable answers.

4. Procedures used to train scorers and to conduct scoring of constructed-response items shall be provided to the Governing Board, along with information regarding the reliability and validity of such scoring. If the technology becomes available to score student responses electronically, the Governing Board shall be informed of the reliability and validity of such scoring protocol, as compared to human scoring.

**Principle 6**

All NAEP test questions shall be free from racial, cultural, gender, or regional bias, and shall be secular, neutral, and non-ideological. NAEP shall not evaluate or assess personal or family beliefs, feelings, and attitudes, nor publicly disclose personally identifiable information.

**Policies and Procedures**

1. An item is considered biased if it unfairly disadvantages a particular subgroup of students by requiring knowledge of obscure information unrelated to the construct being assessed. A test question or passage is biased if it contains material derisive or derogatory toward a particular group. For example, a geometry item requiring prior knowledge of the specific dimensions of a basketball court could result in lower scores for students unfamiliar with that sport, even if those students know the geometric concept being measured. Use of a regional term for a soft drink in an item context may provide an unfair advantage to students from that area of the country. Also, an item that refers to any individual or group in a demeaning manner would be unacceptable.

2. In conducting bias reviews, steps shall be taken to rid the item pool of questions that, because of their content or format, either appear biased on their face, or yield biased estimates of performance for certain subpopulations based on gender, race, ethnicity, or regional culture. A statistical finding of differential item functioning (DIF) will result in a review aimed at identifying possible explanations for the finding. However, such an item will not automatically be deleted if it is deemed valid for measuring what was intended, based on the NAEP assessment framework. Items in which clear bias is found will be eliminated. This policy acknowledges that there may be real and substantial differences in performance among subgroups of students. Learning about such differences, so that performance may be improved, is part of the value of the NAEP.

3. Items shall be secular, neutral, and non-ideological. Neither NAEP nor its questions shall advocate a particular religious belief or political stance. Where appropriate, NAEP questions may deal with religious and political issues in a fair and objective way.
The following definitions shall apply to the review of all NAEP test questions, reading passages, and supplementary materials used in the assessment of various subject areas:

• **Secular** – NAEP questions shall not contain language that advocates or opposes any particular religious views or beliefs, nor shall items compare one religion unfavorably to another. However, items may contain references to religions, religious symbolism, or members of religious groups where appropriate.

Examples: The following phrases would be acceptable: “shaped like a Christmas tree,” “religious tolerance is one of the key aspects of a free society,” “Dr. Martin Luther King, Jr. was a Baptist minister,” or “Hinduism is the predominant religion in India.”

• **Neutral and Non-ideological** - Items shall not advocate for a particular political party or partisan issue, for any specific legislative or electoral result, or for a single perspective on a controversial issue. An item may ask students to explain both sides of a debate, or it may ask them to analyze an issue, or to explain the arguments of proponents or opponents, without requiring students to endorse personally the position they are describing. Item writers should have the flexibility to develop questions that measure important knowledge and skills without requiring both pro and con responses to every item.

Examples: Students may be asked to—

• compare and contrast positions on states’ rights, based on excerpts from speeches by X and Y;
• analyze the themes of Franklin D. Roosevelt’s first and second inaugural addresses;
• identify the purpose of the Monroe Doctrine;
• select a position on the issue of suburban growth and cite evidence to support this position;
• provide arguments either for or against Woodrow Wilson’s decision to enter World War I;
• summarize the dissenting opinion in a landmark Supreme Court case.

The criteria of neutral and non-ideological also pertain to decisions about the pool of test questions in a subject area, taken as a whole. The Governing Board shall review the entire item pool for a subject area to ensure that it is balanced in terms of the perspectives and issues presented.

4. The Governing Board shall review both stimulus materials and test items to ensure adherence to the NAEP statute and the policies in this statement. Stimulus materials include reading passages, articles, documents, graphs, maps, photographs, quotations, and all other information provided to students in a NAEP test question.
5. NAEP questions shall not ask a student to reveal personal or family beliefs, feelings, or attitudes, or publicly disclose personally identifiable information.
NAEP CIVICS, GEOGRAPHY, AND U.S. HISTORY ASSESSMENTS:
OVERVIEW

In March 2018, the ADC discussed that the current NAEP Assessment Schedule indicates that new frameworks may be needed for the NAEP Civics, Geography, and U.S. History assessments to be conducted in 2022. The Committee acknowledged that updated frameworks cannot be completed in time for the 2022 administration and planned to review the assessments more closely to inform determinations about when new frameworks are needed.

The Committee noted that NAEP frameworks should retain emphasis on applications and practices, such as historical thinking and interpretation, especially given that this is a contemporary emphasis in U.S. classrooms. The Committee also expressed interest in additional information on:

- How historical thinking and interpretation is reflected in items;
- How the contemporary period articulated in the current NAEP U.S. History Framework is reflected in NAEP U.S. History Assessment items;
- How items in the NAEP Civics, Geography, and U.S. History assessments address contemporary contexts more broadly, relative to the current frameworks;
- How new developments, such as geographic information systems (GIS), have been addressed relative to the current frameworks; and
- How the digital based assessment platform has been used to make the assessments more engaging to students.

Andy Weiss of ETS will brief the Committee on these issues, while showcasing several items from the most recent assessment as exemplars. After the briefing, additional exemplar items will be posted for ADC secure review to inform follow-up discussion.
**NEXT STEPS FOR ADC FRAMEWORK ACTIVITIES**

The ADC develops recommendations for what NAEP should assess and preparing content recommendations for Board deliberation and action. By engaging a wide array of stakeholders, each NAEP framework details these recommendations, describing what students should know and be able to do in a subject area and what will be tested on NAEP. Framework panels review assessment trends internationally to develop recommendations for ADC and Board deliberation. The panels also make recommendations for what should be included in NAEP questionnaires to provide context on student achievement.

Recent ADC discussions have raised several issues for ongoing discussion as the Committee prepares content recommendations for Board deliberation and action:

- Expected gains and losses for each path forward.
- Extent to which current frameworks are flexible enough to adapt as needed.
- The optimal role of NAEP for each content area.
- The level of specificity most useful to policymakers, researchers, and educators.
- How future NAEP items will be a resource for the field.
- How to establish and maintain partnerships that highlight actionable aspects of results, e.g., teacher access to released NAEP items and contextual information.
- How to develop viable options for new configurations of NAEP assessment content in ways that balance expertise, outreach, research, and trends in curricular standards.
- How to incorporate how other countries think about changing what they assess.
- Whether to more deeply assess an existing content area or add new content areas.
- Whether streamlining of NAEP frameworks is an appropriate goal.
- How to be intentional about content overlap between different assessments, while fulfilling statutory requirements, e.g., biennial reading and mathematics assessment.
- How Board and Committee priorities should be reflected in upcoming framework updates.

A Strategic Vision Progress Report across all Board committees is presented in the Executive Committee tab. A working draft of ADC’s project plans is attached, reflecting overarching projects for informing educators, updating policies, and exploring new approaches. More detailed timelines are presented for the NAEP Mathematics and Reading frameworks, the first two framework projects planned. A summary of common elements for each framework project follows.

At the August 2018 Board meeting, the ADC will have an opportunity to take stock and discuss next steps.
## WORKING DRAFT* PLAN: ALL ADC STRATEGIC VISION (SV) ACTIVITIES

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<th>ACTIVITY</th>
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<tr>
<td>Identify NAEP Resources &amp; Information for Educators (SV #3 Expanding NAEP Resources and SV #6 Contextual Variables)</td>
<td>May 2017</td>
<td>Nov 2021</td>
<td>ADC discussed NAEP Questions Tool and contextual variables in 2017. Suggestions for new or refined NAEP resources can be shared with R&amp;D for Board outreach. To be determined: when/how to develop ADC recommendations.</td>
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<tr>
<td>Explore New Approaches to Framework Update Processes (also SV #8 International Assessments)</td>
<td>Nov 2017</td>
<td>Aug 2023</td>
<td>The Board’s Technical Services contractor is an opportunity for analyses exploring innovations in how NAEP assessment updates are implemented. Framework Update Projects will review other countries’ assessment programs to inform frameworks, framework processes, contextual data, and reporting.</td>
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<td>Review &amp; Update Civics, Geography, and U.S. History Frameworks (Depends on NAEP Schedule)</td>
<td>Mar 2018</td>
<td>May 2020</td>
<td>Discussion of outreach began in March 2018, with suggestions to develop options for the ADC to consider. Review of current NAEP item pools will also inform ADC recommendations.</td>
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<td>Review &amp; Update Economics Framework (Depends on NAEP Schedule)</td>
<td>Mar 2020</td>
<td>Aug 2021</td>
<td>Depending on ADC recommendations and Board Assessment Schedule decisions, Economics may or may not be a standalone project.</td>
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<td>Review &amp; Update Science and Technology &amp; Engineering Literacy (TEL) Frameworks (Depends on NAEP Schedule)</td>
<td>Sep 2020</td>
<td>Nov 2022</td>
<td>Discussion of outreach began in March 2018, Tentative next steps: learn more about standards in NGSS non-adopter states and learn whether stakeholders view that some or all of the TEL subarea on Technology &amp; Society addresses student achievement goals in Civics, Geography, U.S. History, or Economics.</td>
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<td>Develop Content Descriptions for the Long-Term Trend Mathematics and Reading Assessments (SV #7Long-Term Trend)</td>
<td>TBD</td>
<td>TBD</td>
<td>March 2018 discussion called for content outlines to be useful for LTT deliberations and efforts to describe the knowledge and skills of lower performing students. Staff is preparing an implementation plan regarding how content outlines can be developed.</td>
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* All timelines are estimated. This draft will be updated based on Board policy decisions. All activities address Strategic Vision Priority #5 Updating Frameworks, unless otherwise noted.

¹ Timeline includes administering the assessment.
# Mathematics Framework: Expected Milestones

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<th>Milestone</th>
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<tr>
<td>ADC Discussion with External Experts in Mathematics</td>
<td>Scheduled for May 2018, allowing the ADC to simultaneously review the Mathematics Standards report and engage mathematics experts.</td>
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<tr>
<td>ADC Recommendation for Updating Assessment</td>
<td>Based on May 2018 ADC discussion, the ADC will prepare a recommendation on the type of framework update needed, including a draft charge for the Visioning and Development Panels that will be convened. The recommendation would be presented for Board action in August 2018.</td>
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<td>Board Action on Charge</td>
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<tr>
<td>Framework Contractor Selection</td>
<td>A contractor will be selected by Summer 2018 to begin preparing and compiling resources for the Visioning and Development Panel meetings.</td>
</tr>
<tr>
<td>Trend Scan &amp; Resource Compilation</td>
<td></td>
</tr>
<tr>
<td>Panel Meetings (3 to 6)</td>
<td>After Board action on the charge in 2018, the Visioning Panel will be convened to begin the series of Visioning and Framework Development Panel meetings to prepare a draft framework. ADC will receive ongoing updates. The full Board will review the draft when public comment is being collected. The Development Panel will use Board and public feedback to finalize the draft for Board action.</td>
</tr>
<tr>
<td>Full Board Review &amp; Public Comment</td>
<td></td>
</tr>
<tr>
<td>Framework Draft Finalized</td>
<td></td>
</tr>
<tr>
<td>ADC Final Review of Framework</td>
<td></td>
</tr>
<tr>
<td>Board Action</td>
<td>Summer/Fall 2019.</td>
</tr>
<tr>
<td>Assessment Administered</td>
<td>The Board-adopted framework will be provided to NCES by 2019. After item development, the newly updated assessment would be administered in 2025.</td>
</tr>
</tbody>
</table>

[^2]: The mathematics framework project will be implemented by the same contractor as the reading framework project, with some staggering in the schedule.

[^3]: See Attachment F for a project update.
**READING FRAMEWORK: EXPECTED MILESTONES**

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Status</th>
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</thead>
<tbody>
<tr>
<td>ADC Discussion with External Experts in Reading</td>
<td>Scheduled for March 2018.</td>
</tr>
<tr>
<td>ADC Continues Outreach and Prepares Recommendation for Board Deliberation</td>
<td>Summer 2018 through Spring 2019.</td>
</tr>
<tr>
<td>Board/ADC Decision on Reading Framework Update</td>
<td>This includes anticipated Board adoption of a newly extended NAEP schedule of assessments, which is slated for Board action in March 2019.</td>
</tr>
<tr>
<td>ADC Recommendation for Updating Assessment</td>
<td>Based on ADC outreach and framework reviews, the ADC will prepare a recommendation on the type of framework update needed, including a draft charge for the Visioning and Development Panels that will be convened. Board action is slated for Spring 2019.</td>
</tr>
<tr>
<td>Board Action on Charge</td>
<td>A contractor will be selected by Summer 2018 to begin preparing and compiling resources for the Visioning and Development Panel meetings.</td>
</tr>
<tr>
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<tr>
<td>Board Action</td>
<td></td>
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<tr>
<td>Assessment Administered</td>
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</table>

**Common Elements of Each Framework Update Project**

Based on the revised Framework Development Policy, several milestones address all NAEP assessment framework projects. Framework update projects engage stakeholders and content experts to identify needed revisions, via subject-specific factors including:

- Evolution of discipline and implications for NAEP frameworks
- Relevance to students' postsecondary endeavors
- Student achievement trends in terms of contextual factors
- Digital-based assessment issues
- International content and measurement trends

---

4 The reading framework project will be implemented by the same contractor as the mathematics framework project, with some staggering in the schedule.
As a first step, the ADC conducts a framework review, where content experts are invited to a Committee session to provide reflections on the state of the discipline and the extent to which the relevant NAEP framework should be updated. Studies and additional outreach is pursued, as needed, to inform the ADC’s recommendation about the type of framework update that is required. Next, the ADC brings its recommendation to the full Board for approval. In the case of an anticipated framework update, the recommendation includes a charge to stakeholders who will serve on the panels convened to draft recommendations for the ADC's consideration.

After Board discussion of the ADC recommendation, the Board will take action on the charge. Concurrently, Board staff will identify a contractor to execute the framework update process.

The framework contractor will launch the project by identifying individuals to serve on the framework panels and by compiling and developing resources to support the meetings of these stakeholders. A subset of these resources will include the Governing Board’s charge to the framework panels as well as documents used to inform the Board’s development of the charge. The first meeting of stakeholders will be for the Visioning Panel to discuss the major issues to be addressed in the framework. A subset of the Visioning Panel will continue on as the Development Panel to develop an updated framework. This panel will also develop the recommended updates to the Test and Item Specifications, as well as the Contextual Variables.

The ADC monitors the framework contractor’s work via regular project updates. A draft of the panels’ recommended framework will be shared for full Board review and public comment, as well as review by the Board’s Committee on Standards, Design and Methodology. This feedback will allow the Development Panel to address concerns and finalize the draft framework, specifications, and contextual variables for the ADC’s final review and Board action. The adopted framework, specifications, and contextual variables are given to NCES to begin assessment development, piloting, and finally administration of the operational assessment based on the new framework.
LONG-TERM TREND CONTENT DESCRIPTIONS:
NEXT STEPS

March 2018 Executive Committee deliberations on the NAEP Long Term Trend (LTT) assessment called on ADC to lead development of content descriptions of the LTT assessments. These descriptions will support LTT item development, as well as updates to the Governing Board LTT policy and improved explanations of LTT assessment goals.

In March, the ADC also discussed initial ideas for this work, and expressed interest in making this prospective documentation as useful as possible for LTT deliberations and other efforts to provide more information about the knowledge and skills demonstrated by lower performing students on NAEP. The ADC requested updates from staff, regarding recommended plans to develop these content descriptions.

Since March 2018, Governing Board staff has obtained a resource from NCES capturing previous research to list measurement objectives of the LTT assessment in mathematics. This resource can serve as the foundation for a comprehensive description of LTT Mathematics. It is yet to be determined whether a similar resource exists for LTT Reading. After confirming these baseline documents, Board staff will work with the Human Resources Research Organization (HumRRO), as the Board’s current contractor for Technical Support Services. In partnering with HumRRO for this effort, experts can be engaged to ensure consistency in terminology used for measurement objectives over time, for example. This would be part of the process to formalize the content descriptions for Board deliberations and eventual publication.
NCES Sponsored NAEP Mathematics and Reading Comparisons Studies

NAEP and the Common Core State Standards - Mathematics

The NAEP Validity Studies Panel is conducting a series of three studies comparing the content of the NAEP Mathematics Assessment and the Common Core State Standards – Mathematics (CCSS-M). The first study compares the NAEP mathematics framework and the CCSS-M. The second study compares the items in the 2015 NAEP item pool and the CCSS-M. The third study compares 2017 NAEP items with items in assessments built specifically to align with the CCSS-M. Two studies have been completed and the final study reports can be found at the links provided below. The third study is in process with an expected completion target of Spring 2019.

The Alignment Between the NAEP Mathematics Framework and the CCSS for Mathematics

Study of the Alignment of the 2015 NAEP Mathematics Items at Grades 4 and 8 to the Common Core State Standards (CCSS) for Mathematics

NAEP and the Common Core State Standards - English Language Arts

The NAEP Validity Studies Panel is conducting a pair of studies comparing the content of the NAEP Reading and Writing Assessments and the Common Core State Standards – English Language Arts (CCSS-ELA). The first study compares the NAEP Reading and Writing Frameworks and the CCSS-ELA. The second study compares the NAEP reading items and writing tasks with the items in assessments built specifically to align with the CCSS-ELA. The first study has been completed and the final report can be found at the link provided below. The second study is in process with an expected completion target of Spring 2019.

A Study of NAEP Reading and Writing Frameworks and Assessments in Relation to the Common Core State Standards in English Language Arts

NAEP and International Comparisons Studies - Mathematics

A Comparison Study of the Program for International Student Assessment (PISA) 2012 and the National Assessment of Educational Progress (NAEP) 2013

This study compares the mathematics frameworks and item pools used in the National Assessment of Educational Progress (NAEP) with the Program for International Student Assessment (PISA) and vice versa. Differences in item features between the two assessments are also described. The working paper is available here.
A Comparison of the 2011 Grade 8 NAEP and TIMSS Mathematics and Science Frameworks

This study compares the similarities and differences in the content and cognitive dimensions of the 2011 NAEP Mathematics and the 2011 TIMSS Mathematics frameworks at grade 8. The study was conducted as one of the activities associated with the 2011 NAEP TIMSS Linking Study. The full report is available here.

A Comparison of the 2011 Trends in International Mathematics and Science Study (TIMSS) and the 2011 National Assessment of Educational Progress (NAEP Framework)

This paper reports the results of two expert panels that examined the similarities and differences between the Trends in International Mathematics and Science Study (TIMSS) and the National Assessment of Educational Progress (NAEP) by classifying TIMSS 2011 grade 4 and 8 mathematics and science items to the NAEP 2011 Mathematics and Science Frameworks. The full report is available here.

NAEP and International Comparison Study - Reading

Comparison of the PISA 2009 and NAEP 2009 Reading Assessment

This paper provides a summary of the similarities and differences between PISA 2009 and the NAEP 2009 Reading Assessment including a high-level comparison of the frameworks and assessment features. The paper is available here.
## Assessment Development Committee
### Item Review Schedule
**April 2018 – December 2018**
**Updated June 26, 2018**

<table>
<thead>
<tr>
<th>Review Package to Board</th>
<th>Board Comments to NCES</th>
<th>Survey/Cognitive</th>
<th>Review Task</th>
<th>Approx. Number Items</th>
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<td>7/2/2018</td>
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<tr>
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<td>8/10/18</td>
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<tr>
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<td>8/10/2018</td>
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<td>8/10/2018</td>
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<td>7/25/2018</td>
<td>8/10/18</td>
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<tr>
<td>7/25/2018</td>
<td>8/10/18</td>
<td>Cognitive</td>
<td>2019 Science (4, 8, 12) Operational (ICTs and hHOTs)</td>
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<tr>
<td>8/10/2018</td>
<td>8/31/2018</td>
<td>Survey</td>
<td>2022 TEL (8) Existing Pool Review*</td>
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<td>TBD Fall 2018</td>
<td>Cognitive</td>
<td>2022 TEL (8 &amp; 12) Pilot Concept Sketches</td>
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</tbody>
</table>

**NOTE:** *SBT* indicates Scenario-Based Task
*DI* indicates Discrete Item.
National Assessment Governing Board

Ad Hoc Committee on
Measures of Postsecondary Preparedness

Thursday, August 2, 2018
1:30 – 4:00 pm

Developing Recommendations

AGENDA

1:30 – 1:40 pm     Welcome and Overview of Committee’s Charge
                   Terry Mazany, Committee Chair

1:40 – 2:00 pm     Reflections on the Futurists Expert Panel Meeting
                   Terry Mazany

2:00 – 2:30 pm     Technical Considerations for the Committee’s Potential Recommendations
                   Peggy Carr, Associate Commissioner

2:30 – 3:45 pm     Discussion of Potential Recommendations & Prepare for Friday’s Board Meeting Discussions
                   Terry Mazany

3:45 – 4:00 pm     Next Steps to Develop Recommendations and Report
                   Terry Mazany

Additional Items:
DRAFT State Assessment Focus Group Meeting Notes
Higher Education Expert Panel Meeting Notes
Industry Expert Panel Meeting Notes

Attachment C
Attachment D
Attachment E
Draft Notes of the Expert Panel Meeting Representing Futurists
June 21, 2018
National Assessment Governing Board
Ad Hoc Committee on Measures of Postsecondary Preparedness

Contents

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Reflections ................................................................................................................................................ 5
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Attachment A
As one step in addressing the charge of the Ad Hoc Committee on Measures of Postsecondary Preparedness, HumRRO organized and facilitated a meeting with a select group of futurists. The purpose of this meeting was to elicit input from thought leaders regarding the future of postsecondary education and work.

We were fortunate to assemble an exceptional panel of visionaries with a variety of perspectives. The panel members included Randy Bennett, Educational Testing Service; Karen Cator, Digital Promise; David Conley, EdImagine; Alana Dunagan, Clayton Christensen Institute; Devin Fidler, Rethinkery Labs, and Nancy Lue, Advanced Education Research and Development Fund on behalf of the Chan Zuckerberg Initiative and the Bill & Melinda Gates Foundation. Also, in attendance were several Governing Board members, Governing Board staff members, and HumRRO staff.

The meeting was held on June 21, 2018 in San Francisco, California. An overview of the National Assessment Governing Board and the charge of the Ad Hoc Committee on Measures of Postsecondary Preparedness, a “facebook” of attendees with brief biographic summaries, along with the agenda and logistical information for the meeting were sent to the panelists in advance of the meeting. Appendix A contains the agenda, list of attendees, and panelist biographies.

Terry Mazany, Ad Hoc Committee Chair, welcomed the futurists and set the stage for the role of NAEP in the future, given the impact of technology on work as well as the economic and global context in which students enter the postsecondary world. He led the attendees through introductions. Thanos Patelis (HumRRO) reviewed the agenda and stated the goals for the meeting.

To establish the perspectives of these varied experts, each panelist provided a 10-minute presentation of their initial thoughts regarding five discussion questions: (a) what are the trends you see that will define the future of learning and schools? (b) what are the trends you see that will define the future of work and the skills that will be most valued by employers of the future? (c) what are the most promising technologies that will redefine education? (d) what things are most likely to disrupt how we think about teaching and learning? and (e) what are the trends that most concern you, and why? Copies of the presentation slides are in Appendix B.

Following the presentations, Thanos Patelis facilitated deeper discussion about common themes and the five questions. Finally, Terry Mazany offered some concluding comments.

The purpose of this document is to summarize the themes and comments made by the panelists. The information in this report is meant to provide insight into the rich conversation and comments provided by the expert panelists.

---

1 Although some panelists would not describe themselves as “futurists,” per se, their careers all include the identification and evaluation of trends, as well as forecasting future conditions or developments.
**Presentations**

**Randy Bennett** described seven trends in the future of learning.

- Learning is increasingly technology-based with complex tasks (e.g., simulation and games).
- Materials and methods used in learning are only now catching up with cognitive science.
- Learning is more person-based, adaptive, and customized on different dimensions, to (a) allow accessibility to make learning more available to students with diverse learning types, (b) personalize in terms of competency level, (c) engage students effectively, and (d) give students greater agency over their learning goals.
- New constructs and competencies, such as socioemotional learning, citizenship and citizen engagement, and cross-cultural competency, are becoming more prevalent.
- Prior knowledge is critical when learning new information or developing new skills.
- There is a focus on cross-disciplinary skills such as communication and problem solving. However, contextual differences within disciplines are important considerations (e.g., problem solving in art differs from problem solving in science).
- Assessment embedded in instruction with automated analysis and feedback, allows for adjustment of instruction.

In addition to trends in the future of learning, Dr. Bennett described two trends of most concern.

- Personalization – There is concern that personalization could be used to exacerbate as much as ameliorate differences in opportunities and learning. For example, students from underrepresented groups could be routed toward basic skills classes.
- Embedding assessment in instruction – There is potential for embedded assessment in instruction for student learning, however conflating assessment for learning with assessment for accountability could be problematic, especially if used to make policy judgements.

**Karen Cator** provided the following perspectives reagarding the five questions:

- Trends in the future of learning include: (a) personalization to accommodate variability in students through learning science, (b) more flexible learning to obtain and demonstrate competency, and (c) performance-based assessments leading to credentials for the changing global workforce.
- Trends in the future of work and skills include artificial intelligence (AI) which has the potential to disrupt many jobs. Employees will need deeper learning skills such as collaboration and social emotional skills. We should focus on what is uniquely human.²
- Technology can be used to augment human performance. For example, data from embedded assessment and improved diagnostics can provide more precise and accurate analyses of student knowledge and performance, helping teachers perform more effectively in the classroom.
- Learning science could be disruptive. People will have jagged profiles—different levels of competence across skills—based on individual differences and the contexts in which they apply the skills.

² Ms. Cator recommended Jack Ma’s presentation at the World Economic Forum on The Way We Teach; https://www.youtube.com/watch?v=pQCF3PtAaSg.
• Most concerning is disenfranchisement of teachers. As an example, one-third of current teaching jobs in St. Louis are vacant. Other areas of concern include limited resources in schools, increasing cost of higher education, limitations of current assessments, equity of access to quality learning activities, and the digital learning gap.

David Conley shared the following insights regarding the five questions:

• The future of learning includes the following trends: (a) taking the teacher out of the bottleneck role, thereby allowing students to work at their own pace and receive just-in-time learning; (b) providing more social learning; (c) using technology to identify learning patterns to personalize learning; and (d) focusing on adapting skills to accommodate changes in work rather than learning fixed skill sets.

• Trends in the future of work and skills include changes such as (a) gig work versus long-term careers, (b) continued adaptability, (c) hiring at low- and high-skill end with less at the middle-skill level, (d) global work teams while living locally, (e) increasing service work, and (f) standardization versus bespoke work (see jagged profiles as mentioned by Ms. Cator).

• Promising technologies in education are adaptability, including a wider variety of students, specialized job/task-specific reading, and web-based learning.

• The following may contribute to disruptions in teaching and learning: (a) students having more agency over their learning, (b) basic skills taught in context using simulations or serious games such as used in the military and medical training, (c) self-directed learning will require resources for teachers to help students who have trouble directing their own work, and (d) emphasis on career preparation with certifications and badges over liberal arts education.

• The three most concerning trends are (a) equity in education, (b) equity in defining preparedness, and (c) increasing the pace of disruptive economic change.

Alana Dunagan discussed three trends in the future of learning and work: (a) increased online learning in higher education and K-12, (b) certified learning not requiring a terminal degree (e.g., a certification), and (c) workforce alignment of education.

Regarding disruptions to teaching and learning, Ms. Dunagan explained that corporate bankruptcy following implementation of disruptive technology occurs when companies do not adapt by using technology to expand the reach of their services (i.e., they continue serving the same set of customers rather than expanding their customer base); Blockbuster is an example of this situation. Disruptive innovations in education are similar. Higher education institutions are seeing falling enrollment, while training in specific skills matter more. Jobs requiring higher education are growing twice as fast as jobs that do not, because of disruption by the education technology market. Innovators in the education technology space are developing partnerships with employers and creating new ways of offering higher education providing the needed training.

Ms. Dunagan stated the biggest concern in education and work is the prestige-based model of signaling competence (i.e., a degree from an elite university is highly valued over a degree from a lower tier school without regard to a student’s actual knowledge and skill). This model ignores the skills a student has and does not include employers in identifying the skills that students should learn. A better model would engage businesses in identifying skill needs, offer education aligned to workforce needs, and provide students with evidence of skill attainment and a means for submitting that information to employers.
Devin Fidler described a history of change in organization strategies from guilds to industrialization to manufacturing/assembly to digital. The advent of the World Wide Web facilitated communication and has expanded to commerce and coordination. He provided examples of using technology to speed up work; for example, peer to peer applications such as TaskRabbit, Gigwalk, and Upwork have millions of people enrolled to offer their services with qualifications based on past performance. Employers can use these applications to identify well-qualified candidates with the appropriate skills mix and a history of positive reviews; employees can use these applications to find jobs and to see what skills are in demand.

Mr. Fidler noted the most promising technologies are using organizational technologies in education technology with artificial intelligence. Disruption will come from small innovative organizations who are more nimble than large businesses. The biggest concern is the stereotype that organization is dehumanizing; however, organization can expand human capability.

Nancy Lue identified the following education trends:

- Return on education (i.e., value of education)
- Continuous improvement (e.g., Kaizen education)
- Rock star teachers available through technology
- Knowledge as currency (e.g., microcredentials, badges)
- Bid data as smart data (i.e., using data to personalize learning with Dreambox, Knewton, etc.)
- Mobile technology learning applications
- Mind, body, and soul incorporated into learning (e.g., Goldie Hawn’s MindUp curriculum)

Ms. Lue stated equity issues pervade all the trends. For example, education technology has costs which limits access. Ten percent of students do not have smartphones.

Discussion

Thanos Patelis (HumRRO) facilitated a deeper discussion among panelists about common themes and the discussion questions.

Personalized learning. Content can be tailored to student preparation, interest, and ability. Learning will feel more purposeful, connected, and relevant. Fewer students will be seated in rows in classrooms on a rigid schedule. In high school, students may enroll in work training programs or participate in micro-internships. Teachers will serve as mentors. There is a need to change the traditional school organization/culture and provide teachers with the knowledge and skills to educate students in a new environment.

Contextual data. Is a student goal-focused or not? Using data about students’ goals can improve instruction. Contextual data (e.g., goals, interests, self-confidence) may provide clues as to why a student might be struggling and may also provide insights to inform how to individualize instruction.

Equity. Opportunity to learn pervades multiple areas. Cost and availability can be barriers to access educational technology and higher education.

Big data. Educational technology generates a lot of data. Educators need to learn how to analyze and use the data, taking a data systems point of view. Also, there is a need to teach
teachers how to capture and document performance data on what students are doing in the classroom and how to use those data to improve classroom instruction and activities.

*Data dashboards.* Data dashboards can connect data from different sources, interpret multiple data points, and provide evidence of what students can do (versus cannot do).

*Micro-credentials.* Micro-credentials can be used by students and teachers. Students could earn a micro-credential when mastering a concept. Teachers can use their students’ micro-credentials to identify the skills acquired and those that need to be taught or re-taught.

*Competency assessments.* Students would benefit from measures of job-related skills to show their potential and demonstrate performance capabilities, particularly if the measures do not correlate to student background. Employers benefit because they have evidence of a job candidate’s skills. Educators can use competency data to mentor students on achieving goals.

**Panelist Recommendations**

As a wrap-up exercise, Thanos Patelis asked each panelist to make one recommendation for the Governing Board to consider.

**Randy Bennett** – Use NAEP’s national probability sample to describe what instruction is like at different levels for different types of students (e.g., students with disabilities, socioeconomic status) across time.

**Karen Cator** – Work toward a more coherent assessment system across NAEP and states.

**David Conley** – Endorse the work of the Ad Hoc Committee with a longer-term vision for NAEP to be bold in creating better items and measuring traditional content with greater precision.

**Alana Dunagan** – Develop innovative methods to measure flexibility, problem solving, and non-traditional skills that people will need in the future.

**Devin Fidler** – Look at partnering with prestigious organizations within the learning space that function outside of formal assessment, such as skunk works and incubators.

**Nancy Lue** – Use NAEP to assess the technology gap and equity issue in technology use outside of the classroom.

**Reflections**

Terry Mazany expressed his appreciation for the panelists’ insights. He noted that each expert presented similar ideas through a different lens; while this might have seemed repetitive, it actually reinforced the conclusions. The panelists convinced him that traditional education enterprise is collapsing in slow motion. Innovation outside of education is occurring at an accelerating pace. Learning might occur in smaller units such as micro-credentials.

Mr. Mazany discussed the high cost of traditional higher education and the trillion-dollar impact of student debt on the economy. He acknowledged the existence of prestige-based signaling that maintains inequity in the system. These are complex and challenging social issues. NAEP may be able to be a market signal by Governing Board priorities regarding what to measure and report on. He opined that perhaps NAEP can reinforce that prestige alone is not the gold standard.
Appendix A: Meeting Agenda, Attendees, and Panelist Biographies

**Futurist Expert Panel**

**Thursday, June 21, 2018 1:00 pm – 4:00 pm PT**

Room: Cypress A * Hyatt Regency San Francisco Airport
1333 Bayshore Highway * Burlingame, California, USA, 94010

**Agenda**

<table>
<thead>
<tr>
<th>Time</th>
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| 1:00 – 1:15 pm | Welcome, Introductions, and Overview of the Ad Hoc Committee  
*Terry Mazany, Chair of the Ad Hoc Committee on Measures of Postsecondary Preparedness*  
Overview of the Agenda and Goals for the Meeting  
*Thanos Patelis, HumRRO* |
| 1:15 – 2:45 pm | Panelist Perspectives and Initial Thoughts Regarding the Discussion Questions  
*A series of ten-minute presentations, each followed by a five-minute Q&A.*  
1:15 – 1:30 Randy Bennett *(Educational Testing Service)*  
1:30 – 1:45 Karen Cator *(Digital Promise)*  
1:45 – 2:00 David Conley *(EdImagine)*  
2:00 – 2:15 Alana Dunagan *(Clayton Christensen Institute)*  
2:15 – 2:30 Devin Fidler *(Rethinkery Labs)*  
2:30 – 2:45 Nancy Lue *(Advanced Education Research & Development Fund)* |
| 2:45 – 3:45 pm | Panel Discussion  
*Facilitated by Thanos Patelis* |
| 3:45 – 4:00 pm | Final Reflections  
*Terry Mazany* |

**Conducted in Support of the National Assessment Governing Board’s Ad Hoc Committee on Measures of Postsecondary Preparedness**
Attendees

Expert Panelists:

- Randy Bennett, Norman G. Frederickson Chair in Assessment Innovation in the Research & Development Divisions, Educational Testing Service
- Karen Cator, President and CEO of Digital Promise
- David Conley, President, EdImagine
- Alana Dunagan, Researcher for Higher Education, Clayton Christensen Institute
- Devin Fidler, Founder, Rethinkery Labs
- Nancy Lue, Co-Lead, Advanced Education Research & Development Fund

Governing Board Members:

- James Geringer, former Governor of Wyoming
- Carol Jago, Associate Director, California Reading and Literature Project at UCLA
- Terry Mazany, Chair, Ad Hoc Committee on Measures of Postsecondary Preparedness
- Dale Nowlin, Teacher and Mathematics Department Chair, Bartholomew Consolidated School Corporation, Columbus, Indiana
- Alice Peisch, Legislator, Massachusetts House of Representatives, Wellesley, Massachusetts
- Linda Rosen, former Chief Executive Officer, Change the Equation, Washington, DC
- Chasidy White, Director of Strategic Initiatives, Office of the Superintendent, Montgomery, Alabama

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- Lisa Stooksberry, Deputy Executive Director
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- Sunny Becker, Principal Staff Scientist
- Thanos Patelis, Principal Scientist
Ad Hoc Committee Meeting on Postsecondary Preparedness

Panelist Biographies

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Randy E. Bennett Ph.D.
Norman O. Frederiksen Chair in Assessment Innovation in the Research & Development Division
Educational Testing Service

Randy E. Bennett is Norman O. Frederiksen Chair in Assessment Innovation in the Research & Development Division at Educational Testing Service in Princeton, New Jersey. Bennett’s work has focused on integrating advances in cognitive science, technology, and educational measurement to create approaches to assessment that have positive impact on teaching and learning. From 1999 through 2005, he directed the NAEP Technology Based Assessment project, which included the first administration of computer-based performance assessments with nationally representative samples of school students, and the first use of “clickstream,” or logfile, data in such samples to measure the processes used in problem solving. From 2007 to 2016, he directed an integrated research initiative titled, *Cognitively-Based Assessment of, for, and as Learning* (CBAL), which focused on creating theory-based summative and formative assessment intended to model good teaching and learning practice. Randy Bennett is president of the International Association for Educational Assessment (IAEA) (2016-), an organization primarily constituted of governmental and non-governmental nonprofit measurement organizations throughout the world, and immediate past president of the National Council on Measurement in Education (NCME) (2017-2018), whose members are individuals employed primarily in universities, testing organizations, state education departments, and school districts. He is a Fellow of the American Educational Research Association.
Karen Cator is President and CEO of Digital Promise and a leading voice for transforming American education through technology, innovation and research. From 2009-2013, Karen was Director of the Office of Educational Technology at the U.S. Department of Education, where she led the development of the 2010 National Education Technology Plan and focused the Office’s efforts on teacher and leader support. Prior to joining the department, Cator directed Apple’s leadership and advocacy efforts in education. In this role, she focused on the intersection of education policy and research, emerging technologies, and the reality faced by teachers, students and administrators. She began her education career in Alaska as a teacher, ultimately leading technology planning and implementation. She also served as Special Assistant for Telecommunications for the Governor of Alaska. Cator holds a master’s in school administration from the University of Oregon and received the 2014 College of Education Distinguished Alumni award. The American Association of Publishers has awarded Cator with the 2014 Visionary Award. She received her bachelor’s in early childhood education from Springfield College and received the 2015 Distinguished Alumna award. She is an Aspen Pahara Fellow, the past chair for the Partnership for 21st Century Skills and has served on boards including the Software & Information Industry Association-Education.
David Conley, Ph.D.
President, EdImagine
Professor of Educational Policy and Leadership in the College of Education at the University of Oregon
Director, Center for Educational Policy Research

David Conley is Professor of Educational Policy and Leadership in the College of Education at the University of Oregon where he directs the Center for Educational Policy Research. He is the founder and president of EdImagine, an educational strategy consulting company. Additionally, he founded and served for 12 years as CEO of the Educational Policy Improvement Center, EPIC (now Inflexion). He recently completed an appointment as Senior Fellow for Deeper Learning under the sponsorship of the Hewlett Foundation.

Dr. Conley is a national thought leader in the areas of college and career readiness, student ownership of learning, systems of assessment, educational accountability, and the future of education and the economy. He has published multiple articles and policy briefs as well as three books in these areas. His most current book, published by Harvard Education Press, is entitled *The Promise and Practice of Next Generation Assessment*.

He serves on numerous boards and advisory committees including as a member of the technical advisory committee of the Smarter Balanced Assessment Consortium (SBAC) and the Illinois State Board of Education Accountability Technical Advisory Committee, and as a founding board member of New Meridian, which now manages the PARCC assessments. Additionally, he chairs the New Meridian Steering Committee. Previously, he co-chaired the Validation Committee for the Common Core State Standards.

He has conducted multiple major research studies for the Association of American Universities, the College Board and its Advanced Placement program, the International Baccalaureate, and the National Assessment of Governing Board. He has most recently studied next generation systems of assessment, new indicators of college readiness, and new methods to determine career readiness.

Before entering higher education at the University of Oregon in 1989, Dr. Conley spent 20 years in the public-school system in a variety of roles including teacher and co-director of two alternative schools, a site and central-office administrator, and an executive in a state education agency. He is a first-generation college attendee who received his AA from Cabrillo College, his BA from the University of California, Berkeley, and his MA and PhD from the University of Colorado, Boulder. He grew up on the central coast of California, where he spent a great deal of time at the beach.
Alana Dunagan
Researcher, Higher Education, Clayton Christensen Institute

Alana leads the Institute’s higher education research and works to find solutions for a more affordable system that better serves both students and employers. In this role, Alana analyzes disruptive forces changing the higher education landscape. Her research includes studying business model innovations, public policies, and investment strategies that can give rise to new and sustainable postsecondary models.

Prior to joining the Christensen Institute, Alana spent ten years in institutional investment management working on behalf of nonprofits, particularly colleges and universities. She worked as an investment consultant for Slocum, and spent five years with Macalester College managing their $700 million endowment. She holds a BA in Economics and Political Science from Macalester College and an MBA from the Harvard Business School.
Devin Fidler
Founder, Rethinkery Labs

Devin has worked with senior leaders at dozens of Fortune 1000 companies to systematically explore emerging issues and technologies, and to analyze their potential impacts. His ongoing work at Rethinkery Labs, including developing tools for “self-driving” management, has been covered by HBR, the New York Times, Wired and a number of other publications. He argues that today, companies themselves are a technology on the verge of disruption. Prior to founding Rethinkery, Devin founded and led the Future of Work and Future of Learning programs at the Palo Alto-based Institute for the Future.

Devin is a frequent speaker at gatherings of business leaders and others interested in the transformation of work and organizations. He approaches projects from a strongly international perspective, having lived and worked in several countries throughout his career.
Nancy Lue
Co-Lead, Advanced Education Research & Development Fund

Nancy Poon Lue is currently co-leading the exploration of a national Advanced Education Research & Development Fund on behalf of the Chan Zuckerberg Initiative and the Bill & Melinda Gates Foundation. She is also a Partner and Secretary of the Board of Directors of the venture philanthropy organization Silicon Valley Social Venture Fund (SV2). Previously, she served as Executive Director at the venture capital firm Global Silicon Valley (GSV) and was the inaugural General Manager of the EdTech Lab at GSVlabs. During the Obama Administration, Nancy was a Senior Advisor at the U.S. Department of Education where she led the development of the agency’s five-year strategic plan. Nancy is a Senior Fellow with the American Leadership Forum-Silicon Valley and sits on the Advisory Board of the AT&T Aspire Accelerator and the GreenLight Fund-Bay Area. She earned her B.A. and Ed.M. from Harvard College and Harvard Graduate School of Education.
Appendix B: Panelist Presentations

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Trends in the Future of Learning

- Technology-based, making greater use of complex tasks, games, simulations
- Based on more modern underlying models of cognition and learning
- Personalized in terms of:
  - Accessibility
  - Cognitive level
  - Background and interest
  - Learning goal
- Include (or give greater emphasis to) “new” competencies, e.g.:
  - Cross-cultural competence
  - Using technology tools for problem solving
- Include traditional competencies:
  - Knowledge acquisition and construction
  - Media (more or less) important for technology
- Include focus on cross-cutting skills within the disciplines
  - Communication, critical thinking
- Embed assessment within instruction, including automated analysis and feedback.

Thoughts on the Future of Education and Work

Randy Bennett
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Presentation as a member of the Expert Panel at the meeting of the National Assessment Governing Board's Ad Hoc Committee on Measures of Presecondary Preparedness, San Francisco, CA, June 2018.

Trends in the Future of Work

- Continued automation of many types of manual, cognitive, and social-interactional work
- Pervasiveness of technological tools for problem solving as:
  - Aids requiring constant proximal human interaction (Excel)
  - Extensions allowing for remote reach (drones)
  - Assistants: Carry out this subtask (Siri)
  - “Intelligent” implementers: Work independently with human QC

Overview

1. What are the trends you see that will define the future of learning and schooling?
2. What are the trends you see that will define the future of work and the skills that will be most valued by employers of the future?
3. What are the most promising technologies that will reframe education?
4. What things are most likely to disrupt how we think about teaching and learning?
5. What are the trends that most concern you, and why?
Most Likely Challenges to Disruptions for Teaching and Learning

- In K-12, the challenges are still greater than the disruptors
  - Level of, and extent of variation in, quality of teaching
  - Level of, and extent of variation in, school technology
  - Variation in funding for education by locale
  - Grade-based organization of schooling
  - Local control
  - Little evidence, making it difficult to see a clear pattern of scale
  - Size (3rd largest country in the world)
  - Concerns for privacy of student data
  - Concerns over corporatization of education
  - Public indifference, even apathy, toward rigorous expectations and toward addressing inequality

Skills Most Valued by Employers

- Using technology tools for problem solving—i.e., to create value by being able to use:
  - Aids requiring constant proximal human interaction (Excel)
  - Extensions allowing for remote reach (drones)
  - Assistants: Carry out this subtask (Siri)
  - "Intelligent" implementers: Work independently with human QC
- Being able to, individually and in collaboration with others, locate, evaluate, integrate, synthesize, apply, and construct knowledge (i.e., to learn)
- Being able to communicate, educate, and help others make effective decisions

Most Likely Disruptors

- People
  - What factors will make educators, policy makers, parents, students, and public advocates for, and accept, change?

Most Promising Technologies for Education

- Technologies that increase opportunities for remote social interaction
  - Learning is a social activity
- Adaptive learning (intelligent tutoring) combined with human instruction
- Simulations, games, virtual reality that pose tasks and situations similar to the ones students must learn to negotiate as proficient practitioners in a domain
- Analytics to help adapt instruction, guide students in managing their learning, help teachers improve instruction and its management

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**Trends of Most Concern**

- Personalization
  - Equity: differential focus of instruction by demographic group
- Idea of replacing end-of-unit assessment with embedded formative assessment
- Use of AI (without sufficient human oversight) for consequential decision-making purposes
  - When explanation is important, current approaches to AI are insufficient for making decisions that affect life chances
  - EU GDPR requires provision of an explanation

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*Expert Panel Meeting Representing Futurists*
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1. What are the trends you see that will define the future of learning and schooling?

- Personalization
- Learner Variability (advancements in learning sciences)
- Competency-based learning (+ performance assessment)
- World Challenges (e.g., UN SDGs)
- Workforce Changes

Global Goals

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What are the trends you see that will define the future of work and the skills that will be most valued by employers of the future?

**Artificial Intelligence**
- Ability to learn
- Work with others
- Flexibility and comfort with complexity
- Creativity and solution development
- Computational Thinking

What are the most promising technologies that will redefine education?

**Augment Human Performance**
- Data and instrumentation (like location & weather) - Adaptive
- Improved diagnostics and embedded assessment
- Moving from (average and comparison) to precision and accuracy
- Virtual and augmented reality
- Open Education Resources - organized, findable and contextualized

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What things are most likely to disrupt how we think about teaching and learning?

- Learning Sciences
- Improvement Science
- Research and Evidence
- Advanced R&D - Fainters' Quadrant

What we know - Learning Sciences

- Learning is Developmental
- Challenging & Achievable
- Total Environment
- Practice-Practice-Practice
- Personal & Meaningful
- Habits of Mind
- Prior Knowledge
- Emotion Matters
- Social Interaction
- Unique Jaded Profiles

Learner Variability

What are the trends that most concern you, and why?

- Lack of respect for and disenfranchised teachers
- Under-resourced schools
- Cost of higher education
- Assessments that fall far short of the full picture
- Issues of inequity
- Digital Learning Gap (Access - Participation - Powerful Use)
Conley Presentation
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These slides are the intellectual property of the presenters and should not be used or distributed for purposes beyond this Committee without permission.
Dunagan Presentation
Disruption could create major benefits for students and society:

- Radically Affordable
- Accessible for All
- Workforce Aligned
- Modern + Sustainable
- Knowledge + Skills

Higher education is unaffordable:

- Real income & tuition in 2018 dollars
- Student loan volume up 20x in last 30 years

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Today's Landscape: Enrollment

- Traditional-aged population going to college
- Enrollments increasing

But our economy is more dependent on skilled workers than ever before

Skills matter more than ever

- Many current businesses can't find skilled workers
- Jobs requiring higher education are growing faster than those that don't

Lots of new, innovative players emerging

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1) Online learning is quickly becoming ubiquitous in higher education.

- Fall 2016: 30.2% of undergrads and 36.8% of graduate students are learning online.
- Online learning is especially prevalent among those who otherwise wouldn't be able to access higher education.
- About half of parents enrolled in school were learning online.

Access and equity, affordability:

2) Learning in smaller denominations than the degree:

- College is still the currency of the labor market...
- ...But, as Ryan Craig says, it's a currency system with $106,000 bills and no smaller denominations.
- Automation and technology are changing the nature of work—and that change will be continuous.
- Learning won’t end with college graduation...
- ...This creates big opportunities.
3) Workforce alignment built into program and curriculum design:
- Building relevant certifications into programs
- Using industry experts (rather than academic experts) to design curriculum
- Creating explicit learning opportunities and learning-to-network opportunities
- Incremental learning

Keep the conversation going.
#disruptiveinnovation
www.caspertechinstitute.org
Fidler Presentation
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There Are Many Ways to Organize

- 4000 years ago, first legal structures for companies
- 1200 years ago, the guilds that encode industry across Europe
- 250 years ago, Industrial Revolution and modern companies emerge
- 130 years ago, Assembly lines, globalization, etc.

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There Are Many Ways to Organize

- 1000 years ago: First legal structures for companies
- 900 years ago: Trade guilds and modern companies emerge
- 750 years ago: Assembly lines, globalization etc.

There Are Many Ways to Organize

- 1000 years ago: First legal structures for companies
- 900 years ago: Trade guilds and modern companies emerge
- 750 years ago: Assembly lines, globalization etc.

Digital Organization is Special

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Use emerging technologies to:
activate, deactivate & reconfigure resources
where they are needed & when they are needed

The Frontiers of “OrgTech”

A Collective Intelligence Engine

Work that looks for people, instead of people looking for work
Using platforms to find the best matches available
Collective Intelligence Surfacing insights
Training, National Interest, and the New OS

- Orchestration becomes a more powerful skill
- Many more established industries can expect competitors built along these lines - Transition and national interest

Thank You!

Devir Fidor | Devir@RethinkeryLab.com

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Lue Presentation
National Assessment Governing Board Futurist Panel

June 21, 2018

Nancy Poon Lue

1. Return on Education (ROE)

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2. Kaizen Edu

3. Hollywood Meets Harvard

4. Knowledge As a Currency

5. Big Data = Smart Data
6. Mobile

7. Mind, Body, Soul
Ad Hoc Committee on Measures of Postsecondary Preparedness
Potential Recommendations: A Working Draft

This initial working draft reflects the deliberations of the Ad Hoc Committee on Measures of Postsecondary Preparedness’ (the Committee, or we) thus far in pursuit of its charge. This draft should be challenged and improved, as the Committee members debate the potential recommendations and prepares the Committee’s final report to the Board.

Background and Charge

In August 2017, the National Assessment Governing Board commissioned the Ad Hoc Committee on Measures of Postsecondary Preparedness to review existing research, collect expert testimony, and prepare recommendations for the National Assessment Governing Board’s consideration to achieve Strategic Vision priority #10, which states, “Develop new approaches to measure the complex skills required for transition to postsecondary education and career.”

At the broadest level of policy, The Nation’s Report Card, also known as the National Assessment of Educational Progress (NAEP), provides a platform to change the nation’s valuation of what is important in student learning and create a paradigm shift in America’s education system about what matters and gets measured. The Governing Board has the opportunity to determine if there is a compelling national interest that warrants changes in NAEP to signal such a shift.

Exploratory Approach

To address its charge, the Committee considered the trends that most likely will shape the future, and thereby determine, to a great extent, the skills and knowledge students will need. Through meetings with expert panels and commissioning focused research papers, the Committee pursued the answers to the following three research questions:

1. **Work of the future (readiness for what?):** What are we, as a nation, preparing students for? Changes in the workplace are not only inevitable, but are accelerating, driven by technological advances, demographic shifts, and social changes. The growing prevalence of self-driving vehicles, the widespread use of robots, and advances in artificial intelligence are signs of existing innovations poised to dramatically change the jobs available to young Americans. Young Americans hold different expectations about work, and the ways in which people connect and communicate with each other are also changing. How will the workplace change given these trends and emerging
technologies? How will our communities change given these trends and how will the nature, content, and delivery of education opportunities change?

2. **Requisite skills for future work (skills for what?):** With a better understanding of the future workplace, we can better understand the skills that young Americans will need to succeed. But should we consider more than just workplace skills? What about skills like citizenship and financial literacy? How do these skills factor into the question of measuring postsecondary preparedness?

3. **Measures of preparedness (measures for what?):** Finally, what metrics exist to capture the skills that young Americans will need in the workplace, for their roles in their communities, and in their personal lives? Can such metrics include data from sources in addition to or instead of assessments? Additionally, what metrics do not exist but are needed to help the nation better understand if students are prepared as they exit high school, regardless of which paths they take—through college or other postsecondary learning experiences or directly to the workforce?

**Beliefs and Values**

Based upon its investigations to answer the three research questions, the Committee identified the following beliefs and values that will guide its final recommendation(s) to the Board:

- We believe that high school graduation remains an important transition in a young person's life, and that the nation needs to know if the culmination of PK-12 schooling and other experiences have prepared students for life following high school.

- We value the multiple pathways that young Americans take following high school, and challenge the notion that all high school graduates must immediately enroll in a four-year college to be successful in life.

- We believe that academic knowledge remains critical for students’ success, and that other crosscutting cognitive skills such as creativity and problem-solving are increasingly important for postsecondary preparedness.

- We confirm that a comprehensive measure of the degree to which young Americans are prepared for life after high school, regardless of the pathway they pursue, does not currently exist.

- We recognize that in the United States, education policy formulation and implementation remain the responsibilities of states. Therefore, whatever measures are established to document students’ postsecondary preparedness should be available not
only as a national measure but also as a measure of each state's progress in preparing young people for life after high school.

- As the agency established by the United States Congress to set policy for The Nation's Report Card, we believe it is the National Assessment Governing Board's responsibility, in partnership with the National Center for Education Statistics (NCES), and stakeholders, to identify thoughtful and meaningful approaches to providing the American public with measures that indicate how we as a nation are preparing America's youth for their lives following high school.

**NAEP’s Assets**

By law NAEP must remain a low-stakes assessment with generalized results and is prohibited from gathering data in a way that could generate individual school or student scores. Thus, any reports to the American public on measures of postsecondary preparedness will be provided at the national, state level, and Trial Urban District Assessment (TUDA) level, assuming sufficient funding and the voluntary participation of states and TUDA districts. These requirements protect NAEP results against misuse and enable the Governing Board to engage in groundbreaking work in reporting on postsecondary preparedness.

NAEP has a portfolio of established measures, which have the potential to provide critical indicators of postsecondary preparedness. These include:

- **NAEP Frameworks & Assessments** – NAEP frameworks and assessments can be used to determine 12th grade student knowledge and skills in areas including: reading, mathematics, science, writing, civics, U.S. history, geography, economics, technology and engineering literacy, and the arts.

- **NAEP’s High School Transcript Study** – NAEP’s High School Transcript Study collects a variety of measures which could be utilized in a report on postsecondary preparedness.

- **NAEP Student, Teacher, and Principal Surveys** – NAEP has a long history of collecting information from students and teachers and reporting that information alongside NAEP assessment results to provide context about students’ learning opportunities, school climates, teachers’ experiences, and related characteristics to understand if, how, and why those data correlate with student achievement.

In addition, the Governing Board may consider creating new NAEP measures and/or incorporating non-NAEP data sources to populate a more complete report card on postsecondary preparedness (for example, other NCES survey data, data collected by other federal or state agencies, etc).
Developing Potential Recommendations

The Committee’s conversations to date have focused on its desire to contribute to the nation’s understanding of postsecondary preparedness, but more discussion is needed on what the Governing Board and NCES could and should pursue. Regardless of the ultimate claim that NAEP would make or the measures it would use, the Governing Board needs to identify the critical constructs that define postsecondary preparedness. This leads to the following potential recommendation:

Draft Recommendation #1: The Governing Board should create a new NAEP framework that identifies the comprehensive set of knowledge and skills necessary to indicate postsecondary preparedness for any pathway after high school.

Presuming the Committee recommends the creation of a new postsecondary preparedness framework, the Governing Board and NCES would collaborate in conducting the necessary research about what measures exist within NAEP or beyond NAEP and what measures would need to be developed for that framework. Based on the data available, a preparedness framework most likely would be based on a system of indicators derived from multiple sources. In recommending the Governing Board engage in further work to report on postsecondary preparedness indicators, the Committee should consider what, ultimately and realistically, its desired report card would look like. The Committee’s preferences will shape the scope of its second recommendation, which might include one or more of the options listed below in #2 A-E.

Draft Recommendation #2: The Governing Board should commit, to the extent that it can, given its statutory authority and what is technically defensible, to measure and report on the postsecondary preparedness of students in grade 12 by utilizing one or more of the following approach(es):

A. **Align Existing NAEP Assessments with Postsecondary Preparedness Indicators**: As NAEP frameworks and test items are revised, the Board and NCES could shift the knowledge and skills measured within each subject assessment to better align with the constructs identified in the NAEP Postsecondary Preparedness Framework.

B. **Enhance and Elevate NAEP’s Contextual Variables**: Within the context of existing NAEP assessments, develop and include contextual questions that capture dimensions of preparedness and contribute to changing the national narrative on what is important in student achievement by increasing the focus on contextual variables in the initial reporting of NAEP results.

C. **Develop a New NAEP Postsecondary Preparedness Assessment**: Develop a new voluntary NAEP assessment for postsecondary preparedness knowledge and skills
that could be offered at grade 12 (and possibly earlier) at the national, state, and TUDA levels.

D. **Create a New NAEP Report Card Utilizing Extant NAEP Measures:** Design a new NAEP Report Card that utilizes existing measures across NAEP, including assessment data, contextual variables, and the High School Transcript Study to issue a report to the nation with a more complete analysis of postsecondary preparedness measures.

E. **Serve as a Clearinghouse of Postsecondary Preparedness Indicators using NAEP and External Data Sources:** Broker data from various sources beyond NAEP to capture a wider range of achievement measures that are more reflective of, and customizable to, students’ learning pathways, by reporting on industry-recognized credentials, workplace learning experiences, apprenticeships, etc.

**What are the challenges?**

As we consider what our recommendations to the Governing Board should be, we should give due consideration to the challenges in pursuing this work. Endeavoring to define and measure postsecondary preparedness in a way that encompasses skills needed for both college and career marks a dramatic departure from how the Governing Board has approached this issue in the past.

In deciding what and how NAEP might report on postsecondary preparedness, the Board must conduct a review of our statutory authority. The Board should give credence to the language we use to describe those skills and guard against any negative connotations that may be associated with the terms “soft,” “basic,” and “non-cognitive” skills. And while some may debate the worthiness of including those types of skills more prominently within NAEP, we note that OECD has made substantial use of these types of variables with great acceptance and demand for them. While the prohibition against NAEP providing individual student results limits the usability of the data, it also creates the critical low-stakes environment for the Governing Board to pioneer new indicators of student success.
DRAFT Summary of the Focus Group Meeting with State Education Officials
June 28, 2018

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

In an effort to provide input from state education departments to the charge of the Ad Hoc Committee on Measures of Postsecondary Preparedness, HumRRO, with the assistance of National Assessment Governing Board (Governing Board) and Council of Chief State School Officers Organization (CCSSO) staff, organized and facilitated a meeting with state education officials responsible for assessment and/or accountability in their states. The meeting was scheduled to take advantage of the presence of these state officials at the National Conference on Student Assessment (NCSA) sponsored by CCSSO in San Diego, CA from June 27 to June 29, 2018. The purpose of this meeting was to elicit input from state officials about their efforts in developing and using indicators of postsecondary preparedness/readiness.

The attendees of this meeting included Chris Janzer, Michigan; Russell Keglovits, Nevada; Shelley Loving-Ryder, Virginia; Vaughn Rhudy, West Virginia; Michael Sibley, Alabama; Jenny Singh, California; Allison Timberlake, Georgia; and Vince Verges, Florida. Also, in attendance were two Governing Board members, Governing Board staff members, CCSSO staff members, and HumRRO staff.

The meeting was held on June 28, 2018 in San Diego, California. An overview of the National Assessment Governing Board and the charge of the Ad Hoc Committee on Measures of Postsecondary Preparedness, along with the agenda and logistical information for the meeting were sent to the participants in advance of the meeting. The agenda is in Appendix A.

Thanos Patelis (HumRRO) started the meeting and reviewed the agenda along with the goals for the meeting. Lily Clark, Assistant Director for Policy and Research for the National Assessment Governing Board welcomed everyone and provided an overview of the National Assessment Governing Board’s Initiative on Postsecondary Preparedness.

Thanos Patelis facilitated a conversation with the participants to discuss the following set of guiding questions:

- How does your state define college and career readiness?
- Did your state consult with industry groups to define career readiness?
- What measures does your state use to assess career readiness?
- Is military service a component of postsecondary readiness in your state?
- How does your state use non-cognitive measures?
- Are there innovative or non-traditional indicators that your state might use to measure or report on students’ college and/or career readiness (e.g. student interest, micro-credentials earned, work-based learning, etc.)?
- What NAEP reporting on postsecondary readiness would be useful to states?

The purpose of this document is to provide a summary of the themes that represented the input from and conversation among the meeting participants.
Definitions of college and career readiness/preparedness included:
  o Ready to enroll and succeed in college courses without remediation
  o College readiness is different from career readiness, making it difficult to agree on a definition covering both and treat them with parity.
  o Career can be defined as a job paying a living wage, which varies by location.
  o Military readiness is a postsecondary option involving a set of cognitive and physical requirements, and seen as an indicator in some state accountability plans.
  o Assessments play a role in defining what is college and career ready based on performance levels established empirically.

Obtaining college and career readiness skills
  o Schools and industry jointly develop diplomas with technical career skills.
    ▪ Earn through career technical education (CTE) programs, work-based learning, industry/credential exams, portfolios
    ▪ Examples of efforts within states were discussed.
  o Soft skills, such as communication and leadership skills, can be learned through service learning, student organizations, work-based learning, and simulated work environments.
  o Skills beyond soft skills such as accessing information
  o How do we ensure students are agile in facing an environment where we do not know what will be required?

College and career readiness data
  o Geographic differences were reported based on the types of local industry and jobs available. States want data at a regional level.
  o Some soft skills are not easily defined or measured (e.g., time management, intellectual curiosity).
  o Student level data on absences, credits, and required course attainment can serve as proxies for soft skills
  o Availability of readiness data might impact willingness of industry to stay in or come to an area.
  o Portfolio of artifacts (in the form of certificates, work-based learning, etc.), experiences (advanced courses, dual credit) and other measures
  o Concern about equity
  o One suggestion involved the state supporting and incorporating local accountability plans and metrics that involve school-specific indicators around important constructs of school culture, climate, and other environmental measures.

Measurement of college and career readiness
  o College readiness is easier to measure than career readiness.
  o Soft skills typically are not included in state standards.
  o Measures should be general (vs. specific) to stay relevant over time.
  o Should measure soft skills early.
  o Governing Board is in unique position to develop measure of soft skills at the state level.
  o States would like to see best practices in providing, documenting, and measuring college and career readiness skills. Is there evidence that students with certificates have been successful?
Appendix A: Meeting Agenda and Attendees

Discussion of State Efforts on College and Career Readiness

Thursday, June 28, 2018, 7:30 to 8:50 a.m.
Room: Cobalt 520 (Level 5)
Hilton San Diego Bayfront
San Diego, CA

Agenda

Purpose: Identify and discuss states’ current and innovative practices regarding college and career readiness to inform the National Assessment Governing Board’s effort to “Develop new approaches to measure the complex skills required for transition to postsecondary education and career”.

7:30 – 7:45 a.m. Breakfast & Introductions

7:45 – 8:00 a.m. Overview of the National Assessment Governing Board’s Initiative on Postsecondary Preparedness
Lily Clark, Assistant Director for Policy and Research
National Assessment Governing Board

8:00 – 8:50 a.m. Discussion of State Efforts on College and Career Readiness
Thanos Patelis, Facilitator, HumRRO

Guiding Questions:
• How does your state define college and career readiness?
• Did your state consult with industry groups to define career readiness?
• What measures does your state use to assess career readiness?
• Is military service a component of postsecondary readiness in your state?
• How does your state use non-cognitive measures?
• Are there innovative or non-traditional indicators that your state might use to measure or report on students’ college and/or career readiness (e.g. student interest, microcredentials earned, work-based learning, etc.)?
• What NAEP reporting on postsecondary readiness would be useful to states?

8:50 AM Thank you and Adjourn
Attendees

State Officials (Department of Education)
Chris Janzer, Michigan
Russell Keglovits, Nevada
Shelley Loving-Ryder, Virginia
Vaughn Rhudy, West Virginia
Michael Sibley, Alabama
Jenny Singh, California
Allison Timberlake, Georgia
Vince Verges, Florida

CCSSO Staff Members
Fen Chou
Scott Norton

National Assessment Governing Board Members
Tyler Cramer
Joe Willhoft

National Assessment Governing Board Staff Members
Michelle Blair
Lily Clark
Sharyn Rosenberg
Lisa Stooksberry

HumRRO
Sunny Becker
Monica Gribben
Thanos Patelis
Sheila Schultz
Art Thacker
As one step in addressing the charge of the Ad Hoc Committee on Measures of Postsecondary Preparedness, HumRRO organized and facilitated a meeting with a select group of higher education innovators. The purpose of this meeting was to elicit input from leaders and experts in higher education about (a) the jobs that will exist in 2030, (b) the skills that these jobs will require, and (c) the measures/indicators that would be needed to determine the status of elementary and secondary students with respect to these skills.

We were fortunate to assemble an exceptional panel of experts and leaders. The panel members included Dr. Sarah DeMark, Vice President of Academic Programs, Western Governors University; Dr. Pradeep Kotamraju, Bureau Chief, Career and Technical Education, Division of Community Colleges and Workforce Preparation, Iowa Department of Education; Mr. Michael Morsches, Dean of Learning Enrichment and College Readiness, Moraine Valley Community College; Dr. Yvette Mozie-Ross, Vice Provost for Enrollment Management and Planning, University of Maryland, Baltimore County; and Dr. Holly Zanville, Senior Advisor for Credentialing and Workforce Development, Lumina Foundation. Also, in attendance were some Governing Board members, Governing Board staff members, and HumRRO staff, listed in Appendix A.

The meeting was held on April 19, 2018 in Chicago, Illinois. An overview of the National Assessment Governing Board and the charge of the Ad Hoc Committee on Measures of Postsecondary Preparedness, along with the agenda and logistical information for the meeting were sent to the panelists in advance of the meeting.

Thanos Patelis (HumRRO) opened the meeting and after quickly informing the group of some logistics, Terry Mazany, Ad Hoc Committee Chair, set the stage for the role of NAEP in the future, given the impact of technology on work as well as the economic and global context in which students enter the post-secondary world. He led the attendees through introductions. Thanos Patelis facilitated the meeting around the three areas of inquiry involving (a) the jobs of 2030, (b) the skills these jobs will require, and (c) the measures/indicators needed to measure these skills. Finally, Terry Mazany offered some concluding comments. The agenda and the list of all attendees is in Appendix A.

The purpose of this document is to summarize the themes and comments made by the panelists. The information in this report is meant to provide insight into the rich conversation and comments provided by the expert panelists.
The Future of the Workplace and Work

With experts representing higher education, the discussion of the future of the workplace and work focused on pathways to work, primarily through postsecondary education and training.

- Postsecondary institutions need to create pathways to develop agile employees who are open to lifelong learning.
- Lifetime or continuous learning will become the norm. Employees will need to continue to learn from different providers, from colleges/universities to specific training courses to experiential opportunities, throughout their lives. Information technology (IT) workers already face this with a variety of certifications for specific technology tools and applications. Highly-regulated occupations will likely be the last ones to make changes.
- Postsecondary institutions need to partner with employers to identify education and training needs so that graduates possess the knowledge and skills needed for jobs.
  - Look to IT which is leading the way in defining job requirements and credentials for employees.
  - One of the panelists described a keynote presentation by the CEO from Chegg, Dan Rosensweig, describing the current disconnect between expectations and responsibilities of employers, higher education, and students. He illustrated this by placing each of the stakeholders at the vertices of a triangle with arrows facing outward indicating a lack of working together rather than arrows pointing inward, toward each other, signaling collaborative planning and working together toward similar goals.
  - Educators can be resistant to business models.
- There are still barriers to postsecondary education. Although community colleges have an open policy (in some states students do not need a high school diploma to enroll in community college), students may find it difficult to pursue their desired major or to matriculate. Prerequisites and competitive admission in selected programs (e.g., healthcare) are barriers to entry.
  - Similarly, some 4-year colleges guarantee admission to those with associate’s degrees, but cannot guarantee admission into specific programs due to enrollment capacity and accreditation requirements such as completion of specific coursework.
  - Some community college graduates are not prepared for 4-year colleges and universities because their 2-year institutions have limited qualification requirements for instructors and low standards for their graduates. Both of these factors could be a barrier to continued education.
- More individualization in postsecondary education requires “policy by anomaly.”
  - In developmental education, need to identify what students need and how to get it to them. Placing students on paths matching their goals raises retention rates.
- Strong partnerships are needed between 2- and 4-year institutions of higher education to facilitate students’ transfer between schools.
  - High school graduation projections show Hispanics are the fastest growing group1 and many of this group begin their postsecondary studies in community college.
  - Many students are graduating from high school with associate’s degrees obtained through early middle college programs and dual enrollment.
- Colleges and universities must provide different, perhaps individualized, services to students who enter at different points on the pathway to a 4-year degree. Historically, 18-year-old high school graduates enter as freshmen with new-student services and support structure

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for the first year or two. Institutions are now called on to help a select group of high school graduates entering college with associate’s degrees, yet perhaps still needing wraparound services due to their youth (compared to the services offered to 20-year-old or older students transferring to a 4-year program with an associate’s degree). Other students may start and stop their education multiple times and attend several institutions before graduating.

- To prepare students for future jobs, we need vertical and horizontal articulation. For horizontal articulation, students need technical, academic, and employability skills (e.g., grit, self-understanding). For vertical articulation, the key is determining at what age/grade to start. High school staff say it needs to start in middle school; middle school staff say it needs to start in elementary school.
- Need a mechanism to validate training and experience as part of the pathway to a degree. More and more high school graduates are already working through the gig economy. Other students have jobs and families while attending college.
  - Look to the military; they validate training as credits.
  - Western Governors University (WGU) provides micro-credentials or badges as students achieve milestones to show them the skills and knowledge attained as they work toward their bachelor’s degree.
  - Give students the ability to curate their work and educational experiences.
- There is tension between an integrated approach providing a broad range of skills (academic, technical, and employment-oriented) and the business need for a narrow, specific set of skills to meet a skill shortage. One is too esoteric, the other too pragmatic.
- Post-secondary institutions will not be the destination, but a vehicle for certifying student competencies.
- Expect the acquisition and use for knowledge and skills to flip. Currently, knowledge is the base foundation provided by formal education and we obtain skills as needed. In the future, skills will be the base and we will obtain knowledge as needed.

Skills Needed in the Future

- Don’t teach students to do what a robot can do better.
  - Robots are better than humans at pattern recognition, repetitive tasks, etc. but they are not able to understand nuance of language, social relationships, or creativity.
  - It will be important for humans to connect domains.
  - McKinsey has developed a list of human skills such as empathy, planning, creativity, common sense, sense making, novel thinking, nuance of language, social relationships, etc.²
- In addition to content or professional knowledge, students need:
  - practical transition skills
  - key learning skills and cognitive strategies
  - strong foundation of self-understanding and engagement strategies
  - critical thinking
  - affective mindset and skills
  - meta learning
  - financial literacy
  - information technology literacy
  - health and wellness literacy.

• Schools can provide learning and workplace skills.
  o College experience courses for high school students.
  o WGU offers eight synchronous online sessions with a small, facilitated cohort on
    skills such as self-efficacy, communication, and learning styles. In a pilot test with at-
    risk students, there were significant positive outcomes: performance in courses as
    well as retention increased. Some of the skills, including leadership and
    communication, were identified by the medical profession as ones missing in
    graduates. These skills not only make graduates better job candidates but also more
    resilient students.

• Consider where or why skills are needed to build awareness of how skills fit into work.

• Four-year institutions look for grit or persistence as a necessary skill for student success.
  Students with a solid academic foundation and grit should be able to succeed, whereas
  students with a strong foundation of academic knowledge and no grit may not be able to
  handle the rigor of college.

• Class attendance is the best predictor of success, as evidenced both by anecdote and
  research. Some colleges require attendance and initiate interventions if students do not
  attend class.
  o There is a question of how to measure attendance for online courses. One approach
    is to look at student engagement using interaction data from Learning Management
    Systems (LMS).

• Students need to learn how to get “unstuck” when in a challenging situation.

• Employers are looking for people who can work across left and right brains and are able to
  work with technology.

  **Measures of Skills in the Future**

• Employers offer performance-based pay for high-value, high-priority credentials supporting
  ability to use skills.
  o Students may demonstrate their skills through portfolios.
  o Use blockchain\(^3\) to document achievements and portfolio.

• Need new types of student assessment.
  o Current assessments focus too much on knowledge and not enough on skills,
    character, and meta learning.
  o Students take most current assessments working alone rather than in teams. Need
    authentic assessments of team work with hands-on performance components.

• Leading-edge assessments use simulation and are more applied, with problem solving
  scenarios that assess whether you can use knowledge.

• Create dashboards for parents and students to see skill attainment, including credentials.

• Use micro credentials and then stack those credentials to meet employer-relevant needs.

• There is a tension between broad versus specific measurement of skills.

• Include all stakeholders in identifying what and how to measure skills.

• Measuring college or postsecondary readiness is different than college or postsecondary
  success.

• Some postsecondary institutions use transcripts, others don’t.
  o Transcripts could provide an opportunity to leverage high school data for
    postsecondary instructors to know what students have done prior to college and to
    personalize postsecondary instruction.

\(^3\) For information about blockchain: [https://hbr.org/2017/01/the-truth-about-blockchain](https://hbr.org/2017/01/the-truth-about-blockchain)
Expect seat time to be a less helpful measure from an industry perspective. They will be interested in a “transcript” with learning opportunities, perhaps using blockchain technology.

For transcripts to be useful to instructors, need a way to standardize them.

Need to include attendance on transcript.

- Metrics of academic rigor exist with validity evidence provided to support their value in predicting college outcomes.
- Concern with the shelf life of measures such as SAT or ACT, course grades, etc. Are high school results as valid for older, returning students?
- Metrics should include student employment.
- Measures of service learning are needed.

**Reflections**

Terry Mazany offered four reflections on the discussion:

1. **We need to project all of the allied trends in society to 2030.** Work is shifting to a gig economy. This will be the reality for 16- to 18-year-olds in 2030. We need to factor the expected changes in the economy of 2030 into the skills required to work in the future. Data is the new oil. Micro-credentialing and digital badges will more and more populate transcripts and portfolios.

2. **There will be several paradigm shifts:** (a) knowledge/skill flip, (b) everything has a developmental progression except technology, (c) the nontraditional student of today will be the traditional student of tomorrow, (d) students will be agents for themselves, and (e) a world where trust is collapsing in every venture except nonprofit ventures – blockchain as a key to build this trust.

3. **We are in-between systems.** We need to maintain an ecological perspective of each part of the system and look at the reciprocal changing role of employers.

4. **The role of NAEP:** We need to align NAEP with the requirements of Every Student Succeeds Act (ESSA), such as conditions of learning. This might be done by back-mapping the requirements of ESSA with what NAEP provides.
Appendix A: Meeting Agenda and Attendees

Expert Panel Meeting
National Assessment Governing Board
Ad Hoc Committee on Measures of Postsecondary Preparedness

April 19, 2018 | Agenda

11:00 to 11:05 AM  Start Meeting
Thanos Patelis, Facilitator, HumRRO

11:05 to 11:15 AM  Welcome and Introductions
Terry Mazany, National Assessment Governing Board Member
Chair, Ad Hoc Committee on Measures of Postsecondary Preparedness

11:15 AM to 12:00 PM  Work of the Future
Thanos Patelis

Guiding Questions:
- What do you see as the postsecondary pathways that high school seniors graduating in 2030 will be choosing among? (11:15-11:40)
- Compared to now, what kind of trends do you see shaping postsecondary education in 2030? (11:40-12:00)

12:00 to 12:15 PM  Break to get lunch

12:15 to 1:00 PM  Skills for the Work of the Future
Thanos Patelis

Guiding Questions:
- How have postsecondary entrance expectations changed in recent years? (12:15-12:40)
- What types of competencies and content knowledge will graduating high school seniors need to be prepared for postsecondary pathways in 2030? (12:40-1:00)

1:00 to 1:45 PM  Measures of these Skills
Thanos Patelis

Guiding Questions:
- What measures do you see being used for these competencies?; What will require new or updated measurement tools? (1:00-1:20)
- What metrics would provide helpful information in the aggregate about the competencies of graduating high school seniors? (1:20-1:45)

1:45 to 2:00 PM  Final thoughts and concluding remarks
Terry Mazany
Attendees

Expert Panelists:
- Sarah DeMark, Vice President of Academic Programs, Western Governors University
- Pradeep Kotamraju, Bureau Chief, Career and Technical Education, Iowa Department of Education
- Michael Morsch, Dean of Learning Enrichment and College Readiness, Moraine Valley Community College
- Yvette Mozie-Ross, Vice Provost for Enrollment Management and Planning, University of Maryland, Baltimore County
- Holly Zanville, Senior Advisor for Credentialing and Workforce Development, Lumina Foundation

Governing Board Members:
- Terry Mazany, Chair, Ad Hoc Committee on Measures of Postsecondary Preparedness
- Dale Nowlin, Teacher and Mathematics Department Chair, Bartholomew Consolidated School Corporation, Columbus, Indiana
- Alice Peisch, Legislator, Massachusetts House of Representatives, Wellesley, Massachusetts
- Chasidy White, Director of Strategic Initiatives, Office of the Superintendent, Montgomery, Alabama

Governing Board Staff Members:
- Bill Bushaw, Executive Director
- Lisa Stooksberry, Deputy Executive Director
- Lily Clark, Assistant Director for Policy & Research

HumRRO Staff Members:
- Monica Gribben, Senior Staff Scientist
- Sunny Becker, Principal Staff Scientist
- Thanos Patelis, Principal Scientist
Sarah DeMark, Ph.D.
Vice President of Academic Programs
Western Governors University

Sarah DeMark joined nonprofit Western Governors University (WGU) in September 2014, and serves as the Vice President of Academic Programs, responsible for leading WGU’s portfolio strategy as well as the design and development of the university’s competency-based degrees, curriculum and assessments. This portfolio includes more than 50 programs, 600 courses, and nearly 1000 assessments.

Prior to joining WGU, DeMark spent more than 15 years at leading IT companies, serving in various leadership roles where she oversaw the strategy and execution of the design, development, and deployment of certification and curriculum-based assessment portfolios. Previously, she was an independent consultant working with state and local school districts, as well as working with The College Board on SAT and AP program evaluation.

DeMark is published in numerous journals and books and is a sought-after speaker. DeMark currently sits on ANSI’s Personnel Certification Accreditation Committee, which serves to validate whether certification programs adhere to standards.

DeMark earned a Ph.D. in Educational Psychology (Measurement, Statistics, & Methodological Studies) from Arizona State University. DeMark earned B.S. degrees in both Elementary Education and Psychology from Vanderbilt University.
Pradeep Kotamraju, Ph.D.
Bureau Chief, Career and Technical Education
Division of Community Colleges and Workforce Preparation
Iowa Department of Education

Dr. Pradeep Kotamraju is currently the Bureau Chief, Career and Technical Education, Division of Community Colleges, Iowa Department of Education. As Iowa’s State Director for Career and Technical Education (CTE), he has leadership responsibility in managing those secondary and community college CTE programs that are funded through the Carl D. Perkins federal program. Previous to his current position as the Iowa CTE State Director, Dr. Pradeep Kotamraju has served the Deputy Director, National Research Center for Career and Technical Education (NRCCTE), University of Louisville, Louisville, Kentucky. Prior to that, he served as the System Director, Perkins, at the Minnesota State Colleges and Universities, Office of the Chancellor. Dr. Kotamraju has worked in several senior administrative positions in higher education and workforce development agencies in Minnesota.

Dr. Kotamraju has written several publications and monographs, and made numerous presentations, in the area of student success in career and technical education, workforce development in the United States, and, in the area of economic progress in the developing world. His research has included the examination of a variety of labor market information and workforce development issues that connect occupations, skills and careers, as individuals transitioned back and forth between employment and education. Dr. Kotamraju has been invited to participate on several statewide, regional and national committees that have focused on CTE programs, budget and finance, and accountability. Some of these committees have had even broader focus that places CTE right front and center when it comes to connecting education, workforce development, and economic development.

Before working in the public sector, Dr. Kotamraju taught college- and university-level Economics and Statistics at several higher education institutions in Minnesota and Kentucky. Dr. Kotamraju holds a Ph.D. in Economics from the University of Illinois. He received his Masters Degree in Economics from George Washington University, and his Bachelors in Economics from the University of Delhi, India.
Michael Morschés has worked in higher education for more than thirty years. His primary focus has been on developmental education and the transition from high school to college.

Michael currently serves as the Dean of Learning Enrichment and College Readiness at Moraine Valley Community College. He oversees the ABE/GED, ESL, developmental education, literacy volunteers, and tutoring programs. Michael has published numerous articles and handbooks on retention, student engagement, and teacher training in post-secondary institutions.
Yvette Mozie-Ross, Ph.D.
Vice Provost for Enrollment Management and Planning
University of Maryland, Baltimore County

Yvette Mozie-Ross, PhD, is Vice Provost for Enrollment Management and Planning at the University of Maryland, Baltimore County (UMBC). As Vice Provost, Dr. Mozie-Ross provides oversight and strategic planning for the areas of undergraduate admissions and orientation, financial aid and scholarships, academic and pre-professional advising, records and registration, and the student administration project (student information system). With a higher education career spanning over 25 years, she has served in numerous professional capacities including residence community director, coordinator of multicultural recruitment, assistant director for transfer recruitment and admissions, director of undergraduate admissions, and director of academic services (advising and registration). Dr. Mozie-Ross has served on various national and statewide committees and workgroups including the College Boards’ Commission for Transfer Policy and Practice, and the Maryland Higher Education Commission’s State Plan Writing Group on Access, Affordability and Completion. She has served on the university’s Strategic Planning Steering Committee and is currently serving as a member of the governing board for the Baltimore Collegetown Network, a consortium of 13 colleges in Baltimore, Maryland. Dr. Mozie-Ross frequently lends her expertise, both nationally and internationally, in the area of data analytics and leveraging analytics for institutional transformation. Dr. Mozie-Ross earned her bachelor’s degree from UMBC in 1988, her master’s degree from University of Maryland University College in 1994, and her doctorate in Education Policy and Leadership at the University of Maryland, College Park in 2011. Her dissertation research examined the academic and background characteristics of high school graduates who identified teachers as influential in their choice of college. Dr. Mozie-Ross enjoys spending time with her husband of 22 years and their 20-year old son. Her pass-time interests include family genealogical research and running.
Holly Zanville, Ph.D.
Senior Advisor for Credentialing and Workforce Development
at Lumina Foundation

Holly Zanville is Senior Advisor for Credentialing and Workforce Development at Lumina Foundation. She leads a new portfolio on Worker and Employer Engagement that focuses on building the capacity of educators and employers to scale and spread the best ideas in training, credentialing, and other workforce development strategies linked to postsecondary learning opportunities; and examining issues around the future of work and learning. Her work includes cultivation of networks and partnerships essential to the emerging new postsecondary learning system including Credential Engine, quality assurance efforts to ensure that credentials stand for high-quality learning, and networks for research and industry sector engagement. She previously led Lumina’s development of the national Connecting Credentials initiative, credential completion for returning adults with prior college/no credential, and statewide approaches to reverse-transfer degrees through the Credit When It’s Due initiative. Zanville received her Ph.D. in Educational Administration from the University of Minnesota; MA in English from the University of Wisconsin-Madison, and BA in English and Biology from Lindenwood University.
Notes of the Expert Panel Meeting Representing Industry
February 22, 2018

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

As part of meeting the charge of the Ad Hoc Committee on Measures of Postsecondary Preparedness, HumRRO organized and facilitated a meeting with industry experts. The purpose of this meeting was to get input from leaders and experts in industry about (a) the jobs that will exist in 2030, (b) the skills that these jobs will require, and (c) the measures/indicators that would be needed to provide a status of elementary and secondary students with respect to these skills.

We were fortunate to assemble an exceptional panel of experts and leaders. The panel members included Ms. Paula Collins, Texas Instruments, Mr. Marcelino Ford-Livene, Intel Corporation, Dr. Scott Heimlich, Amgen Foundation, Dr. Chauncy Lennon, JPMorgan Chase, and Mr. Reginald McGregor, Rolls-Royce Corporation.

The meeting was held on February 22, 2018 in Alexandria, Virginia. An overview of the National Assessment Governing Board and the charge of the Ad Hoc Committee on Measures of Postsecondary Preparedness, along with the agenda and logistical information for the meeting were sent to the panelists in advance.

Thanos Patelis (HumRRO) opened the meeting and after quickly informing the group of some logistics, Terry Mazany provided an overview and led the attendees through introductions. Then, Thanos Patelis facilitated the meeting around the three areas of inquiry involving (a) the jobs of 2030, (b) the skills that they will require, and (c) the measures/indicators that will be important to provide. Finally, Terry Mazany offered some concluding comments. The agenda and the list of all attendees is in Appendix A.

The purpose of this document is to provide information on the themes and comments made by the panelists. The information in this report is meant to provide insight into the rich conversation and comments provided by the expert panelists.

The Future of the Workplace and Work

- The titles of the jobs in 2030 cannot be predicted. However, the jobs of the future will require many skills and will be driven by globalization, artificial intelligence, and “big data”.
  - Globalization will change the workplace, from the types of jobs available (i.e., global competition for jobs) to working on cross-cultural teams.
  - Workplace integration will increase (e.g., working across disciplines instead of in silos by discipline).
  - The pace of automation and existence of the internet enable rapid access to information which will affect what employees do on the job and their job descriptions. The use of the internet and automation will only increase
  - Employers should embrace new methods of communication, driven by the next generation. For example, hiring managers may not be familiar or may be
uncomfortable with the latest communication modes of those applying for jobs. Rather than allowing that to impact negatively on job applicants, employers should acknowledge the differences as innovation or trends to monitor. Job applicants may also need to be attuned to this dynamic.

- Technology will be at the forefront. For example, JP Morgan Chase is a “tech company that also loans money”; they do not consider themselves primarily a financial institution.
- Complicated tasks can be handled by automation (which will replace some jobs). Employees of the future will need to work with automated equipment and employees will be needed to design and service the automation.
- Complex tasks will take human thought (and these types of jobs will remain and additional ones will be added in the future).

• There is and likely there will continue to be a duality in the job descriptions of the future: academic skills and college degree required versus high school diploma and training and apprenticeship experience required. Panelists noted they come from the academic skills track and although they acknowledge the diploma-training track, they suggested consulting with experts in that area for a more detailed picture of what the future holds for those not following the 4-year college track.
  - Need to hire the person with the right skill set, not the person with the most qualifications (who may be overqualified and a poor fit for the work). This is sometimes a tendency when college-graduate hiring managers put more emphasis on college degree, the background they come from and perspective they bring to their job, than is warranted by the demands of the job being filled.
  - Most jobs that do not require a 4-year college degree, will require additional training, such as a 2-year college degree, technical training, or post-secondary education and/or training leading to certification.
  - Employer provides job skills (e.g., specific knowledge and procedures), while employee brings workplace competencies to the job (see competencies in the skills needed in the future). More job-related training will be provided by the employer, such as in-house mini-MBA programs provided by large corporations.
  - Continuous learning will be required to keep up with change. The employer will support or provide the training or education; the employee must participate to keep pace.

• Panelists indicated the need for initiatives to empower students, especially those who are “at-risk” and do not have role models, with an understanding of the labor market and expose them to employment options. Suggestions for empowering students so they are ready for post-secondary steps to meet their goals:
  - Help them define pathways to jobs.
  - Assist in setting goals; define an individual's “north star”.

• Employer/employee relationships will change.
  - More contract work will emerge, which allows workers to dictate own schedule and/or workplace.

• Office space will be different.
  - For example, if employees come to the office, they will use a laptop and choose a work space area plugging into the network. The exact location may vary and will be more fluid than today.
Skills Needed in the Future

- Panelists described the need for employees to be able to apply skills, which defines competencies. Having a skill is not sufficient. Must know how to apply the skill to real world problems.
- The skills that were highlighted were as follows:
  - Ability to collaborate with people and machines, as the workplace incorporates more technology and automation as well as more collaboration.
  - Ability to interact with technology in jobs at all levels. Career Technical Education (CTE) can provide skills and certification for certain jobs.
  - Data skills are in demand - data is the new oil.
  - Less focus on job-specific content skills and more on workplace competencies:
    - Critical thinking, effective communication, collaboration, adaptability, problem solving, creativity, integrity, community/workplace citizenship, agility, learning disposition, persistence, attitude, interest.
  - Able to handle failure – know what to do when the button fails.
- Need power skills and experience, especially for at-risk students, to navigate the job market and succeed in entry-level positions – resume writing, oral communication, working on teams, basic reading/writing and mathematics ability.

Measures of Skills in the Future

- Consider measuring post-secondary readiness skills in grade 8.
- Maintain traditional knowledge measures (i.e., reading, mathematics).
  - Some went as far as to say that these measures of academic skills should not be removed and any other measures should be added.
- Design-build skills can be measured by persistence. Do you persist until object is built?
- Measure application of skills at grade 12. Can students demonstrate their skills (versus showing their knowledge of skills)?
- Add new measures tapping workplace requirements. Be creative in measuring skills (e.g., use certificates or credentials). Leverage CTE curriculum and measures.
  - In the interview process for candidates, hiring managers will give a problem to solve. Therefore, such metrics that demonstrate process and results of solving problems would be helpful.
- Need measures on collaboration, empowerment, and creativity.
- Tie relevancy of measures to industry and align with education. Do this regionally so that measures of preparedness are informative to:
  - students (do they have the skills needed for jobs in their community?),
  - industry (do local job applicants have the skills needed for jobs being offered in their community?),
  - educators (are they preparing students for post-secondary opportunities in their community?), and
  - policy makers (does the local workforce have the skills that industry in their community require?).
- While this may not be the Governing Board’s responsibility, students should be given the ability to develop digital portfolios, including coursework and experiential activities, in school to demonstrate their skills and achievements. This would be helpful to employers.
- The measures must keep evolving as the type of work and required skills change over time.
- One interesting observation was that the panelists described job training interventions for at-risk youth with measures of program success embedded as artifacts of the experience. Did the participant build something? While the final product might not have been their initial design, the focus was on the creative process and the ability to troubleshoot problems as well as to persist in developing the final product.
Appendix A: Meeting Agenda and Attendees

Expert Panel Meeting
National Assessment Governing Board
Ad Hoc Committee on Measures of Postsecondary Preparedness

February 22, 2018 | Agenda

11:00 to 11:05 AM  Start Meeting
Thanos Patelis, Facilitator, HumRRO

11:05 to 11:15 AM  Welcome and Introductions
Terry Mazany, National Assessment Governing Board Member
Chair, Ad Hoc Committee on Measures of Postsecondary Preparedness

11:15 AM to 12:00 PM  Work of the Future
Thanos Patelis, Facilitator, HumRRO

Guiding Questions:
- What do you see as the type of jobs graduating high school seniors will have in 2030?
- Compared to jobs now, what kind of trends do you see emerging for jobs in 2030?
- Do you foresee any differences of jobs by industry or do you expect similar trends to occur for all jobs?
- What do you see as expectations of employers for these students?
- How do you envision the hiring process to be?
- What role will postsecondary institutions play in training and preparing students for these jobs?

12:00 to 12:15 PM  Break to get lunch

12:15 to 1:00 PM  Skills for the Work of the Future
Thanos Patelis, Facilitator, HumRRO

Guiding Questions:
- What types of skills will graduating high school seniors need to have in 2030 in order to get the jobs in 2030?
- What would you consider pre-requisite skills vs. skills that can be acquired on the job?
- What role will postsecondary institutions play in training these skills?
- What would a hiring manager in 2030 look for in prospective hires?

1:00 to 1:45 PM  Measures of these Skills Associated with Work of the Future
Thanos Patelis, Facilitator, HumRRO

Guiding Questions:
- What measures do you see being used to represent these skills?
- What metrics would provide helpful information in the aggregate about the skills of graduating high school seniors?

1:45 to 2:00 PM  Final thoughts and concluding remarks
Terry Mazany, National Assessment Governing Board Member
Chair, Ad Hoc Committee on Measures of Postsecondary Preparedness
Attendees

Expert Panelists:
- Paula Collins, Texas Instruments
- Marcelino Ford-Livene, Intel Corporation
- Scott Heimlich, Amgen Foundation
- Chauncy Lennon, JPMorgan Chase
- Reginald McGregor, Rolls-Royce Corporation

Governing Board Members:
- Terry Mazany, Chair, Ad Hoc Committee on Measures of Postsecondary Preparedness
- Honorable James E. Geringer, Former Governor of Wyoming, Cheyenne, Wyoming
- Carol Jago, Associate Director, California Reading & Literature Project at UCLA, Oak Park, Illinois
- Dale Nowlin, Teacher and Mathematics Department Chair, Bartholomew Consolidated School Corporation, Columbus, Indiana
- Honorable Beverly Perdue, Former Governor of North Carolina, New Bern, North Carolina
- Linda P. Rosen, Chief Executive Officer, Change the Equation, Washington, DC
- Chasidy White, Director of Strategic Initiatives, Office of the Superintendent, Montgomery, Alabama

Governing Board Staff Members:
- Bill Bushaw, Executive Director
- Lisa Stooksberry, Deputy Executive Director
- Lily Clark, Assistant Director for Policy & Research
- Laura LoGerfo, Assistant Director for Reporting & Analysis
- Munira Mwalimu, Executive Officer & Contracting Officer
- Sharyn Rosenberg, Assistant Director for Psychometrics
- Angela Scott, Management & Program Analyst

HumRRO Staff Members:
- Monica Gribben, Senior Staff Scientist
- Deirdre Knapp, Vice President, Assessment and Evaluation in Education and the Workplace
- Jackson Millard, Research Associate
- Thanos Patelis, Principal Scientist
**Expert Panelists**

**Paula Collins**  
Vice President, Worldwide Government Relations  
Texas Instruments

Paula J. Collins is vice president of Worldwide Government Relations for Texas Instruments where she leads the Company's advocacy activities in the United States and abroad. She joined Texas Instruments in 1999 as Director of Government Relations and managed the Company's legislative and public policy activities on a wide range of issues, including immigration, funding for basic research and education.

Ms. Collins came to Texas Instruments with extensive government, corporate and business association experience. After serving as a legislative assistant on Capitol Hill, she joined American Express Company, where for ten years she directed the Company's legislative activities on a wide range of public policy issues including a number of trade initiatives. In 1993, she joined the Business Roundtable where she worked closely with corporate leaders to develop and implement public policy campaigns on international trade, budget and workforce initiatives. From 1995-1997, she directed international trade relations at Eastman Kodak Company and from 1997-1999 was a principal with The Fratelli Group, a strategic communications firm where she played an active role in the development and implementation of comprehensive public affairs strategies for several coalitions on trade and telecommunications issues.

Ms. Collins is a graduate of Yale University and attended the Program for Management Development at Harvard Business School. She is an active participant in her church and local civic organizations, and is a member of several professional organizations. She is a member of the Board of Directors and Executive Committee of the Information Technology Industry Council, and chairman of the Board of the Task Force on American Innovation.
Marcelino Ford-Livene is the General Manager of Global Programs and Alliances for Intel’s Worldwide Corporate Affairs Group. In this capacity, he leads the organization charged with designing the framework and strategic plan for identifying and prioritizing win-win strategic alliances, relationships and partnerships with various global industry, government and special interest groups that advance the strategic direction of Intel’s Diversity and Inclusion Initiative. Prior to this role, Ford-Livene was the General Manager of New Channels and Advanced Advertising for Intel Media, where he led the organization charged with programming, licensing and distributing new format television channels and advertising-supported video-on-demand programming. He was also responsible for advertising sales, advertising operations, audience research and data analytics for Intel Media’s OTT services. He also co-authored patents on TV viewership analytics and advanced advertising behavioral targeting. Prior to Intel, he was a senior member of TV Guide’s corporate development and planning team. He has also held senior positions with the U.S. Federal Communications Commission in Washington, DC. He served as Special Counsel for New Media Policy for Chairman William E. Kennard and as Senior Counsel and Director of Media Strategic Analysis for the FCC’s Office of Strategic Planning under Chairman Michael Powell. Ford-Livene was the Division Chairman of the Interactive Media Division for the American Bar Association’s Forum on the Entertainment and Sports Industries from 2006 to 2013. He also served for eight years on the board of the TV Academy, the organization that awards the prestigious Primetime Emmy for creative excellence in the television industry. He was also the TV Academy’s Board Secretary and a member of its Executive Committee from 2010 to 2013. He is currently the Co-Chairman of the TV Academy’s Diversity Committee and a founding board member of the Digital Diversity Network. Corporate boards that Ford-Livene has served on include Delivery Agent in San Francisco, CA and TRA Global, which was acquired by TiVo. Ford-Livene earned a B.A. in economics from UC San Diego, a J.D./M.B.A. from the University of Illinois and has completed an Executive Leadership Program at Harvard Business School.
Scott Heimlich
Vice President, Amgen Foundation

Scott M. Heimlich is vice president of the Amgen Foundation. He is responsible for the strategic management and direction of the Foundation’s science education portfolio, including the development and oversight of key initiatives at the K-12 and higher education levels. He was the principal architect and continues to lead the Amgen Scholars Program, the Foundation’s largest initiative providing undergraduates with access to research opportunities at premier educational and research institutions across the world. Under his leadership, the Amgen Biotech Experience transformed from a local program into a multi-site, international initiative bringing biotechnology lab experiences to over 80,000 secondary students a year. With these and many other initiatives, the Foundation’s commitment to science education recently surpassed the $125 million milestone.

Prior to joining Amgen in 2005, he served in positions at the University of California, Los Angeles, Los Angeles Pierce College, University of Southern California, and a junior high school in Japan. He holds a bachelor’s degree, master’s degree, and doctorate in education from the University of California, Los Angeles.

Chauncy Lennon
Managing Director and Head of Workforce Initiatives
Global Philanthropy
JPMorgan Chase & Co.

Chauncy Lennon leads JPMorgan Chase & Co.’s initiatives to promote economic opportunity through investments in workforce practice, innovation, and policy. These include New Skills at Work, a $250 million global initiative to support demand-driven workforce systems that promote prosperity for workers and industries; New Skills for Youth, a $75 million initiative to increase the number of young people who complete career pathways that begin in high school and end with postsecondary degrees or credentials aligned with good-paying, high-demand jobs; The Fellowship Initiative, a program providing young men of color with learning experiences that help them achieve their education and career potential; and a $17 million investment in Summer Youth Employment Programs in US cities to help underserved youth obtain the skills necessary to build lasting careers.

He serves on the New York City Workforce Development Board, the College Promise Campaign Advisory Board, and the Neighborhood Trust Financial Partners Board.
He joined JPMorgan Chase from the Ford Foundation, where his grant-making focused on promoting economic advancement for low-income workers by improving access to workforce development and work support programs. Prior to the Ford Foundation, he was senior vice president for Asset Building at Seedco, a national workforce development intermediary. He also has extensive experience researching the mobility patterns of the working poor. He earned his Ph.D. in anthropology from Columbia University, master's degree from the University of Chicago and bachelor's degree from Williams College. He has taught urban studies at Columbia's School of International and Public Affairs and Barnard College.

Reginald McGregor
Manager, Research & Technology Strategy Group
Rolls-Royce Corporation

Reginald McGregor, Manager of Engineering Employee Development and STEM Outreach at Rolls-Royce Corporation. He is a Mechanical Engineer with over 15 years' experience in various engineering roles. He spent over 8 years in early career development managing the engineering co-op; high school internship and graduate development programs. Reginald holds BS in Mechanical Engineering, MBA and currently completing a MS in Technology Leadership and Innovation. He is very active in workforce development and STEM education and serving the community. Reginald enjoys reading, outdoor activities and spending time with family.

Reginald serves on several boards and committees including the Governor-appointed Region 5 Works Council, President of the Lawrence Township School Board, Indiana STEM Advisory Council, STEMx National Advisory Board, Purdue Engineering Education Industrial Advisory Council, Marion County Superintendents STEM Coalition, Indiana Chamber of Commerce K-12 and Workforce Committees, Million Women Mentor Steering Committee, Indiana Afterschool Network Board, and EmployIndy Youth Committee.
National Assessment Governing Board

Executive Committee

Thursday, August 2, 2018
5:00 – 6:00 pm

AGENDA

5:00 – 5:05 pm Welcome and Agenda Overview
Tonya Matthews, Vice Chair

5:05 – 5:15 pm ACTION: Nomination for Board Vice Chair for the Term
October 1, 2018 – September 30, 2019
Chasidy White

5:15 – 6:00 pm CLOSED: NAEP Assessment Schedule and Budget Briefing
Bill Bushaw, Executive Director
Peggy Carr, Associate Commissioner
National Assessment Governing Board
Strategic Vision – Second Annual Progress Report
August 2018

On November 18, 2016, the National Assessment Governing Board unanimously adopted its Strategic Vision to focus the Board’s work from 2017 through 2020. This approval marked the beginning of the implementation phase, which is managed by the staff, overseen by the Board, and conducted in partnership with the National Center for Education Statistics (NCES). For each of the four years during the Strategic Vision’s implementation, the staff will provide annual progress reports to the Governing Board. The following report captures the Governing Board’s second year of progress in pursuing the Strategic Vision priorities.

This progress report is backward-looking capturing notable work of the past year to implement the Board’s vision. It is important to note, however, that not all of the activities undertaken lend themselves to obvious measures of progress that can be reported at this time and efforts for some priorities will be focused in later years of implementation. The progress made on the Governing Board’s Strategic Vision is the result of the important contributions of and collaborations among the Board members, Board staff, NCES, and contractors.

SV #1 — Strengthen and expand partnerships by broadening stakeholders’ awareness of NAEP facilitating their use of NAEP resources.

- Staff, with Board members and NCES support, planned the first-ever NAEP Day on April 10, 2018 to release the results of the 2017 Nation’s Report Card in reading and in mathematics. The in-person and online audiences for both the national and state release in the morning and the Trial Urban District Assessment (TUDA) release in the afternoon shattered previous records.
- To prepare for NAEP Day, the Governing Board and NCES hosted several pre-release briefings with our partners, the National Governors Association, the Council of Chief State School Officers, and for the first time this year, the Council of the Great City Schools. These briefings proved invaluable in addressing questions about the transition to digital-based assessment and in focusing NAEP Day on the results and panel discussions.
- The partnership with the Council of the Chief State School Officers (CCSSO) continues, including supporting the CCSSO/Governing Board NAEP Policy Task Force.
- The staff held its first meeting of the NAEP TUDA Policy Task Force in partnership with the Council of the Great City Schools. The collaboration already has provided critically important insights, some of which shaped the outcome of NAEP Day.
• The Board continues to host stakeholder panel sessions during Governing Board meetings including: (1) a preschool education panel in May 2018 at our quarterly meeting in Montgomery, Alabama; and (2) a web-streamed panel on international assessments in November 2017 that convened a stellar panel of global experts, drew substantial attention, and illuminated similarities and differences with NAEP among assessments in Germany and China as well as international assessments such as the Programme for International Student Assessment (PISA).

• The new Governing Board multiyear communications contract, awarded in Fall 2017, has helped to increase significantly the Governing Board’s outreach via social media.

• Through its communications contract, the Board has implemented customer relation management (CRM) software, SalesForce, to document all its outreach efforts—allowing us to quantify the extent of our outreach activities. This allows us to track progress, comparing outreach for specific events, and also compare overall outreach year-to-year.

• Continued person-to-person outreach. Staff scheduled well over 60 meetings in the past 12 months with top leaders of important stakeholder organizations.

• Strategically using relations with partner organizations coupled with improved social media approaches to significantly increase awareness of NAEP resources. For example, when we have results for particular states or districts, we target their social media.

SV #2 — Increase opportunities to connect NAEP to administrative data and state, national and international student assessments.

• The Board and staff (in conjunction with NCES) has continued its work on:
  o a national NAEP-ACT linking study;
  o longitudinal studies following students who took grade 8 NAEP in 2013 into high school and first year of college in North Carolina and Tennessee;
  o longitudinal studies following students who took grade 12 NAEP in 2013 into college in Massachusetts, Michigan, and Tennessee.

• NCES has continued its work on:
  o a NAEP-High School Longitudinal Study (HLSL) linking study;
  o a NAEP-Early Childhood Longitudinal Study-Kindergarten (ECLS-K) linking study;
  o a NAEP-TIMSS linking study; and
  o linking studies of NAEP and selected state assessments

• The Ad Hoc Committee on Measures of Postsecondary Preparedness discussions over the past year have considered how various data sources, beyond NAEP assessment items, might be included in an expanded report on the preparedness of high school seniors as they transition to life after high school.
SV #3 — Expand the availability, utility and use of NAEP resources, in part by creating new resources to inform education policy and practice.

- Significantly improved our ability to capture and disseminate social media friendly video of important issues related to NAEP results including 1) NAEP results in rural states; 2) the international symposium, “Thinking Beyond Borders: The Future of Student Assessment,” from November 17; 3) repurposing video from the NAEP history, geography and civics release in 2015; 4) video associated with the 2017 NAEP reading and math release in April; and 5) video associated with Board Member roles and responsibilities.

- In the last 12 months, Board and staff provided over 20 presentations at education related events, including the annual meetings of the American Educational Research Association and National Council on Measurement in Education in New York City, the National Conference on Student Assessment in San Diego, and meetings with the National Association of Secondary School Principals, National Association of Elementary School Principals, Arts Education Partnership, Education Commission of the States, National PTA, Indiana Council of Teacher of Mathematics, National Board for Professional Teaching Standards, and Reading is Fundamental.

- The team conducted a successful release of the 2017 NAEP reading and mathematics results that included significant use of social media, scheduling of multiple prerelease embargoed briefings, and the establishment of NAEP Day focused on how state and district leaders utilize NAEP results and why NAEP reading results have remained unchanged for several years.

- The staff have increased the number of infographics and one pagers that focus on important NAEP information and findings including one pagers on the transition to digitally based assessments, background information about TUDA, explanation of NAEP achievement levels and background information related to the release of NAEP reading and mathematics results.

- We have begun an effort to identify appropriate and inappropriate uses of NAEP, which will assist the Governing Board in developing a policy on the appropriate use of NAEP.

- In partnership with NCES, Board staff presented at the National Association of Elementary School Principals’ annual conference for principal leaders, demonstrating how to use NAEP to understand school context.

SV #4 — Promote sustained dissemination and use of NAEP information beyond report card releases with consideration for multiple audiences and ever-changing multimedia technologies.

- The Governing Board’s social media accounts update weekly with more novel content and with more connections to partners than in previous years.
• Staff continued to develop focused analyses, videos, and infographics of NAEP results that explore findings and variables not traditionally highlighted in initial releases. Recent artifacts include:
  o infographics on the top 10 most improved jurisdictions in NAEP math and reading, grades 4 and 8, from 2009-2017,
  o a featured narrative on how Tennessee used NAEP scores to improve academic performance and become the fastest-improving state on NAEP from 2011-2015; and
  o focused analysis of NAEP results related to rural schools and urban districts, which resulted in a video on rural school performance that was posted and widely shared on social media and three as motion infographics on contextual variables and data related to TUDA results.
  
• Staff issued a request for proposals to develop a more strategic approach in drawing attention to the many products and artifacts the Governing Board releases.

• Board members and staff continue to engage with educators and policymakers through presentations to nonpublic school leaders, elementary school leaders, leaders representing large urban districts, mathematics teachers, and leaders of education organizations who are members of the Learning First Alliance.

SV #5 — Develop new approaches to update NAEP subject area frameworks to support the board’s responsibility to measure revolving expectations for student, while maintaining rigorous methods to support reporting of student achievement trends.

• The Board adopted an updated policy on NAEP framework development and updates at the March 2018 meeting.

• The Board conducted reviews of the NAEP Mathematics Framework and the NAEP Reading Framework, which included hosting expert panel discussions and commissioning papers.

• Board staff conducted five informational meetings with several partners in the mathematics education and reading education communities, regarding the Board’s framework activities.

• The Board will begin a NAEP Mathematics Framework update during this fiscal year, with an update process incorporating best practices nationally and internationally. This effort will consider the Board’s review of state mathematics standards, which will be completed by a contractor in summer 2018.

• The Board is updating its policy on achievement level setting, and also updating achievement level descriptors. Several research efforts and input from technical experts have informed proposed updates to the Board’s policy on developing achievement
levels for NAEP. The full Board will be discussing the revised policy during the August 2018 Board meeting, with action planned for November 2018.

SV #6 — Continue improving the content, analysis and reporting of NAEP contextual variables by considering the questions relevance, sensitivity and potential to provide meaningful context insights for policy and practice.

- The staff continued collaboration with NCES, participating in the process to innovate and improve contextual variables.
- NCES has plans underway to update the household composition variable, prompted by the Board’s review of contextual variables.
- The NAEP Mathematics Framework update, which begins this fiscal year, will address updates of contextual variables that support deeper understanding of student achievement in mathematics.

SV #7 — Research policy and technical implications related to the future of NAEP long-term trend assessments reading and mathematics.

- The Board held numerous discussions at Board meetings to better understand the technical, policy, operational, and budgetary issues related to the options for LTT as NAEP transitions to DBA.
- The Board held numerous discussions at Board meetings and via webinar to better understand the technical, policy, operational, and budgetary issues related to the options for LTT as NAEP transitions to DBA. Each standing committee continues to work on various aspects of its LTT policy as NCES prepares to transition LTT to the DBA mode.

SV #8 — Research assessments used in other countries to find new possibilities to innovate the content, design, and reporting of NAEP.

- In November 2017, the Governing Board hosted a half-day symposium, “Thinking Beyond Borders: The Future of Assessment,” and invited Andreas Schleicher and Dirk Hastedt, leaders overseeing PISA, PIRLS, and TIMSS along with Peggy Carr and other experts in national student assessments in Germany and China.

SV #9 — Develop policy approaches to revise the NAEP assessment subdivision schedule based on the nation’s evolving needs, the board’s priorities, and NAEP funding.

- In March 2018, the Governing Board approved a “Resolution on Priorities” in establishing the schedule for NAEP assessments in 2025 and beyond. This resolution was the result of Board deliberations in plenary sessions, small group discussions, and consultation with policy experts over the course of a year.
SV #10 — Develop new approaches to measure the complex skills required for transition to postsecondary education and career.

- In August 2017, the Governing Board established the Ad Hoc Committee on Measures of Postsecondary Preparedness. The Committee has met four times and will deliver its report to the Governing Board in November 2018 as established in the charge.

- The Board and staff continued its research to gather validity evidence for using 12th grade NAEP reading and math results to estimate the percentage of grade 12 students academically prepared for college.
# National Assessment Governing Board
## Strategic Vision Implementation Activities Report*

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<td>SV1 Develop and Sustain Partnerships</td>
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<tr>
<td>Work with Partners to Increase Awareness and Use of NAEP</td>
<td>August 4, 2016</td>
<td>December 31, 2020</td>
<td>R&amp;D</td>
</tr>
<tr>
<td>Maintain Database of Points of Contact</td>
<td>October 12, 2017</td>
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<tr>
<td>Disseminate Content with/through Partners</td>
<td>October 1, 2016</td>
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<td>TUDA Task Force</td>
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<tr>
<td>State Policy Task Force</td>
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<tr>
<td><strong>SV2 Linking Data</strong></td>
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<tr>
<td>Incorporate Ongoing Linking Studies and Consider Additional Work</td>
<td>November 18, 2016</td>
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<td>COSDAM, NCES</td>
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<tr>
<td>Expand NAEP Linkages to Administrative Data</td>
<td>September 8, 2017</td>
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<tr>
<td>Board Considers What Federal Data Presented with NAEP</td>
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<td>Board Promotes Work Accomplished through NCES Secondary Research Grants</td>
<td>August 4, 2016</td>
<td>December 27, 2019</td>
<td>R&amp;D, NCES</td>
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<tr>
<td>Learn from Reporting of International Assessments</td>
<td>November 17, 2017</td>
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<tr>
<td><strong>SV3 Expand NAEP Resources</strong></td>
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<tr>
<td>Create Tools for New Audiences (also SV4)</td>
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<td>Develop 'Menu of Engagement'</td>
<td>January 1, 2018</td>
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<td>Create 'Brief Case' Studies on NAEP Use (also SV4)</td>
<td>January 1, 2018</td>
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<td>Build Teacher Prep Toolkit</td>
<td>August 2, 2018</td>
<td>August 9, 2019</td>
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<tr>
<td>Share Effective Uses of NAEP</td>
<td>March 1, 2018</td>
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<tr>
<td>Research Uses of NAEP by Various Audiences</td>
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<tr>
<td>Improve Understanding of NAEP Achievement Levels</td>
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<tr>
<td>Develop Statement of Intended and Appropriate Uses of NAEP</td>
<td>November 16, 2018</td>
<td>May 18, 2019</td>
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<tr>
<td>Host Stakeholder Panels at Board Meetings</td>
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<td>Disseminate Information on NAEP Technical Procedures to Share Expertise</td>
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<td><strong>SV4 Dissemination and Use of NAEP</strong></td>
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<td>Post-release Stakeholder Events to Extend Life of Results</td>
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<td>Expand Capability for More Wide-ranging Communications Approaches and Products</td>
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<td>Identify Advanced and More User-friendly Approaches to Presenting NAEP Results</td>
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<td>Update Framework Development Policy</td>
<td>June 5, 2017</td>
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<tr>
<td>Explore New Approaches to Framework Update Processes (also SV8)</td>
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<td>Review &amp; Update Reading Framework for 2025 Assessment</td>
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<td>Review &amp; Update Civics, Geography, and U.S. History Frameworks (Depends on Assessment Schedule Decisions)</td>
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<td>Review &amp; Update Economics Framework (Depends on Assessment Schedule Decisions)</td>
<td>March 6, 2020</td>
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<td>Review &amp; Update Science and TEL Frameworks (Depends on Assessment Schedule Decisions)</td>
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<tr>
<td>Review &amp; Update Writing Framework (Depends on Assessment Schedule Decisions)</td>
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* Working Draft: Dates reflect tentative plans.
National Assessment Governing Board  
Strategic Vision Implementation Activities Report*

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<td>Update Board Policy on Achievement Levels (including New Approaches to ALDs)</td>
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<td>SV6 Contextual Variables</td>
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<td>R&amp;D Reviews and Gives Feedback on New Reporting of Contextual Data</td>
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<td>R&amp;D Reviews 2021 Core Contextual Data</td>
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<tr>
<td>Periodic ADC-R&amp;D Meetings on Core and Subject-Specific Variables (also SV6)</td>
<td>November 17, 2017</td>
<td>December 31, 2020</td>
<td>ADC, R&amp;D</td>
</tr>
<tr>
<td>ADC Identifies NAEP Resources for Educators (also SV3)</td>
<td>May 18, 2017</td>
<td>March 18, 2021</td>
<td>ADC, R&amp;D</td>
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<tr>
<td>SV7 Long-Term Trend</td>
<td>August 8, 2016</td>
<td>May 18, 2018</td>
<td>COSDAM</td>
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<tr>
<td>Ed Haertel Overview Paper</td>
<td>August 8, 2016</td>
<td>December 9, 2016</td>
<td>COSDAM</td>
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<tr>
<td>Reaction Papers (4)</td>
<td>December 12, 2016</td>
<td>February 17, 2017</td>
<td>COSDAM</td>
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<tr>
<td>Washington DC Symposium</td>
<td>March 2, 2017</td>
<td>March 2, 2017</td>
<td>Full Board</td>
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<tr>
<td>AERA Symposium</td>
<td>April 29, 2017</td>
<td>April 29, 2017</td>
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<tr>
<td>Governing Board Discussions</td>
<td>March 3, 2017</td>
<td>May 18, 2018</td>
<td>Full Board</td>
</tr>
<tr>
<td>Tasks Assigned to Committees</td>
<td>March 1, 2018</td>
<td>March 1, 2018</td>
<td>Executive Committee</td>
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<tr>
<td>SV8 Other Countries</td>
<td>November 17, 2017</td>
<td>November 17, 2017</td>
<td>Full Board</td>
</tr>
<tr>
<td>International Assessment Expert Panel</td>
<td>November 17, 2017</td>
<td>November 17, 2017</td>
<td>Full Board</td>
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<tr>
<td>SV9 Assessment Schedule</td>
<td>May 19, 2017</td>
<td>March 1, 2019</td>
<td>Executive Committee</td>
</tr>
<tr>
<td>Develop Policy Priorities</td>
<td>May 19, 2017</td>
<td>March 2, 2018</td>
<td>Executive Committee</td>
</tr>
<tr>
<td>Considerations of Consolidated Frameworks and Coordinated Administrations</td>
<td>November 17, 2017</td>
<td>November 17, 2018</td>
<td>Full Board</td>
</tr>
<tr>
<td>Revise NAEP Assessment Schedule</td>
<td>August 6, 2018</td>
<td>March 1, 2019</td>
<td>Full Board</td>
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<tr>
<td>SV10 Postsecondary Preparedness</td>
<td>August 6, 2016</td>
<td>August 31, 2020</td>
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<tr>
<td>Ad Hoc Committee Develops Recommendations</td>
<td>August 3, 2017</td>
<td>November 17, 2018</td>
<td>Ad Hoc Committee</td>
</tr>
<tr>
<td>Ad Hoc Committee created</td>
<td>August 3, 2017</td>
<td>August 3, 2017</td>
<td>Ad Hoc Committee</td>
</tr>
<tr>
<td>Ad Hoc Committee meets to discuss approach &amp; discuss Q1: ready for what?</td>
<td>November 16, 2017</td>
<td>November 16, 2017</td>
<td>Ad Hoc Committee</td>
</tr>
<tr>
<td>Expert Panel - Industry Innovators</td>
<td>February 22, 2018</td>
<td>February 22, 2018</td>
<td>Ad Hoc Committee</td>
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<tr>
<td>Ad Hoc Committee meets to discuss Q2</td>
<td>March 1, 2018</td>
<td>March 1, 2018</td>
<td>Ad Hoc Committee</td>
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<tr>
<td>Expert Panel - Higher Ed Innovators</td>
<td>April 19, 2018</td>
<td>April 19, 2018</td>
<td>Ad Hoc Committee</td>
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<tr>
<td>Ad Hoc Committee meets to discuss Q3</td>
<td>May 17, 2018</td>
<td>May 17, 2018</td>
<td>Ad Hoc Committee</td>
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<tr>
<td>Expert Panel - Futurists</td>
<td>June 21, 2018</td>
<td>June 21, 2018</td>
<td>Ad Hoc Committee</td>
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<tr>
<td>Stakeholder input: State Assessment Experts @NCSA</td>
<td>June 28, 2018</td>
<td>June 28, 2018</td>
<td>Ad Hoc Committee</td>
</tr>
<tr>
<td>Ad Hoc Committee meets &amp; discusses draft recommendations</td>
<td>August 2, 2018</td>
<td>August 2, 2018</td>
<td>Ad Hoc Committee</td>
</tr>
<tr>
<td>Expert Panel - Students</td>
<td>September 27, 2018</td>
<td>September 27, 2018</td>
<td>Ad Hoc Committee</td>
</tr>
<tr>
<td>Ad Hoc Committee - ACTION on Recommendations Report</td>
<td>November 15, 2018</td>
<td>November 15, 2018</td>
<td>Ad Hoc Committee</td>
</tr>
<tr>
<td>Ad Hoc Committee presents Recommendations to the Board</td>
<td>November 16, 2018</td>
<td>November 16, 2018</td>
<td>Full Board</td>
</tr>
<tr>
<td>Board Action on Ad Hoc Committee Recommendations</td>
<td>November 17, 2018</td>
<td>November 17, 2018</td>
<td>Full Board</td>
</tr>
<tr>
<td>Implement Approved Recommendations of Ad Hoc Committee</td>
<td>November 19, 2018</td>
<td>August 31, 2020</td>
<td>Full Board</td>
</tr>
<tr>
<td>Continue Research to Gather Validity Evidence on Academic Preparedness for College</td>
<td>August 6, 2016</td>
<td>August 31, 2020</td>
<td>COSDAM</td>
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</tbody>
</table>

July 16, 2018

* Working Draft: Dates reflect tentative plans.
National Assessment Governing Board
Committee on Standards, Design and Methodology

Friday, August 3, 2018
9:30 am – 12:00 pm

AGENDA

9:30 – 9:35 am Welcome and Review of Agenda

Andrew Ho, COSDAM Chair

9:35 – 10:25 am Design Considerations for Studies to Review and Revise the NAEP Mathematics and Reading Achievement Level Descriptions (SV #5)

Sharyn Rosenberg, Assistant Director for Psychometrics
Sunny Becker, HumRRO

Attachment A

10:25 – 11:10 am Uses of NAEP (SV #3)

Sharyn Rosenberg
Andrew Ho

To be sent under separate cover

11:10 am – 12:00 pm CLOSED SESSION: Briefing on 2017 NAEP Writing Assessment

Helena Jia, Educational Testing Service

Information Item

Update on Implementing the Strategic Vision (SV #2-10) Attachment B
Design Considerations for Studies to Review and Revise the NAEP Mathematics and Reading Achievement Level Descriptions (SV #5)

The primary recommendation from the recent evaluation of NAEP achievement levels (National Academies of Sciences, Engineering, and Medicine, 2017) was to evaluate the alignment, and revise if needed, the achievement level descriptions (ALDs) for NAEP mathematics and reading assessments in grades 4, 8, and 12:

Recommendation #1: Alignment among the frameworks, the item pools, the achievement-level descriptors, and the cut scores is fundamental to the validity of inferences about student achievement. In 2009, alignment was evaluated for all grades in reading and for grade 12 in mathematics, and changes were made to the achievement-level descriptors, as needed. Similar research is needed to evaluate alignment for the grade 4 and grade 8 mathematics assessments and to revise them as needed to ensure that they represent the knowledge and skills of students at each achievement level. Moreover, additional work to verify alignment for grade 4 reading and grade 12 mathematics is needed.

In its formal response to this evaluation, the Board agreed to conduct studies to achieve this goal and noted that the revision of the updated Board policy on NAEP achievement levels will address the larger issue of specifying a process and timeline for conducting regular recurring reviews of the achievement level descriptions in all subjects and grades.

The current draft of the revised Board policy on NAEP achievement levels (to be discussed during a plenary session at the upcoming August Board meeting) specifies that empirical data shall be used to review and revise content ALDs for reporting. In addition, these reporting ALDs shall be written in terms of what students at each level do know and can do rather than what they should know and should be able to do.

As part of the Technical Support contract, Governing Board staff requested that the Human Resources Research Organization (HumRRO) organize an expert panel meeting to solicit technical input on considerations for: 1) conducting studies to review and revise the mathematics and reading ALDs at grades 4, 8, and 12, as referenced in the Board’s formal response to the evaluation of NAEP achievement levels; and 2) implementing reporting ALDs more generally, as referenced in the draft revised policy statement.

On July 12-13, the following panelists were convened in Alexandria, VA: Dr. Susan Davis-Becker (ACS Ventures, LLC), Dr. Karla Egan (EdMetric, LLC), Dr. Steve Ferrara (Measured Progress), Dr. Ed Haertel (Stanford University), Dr. Andrew Kolstad (P20 Strategies, LLC), Dr. Susan Loomis (Consultant), Dr. Barbara Plake (University of Nebraska-Lincoln), and Dr. Laurie Wise (HumRRO).
Due to the proximity of the expert panel meeting to the August Governing Board meeting, formal meeting minutes are not yet available but they will be shared with COSDAM members later in August. During the upcoming August COSDAM meeting, Dr. Sharyn Rosenberg of the Governing Board staff and Dr. Sunny Becker of HumRRO will share key takeaways from the expert panel meeting to inform COSDAM discussion on next steps and recommendations for conducting studies to review and revise the math and reading ALDs.
Strategic Vision Activities Led by COSDAM

During the November 2016 Board meeting, a Strategic Vision was formally adopted to guide the Board’s work over the next several years. For each activity led by COSDAM, information is provided below to describe the current status and recent work, planned next steps, and the ultimate desired outcomes. Please note that many of the Strategic Vision activities require collaboration across committees and with NCES, but the specific opportunities for collaboration are not explicitly referenced in the table below. In addition, the activities that include contributions from COSDAM but are primarily assigned to another standing committee (e.g., framework update processes) or ad hoc committee (i.e., exploring new approaches to postsecondary preparedness) also have not been included below.

The Governing Board’s Assistant Director for Psychometrics, Sharyn Rosenberg, will answer any questions that COSDAM members have about ongoing or planned activities.

<table>
<thead>
<tr>
<th>Strategic Vision Activity</th>
<th>Current Status and Recent Work</th>
<th>Planned Next Steps</th>
<th>Desired Outcome</th>
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<tr>
<td>SV #2: Increase opportunities to connect NAEP to administrative data and state, national, and international student assessments</td>
<td>Ongoing linking studies include: national NAEP-ACT linking study; longitudinal studies at grade 12 in MA, MI, TN; longitudinal studies at grade 8 in NC, TN; NAEP-TIMSS linking study; NAEP-HSLS linking study; NAEP Validity Studies (NVS) studies</td>
<td>Complete ongoing studies</td>
<td>NAEP scale scores and achievement levels may be reported and are better understood in terms of how they relate to other important indicators of interest (i.e., other assessments and milestones)</td>
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<tr>
<td>Incorporate ongoing linking studies to external measures of current and future achievement in order to evaluate the NAEP scale and add meaning to the NAEP achievement levels in reporting. Consider how additional work could be pursued across multiple subject areas, grades, national and international assessments, and longitudinal outcomes</td>
<td>Informational update on current studies was provided in the March 2018 COSDAM materials</td>
<td>Decide what new studies to take on</td>
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<td>As of June 2018, analyses are currently underway for the national NAEP-ACT linking study, with presentation to COSDAM tentatively planned for November 2018</td>
<td>Decide how to use and report existing and future results</td>
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<td>Complete additional studies</td>
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<tr>
<td>Strategic Vision Activity</td>
<td>Current Status and Recent Work</td>
<td>Planned Next Steps</td>
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<td>SV #3: Expand the availability, utility, and use of NAEP resources, in part by creating new resources to inform education policy and practice</td>
<td>Ina Mullis of the NVS panel spoke with COSDAM at the March 2017 Board meeting and is working on a white paper about the history and uses of NAEP. During the upcoming August 2018 Board meeting, COSDAM will discuss how to use information from an ongoing study to inform a policy statement on intended and appropriate uses of NAEP.</td>
<td>Use research to draft short document of intended and appropriate uses for COSDAM discussion (November 2018). NCES produces documentation of validity evidence for intended uses of NAEP scale scores. Governing Board produces documentation of validity evidence for intended uses of NAEP achievement levels.</td>
<td>Board adopts formal statement or policy about intended uses of NAEP. The goal is to increase appropriate uses and decrease inappropriate uses (in conjunction with dissemination activities to promote awareness of the policy statement).</td>
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</table>
| Research when and how NAEP results are currently used (both appropriately and inappropriately) by researchers, think tanks, and local, state and national education leaders, policymakers, business leaders, and others, with the intent to support the appropriate use of NAEP results (COSDAM with R&D and ADC) | This idea was generated during the August 2017 COSDAM discussion of the Strategic Vision activities. | Work with NCES and R&D to refine list of technical topics for dissemination efforts. | Stakeholders benefit from NAEP technical expertise.

Disseminate information on technical best practices and NAEP methodologies, such as training item writers and setting achievement levels | | | |

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**Note:** COSDAM stands for the Committee on Scientific and Technical Affairs, which is responsible for the NAEP (National Assessment of Educational Progress) project.
<table>
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<tr>
<th>Strategic Vision Activity</th>
<th>Current Status and Recent Work</th>
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<th>Desired Outcome</th>
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<tbody>
<tr>
<td>SV# 5: Develop new approaches to update NAEP subject area frameworks to support the Board’s responsibility to measure evolving expectations for students, while maintaining rigorous methods that support reporting student achievement trends</td>
<td>Input for the policy revision was provided through a panel of standard setting experts, a literature review on considerations for creating and updating achievement level descriptors (ALDs), and a technical memo on developing a validity argument for the NAEP achievement levels (early 2018)</td>
<td>Seek external feedback and public comment (September 2018)</td>
<td>Board has updated policy on achievement levels that meets current best practices in standard setting and is useful for guiding the Board’s achievement levels setting work</td>
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<td></td>
<td>COSDAM discussed the policy revision during the May and March 2018 Board meetings</td>
<td>Full Board call to discuss revised draft policy (October 2018)</td>
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<td></td>
<td>Full Board will discuss the draft revised policy during the upcoming August 2018 Board meeting</td>
<td>Board action on revised policy statement (November 2018)</td>
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<tr>
<td>SV# 7: Research policy and technical implications related to the future of NAEP Long-Term Trend assessments in reading and mathematics</td>
<td>White papers commissioned, symposium held in Washington, DC (March 2017), and follow-up event held at American Educational Research Association (AERA) annual conference (April 2017)</td>
<td>Per the discussion and next steps at the March 2018 Executive Committee meeting, COSDAM will discuss design considerations for the next administration of LTT. Potential design considerations will be dependent on the schedule for conducting the next LTT assessment (TBD)</td>
<td>Determine whether changes to the NAEP LTT schedule, design and administration are needed (led by Executive Committee and NCES)</td>
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<td>Full Board and Executive Committee discussions (March, May, and August 2017) and webinar on secure LTT items and p-values from 2012 administration (October 2017).</td>
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<tr>
<td>Strategic Vision Activity</td>
<td>Current Status and Recent Work</td>
<td>Planned Next Steps</td>
<td>Desired Outcome</td>
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<td>SV# 9: Develop policy approaches to revise the NAEP assessment subjects and schedule based on the nation’s evolving needs, the Board’s priorities, and NAEP funding</td>
<td>COSDAM presentation and discussion on initial considerations for combining assessments</td>
<td>Additional discussion planned for November 2018, with Board action on the NAEP Assessment Schedule tentatively scheduled for March 2019</td>
<td>Determine whether new assessment schedule should include any consolidated frameworks or coordinated administrations</td>
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<tr>
<td>Pending outcomes of stakeholder input (ADC activity), evaluate the technical implications of combining assessments, including the impact on scaling and trends</td>
<td>Full Board presentation and discussion on efficiencies in what and how to measure student knowledge and skills (March 2018)</td>
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<td>Small group discussions during the May 2018 Board meeting</td>
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<td>The upcoming August 2018 Board meeting includes a plenary session on the assessment schedule, focused on Social Studies</td>
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<td>SV# 10: Develop new approaches to measure the complex skills required for transition to postsecondary education and career</td>
<td>Several studies are ongoing (see activities under SV# 2)</td>
<td>Decide whether additional research should be pursued at grade 8 to learn more about the percentage of students “on track” to being academically prepared for college by the end of high school or whether additional research should be conducted with more recent administrations of NAEP and other tests</td>
<td>Statements about using NAEP as an indicator of academic preparedness for college continue to be defensible and to have appropriate validity evidence</td>
</tr>
<tr>
<td>Continue research to gather validity evidence for using 12th grade NAEP reading and math results to estimate the percentage of grade 12 students academically prepared for college</td>
<td>Per COSDAM discussion at August 2017 meeting, additional studies are on hold until at least November 2018 pending Board decision on how to move forward with findings from Ad hoc Committee on Measures of Postsecondary Preparedness</td>
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<td>Decide whether Board should make stronger statement and/or set “benchmarks” rather than using “plausible estimates”</td>
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National Assessment Governing Board
Reporting and Dissemination Committee

Friday, August 3, 2018
9:30 am – 12:00 pm

AGENDA

9:30 – 9:35 am Welcome
Rebecca Gagnon, Chair

9:35 – 9:45 am Follow-up from Contextual Variable Review
Laura LoGerfo, Assistant Director for Reporting and Analysis

9:45 – 10:30 am Considerations for Long-Term Trend
Rebecca Gagnon

10:30 – 11:15 am Charter School Data on NAEP
Arnold Goldstein, CRP, Inc.  
Attachment A

11:15 am – 12:00 pm Strategic Vision: Retrospective and Anticipatory
Stephaan Harris, Assistant Director for Communications
Laura LoGerfo  
Attachment B
Focused Reporting on NAEP: Charter Schools

This document describes CRP’s plan for reporting on important features of the nation’s charter schools. NAEP is the primary data source for this reporting, supplemented by a literature review and an interview with a charter school expert. The analyses will focus on the NAEP mathematics and reading assessments administered at the national, state, and select urban district levels in the 4th and 8th grades from 2002, when NAEP started to collect charter school information, to 2017. The work will describe the organizational characteristics of charter schools, the characteristics of their students, and charter school performance compared to non-charter public schools.

**Definition of Charter Schools**

The NAEP school administrator questionnaire includes a charter school supplement that addresses the various purposes for which charter schools are created and whether the school serves particular groups of students or focuses on a specific educational emphasis.

In the nation as a whole, over half the charter schools that include 4th grade had no particular focus, while 27 percent had a curricular focus, 15 percent were founded on an educational theory, and 7 percent were based on a moral philosophy. In Colorado, by contrast, 58 percent of charter schools had a specific educational theory and 18 percent a moral philosophy. In Utah, 81 percent were based on a particular educational theory.

In terms of legal organization, nationally 38 percent of charter schools that include a 4th grade were part of a local education agency (LEA), 26 percent were independent of an LEA, and 36 percent were in a separate LEA. In Alaska, Georgia, and Maryland, however, 100 percent of the charter schools were part of an LEA. In Michigan, 73 percent were independent from an LEA. And in Idaho, 83 percent were in separate LEAs.

Similar diversity is shown in the type of organization that granted the schools’ original charter: a school district, state board of education, postsecondary institution, state charter grantor, city or state board, or other entity.

**Characteristics of Charter Schools and Students**

The charter school report will describe the demographic characteristics of charter school students in comparison to non-charter school students. CRP will highlight states, and perhaps large urban school districts, in which these characteristics differ, to illustrate the diversity of charter schools throughout the nation. Demographic characteristics of students will include race/ethnicity,
eligibility for the National School Lunch Program (NSLP), and the schoolwide prevalence of students with disabilities and English language learners.

Nationally, 32 percent of charter school students in 8th grade were white, 27 percent were black, and 32 percent were Hispanic. In large cities, the race/ethnic composition of charter schools was quite different: 15 percent white, 42 percent black, and 34 percent Hispanic. This distribution also contrasts with non-charter schools in large cities: 21 percent white, 21 percent black, and 45 percent Hispanic.

Charter and non-charter schools in large cities did not differ in percent of students eligible for the National School Lunch Program—64 percent in charter schools and 65 percent in non-charter schools. They also had similar percentages of students with disabilities and English language learners.

**Academic Performance**

CRP will show 2017 NAEP reading and math scores for states with higher performance by charter schools as well as those with higher performance by non-charter schools to represent the wide variation in performance. Contextual data will indicate that charter schools may serve specific population groups or objectives that need to be considered when comparing charter and non-charter academic performance.

Nationally, 4th grade NAEP reading scores in charter schools have improved from 212 in 2003 to 222 in 2017 (non-charter schools: 217 to 221). The percent of students at or above Proficient has increased from 27 to 36 percent (non-charter schools: 30 to 35 percent). In mathematics at grade 8, charter schools improved from 268 in 2005 to 282 in 2017 (non-charter schools: 278 to 282). The percent at or above Proficient increased in charter schools from 21 percent to 33 percent (non-charter schools: 29 to 33 percent).

**Plans for Visual Presentation**

The following elements will be designed for posting on the Governing Board website and social media:

- Number of charter schools and enrollment trends, types of charter schools (part of LEA, independent of LEA, separate LEA), percent of charter schools in an organization that operates other charters, and whether they have a particular focus (curricular focus, educational theory, moral philosophy);
- Percent of students in charter schools and demographic characteristics, compared with non-charter school students; and
- Academic performance of charter school students (average scores and achievement levels), compared with non-charter school students.
<p>| Inform #1: Strengthen and expand partnerships by broadening stakeholders’ awareness of NAEP and facilitating their use of NAEP resources |
|---|---|---|---|---|---|
| 1. Develop and Sustain Partnerships // Identify What Partners Need to Expand Use and Utility of NAEP | Board staff | Meet with ongoing and new partners | Increased number of partners and meetings | Summer 2015 - ongoing | New Executive Director will meet with partners |
| Board staff; Communications contractor | Send newsletters to partners | Newsletters opened by recipients; Increased website traffic | October 2016 - ongoing | Higher open rates, fewer bounces |
| Communications contractor – Client Relationship Management tool (CRM) | Audit and maintain database of contacts | Contact lists of partners current and error free; Increased partnerships | October 2017 - ongoing | Weekly tracking of what posts elicit attention and shares |
| 2. Work with Partners to Increase Awareness and Use of NAEP | Board members; Board staff; NCES staff; Communications contractor | Submit proposals to annual meetings | Increased representation at events/meetings; Increased number of conference presentations | August 2016 - ongoing | Increases in partners retweeting our work through social media; Presented to NAESP, ConnCAN, and Reading Is Fundamental |
| 3. Focused Reporting of NAEP Results | Board staff; CRP contractor; Communications contractor | Four tasks that will produce content to disseminate through partners | Increased traffic to website and social media; Views of artifacts; Numbers of posts and re-posts | October 2016 - ongoing | New graphics introduced biweekly; TUDA artifacts posted in June |
| Board staff; Communications contractor | Produce quick graphics, videos, artifacts for dissemination | Traffic to web page; Views of artifacts; Number of posts and re-posts | January 2018 - ongoing | Graphics and videos based on 2017 data posted and underway |</p>
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<tr>
<th></th>
<th>Responsibility</th>
<th>Action</th>
<th>Measurable Outcomes</th>
<th>Start Date</th>
<th>Current Status</th>
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<tbody>
<tr>
<td>4</td>
<td>Highlight Contextual Data in Reporting</td>
<td>Board members; Board staff; NCES staff; Communications contractor; HumRRO technical support contract</td>
<td>Review contextual data for messaging / dissemination, including new indicators; Use contextual data in graphics, videos, toolkits</td>
<td>Ongoing</td>
<td>Follow-up artifacts from 2017 release will focus on contextual data; HumRRO now investigating what contextual variables related to NAEP scores from curated list</td>
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<td>Increased number of artifacts with contextual data; Increased number of partners posting and re-posting artifacts; Traffic to social media posts with NAEP contextual data</td>
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<td>5</td>
<td>Identify Opportunities to Promote Use of NAEP Data with Federal Datasets</td>
<td>Board members; Board staff; NCES staff</td>
<td>Determine what data would be feasible, useful, and of similar quality to NAEP to promote</td>
<td>August 2019</td>
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<td>Launch site with NAEP results and connections to other data; Traffic to website</td>
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<td>Board members; Board staff; NCES staff</td>
<td>Collaborate with COSDM about connecting NAEP with other data</td>
<td>March 2019</td>
<td>TBD</td>
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<td>Joint meeting of COSDM and R&amp;D to develop decisions to present to Board</td>
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<td>6</td>
<td>Learn from Reporting of International Assessments <em>(Also, SV #8)</em></td>
<td>Board members; Board staff; NCES staff; Communications contractor</td>
<td>Learn about international assessments</td>
<td>November 2017 Board meeting</td>
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### Strategic Vision – Activities for Reporting and Dissemination Committee

<table>
<thead>
<tr>
<th>Responsibility</th>
<th>Action</th>
<th>Measurable Outcomes</th>
<th>Start Date</th>
<th>Current Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board members; Board staff; NCES staff</td>
<td>Invite OECD staff to present on reporting approaches</td>
<td>Discussions about what practices to apply to NAEP</td>
<td>March 2019 (?)</td>
<td>Future R&amp;D meeting focused on international reporting</td>
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<td></td>
<td>Meet with NCES staff to consider crossover of reporting approaches</td>
<td>Board meeting plenary session re: feasible options; Possible incorporation of elements of international work in 2019 Nation’s Report Card</td>
<td>2019 (?)</td>
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**Inform #3: Expand the availability, utility, and use of NAEP resources, in part by creating new resources to inform education policy and practice**

7. **Add Meaning to NAEP Achievement Levels**
   - Technical support contract with HumRRO (COSDAM lead)
   - Use findings from HumRRO study to develop guides
   - Graphic and/or video instructing how to use and interpret achievement levels
   - October 2017 - ongoing
   - Met with COSDAM in May 2018 to discuss how to improve understanding and usefulness of achievement levels; R&D will contribute and review guide

8. **Research Effective Uses of NAEP**
   - Technical contract with HumRRO; Communications contractor
   - Learn where and how NAEP is used effectively
   - Report on best practices—where, what, under what conditions
   - October 2017 - ongoing
   - Underway
   - Develop graphics and/or videos to support correct interpretation of NAEP results
   - Review NAEP mentions in sampling of reports and in media; Fewer reports of mis-NAEPery compared to TBD baseline
<table>
<thead>
<tr>
<th></th>
<th>Strategic Vision – Activities for Reporting and Dissemination Committee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsibility</td>
<td>Action</td>
</tr>
<tr>
<td>9. Develop New Tools for Audiences</td>
<td>Board members; Board staff; NCES staff; Communications contractor</td>
</tr>
<tr>
<td>10. Identify More User-Friendly Approaches to Presenting NAEP Results</td>
<td>Board staff</td>
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<tr>
<td></td>
<td>Board members; Board staff; NCES staff; Communications contractor</td>
</tr>
<tr>
<td>11. Create “Brief Case” Studies</td>
<td>Board staff; Communications contractor</td>
</tr>
<tr>
<td>Responsibility</td>
<td>Action</td>
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<tr>
<td>Facilitate Teacher Preparation Program Toolkit to Increase Access and Use of NAEP by Teachers</td>
<td>Board staff; Communications contractor</td>
</tr>
<tr>
<td>Communications contractor</td>
<td>Support development of toolkit by partners</td>
</tr>
</tbody>
</table>

Inform #4: Promote sustained dissemination and use of NAEP information beyond Report Card releases with consideration for multiple audiences and ever-changing multi-media technologies...

Note: SV #4 permeates throughout the entire list of planned tasks and activities, so is not presented in separate rows.

Innovate #6: Continue improving the content, analysis, and reporting of NAEP contextual data by considering the questions’ relevance, sensitivity, and potential to provide meaningful context and insights for policy and practice

<table>
<thead>
<tr>
<th>Responsibility</th>
<th>Action</th>
<th>Measurable Outcomes</th>
<th>Start Date</th>
<th>Current Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review Contextual Variables</td>
<td>Board members; Board staff</td>
<td>Review contextual variables to ensure relevance and importance</td>
<td>Ongoing</td>
<td>Reviewed core contextual items at May 2018 R&amp;D meeting; Feedback registered and answered</td>
</tr>
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</table>
### Upcoming NAEP Reports

<table>
<thead>
<tr>
<th>Study</th>
<th>Release Date</th>
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<tbody>
<tr>
<td>2015 Student Questionnaires: Computer Access and Usage in Mathematics and Reading</td>
<td>July 2018</td>
</tr>
<tr>
<td>2015 National Indian Education Study: A Closer Look</td>
<td>July 2018</td>
</tr>
<tr>
<td>2015 Student Questionnaires: Classroom Instruction for Mathematics, Reading, and Science</td>
<td>August 2018</td>
</tr>
</tbody>
</table>
NAEP MATHEMATICS FRAMEWORK UPDATE

Since its creation by Congress in 1988, the National Assessment Governing Board oversees and sets policy for NAEP in several congressionally-mandated areas, which include determining content to be assessed in NAEP. For each NAEP assessment, the Board conducts a framework development process resulting in a NAEP framework that outlines what is to be measured and how it will be measured. The process also produces test specifications with more detailed guidance for NCES assessment development, as well as recommendations for contextual variables to help stakeholders interpret student achievement in the subject area. The Governing Board has developed assessment frameworks and specifications in 11 subject areas.

In March 2018, the Governing Board adopted a revised Framework Development Policy. The revised policy continues the Board’s tradition of conducting a comprehensive, inclusive, and deliberative process to determine the content and format of all NAEP assessments and adds details to address Board processes for framework review and updating.

In May 2018, the Assessment Development Committee (ADC) initiated a review of the NAEP Mathematics Framework, which was last updated in 2001. The Board anticipates updates to several frameworks to support enhanced digital-based assessment. In accordance with the Board’s Framework Development Policy, the ADC review included papers and discussions with an array of mathematics educators and experts, and focused on the relevance of the current NAEP Mathematics Framework.

Development and updates of NAEP assessment frameworks typically include reviews of recent research on teaching and learning, changes in state and local standards and assessments, and other factors. To inform its broader discussions about the extent to which the NAEP Mathematics Framework needs revisions, the Board decided it would be prudent to gather and analyze mathematics curricular standards from all states. The ADC NAEP Mathematics Framework review included a comprehensive analysis of how the NAEP Mathematics Framework for grades 4 and 8 relates to mathematics content standards used across the country.

ADC Chair Shannon Garrison will introduce and lead discussion on the Committee’s recommendation for the NAEP Mathematics Framework. A draft of the recommendation is attached, along with the Governing Board Framework Development Policy. The Committee’s recommendation is slated for full Board action. It will serve as a springboard for the update process to begin in Fall 2018, when the Board convenes Visioning and Development Panels to draft detailed framework update recommendations.
The National Assessment Governing Board Charge to the Visioning and Development Panels
For the 2025 National Assessment of Educational Progress (NAEP) Mathematics Framework

Whereas, The Nation's Report Card—also known as the National Assessment of Educational Progress (NAEP)—is mandated by Congress to conduct national assessments and report data on student academic achievement and trends in public and private elementary schools and secondary schools, and is prohibited from using any assessment to “evaluate individual students or teachers” or “to establish, require, or influence the standards, assessments, curriculum, … or instructional practices of states or local education agencies” (Public Law 107-279);

Whereas, Congress specifically assigned the National Assessment Governing Board responsibilities to “develop assessment objectives consistent with the requirements of this [law] and test specifications that produce an assessment that is valid and reliable, and are based on relevant widely accepted professional standards”;

Whereas, the Governing Board’s Strategic Vision adopted in November 2016 established that the Board will, “develop new approaches to update NAEP subject area frameworks to support the Board's responsibility to measure evolving expectations for students, while maintaining rigorous methods that support reporting student achievement trends”;

Whereas, the Governing Board established in its Framework Development Policy that the Board shall conduct “a comprehensive, inclusive, and deliberative process” to determine and update the content and format of all NAEP assessments;

Whereas, in accordance with the Governing Board’s Framework Development Policy, the Board’s Assessment Development Committee conducted a review of the current NAEP Mathematics Framework, which included papers from leading mathematics educators and a comprehensive analysis of current mathematics standards in all 50 states, the District of Columbia, and the Department of Defense Education Activity;

Whereas, based on the review of the NAEP Mathematics Framework conducted by the Assessment Development Committee, the Committee concludes that much of the framework remains relevant, observes that digital platforms and new research encourage innovation in the content and format of future NAEP Mathematics Assessments, and recommends that the Board update the NAEP Mathematics Framework last updated in 2001 “to be informed by a broad, balanced, and inclusive set of factors” balancing “current curricula and instruction, research regarding cognitive development and instruction, and the nation’s future needs and desirable levels of achievement,” in accordance with the Framework Development Policy;
Therefore,

- The National Assessment Governing Board staff, with appropriate contractor support and oversight by the Governing Board’s Assessment Development Committee, shall conduct a framework update by establishing a Visioning Panel with a subset of members continuing as the Development Panel, in accordance with the Governing Board Framework Development Policy;

- All processes and procedures identified in the Governing Board Framework Development Policy shall be followed;

- The Visioning and Development Panels will recommend to the Board how best to balance necessary changes in the NAEP Mathematics Framework at grades 4, 8, and 12, with the Board’s desire for stable reporting of student achievement trends and assessment of a broad range of knowledge and skills, so as to maximize the value of NAEP to the nation; and the Panels are also tasked with considering opportunities to extend the depth of measurement and reporting given the affordances of digital based assessment;

- The update process shall result in three documents: a recommended framework, assessment and item specifications, and recommendations for contextual variables that relate to student achievement in mathematics;

- At the conclusion of the NAEP Mathematics Framework update process, the National Assessment Governing Board shall review recommendations from the Visioning and Development Panels, and take final action on recommended updates to the mathematics framework, assessment specifications, and subject-specific contextual variables; and

- The framework update adopted by the Board will guide development of the 2025 NAEP Mathematics Assessment.
National Assessment Governing Board

Framework Development

Policy Statement

It is the policy of the National Assessment Governing Board to conduct a comprehensive, inclusive, and deliberative process to determine and update the content and format of all assessments under the National Assessment of Educational Progress (NAEP). The primary result of this process shall be an assessment framework (hereafter, “framework”) with objectives to guide development of NAEP assessments for students in grades 4, 8, and 12 that are valid, reliable, and reflective of widely accepted professional standards.

The Governing Board, through its Assessment Development Committee, shall monitor the framework development and update processes to ensure that the final Governing Board-adopted framework, specifications, contextual variables documents, and their development processes comply with all principles and guidelines of the Governing Board Framework Development Policy.

Introduction

Since its creation by Congress in 1988, the Governing Board has been responsible for determining the content and format of all NAEP assessments. The Governing Board has carried out this important statutory responsibility by engaging a broad spectrum of stakeholders in developing recommendations for the knowledge and skills NAEP should assess in various grades and subject areas. From this comprehensive process, the Governing Board develops a framework to outline the content and format for each NAEP assessment at grades 4, 8, and 12. Development of a framework for a new assessment is guided by the schedule of NAEP assessments adopted by the Governing Board.

Under provisions of the National Assessment of Educational Progress Authorization Act of 2002 (P.L. 107-279), Congress authorized the Governing Board to continue its mandate for determining the content and format of valid and reliable assessments based on widely accepted professional testing standards and active participation of stakeholders. This mandate
aligns with the purpose of NAEP, which is to provide fair and accurate measurement of student academic achievement.

Given this mandate, the Governing Board must ensure that the highest standards of test development are employed in framework development to support the validity of educational inferences made using NAEP data. The Governing Board Item Development Policy details principles and guidelines for NAEP assessment items, and the Governing Board has final authority on the appropriateness of all assessment items.

By law, NAEP assessments shall not evaluate personal beliefs or publicly disclose personally identifiable information, and NAEP assessment items shall be secular, neutral, and non-ideological and free from racial, cultural, gender, or regional bias.

To develop the recommended framework for Board adoption, the Governing Board convenes stakeholders to identify the content and design for each NAEP assessment.

In this process, involved stakeholders include:

Teachers
Curriculum Specialists
Content Experts
Assessment Specialists
State Administrators
Local School Administrators
Policymakers
Business Representatives
Parents
Users of Assessment Data
Researchers and Technical Experts
Members of the Public

This Policy complies with the National Assessment of Educational Progress Authorization Act of 2002 (P.L. 107-279) and the documents listed below which express widely accepted technical and professional standards for test development. These standards reflect the agreement of recognized experts in the field, as well as the policy positions of major professional and technical associations concerned with educational testing. A procedures manual shall provide additional detail about how this Policy is implemented.


Principles for Framework Development

Principle 1: Elements of Frameworks

Principle 2: Development and Update Process

Principle 3: Framework Review

Principle 4: Resources for the Process

Principle 5: Elements of Specifications

Principle 6: Role of the Governing Board
Guidelines for the Principles

Principle 1:  Elements of Frameworks

The Governing Board is responsible for developing a framework for each NAEP assessment. The framework shall define the scope of the domain to be measured by delineating the knowledge and skills to be tested at each grade, the format of the NAEP assessment, and the achievement levels.

Guidelines

a) The framework shall determine the extent of the domain and the scope of the construct to be measured for each grade level in a NAEP assessment. The framework shall provide information to the public and test developers on three key aspects of the assessment:

   • What is to be measured, including definitions of the constructs being assessed and reported upon and descriptions of the purpose(s) of the assessment;
   • How that domain of content is most appropriately measured in a large-scale assessment, including the format requirements of the items and the assessment, the content and skills to be tested at each grade, sample items for each grade to be tested, the weighting of the item pool in terms of content and cognitive process dimensions, and any additional requirements for the assessment administration unique to a given subject area, such as provision of ancillary materials and uses of technology; and
   • How much of the content domain, in terms of knowledge and skills, should students know and be able to do at the basic, proficient, and advanced levels in achievement level descriptions for each grade to be tested. The achievement level descriptions shall be based on the Governing Board’s policy definitions for basic, proficient, and advanced achievement and shall incorporate the content and process dimensions of the assessment at each grade.

b) The framework shall determine the construction of items for each NAEP assessment. The achievement level descriptions in each framework shall also be used in the level-setting process.

c) The framework shall focus on important, measurable indicators of student achievement to inform the nation about what students know and are able to do without endorsing or advocating a particular instructional approach.

d) Content coverage in each subject and grade shall be broad, inclusive of content valued by the public as important to measure, and reflect high aspirations for student achievement. (See Principle 4 for more detail on the factors balanced in content coverage.)

e) Frameworks shall be written to be clear and accessible to educators and the general public. The framework shall contain sufficient information to inform all stakeholders about the nature and scope of the given assessment. Following Governing Board adoption, the framework shall be widely disseminated.
**Principle 2: Development and Update Process**

The Governing Board shall develop and update frameworks through a comprehensive, inclusive, and deliberative process that involves active participation of stakeholders.

**Guidelines**

a) In accordance with the NAEP statute, framework development and update processes shall be fair and open through active participation of stakeholders representing all major constituents in the various NAEP audiences, as listed in the introduction above.

- *Framework panels* shall reflect diversity in terms of gender, race/ethnicity, region of the country, and viewpoints regarding the content of the assessment under development.
- *Public comment* shall be sought from various segments of the population to reflect many different views, as well as those employed in the specific content area under consideration.

b) Framework development and update processes shall be executed primarily via two panels: a Visioning Panel with a subset of members continuing as the Development Panel. This process shall result in three documents: a recommended framework, assessment and item specifications, and recommendations for contextual variables that relate to the subject being assessed. For each framework,

- *The Framework Visioning Panel* shall formulate high-level guidance about the state of the field to inform the process, providing these in the form of guidelines. The major part of the Visioning Panel work will be at the beginning to provide initial guidance for developing a recommended framework. The Visioning Panel shall be comprised of the stakeholders referenced in the introduction above. At least 20 percent of this panel shall have classroom teaching experience in the subject areas under consideration. This panel may include up to 30 members, with additional members as needed.

- *The Framework Development Panel* shall develop drafts of the three project documents and engage in the detailed deliberations about how issues outlined in the Visioning Panel discussion should be reflected in a recommended framework. As a subset of the Visioning Panel, the Development Panel shall have a proportionally higher representation of content experts and educators, whose expertise collectively addresses all grade levels designated for the assessment under development. Educators shall be drawn from schools across the nation, including individuals who work with students from high-poverty and low-performing schools, as well as public and private schools. This panel may include up to 15 members, with additional members as needed.

c) In addition to a recommended framework, the framework development or update process shall result in assessment and item specifications (see Principle 5) and recommendations on
related contextual variables to be collected from students, teachers, and school administrators. Recommendations shall take into account burden, cost, quality of the data to be obtained, and other factors. (See the Governing Board Policy on Collecting and Reporting Contextual Data.)

d) The scope and size of a framework development project shall determine the size of framework panels and the number of panel meetings needed. A framework update project may require smaller panels and fewer meetings if a smaller scope is anticipated for recommended revisions. Each project shall begin with a review of major issues in the content area. For a framework update, the project shall also begin with an extensive review of the current framework, and the Visioning Panel shall discuss the potential risk of changing frameworks to trends and assessment of educational progress. (See 4.b).

e) Framework development and updating shall be comprehensive in approach and conducted in an environment that is open, balanced, and even-handed. Panels shall consider all viewpoints and debate all pertinent issues in formulating the content and design of a NAEP assessment, including findings from research. Reference materials shall represent multiple views.

f) For each project, protocols shall be established to support panel deliberations and to develop a unified proposal for the content and design of the assessment. Written summaries of all hearings, forums, surveys, and panel meetings shall be made available in a timely manner to inform deliberations.

**Principle 3: Framework Review**

*Reviews of existing frameworks shall determine whether an update is needed to continue valid and reliable measurement of the content and cognitive processes reflected in evolving expectations of students.*

**Guidelines**

a) At least once every 10 years, the Governing Board, through its Assessment Development Committee (ADC), shall review the relevance of assessments and their underlying frameworks. In the review, the ADC shall solicit input from experts to determine if changes are warranted, making clear the potential risk of changing frameworks to trends and assessment of educational progress. The Board may decide based on the input that the framework does not require revision, or that the framework may require minor or major updates. To initiate updates, the ADC shall prepare a recommendation for full Board approval. Minor updates include clarifications or corrections that do not affect the construct defined for the assessment. Major updates shall include the convening of a Visioning Panel (see Principle 2). Framework revisions shall also be subject to full Board approval.

b) Within the 10 year period for an ADC review, major changes in the states’ or nation’s educational system may occur that relate to one or more NAEP frameworks. In this instance, the ADC will determine whether and how changing conditions warrant an update.
and the Governing Board via recommendation may convene a Visioning Panel to revise or replace the framework. Before framework panels are convened, special research and analysis may also be commissioned to inform the updates to be considered.

c) If the Visioning Panel recommends major updates, then a subset of panel members shall continue as the Development Panel to develop the draft framework and assessment and item specifications, in accordance with Principle 2. Regular reports will be provided to the ADC and the recommended framework update shall be subject to full Board approval.

d) When a framework update is conducted, framework Visioning and Development Panel recommendations shall describe the extent to which adjustments in the achievement level descriptors (see 1.a) and contextual variables (see 2.c) are needed. (See the Governing Board Policy on Achievement Levels and the Governing Board Policy on Collecting and Reporting Contextual Data for additional details.)

**Principle 4: Resources for the Process**

Framework development and update processes shall take into account state and local curricula and assessments, widely accepted professional standards, exemplary research, international standards and assessments, and other pertinent factors and information.

**Guidelines**

a) The NAEP framework development and update processes shall be informed by a broad, balanced, and inclusive set of factors. The framework shall reflect current curricula and instruction, research regarding cognitive development and instruction, and the nation’s future needs and desirable levels of achievement. This delicate balance between “what is” and “what should be” is at the core of the NAEP framework development process.

b) An initial compilation of resources shall summarize relevant research, advantages and disadvantages of the latest developments, and trends in state standards and assessments for the content area. This compilation shall also summarize how stakeholders have used previous NAEP student achievement trends in the assessment area. The compilation may include public comment. Using this compilation as a springboard, framework panel deliberations shall begin by thoroughly identifying major policy and assessment issues in the content area.

c) The framework panels shall also consider a wide variety of resources as deliberations proceed, including but not limited to curriculum guides and assessments developed by states and local districts, widely accepted professional standards, scientific research, other types of research studies in the literature, key reports having significant national and international interest, international standards and assessments, other assessment instruments in the content area, and prior NAEP frameworks, if available.

d) Technical experts shall be involved to uphold the highest technical standards for development of the NAEP framework and specifications. As a resource to the framework
panels, these experts shall respond to technical issues raised during panel deliberations.

e) In balancing the relative importance of various sources of information, framework panels shall consider direction from the Governing Board, the role and purpose of NAEP in informing the public about student achievement, the legislative parameters for NAEP, constraints of a large-scale assessment, technical assessment standards, issues of burden and cost-effectiveness in designing the assessment, and other factors unique to the content area.

**Principle 5: Elements of Specifications**

The specifications document shall be developed for use by NCES as the blueprint for constructing the NAEP assessment and items.

**Guidelines**

a) The assessment and item specifications shall produce an assessment that is valid, reliable, and based on relevant widely accepted professional standards. The specifications shall also be consistent with Governing Board policies regarding NAEP design, such as groupings of items, test administration conditions, and accommodations for students with disabilities and English language learners (see the Governing Board Policy on NAEP Testing and Reporting on Students with Disabilities and English Language Learners). The specifications shall be reviewed by technical experts involved in the process, prior to submission to the Governing Board.

b) The primary audience for the specifications, or assessment blueprint, shall be NCES and the contractor(s) responsible for developing the assessment and the test questions.

c) The specifications shall evolve from the framework and shall be written in sufficient detail so that item writers can develop high-quality questions based on the framework objectives for grades 4, 8, and 12, where applicable. The specifications shall include, but not be limited to detailed descriptions of:

- the content and process dimensions, including the weighting of those dimensions in the pool of questions at each grade;
- types of items;
- guidelines for stimulus material;
- types of response formats;
- scoring procedures;
- achievement level descriptions;
- administration conditions;
- ancillary or additional materials, if any;
- considerations for special populations;
- sample items, including a substantial number and range of sample items with scoring guidelines for each grade level; and
- any unique requirements for the given assessment.

d) Special studies, if any, to be conducted as part of the assessment shall be described in the
specifications. This description shall provide an overview of the purpose and rationale for the study, the nature of the student sample(s), and a discussion of the instrument and administration procedures.

**Principle 6: Role of the Governing Board**

The Governing Board, through its Assessment Development Committee, shall monitor all framework development and updates. The result of this process shall be recommendations for Governing Board action in the form of three key documents: the framework; assessment and item specifications; and contextual variables that relate to the subject being assessed.

**Guidelines**

a) The Assessment Development Committee (ADC) shall be responsible for monitoring framework development and updates that result in recommendations to the Governing Board on the content and format of each NAEP assessment. The ADC will provide direction to the framework panels, via Governing Board staff. This guidance shall ensure compliance with the NAEP law, Governing Board policies, Department of Education and government-wide regulations, and requirements of the contract(s) used to implement the framework project.

b) When a framework Visioning Panel is to be convened, the ADC shall develop a charge for the panel, and the charge shall be subject to full Board approval. The charge will outline any special considerations for an assessment area.

c) The ADC shall receive regular reports on the progress of framework development and updates.

d) In initiating a framework update, the Governing Board shall balance needs for stable reporting of student achievement trends. Regarding when and how an adopted framework update will be implemented, the Board may consider the NAEP Assessment Schedule, cost and technical issues, and research and innovations to support possibilities for continuous trend reporting.

e) At the conclusion of the framework development or update process, the Governing Board shall take final action on the recommended framework, specifications, and contextual variables. The Governing Board shall make the final decision on the content and format of NAEP assessments.

f) Following adoption by the Governing Board, the final framework, specifications, and contextual variables shall be provided to the National Center for Education Statistics (NCES). These documents, which include the achievement level descriptions for Basic, Proficient, and Advanced performance definitions, are provided to NCES to guide development of NAEP test questions and questionnaires.
At the August Board meeting, the Board will engage in small group discussions about the potential recommendations of the Ad Hoc Committee on Measures of Postsecondary Preparedness, which are included in the attached working draft.

The small groups will consider the following questions:

1. What is missing from the ad hoc committee’s list of potential recommendations?
2. What are the opportunities and risks of pursuing these potential recommendations?
3. What is your guidance to the ad hoc committee, as it develops its final recommendations to the Board for the November meeting?

Following the small group discussion on Friday, August 3, the Board will have multiple opportunities to provide their feedback during the August Board meeting. There are 30-minute plenary sessions on both Friday, August 3 and Saturday, August 4 for full Board discussion.

Note the ad hoc committee is expected to discuss and refine the attached draft during its meeting on Thursday, August 2. Therefore, the exact wording or list of potential recommendations that the full Board discusses on Friday, August 3 may change.
Ad Hoc Committee on Measures of Postsecondary Preparedness
Potential Recommendations: A Working Draft

This initial working draft reflects the deliberations of the Ad Hoc Committee on Measures of Postsecondary Preparedness (the Committee, or we) thus far in pursuit of its charge. This draft should be challenged and improved, as the Committee members debate the potential recommendations and prepares the Committee’s final report to the Board.

Background and Charge

In August 2017, the National Assessment Governing Board commissioned the Ad Hoc Committee on Measures of Postsecondary Preparedness to review existing research, collect expert testimony, and prepare recommendations for the National Assessment Governing Board’s consideration to achieve Strategic Vision priority #10, which states, “Develop new approaches to measure the complex skills required for transition to postsecondary education and career.”

At the broadest level of policy, The Nation’s Report Card, also known as the National Assessment of Educational Progress (NAEP), provides a platform to change the nation’s valuation of what is important in student learning and create a paradigm shift in America’s education system about what matters and gets measured. The Governing Board has the opportunity to determine if there is a compelling national interest that warrants changes in NAEP to signal such a shift.

Exploratory Approach

To address its charge, the Committee considered the trends that most likely will shape the future, and thereby determine, to a great extent, the skills and knowledge students will need. Through meetings with expert panels and commissioning focused research papers, the Committee pursued the answers to the following three research questions:

1. Work of the future (readiness for what?): What are we, as a nation, preparing students for? Changes in the workplace are not only inevitable, but are accelerating, driven by technological advances, demographic shifts, and social changes. The growing prevalence of self-driving vehicles, the widespread use of robots, and advances in artificial intelligence are signs of existing innovations poised to dramatically change the jobs available to young Americans. Young Americans hold different expectations about work, and the ways in which people connect and communicate with each other are also changing. How will the workplace change given these trends and emerging
technologies? How will our communities change given these trends and how will the nature, content, and delivery of education opportunities change?

2. **Requisite skills for future work (skills for what?):** With a better understanding of the future workplace, we can better understand the skills that young Americans will need to succeed. But should we consider more than just workplace skills? What about skills like citizenship and financial literacy? How do these skills factor into the question of measuring postsecondary preparedness?

3. **Measures of preparedness (measures for what?):** Finally, what metrics exist to capture the skills that young Americans will need in the workplace, for their roles in their communities, and in their personal lives? Can such metrics include data from sources in addition to or instead of assessments? Additionally, what metrics do not exist but are needed to help the nation better understand if students are prepared as they exit high school, regardless of which paths they take—through college or other postsecondary learning experiences or directly to the workforce?

**Beliefs and Values**

Based upon its investigations to answer the three research questions, the Committee identified the following beliefs and values that will guide its final recommendation(s) to the Board:

- We believe that high school graduation remains an important transition in a young person's life, and that the nation needs to know if the culmination of PK-12 schooling and other experiences have prepared students for life following high school.

- We value the multiple pathways that young Americans take following high school, and challenge the notion that all high school graduates must immediately enroll in a four-year college to be successful in life.

- We believe that academic knowledge remains critical for students’ success, and that other crosscutting cognitive skills such as creativity and problem-solving are increasingly important for postsecondary preparedness.

- We confirm that a comprehensive measure of the degree to which young Americans are prepared for life after high school, regardless of the pathway they pursue, does not currently exist.

- We recognize that in the United States, education policy formulation and implementation remain the responsibilities of states. Therefore, whatever measures are established to document students’ postsecondary preparedness should be available not
only as a national measure but also as a measure of each state's progress in preparing young people for life after high school.

- As the agency established by the United States Congress to set policy for The Nation's Report Card, we believe it is the National Assessment Governing Board's responsibility, in partnership with the National Center for Education Statistics (NCES), and stakeholders, to identify thoughtful and meaningful approaches to providing the American public with measures that indicate how we as a nation are preparing America’s youth for their lives following high school.

**NAEP’s Assets**

By law NAEP must remain a low-stakes assessment with generalized results and is prohibited from gathering data in a way that could generate individual school or student scores. Thus, any reports to the American public on measures of postsecondary preparedness will be provided at the national, state level, and Trial Urban District Assessment (TUDA) level, assuming sufficient funding and the voluntary participation of states and TUDA districts. These requirements protect NAEP results against misuse and enable the Governing Board to engage in groundbreaking work in reporting on postsecondary preparedness.

NAEP has a portfolio of established measures, which have the potential to provide critical indicators of postsecondary preparedness. These include:

- **NAEP Frameworks & Assessments** – NAEP frameworks and assessments can be used to determine 12th grade student knowledge and skills in areas including: reading, mathematics, science, writing, civics, U.S. history, geography, economics, technology and engineering literacy, and the arts.

- **NAEP’s High School Transcript Study** – NAEP’s High School Transcript Study collects a variety of measures which could be utilized in a report on postsecondary preparedness.

- **NAEP Student, Teacher, and Principal Surveys** – NAEP has a long history of collecting information from students and teachers and reporting that information alongside NAEP assessment results to provide context about students’ learning opportunities, school climates, teachers’ experiences, and related characteristics to understand if, how, and why those data correlate with student achievement.

In addition, the Governing Board may consider creating new NAEP measures and/or incorporating non-NAEP data sources to populate a more complete report card on postsecondary preparedness (for example, other NCES survey data, data collected by other federal or state agencies, etc).
Developing Potential Recommendations

The Committee’s conversations to date have focused on its desire to contribute to the nation’s understanding of postsecondary preparedness, but more discussion is needed on what the Governing Board and NCES could and should pursue. Regardless of the ultimate claim that NAEP would make or the measures it would use, the Governing Board needs to identify the critical constructs that define postsecondary preparedness. This leads to the following potential recommendation:

Draft Recommendation #1: The Governing Board should create a new NAEP framework that identifies the comprehensive set of knowledge and skills necessary to indicate postsecondary preparedness for any pathway after high school.

Presuming the Committee recommends the creation of a new postsecondary preparedness framework, the Governing Board and NCES would collaborate in conducting the necessary research about what measures exist within NAEP or beyond NAEP and what measures would need to be developed for that framework. Based on the data available, a preparedness framework most likely would be based on a system of indicators derived from multiple sources. In recommending the Governing Board engage in further work to report on postsecondary preparedness indicators, the Committee should consider what, ultimately and realistically, its desired report card would look like. The Committee’s preferences will shape the scope of its second recommendation, which might include one or more of the options listed below in #2 A-E.

Draft Recommendation #2: The Governing Board should commit, to the extent that it can, given its statutory authority and what is technically defensible, to measure and report on the postsecondary preparedness of students in grade 12 by utilizing one or more of the following approach(es):

A. Align Existing NAEP Assessments with Postsecondary Preparedness Indicators: As NAEP frameworks and test items are revised, the Board and NCES could shift the knowledge and skills measured within each subject assessment to better align with the constructs identified in the NAEP Postsecondary Preparedness Framework.

B. Enhance and Elevate NAEP’s Contextual Variables: Within the context of existing NAEP assessments, develop and include contextual questions that capture dimensions of preparedness and contribute to changing the national narrative on what is important in student achievement by increasing the focus on contextual variables in the initial reporting of NAEP results.

C. Develop a New NAEP Postsecondary Preparedness Assessment: Develop a new voluntary NAEP assessment for postsecondary preparedness knowledge and skills
that could be offered at grade 12 (and possibly earlier) at the national, state, and TUDA levels.

D. **Create a New NAEP Report Card Utilizing Extant NAEP Measures**: Design a new NAEP Report Card that utilizes existing measures across NAEP, including assessment data, contextual variables, and the High School Transcript Study to issue a report to the nation with a more complete analysis of postsecondary preparedness measures.

E. **Serve as a Clearinghouse of Postsecondary Preparedness Indicators using NAEP and External Data Sources**: Broker data from various sources beyond NAEP to capture a wider range of achievement measures that are more reflective of, and customizable to, students’ learning pathways, by reporting on industry-recognized credentials, workplace learning experiences, apprenticeships, etc.

**What are the challenges?**

As we consider what our recommendations to the Governing Board should be, we should give due consideration to the challenges in pursuing this work. Endeavoring to define and measure postsecondary preparedness in a way that encompasses skills needed for both college and career marks a dramatic departure from how the Governing Board has approached this issue in the past.

In deciding what and how NAEP might report on postsecondary preparedness, the Board must conduct a review of our statutory authority. The Board should give credence to the language we use to describe those skills and guard against any negative connotations that may be associated with the terms “soft,” “basic,” and “non-cognitive” skills. And while some may debate the worthiness of including those types of skills more prominently within NAEP, we note that OECD has made substantial use of these types of variables with great acceptance and demand for them. While the prohibition against NAEP providing individual student results limits the usability of the data, it also creates the critical low-stakes environment for the Governing Board to pioneer new indicators of student success.
National Assessment Governing Board
Nominations Committee

CLOSED

August 4, 2018
7:30 – 8:15 am

AGENDA

7:30 – 7:35 am  Welcome and Agenda Overview
Fielding Rolston, Chair

7:35 – 7:40 am  Update on Nominations for Board Terms Beginning on
October 1, 2018
Lisa Stooksberry

7:40 – 7:50 am  Discussion: Board Terms Beginning on October 1, 2019
Committee Members

7:50 – 8:10 am  Discussion: Draft Nominations Procedures Manual
Committee Members

8:10 – 8:15 am  Next steps
Fielding Rolston

8:15 am  Adjourn
Setting the NAEP Assessment Schedule is one of the Governing Board’s most important statutory responsibilities. Historically, the Governing Board has amended the NAEP Assessment Schedule to reflect legislative changes to NAEP’s authorization, new opportunities, and evolving expectations in what students should know and be able to do. According to the Governing Board’s General Policy on Conducting and Reporting NAEP, the Board “periodically establishes a dependable, publicly announced assessment schedule of at least ten years in scope. The schedule specifies the subject or topic (e.g., High School Transcript Study), grades, ages, assessment year, and sampling levels (i.e., national, state, TUDA) for each assessment.” The current Schedule of Assessments (attached) was approved in November 2015 and extends through 2024.

The Board’s Strategic Vision includes a priority to “Develop policy approaches to revise the NAEP assessment subjects and schedule based on the nation’s evolving needs, the Board’s priorities, and NAEP funding” (SV #9). To begin pursuing this strategic priority, Governing Board members engaged in small group and plenary discussions on this topic during several Board meetings over the past year. These discussions culminated in the adoption of a Resolution on Board Priorities for the NAEP Assessment Schedule (attached) at the March 2018 Board meeting.

During the May 2018 Board meeting, Governing Board members engaged in small group discussions to react to potential alternatives for implementing the assessment schedule priorities. There was general agreement that it is a priority to increase the availability of state and TUDA data for Reading, Mathematics, Science, and Writing. There was no consensus, however, on the best approach to the Social Studies assessments.

Currently there are separate frameworks, administrations, and reports for U.S. history, civics, geography, and economics. The NAEP Civics Framework has been in place since the 1998 assessment, while the NAEP Geography and U.S. History Frameworks have been in place since 1994 — with U.S. History undergoing a minor update in 2006. These three assessments are conducted every four years and have always been assessed concurrently. The NAEP Civics, Geography, and U.S. History Assessments were last assessed in 2018. The NAEP Economics Framework, which addresses grade 12 only, has been in place since its first assessment in 2006. The NAEP Economics Assessment has been conducted at different intervals and was last administered in 2012. The ADC has been discussing the need for updates to the frameworks.

On Saturday morning, August 4th, Sharyn Rosenberg of the Governing Board staff and Eunice Greer of the National Center for Education Statistics will present several potential approaches to the assessment of U.S. history, civics, geography, and economics. Relative benefits and costs of each approach will be discussed, including potential implications for trends, achievement levels, and reporting.
Whereas, The Nation’s Report Card—also known as the National Assessment of Educational Progress (NAEP)—is mandated by Congress to conduct a national assessment and report data on student academic achievement and trends in public and private elementary schools and secondary schools (P.L. 107-279);

Whereas, the NAEP Authorization Act requires that NAEP be administered in public and private schools in reading and mathematics at least every 2 years in grades 4 and 8 and every 4 years in grade 12 and conduct the Long-Term Trend assessment in reading and mathematics for ages 9, 13, and 17;

Whereas, the NAEP Authorization Act specifies that beyond the requirements listed above, to the extent time and resources allow, NAEP shall assess and report achievement trends in additional subjects in grades 4, 8, and 12;

Whereas, the Every Student Succeeds Act mandates that states participate in the biennial reading and mathematics NAEP assessments in grades 4 and 8;

Whereas, Congress supported the establishment and expansion of the NAEP Trial Urban District Assessment (TUDA) to provide NAEP results for select large urban districts;

Whereas, NAEP provides national, state, and local policymakers and practitioners with consistent, external, independent measures of student achievement through which results across education systems can be compared at points in time and over time;

Whereas, the National Assessment Governing Board and the National Center of Education Statistics (NCES) continuously work to enhance NAEP’s form (e.g. transitioning to digital-based assessments) and content (e.g. the Technology and Engineering Literacy assessment) to reflect the modern expectations of what students know and can do;

Whereas, Congress authorized the National Assessment Governing Board to determine the NAEP subjects to be assessed;

Whereas, it is the National Assessment Governing Board’s policy, in consultation with NCES, to periodically establish a dependable, publicly announced NAEP Schedule of Assessments spanning at least ten years, and specifying the subjects, grades, ages, assessment years, sampling levels (e.g., national, state, TUDA), and introduction of new and revised frameworks for each assessment;

Whereas, on November 18, 2016 the National Assessment Governing Board unanimously adopted its Strategic Vision which included a priority to “Develop policy approaches to revise the NAEP assessment subjects and schedule based on the nation’s evolving needs, the Board priorities, and NAEP funding”;

Approved March 3, 2018
Therefore, as the National Assessment Governing Board anticipates extending the NAEP Schedule of Assessments into the future, it will uphold all of the aforementioned requirements and make decisions informed by each of the following priorities to ensure NAEP results are impactful and policy-relevant:

- **Utility** – include more voluntary state and Trial Urban District Assessments and continue to align the schedule of NAEP administrations with international assessments in the same subjects to enable actionable comparisons of districts, states, and other nations;

- **Frequency** – commit to assess subjects other than reading and mathematics at least every 4 years to provide additional measures of student academic progress at regular intervals; and

- **Efficiency** – find cost-effective ways to administer NAEP while to the degree possible maintaining a breadth of subjects on the schedule in order to continue reporting progress in student achievement;

Furthermore, the National Assessment Governing Board recognizes that any change to the NAEP Schedule of Assessments requires consideration of the fiscal, technical, and operational implications.
Schedule Information by Subject

Reading
- NAEP legislation specifies every 2 years at grades 4 and 8 for nation and states; NCLB/ESSA requires states to partake
- NAEP legislation specifies every 4 years at grade 12 for nation
- Administration has included voluntary TUDAs for grades 4 and 8 since 2002
- Administered at national level only for grade 12, and for 11-13 states voluntarily participated in 2009 and 2013
- Grade 12 assessment used to estimate % of students academically prepared for college
- Current trend lines begin in 1992
- Administration coincides with PIRLS (grade 4) once every 10 years

Math
- NAEP legislation specifies every 2 years at grades 4 and 8 for nation and states; NCLB/ESSA requires states to partake
- NAEP legislation specifies every 4 years at grade 12 for nation
- Administration has included voluntary TUDAs for grades 4 and 8 since 2003
- Administered at national level only for grade 12, and for 11-13 states voluntarily participated in 2009 and 2013
- Grade 12 assessment used to estimate % of students academically prepared for college
- Current trend lines begin in 1990 for grades 4 and 8; 2005 for grade 12
- Administration coincides with every administration of TIMSS (4 year cycle)

Science
- Has been administered approximately every 4 years at all 3 grades
- Administered to the nation, states, and (usually) voluntary TUDAs for grades 4 and 8
- Administered at national level only for grade 12
- Current trend lines begin in 2009
- Since 2011, administration has coincided with every administration of TIMSS

Writing
- Has been administered approximately every 4 years at grades 8 and 12; much less frequently at grade 4
- Under current framework (beginning with 2011 administration), has been administered to the nation only
- Previous framework included administration to states and voluntary TUDAs in 1998 (states only), 2002, 2007
History
- Has been administered at the national level approximately every 4 years at grade 8; less frequently at grades 4 and 12

Civics
- Has been administered at the national level approximately every 4 years at grade 8; less frequently at grades 4 and 12

Geography
- Has been administered at the national level approximately every 4 years at grade 8; less frequently at grades 4 and 12

Technology and Engineering Literacy (TEL)
- Has been administered at national level for grade 8 only in 2014 and 2018
- Framework covers all 3 grades

Economics
- Framework covers grade 12 only
- Has been administered at national level in 2006 and 2012

Arts
- Framework covers all 3 grades but administered at national level for grade 8 only
- Framework includes 4 areas (Dance, Music, Visual Arts, and Theatre) but only Music and Visual Arts have been included in operational assessment
- New framework is needed for transition to DBA; not feasible to complete in time for 2024 administration

Foreign Language
- Framework to measure Spanish language proficiency adopted in 2000
- Pilot test conducted in 2003 but assessment never administered operationally

High School Transcript Study
- Supplemental data collection to grade 12 Math and Science administrations
- NCES has been working to determine the feasibility of conducting this study for grade 8 and at the state level

Long-Term Trend (LTT)
- Legislation notes continuing for Reading and Math, but no periodicity specified
- Periodicity has varied but generally has been at least every 4 years until 2012
The National Assessment of Educational Progress (NAEP) Authorization Act established the National Assessment Governing Board to set policy for NAEP, including determining the schedule of assessments. (P.L. 107-279)

<table>
<thead>
<tr>
<th>Year</th>
<th>Subject</th>
<th>National Grades Assessed</th>
<th>State Grades Assessed</th>
<th>TUDA Grades Assessed</th>
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<tbody>
<tr>
<td>2014</td>
<td>U.S. History* Civics* Geography*</td>
<td>8</td>
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<td></td>
<td>TECHNOLOGY AND ENGINEERING LITERACY</td>
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<td>2015</td>
<td>Reading* Mathematics* Science**</td>
<td>4, 8, 12</td>
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<td>2016</td>
<td>Arts*</td>
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<td>2017</td>
<td>Reading</td>
<td>4, 8</td>
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<td></td>
<td>Writing</td>
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<td>2018</td>
<td>U.S. History Civils Geography</td>
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<td></td>
<td>Technology and Engineering Literacy</td>
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<td>2019</td>
<td>Reading</td>
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<td>Science</td>
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<td></td>
<td>High School Transcript Study</td>
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<tr>
<td>2020</td>
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<td>Long-term Trend</td>
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NOTES:
*Assessments not administered by computer. Beginning in 2017 all operational assessments will be digitally based.
**Science in 2015 consisted of paper-and-pencil and digital-based components.
~Long-term Trend (LTT) assessments sample students at ages 9, 13, and 17 and are conducted in reading and mathematics.
Subjects in BOLD ALL CAPS indicate the year in which a new framework is implemented or assessment year for which the Governing Board will decide whether a new or updated framework is needed.
Discussion of Revised Draft Policy on NAEP Achievement Level Setting (SV #5)

For the past 1.5 years, COSDAM members have been discussing the need to revise the 1995 Governing Board policy on Developing Student Performance Levels for NAEP. The Board’s formal response to the November 2016 evaluation of the NAEP achievement levels (attached) noted that several of the report recommendations would be addressed through a revision of the Board policy. In particular, the Board’s response stated that the updated policy will specify a process and timeline for conducting regularly recurring reviews of the achievement level descriptions (ALDs) and will be explicit about the conditions that necessitate consideration of a new standard setting. In addition, one of the planned activities for the implementation of the Strategic Vision is to consider new approaches to creating and updating the achievement level descriptions in the revision of the Board policy on achievement levels.

Given that the policy is over 20 years old, there is also a need to revisit the policy more generally to ensure that it reflects current best practices in standard setting.

Several activities have informed the draft revised policy, including ongoing COSDAM discussion, input from technical experts in standard setting, and several research efforts. The March and May 2018 COSDAM meetings were entirely devoted to this topic.

The table below summarizes both prior and planned upcoming activities:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Timeline</th>
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<tr>
<td>Initial COSDAM discussions of planned activities and timeline</td>
<td>March – May 2017</td>
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<tr>
<td>Initial input from standard setting experts</td>
<td>March – April 2017</td>
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<tr>
<td>Initial full Board discussion about potential elements of policy revision</td>
<td>August 2017</td>
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<tr>
<td>Technical advisory panel to seek expert advice and debate on best practices in achievement level setting</td>
<td>January 2018</td>
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<tr>
<td>Literature review of best practices for creating and updating ALDs</td>
<td>February 2018</td>
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<tr>
<td>Technical memo on developing a validity argument for the NAEP achievement levels</td>
<td>February 2018</td>
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<tr>
<td>COSDAM discussion of using research to inform goals for policy revision</td>
<td>March 2018</td>
</tr>
<tr>
<td>COSDAM review and discussion of draft revised policy</td>
<td>May 2018</td>
</tr>
<tr>
<td>Joint COSDAM/R&amp;D discussion on communicating achievement levels</td>
<td>May 2018</td>
</tr>
<tr>
<td>COSDAM call to finalize a consensus draft for full Board discussion</td>
<td>June 2018</td>
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<tr>
<td><strong>Full Board review and discussion of draft revised policy</strong></td>
<td><strong>August 2018</strong></td>
</tr>
<tr>
<td>Public comment on draft revised policy</td>
<td>Fall 2018</td>
</tr>
<tr>
<td>Call to discuss any additional revisions to draft policy</td>
<td>Fall 2018</td>
</tr>
<tr>
<td>Planned full Board action on revised policy</td>
<td>November 2018</td>
</tr>
</tbody>
</table>
Compared to the current (1995) policy on Developing Student Performance Levels for NAEP, the attached proposed revised policy reflects:

- Reorganization of principles, streamlining of language, minimization of redundancies
- Minor (non-substantive) edits to the NAEP policy definitions for clarity
- A change in terminology from Proficient to NAEP Proficient to better differentiate the NAEP achievement levels from other common uses of Basic, Proficient, Advanced
- A new principle on periodic review of achievement level descriptions and cut scores, prompted by the Board’s response to the evaluation of NAEP achievement levels
- A new principle to clarify participation of multiple stakeholders at various points throughout process
- A new principle to summarize the role of the Board
- Reference to an interpretative guide that would accompany the release of NAEP results and explain how the achievement levels should (and should not) be used
- Reference to multiple types of achievement level descriptions (ALDs), including reporting ALDs that would be created using empirical data and written in terms of what students do know and can do rather than what students should know and be able to do
- Clarification on the standard setting participants, in particular the non-educator group
- Additional details about the achievement level setting process, including some practices that have become institutionalized over time (e.g., the use of “impact data”)
- Removal of details on implementation directed to staff and contractors, which will instead be included in a “procedures manual”

On Saturday morning, August 4, 2018, COSDAM Chair Andrew Ho will briefly describe the draft revised policy, followed by full Board discussion. No action is intended at this time. Following the full Board discussion, additional edits will be incorporated and public comment will be sought. It is anticipated that the Board will take action on the revised policy statement during the November 2018 Board meeting.
National Assessment Governing Board

Developing Student Achievement Levels for the National Assessment of Educational Progress

Policy Statement

It is the policy of the National Assessment Governing Board to conduct a comprehensive, inclusive, and deliberative process to develop and review student achievement levels for the National Assessment of Educational Progress (NAEP). Achievement levels consist of general policy definitions for the NAEP Basic, NAEP Proficient, and NAEP Advanced levels, specific achievement level descriptions (ALDs) for each assessment, cut scores that demarcate adjacent levels, and exemplar items or tasks that illustrate performance at each level. This process shall be conducted according to widely accepted professional standards, to produce results that are reasonable, useful, and informative to the public.

The Governing Board, through its Committee on Standards, Design and Methodology (COSDAM), shall monitor the development and review of student achievement levels to ensure that the final Governing Board-adopted achievement level descriptions, cut scores, and exemplars comply with all principles of this policy.

The achievement level setting process shall be carried out by contractors selected through a competitive bidding process. The process shall be managed in a technically sound, efficient, cost-effective manner, and shall be completed in a timely fashion.

Introduction

Since its creation by Congress in 1988, the Governing Board has been responsible for developing student achievement levels for NAEP assessments. The Governing Board has carried out this important statutory responsibility by engaging with a broad spectrum of stakeholders to develop student achievement levels.

Under provisions of the National Assessment of Educational Progress Authorization Act of 2002 (P.L. 107-279), Congress authorized the Governing Board to develop, “achievement levels that are consistent with relevant widely accepted
professional assessment standards and based on the appropriate level of subject matter knowledge for grade levels to be assessed” (Section 303(e)(2)(A)(i)(II).

Given this mandate, the Governing Board must ensure that all achievement level setting processes align with current best practices in standard setting, and that appropriate validity evidence is collected and documented to support the intended uses and interpretations of NAEP achievement levels.

The Governing Board has established the following policy definitions for the NAEP achievement levels, as expectations of what students should know and be able to do. They shall be consistent across all assessments in which achievement levels are set.

**NAEP Basic**

This level denotes partial mastery of prerequisite knowledge and skills that are fundamental for performance at the NAEP Proficient level.

**NAEP Proficient**

This level represents solid academic performance for each NAEP assessment. Students reaching this level have demonstrated competency over challenging subject matter, including subject-matter knowledge, application of such knowledge to real world situations, and analytical skills appropriate to the subject matter.

**NAEP Advanced**

This level signifies superior performance beyond NAEP Proficient.

The Governing Board engages multiple stakeholders throughout the achievement level setting process, including:

- Teachers
- Curriculum Experts
- Content Experts
- Assessment Specialists
- State Administrators
- Local School Administrators
- Policymakers
- Business Representatives
- Parents
- Users of Assessment Data
- Researchers and Technical Experts
- Members of the Public

This policy also complies with the documents listed below which express widely accepted technical and professional standards for achievement level setting. These standards reflect the agreement of recognized experts in the field, as well as the policy positions of major professional and technical associations concerned with educational testing.
In conjunction with this policy the Board shall maintain a procedures manual to establish and document additional details about how this policy is to be implemented. As professional standards evolve and new consensus documents are released, this policy and the procedures manual shall be updated to the extent that new professional standards require. Resources for this purpose shall include, but not be limited to the following:


Principles for Setting Achievement Levels

Principle 1: Elements of Achievement Levels

Principle 2: Development of Achievement Level Recommendations

Principle 3: Validation and Reporting of Achievement Level Results

Principle 4: Periodic Review of Achievement Levels

Principle 5: Stakeholder Input

Principle 6: Role of the Governing Board
Principle 1: Elements of Achievement Levels

The Governing Board is responsible for developing student achievement levels for each NAEP assessment. Achievement levels for each NAEP assessment consist of content achievement level descriptions (ALDs), cut scores that demarcate adjacent levels, and exemplar items or tasks that illustrate performance at each level.

a) **Content achievement level descriptions (ALDs)** translate the policy definitions into specific expectations about student knowledge and skills in a particular content area, at each achievement level, for each subject and grade. Content ALDs provide descriptions of specific expected knowledge, skills, or abilities of students performing at each achievement level. Content ALDs reflect the range of performance that items and tasks should measure. During the achievement level setting process, the purpose of content ALDs is to provide consistency and specificity for panelist interpretations of policy definitions for a given assessment. During reporting, content ALDs communicate the specific knowledge and skills represented by *NAEP Basic*, *NAEP Proficient*, and *NAEP Advanced* for a given assessment.

b) **Cut scores** mark the minimum threshold score, the lower bound, for each achievement level. Performance within a given achievement level begins at the cut score for that level and ends just below the cut score for the successive achievement level.

c) **Exemplar items or tasks**, including student responses, illustrate student performance within each of the achievement levels. They provide specific examples to help the public better understand what students in each achievement level can do.

Principle 2: Development of Achievement Level Recommendations

The Governing Board shall develop student achievement levels for NAEP, consistent with relevant widely accepted professional assessment standards, based on the appropriate level of subject matter knowledge.

a) A Design Document shall be developed at the beginning of the achievement level setting process, to describe in detail the scope of the achievement level setting project being undertaken, including but not limited to all planned materials, procedures, and analyses needed for the project. The Design Document shall be posted for public review with sufficient time to allow for a response from those who wish to provide one.

b) The development of **content achievement level descriptions** (ALDs) shall be completed initially through the process that develops the assessment frameworks. (See the Governing Board Policy on Framework Development for additional details). The Board may then review and revise content ALDs to advance the purposes they serve, whether that is guiding an achievement level setting or informing the public about the meaning of achievement levels. Whether revised or not, the ALDs that guide
achievement level setting shall be articulated in terms of what students should know and be able to do. There shall be no content ALDs developed for performance below the NAEP Basic level.

c) An achievement-level setting panel of subject matter experts shall be convened to recommend achievement level cut scores and exemplars.

i. Each panel shall reflect diversity in terms of gender, race/ethnicity, region of the country, urbanicity, and experience with students with disabilities and English language learners. To ensure that they are qualified to make the judgments required by the achievement level setting process, individual panel members shall have expertise and experience in the specific content area in which the levels are being developed, expertise and experience in the education of students at the grade under consideration, and a general knowledge of assessment, curriculum, and student performance.

ii. This panel shall include teachers, non-teacher educators, and other interested members of the general public with relevant educational background and experience. Teachers shall comprise the majority of the panel, with non-teacher educators (e.g., curriculum directors, academic coaches, principals) accounting for no more than half the number of teachers. The remaining panelists shall be non-educators who represent the perspectives of additional stakeholders representing the general public, including parents, researchers, and employers.

iii. The size of the panels shall reflect best practice in standard setting and be operationally feasible while being large enough to allow for split panels. Most NAEP achievement level settings have historically included approximately 20-30 panelists per grade, divided into two comparable groups with a subset of shared items.

d) Panelists shall receive training on all aspects of the achievement levels setting process to ensure that panelists are well-prepared to perform the achievement level setting tasks required of them. Panelists shall be instructed that their role is to make achievement level recommendations to the Governing Board. Training shall include but not be limited to: the purpose and significance of setting achievement levels for NAEP; the NAEP assessment framework for the given subject area; and administration of a sample assessment under NAEP-like conditions that students experience. It is important for panelists to arrive at a common conceptualization of NAEP Basic, NAEP Proficient, and NAEP Advanced based on the content ALDs. Panelists shall be trained on each element of the judgmental task they perform, including the selection of exemplar items. They should be led by capable content facilitators (who are content experts and have previous experience with achievement level setting) and process facilitators (who have background in standard setting and experience leading panelists through the achievement level setting process). Facilitators shall take a neutral stance and not attempt to influence panelist judgments.
e) The achievement level setting method that generates cut score recommendations may differ depending upon the specific assessment. Nevertheless, the method shall have a solid research base and be appropriate for the content area, item types, number of items, scoring rubrics, and mode of administration, as applicable.

f) Evaluations shall be administered to panelists throughout the achievement level setting process, in accordance with current best practices. Evaluations shall be part of every major component of the process, and panelists shall be asked to confirm their readiness for performing their tasks. Evaluation data may be used for formative purposes (to improve training and procedures in future meetings); summative purposes (to evaluate how well the process was conducted and provide procedural validity evidence); and to inform the Governing Board of any relevant information that could be useful when considering cut score recommendations. The panelists shall have an opportunity to indicate to the Board whether they believe the recommended cut scores are reasonable.

g) In accordance with current best practices, feedback shall be provided to panelists, including “impact data” (i.e., the implications of their selected cut scores on the reported percentages of students at or above each achievement level).

h) The process shall consist of at least two achievement level setting meetings with distinct groups of panelists, a pilot study, and an operational meeting. The purpose of the pilot study is to conduct a full “dress rehearsal” of the operational meeting, including but not limited to: an opportunity to test out materials, training procedures, collection of panelist judgments, feedback given to panelists through the process, software used to conduct analyses, meeting logistics, and other essential elements of the process. The pilot study may result in minor changes to the procedures, as well as major changes that would need additional study before being implemented in an operational meeting. The pilot study provides an opportunity for procedural validity evidence and to improve the operational meeting. At the discretion of the Governing Board, other smaller-scale studies may be conducted prior to the pilot study or in response to issues raised by the pilot study. The criteria in Principle 2a apply to panelists of both meetings.

i) The Governing Board shall ensure that a Technical Advisory Committee on Standard Setting (TACSS) is convened to provide technical advice on all achievement level setting activities. Technical advice provided by standard setting experts throughout the project is intended to ensure that all procedures, materials, and reports are carried out in accordance with current best practices, providing additional validity evidence for the process and results. The Board or its contractor may also seek technical advice from other groups as appropriate, including NCES and the larger measurement community (e.g., the National Council on Measurement in Education).

j) All aspects of the procedures shall have documentation as evidence of the appropriateness of the procedures and results. This evidence shall be made available to the Board at the time of deliberations about the achievement levels. A summary of the evidence shall be available to the public when the achievement level results are reported.
Sample items and student responses known as exemplars shall be chosen from the pool of released items for the current NAEP assessment to reflect performance in the *NAEP Basic*, *NAEP Proficient*, and *NAEP Advanced* regions of the scale. The use of exemplars is intended to help the public better understand what students who are in each achievement level actually know and are able to do for each subject and grade. When possible, exemplars may also be chosen that reflect performance at threshold scores. The collection of exemplars shall reflect the content found in the achievement level descriptions and the range of item formats on the assessment.

The outcomes from the achievement level setting panel meetings (recommended cut scores, exemplars, and ALDs for use in reporting) shall be forwarded to the Board for their consideration.

**Principle 3: Validation and Reporting of Achievement Level Results**

The achievement level setting process shall produce results that have validity evidence for the intended uses and interpretations and are informative to policy makers, educators, and the public.

a) Professional testing standards require evidence to support the intended interpretations and uses of test scores. Among the sources of evidence supporting the validity of test scores is evidence bearing on the standard setting process and results. Although standard setting is necessarily judgmental with no “true” or “correct” cut scores, the Board shall examine and consider available evidence about the procedural integrity of the achievement level setting process, the reasonableness of results, and other evidence in order to support intended uses and interpretations.

b) NAEP achievement levels are intended to estimate the percentage of students (overall and for selected student groups) in each achievement level category, for the nation, and for states and trial urban districts (TUDAs) for some assessments. NAEP is prohibited by law from reporting any results for individual students or schools, so achievement levels do not apply to individual students or schools.

c) To facilitate valid uses of ALDs for reporting, the Board shall ensure that the descriptions of performance for the achievement levels reflect what the empirical data reveal about the knowledge and skills of students in that score range. The Board shall revisit and may revise content ALDs following the achievement level setting to ensure that they are consistent with empirical evidence of student performance. In particular, when content ALDs are reported with results, they shall be written to incorporate empirical data from student performance. They shall describe what students at each level do know and can do rather than what they should know and should be able to do.

d) The Board shall examine and consider all evidence related to validity of the achievement level setting activities. These data shall include, but not be limited to: procedural evidence such as training, materials and panelist evaluation data;
reliability evidence such as consistency across panelist type, subpanels, rounds, and meetings, if appropriate; and external comparisons to other similar assessments, if appropriate, with necessary caveats. The results from validation efforts shall be made available to the Board in a timely manner so that the Board has access to as much validation data as possible as it considers the recommendations regarding the final levels.

e) In describing student performance using the achievement levels, terms such as “students performing at the NAEP Basic level” or “students performing at the NAEP Proficient level” are preferred over “Basic students” or “Proficient students”. The former implies that students have mastery of particular content represented by the achievement levels, while the latter implies an inherent characteristic of individual students.

f) In reporting the results of NAEP, the three achievement levels of NAEP Basic, NAEP Proficient, and NAEP Advanced refer to the three regions of the NAEP scale at and above each respective cut score. The remaining region that falls below the NAEP Basic cut score shall be identified as “below NAEP Basic” when a descriptor is necessary.

g) In describing the NAEP Proficient level, reports shall emphasize that the policy definition is not intended to reflect “grade level” performance expectations, which are typically defined normatively and can vary widely by state and over time. NAEP Proficient may convey a different meaning from other uses of the term “proficient” in common terminology or in reference to other assessments.

h) An interpretative guide shall accompany NAEP reports, including specific examples of appropriate and inappropriate interpretations and uses of the results.

**Principle 4: Periodic Review of Achievement Levels**

*Periodic reviews of existing achievement levels shall determine whether new achievement level descriptions and/or cut scores are needed to continue valid and reliable measurement of current student performance and trends over time.*

a) At least once every 10 years or 3 administrations of an assessment, whichever comes later, the Governing Board, through its Committee on Standards, Design and Methodology (COSDAM), shall review the alignment between the content ALDs and items, based on empirical data from past and recent administrations of NAEP assessments. In its review, COSDAM (in consultation with the Assessment Development Committee) shall solicit input from technical and subject matter experts to determine whether changes to the content ALDs are warranted or whether a new standard setting shall be conducted, making clear the potential risk of changing cut scores to trends and assessment of educational progress. Relevant factors may include but not be limited to: substantive changes in the item types or in the balance of item types; changes in the mode of administering assessments; advances in standard setting methodologies; and changes in the policy environment for using NAEP results.
b) Within the period for a review of achievement level descriptions and cut scores, changes may occur to a NAEP framework. If a framework is replaced or revised for a major update, a new achievement level setting process may be implemented, except in circumstances where scale score trends are maintained. In this latter instance, COSDAM shall determine how to revise the ALDs and review the cut scores to ensure that they remain reasonable and meaningful.

c) If there are major updates to a NAEP framework, the ALDs shall be updated by the Framework Visioning and Development Panel. (See the Governing Board Policy on Framework Development for additional details). Following an assessment administration under the revised framework, COSDAM may decide to use empirical data to revise content ALDs to align with the revised framework.

d) As additional validation evidence becomes available, the Board shall review it and make a determination about whether the achievement levels should be reviewed and potentially redone.

**Principle 5: Stakeholder Input**

The process of developing student achievement levels is a widely inclusive activity. The Governing Board shall provide opportunities to engage multiple stakeholders throughout the achievement level setting process and shall strive to maximize transparency of the process.

a) The process of seeking nominations for the achievement level setting panels shall include outreach to relevant constituencies, such as: state and local educators; curriculum specialists; business representatives; and professional associations in a given content area.

b) The Design Document (describing in detail all planned procedures for the project) shall be distributed for review by a broad constituency and shall be disseminated in sufficient time to allow for a thoughtful response from those who wish to provide one. All interested stakeholders shall have an opportunity to provide public comment.

c) Achievement level setting panelists shall include teachers, non-teacher educators, and other interested members of the general public with relevant educational background and experience, including parents, researchers, and employers. Each panel shall reflect diversity in terms of gender, race/ethnicity, region of the country, urbanicity, and experience with students with disabilities and English language learners.

d) All achievement level setting activities shall be informed by technical advice throughout the process. The Technical Advisory Committee on Standard Setting shall provide ongoing technical input from standard setting and assessment experts, and other groups with relevant technical expertise may be consulted periodically as needed.
e) Ongoing input and coordination with staff and contractors from the National Center for Education Statistics (NCES) is necessary to ensure that all achievement level setting activities are carried out in a manner that is consistent with the design, analysis, and reporting of NAEP assessments.

f) The Governing Board may ask its standing groups representing various constituencies to provide input on the achievement level setting process.

**Principle 6: Role of the Governing Board**

The Governing Board, through its Committee on Standards, Design and Methodology (COSDAM), shall monitor the development and review of student achievement levels to ensure that the final Governing Board-adopted achievement level descriptions, cut scores, and exemplars comply with this policy.

a) The Committee on Standards, Design and Methodology (COSDAM) shall be responsible for monitoring the development and review of achievement levels that result in recommendations to the Governing Board for any NAEP assessment under consideration. COSDAM shall provide direction to the achievement level setting contractor, via Governing Board staff. This guidance shall ensure compliance with the NAEP legislation, Governing Board policies, Department of Education and government-wide regulations, and requirements of the contract(s) used to implement the achievement level setting project.

b) If there is a need to revise the initial achievement level descriptions (ALDs) created at the time of framework development for use in achievement level setting and/or reporting, the Governing Board shall take final action on revised ALDs.

c) COSDAM shall receive regular reports on the progress of achievement level setting projects.

d) COSDAM shall review and formally approve the Design Document that describes all planned procedures for an achievement level setting project.

e) At the conclusion of the achievement level setting project, the Governing Board shall take final action on the recommended cut scores, exemplars, and ALDs for use in reporting. The Governing Board shall make the final determination on the NAEP achievement levels. In addition to the panel recommendations, the Board may consider other pertinent information to assess reasonableness of the results, such as comparisons to other similar assessments.

f) Following adoption by the Governing Board, the final ALDs, cut scores, and exemplars shall be provided to the National Center for Education Statistics (NCES) for reporting the results of the NAEP assessment(s) under consideration.

g) Consistent with Principle 4 above, COSDAM shall periodically review existing achievement levels to determine whether it is necessary to revise achievement level descriptions or conduct a new standard setting.
Legislative Authority

Pursuant to the National Assessment of Educational Progress (NAEP) legislation (Public Law 107-279), the National Assessment Governing Board (hereafter the Governing Board) is pleased to have this opportunity to apprise the Secretary of Education and the Congress of the Governing Board response to the recommendations of the National Academies of Sciences, Engineering, and Medicine evaluation of the NAEP achievement levels for mathematics and reading (Edley & Koenig, 2016).

The cited legislation charges the Governing Board with the authority and responsibility to “develop appropriate student achievement levels for each grade or age in each subject area to be tested.” The legislation also states that “such levels shall be determined by... a national consensus approach; used on a trial basis until the Commissioner for Education Statistics determines, as a result of an evaluation under subsection (f), that such levels are reasonable, valid, and informative to the public; ... [and] shall be updated as appropriate by the National Assessment Governing Board in consultation with the Commissioner for Education Statistics” (Public Law 107-279).

Background

NAEP is the largest nationally representative and continuing assessment of what our nation’s elementary and secondary students know and can do. Since 1969, NAEP has been the country’s foremost resource for measuring student progress and identifying differences in student achievement across student subgroups. In a time of changing state standards and assessments, NAEP serves as a trusted resource for parents, teachers, principals, policymakers, and researchers to compare student achievement across states and select large urban districts. NAEP results allow the nation to understand where more work must be done to improve learning among all students.

For 25 years, the NAEP achievement levels (Basic, Proficient, and Advanced) have been a signature feature of NAEP results. While scale scores provide information about student achievement over time and across student groups, achievement levels reflect the extent to which student performance is “good enough,” in each subject and grade, relative to aspirational goals.
Since the Governing Board began setting standards in the early 1990s, achievement levels have become a standard part of score reporting for many other assessment programs in the US and abroad.

Governing Board Response

Overview

The Governing Board appreciates the thorough, deliberative process undertaken over the past two years by the National Academies of Science, Engineering, and Medicine and the expert members of the Committee on the Evaluation of NAEP Achievement Levels for Mathematics and Reading. The Governing Board is pleased that the report concludes that the achievement levels are a meaningful and important part of NAEP reporting. The report states that, “during their 24 years [the achievement levels] have acquired meaning for NAEP’s various audiences and stakeholders; they serve as stable benchmarks for monitoring achievement trends, and they are widely used to inform public discourse and policy decisions. Users regard them as a regular, permanent feature of the NAEP reports” (Edley & Koenig, 2016; page Sum-8). The Governing Board has reviewed the seven recommendations presented in the report and finds them reasonable and thoughtful. The report will inform the Board’s future efforts to set achievement levels and communicate the meaning of NAEP Basic, Proficient, and Advanced. The recommendations intersect with two Governing Board documents, the Strategic Vision and the achievement levels policy, described here.

On November 18, 2016, the Governing Board adopted a Strategic Vision (https://www.nagb.org/content/nagb/assets/documents/newsroom/press-releases/2016/nagb-strategic-vision.pdf) to guide the work of the Board through 2020, with an emphasis on innovating to enhance NAEP’s form and content and expanding NAEP’s dissemination and use. The Strategic Vision answers the question, “How can NAEP provide information about how our students are doing in the most innovative, informative, and impactful ways?” The Governing Board is pleased that several of the report recommendations are consistent with the Board’s own vision. The Governing Board is committed to measuring the progress of our nation’s students toward their acquisition of academic knowledge, skills, and abilities relevant to this contemporary era.

The Governing Board’s approach to setting achievement levels is articulated in a policy statement, “Developing Student Performance Levels for the National Assessment of Educational Progress” (https://www.nagb.org/content/nagb/assets/documents/policies/developing-student-performance.pdf). The policy was first adopted in 1990 and was subsequently revised in 1995,
with minor wording changes made in 2007. The report motivates the revision of this policy, to add clarity and intentionality to the setting and communication of NAEP achievement levels.

The seven recommendations and the Governing Board response comprise a significant research and outreach trajectory that the Governing Board can pursue over several years in conjunction with key partners. The Governing Board will implement these responses within resource constraints and in conjunction with the priorities of the Strategic Vision.

**Evaluating the Alignment of NAEP Achievement Level Descriptors**

**Recommendation #1:** Alignment among the frameworks, the item pools, the achievement-level descriptors, and the cut scores is fundamental to the validity of inferences about student achievement. In 2009, alignment was evaluated for all grades in reading and for grade 12 in mathematics, and changes were made to the achievement-level descriptors, as needed. Similar research is needed to evaluate alignment for the grade 4 and grade 8 mathematics assessments and to revise them as needed to ensure that they represent the knowledge and skills of students at each achievement level. Moreover, additional work to verify alignment for grade 4 reading and grade 12 mathematics is needed.

The report’s primary recommendation is to evaluate the alignment, and revise if needed, the achievement level descriptors for NAEP mathematics and reading assessments in grades 4, 8, and 12. The Governing Board intends to issue a procurement for conducting studies to achieve this goal. The Governing Board has periodically conducted studies to evaluate whether the achievement level descriptors in a given subject should be revised, based on their alignment with the NAEP framework, item pool, and cut scores. The Governing Board agrees that this is a good time to ensure that current NAEP mathematics and reading achievement level descriptors align with the knowledge and skills of students in each achievement level category. In conjunction with the response to Recommendation #3, the updated Board policy on NAEP achievement levels will address the larger issue of specifying a process and timeline for conducting regular recurring reviews of the achievement level descriptions in all subjects and grades.

The Governing Board agrees strongly with the recommendation that, while evaluating alignment of achievement level descriptors is timely, it is not necessary to consider changing the cut scores or beginning a new trend line at this time. The NAEP assessments are transitioning from paper-based to digital assessments in 2017, and current efforts are focused on ensuring comparability between 2015 and 2017 scores. The Governing Board articulated this in the 2015 Resolution on Maintaining NAEP Trends with the Transition to Digital-Based Assessments ([https://www.nagb.org/content/nagb/assets/documents/policies/resolution-on-trend-and-dba.pdf](https://www.nagb.org/content/nagb/assets/documents/policies/resolution-on-trend-and-dba.pdf)).

**Recommendation #2:** Once satisfactory alignment among the frameworks, the item pools, the achievement-level descriptors, and the cut scores in NAEP mathematics and reading has been
demonstrated, their designation as trial should be discontinued. This work should be completed and the results evaluated as stipulated by law: (20 U.S. Code 9622: National Assessment of Educational Progress: https://www.law.cornell.edu/uscode/text/20/9622 [September 2016]).

Ultimately, the Commissioner of Education Statistics is responsible for determining whether the “trial” designation is removed. The Governing Board is committed to providing the Commissioner with the information needed to make this determination in an expedient manner.

**Regular Recurring Reviews of the Achievement Level Descriptors**

**Recommendation #3:** To maintain the validity and usefulness of achievement levels, there should be regular recurring reviews of the achievement-level descriptors, with updates as needed, to ensure they reflect both the frameworks and the incorporation of those frameworks in NAEP assessments.

The Board’s current policy on NAEP achievement levels contains several principles and guidelines for *setting* achievement levels but does not address issues related to the continued use or reporting of achievement levels many years after they were established. The revised policy will seek to address this gap by including a statement of periodicity for conducting regular recurring reviews of the achievement level descriptors, with updates as needed, as called for in this recommendation. The Governing Board agrees that it is important to articulate a process and timeline for conducting regular reviews of the achievement level descriptors rather than performing such reviews on an ad hoc basis.

**Relationships Between NAEP Achievement Levels and External Measures**

**Recommendation #4:** Research is needed on the relationships between the NAEP achievement levels and concurrent or future performance on measures external to NAEP. Like the research that led to setting scale scores that represent academic preparedness for college, new research should focus on other measures of future performance, such as being on track for a college-ready high school diploma for 8th-grade students and readiness for middle school for 4th-grade students.

In addition to the extensive work that the Governing Board has conducted at grade 12 to relate NAEP mathematics and reading results to academic preparedness for college, the Governing Board has begun research at grade 8 with statistical linking studies of NAEP mathematics and reading and the ACT Explore assessments in those subjects. This work was published while the evaluation was in process and was not included in the Committee’s deliberations. Additional studies in NAEP mathematics and reading at grades 4 and 8 are beginning under contract to the National Center for Education Statistics (NCES). The Governing Board’s Strategic Vision includes an explicit goal to increase opportunities for connecting NAEP to other national and
international assessments and data. Just as the Board’s previous research related grade 12 NAEP results in mathematics and reading to students’ academic preparedness for college, the Governing Board anticipates that additional linkages with external measures will help connect the NAEP achievement levels and scale scores to other meaningful real-world indicators of current and future performance.

**Interpretations and Uses of NAEP Achievement Levels**

**Recommendation #5:** Research is needed to articulate the intended interpretations and uses of the achievement levels and collect validity evidence to support these interpretations and uses. In addition, research to identify the actual interpretations and uses commonly made by NAEP’s various audiences and evaluate the validity of each of them. This information should be communicated to users with clear guidance on substantiated and unsubstantiated interpretations.

The Governing Board’s Strategic Vision emphasizes improving the use and dissemination of NAEP results, and the Board’s work in this area will include achievement levels. The Governing Board recognizes that clarity and meaning of NAEP achievement levels (and scale scores) are of utmost importance. The Governing Board will issue a procurement to conduct research to better understand how various audiences have used and interpreted NAEP results (including achievement levels). The Governing Board will work collaboratively with NCES to provide further guidance and outreach about appropriate and inappropriate uses of NAEP achievement levels.

**Guidance for Inferences Made with Achievement Levels versus Scale Scores**

**Recommendation #6:** Guidance is needed to help users determine inferences that are best made with achievement levels and those best made with scale score statistics. Such guidance should be incorporated in every report that includes achievement levels.

The Governing Board understands that improper uses of achievement level statistics are widespread in the public domain and extend far beyond the use of NAEP data. Reports by the Governing Board and NCES have modeled appropriate use of NAEP data and will continue to do so. This recommendation is also consistent with the goal of the Strategic Vision to improve the dissemination and use of NAEP results. The Governing Board will continue to work with NCES and follow current research to provide guidance about inferences that are best made with achievement levels and those best made with scale score statistics.
**Regular Cycle for Considering Desirability of Conducting a New Standard Setting**

**Recommendation #7:** NAEP should implement a regular cycle for considering the desirability of conducting a new standard setting. Factors to consider include, but are not limited to: substantive changes in the constructs, item types, or frameworks; innovations in the modality for administering assessments; advances in standard setting methodologies; and changes in the policy environment for using NAEP results. These factors should be weighed against the downsides of interrupting the trend data and information.

When the Board’s achievement levels policy was first created and revised in the 1990s, the Board was setting standards in each subject and grade for the first time and had not yet considered the need or timeline for re-setting standards. To address this recommendation, the Governing Board will update the policy to be more explicit about conditions that require a new standard setting.

**Board’s Commitment**

The Governing Board remains committed to its congressional mandate to set “appropriate student achievement levels” for the National Assessment of Educational Progress. The Board appreciates the report’s affirmation that NAEP achievement levels have been set thoughtfully and carefully, consistent with professional guidelines for standard setting, and based on extensive technical advice from respected psychometricians and measurement specialists. The Board also takes seriously the charge to develop the current achievement levels through a national consensus approach, involving large numbers of knowledgeable teachers, curriculum specialists, business leaders, and members of the general public throughout the process. This is only fitting given the Governing Board’s own congressionally mandated membership that explicitly includes representatives from these stakeholder groups.

The Governing Board remains committed to improving the process of setting and communicating achievement levels. The Governing Board is grateful for the report recommendations that will advance these aims.

**Reference**

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National Assessment Governing Board

Composition
The Board is non-partisan, with 26 members representing gender, geographic, and racial-ethnic diversity. Specific categories of members specified in the NAEP law:

- **Policymakers**: governors or former governors (2), state legislators (2), chief state school officers (2), local school district superintendent (1), state (1) and local (1) school board members, nonpublic school administrator or policymaker (1)
- **Educators**: classroom teachers (3), principals (2), curriculum specialists (2)
- **Public**: general public representatives (2), parents (2), business representative (1)
- **Technical experts**: testing and measurement experts (3)

_The director of the Institute of Education Sciences serves as an ex-officio 26th member._

Responsibilities
The responsibilities of the Board are mandated by Congress, and include:

- **Test Development**
  - Select subject areas to assess
  - Develop assessment objectives and test specifications
  - Ensure all items are free from bias
  - Have final authority on appropriateness of all items

- **Technical Methodology**
  - Develop appropriate student achievement levels
  - Design the methodology of the assessment to ensure that assessment items are valid and reliable

- **Reporting and Dissemination**
  - Develop guidelines for reporting and disseminating results
  - Plan and execute the initial public release of NAEP reports
  - Take appropriate actions needed to improve the form, content, use, and reporting of results
# National Assessment Governing Board

## Members and Categories by Term Expiration Date

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*Member currently serving 2nd term and/or not eligible for reappointment.*

Updated 10/20/17
ETHICS PRIMER

FOR

THE NATIONAL ASSESSMENT
GOVERNING BOARD

November 2009
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EXECUTIVE SUMMARY

Now that you are a member of the National Assessment Governing Board ("NAGB") you need to know what ethics laws and rules apply to you. The following is a very brief summary of these rules. For a more detailed discussion of how these rules apply to you, please refer to the attached summary entitled "Ethics Laws and Rules Applicable to SGEs."

Your Status as a Special Government Employee

You are considered an SGE and not a regular federal employee because NAGB anticipates that you will be serving the federal government through your position for only 130 days or less during any period of 365 consecutive days. Whether or not you are paid by the Board for your service is irrelevant. This summary discusses how the ethics rules apply to SGEs.

Criminal Statutes Apply to Your Activities

Some of the ethics laws that apply to you carry criminal penalties. Below is a brief summary of the most important of these laws.

- The chief conflict of interest law bars you from participating personally and substantially in your capacity as a member of NAGB in any particular matter before the federal government that has a direct and predictable effect on your own financial interests or the financial interests of others with whom you have certain relationships. See 18 U.S.C. Section 208.

- If you find yourself with a financial conflict of interest, you have four options: (1) disqualify yourself (you don’t participate in any way in the matter); (2) resign from the outside entity that is the basis for the conflict; (3) sell or divest the stock or other financial interest that is the basis for the conflict; or (4) request and obtain a statutory waiver.¹

- Two other laws prohibit you from representing a third party, with or without compensation, before any court or agency in connection with any particular matter involving specific parties in which the United States is a party or has a direct and substantial interest and in which you have participated personally and substantially as an SGE. In addition, if you serve the federal government for more than 60 days during the immediately preceding period of 365 consecutive days, these restrictions apply to any matter that is pending with NAGB. But remember that these restrictions do not apply to particular matters of general applicability, such as broadly applicable policies, rulemaking proceedings or legislation, that do not involve specific parties. See 18 U.S.C. Sections 203 and 205.

¹ In rare circumstances, with the concurrence of the U.S. Office of Government Ethics, you may obtain a waiver of the conflict of interest.
• Another criminal law limits some of your activities after your service on NAGB ends. This law prohibits you from representing others in connection with the same particular matter involving specific parties in which you participated personally and substantially during your service to NAGB. This prohibition lasts for your lifetime. See 18 U.S.C. Section 207.

Standards of Ethical Conduct for Employees of the Executive Branch

The Standards of Ethical Conduct for Employees of the Executive Branch (Standards), 5 C.F.R. Part 2635, are regulations that apply both to regular federal government employees and to SGEs. However, a few exceptions exist in the Standards in recognition of the fact that SGEs are working for the government only in a very limited way. A brief synopsis of some these rules and their exceptions follow.

• **Fundraising:** You may not use your official title, position and authority to engage in fundraising.

• **Gifts:** You may not accept gifts from a “prohibited source” or offered to you because of your official position on NAGB. A prohibited source includes any person: seeking official action from NAGB; doing or seeking to do business with NAGB; conducting activities regulated by NAGB; or having interests that may be substantially affected by your official duties. There are many exceptions to this rule that are discussed in more detail in the accompanying memorandum.

• **Lobbying:** In your role as a member of NAGB, you may not urge others to contact Congress or a state legislature to urge the passage or defeat of legislation. Additional restrictions exist regarding lobbying. You should contact Department of Education’s Ethics Division before engaging in any type of lobbying.

• **Misuse of Position:** You may not use your position on NAGB or nonpublic information gained through your service on NAGB to seek advantage for yourself or others. In addition, you may not use your NAGB title in a manner that makes it appear that NAGB is sanctioning your views, products, services or personal enterprises.

• **Political Activities:** You may not engage in political activity when you are on duty or in a federal government building or car, and you may never use your official title as a member of NAGB in connection with political activities.

• **Teaching, Speaking and Writing:** You may not receive compensation for teaching, speaking or writing if: (1) the invitation was offered to you because of your position on NAGB; (2) the information conveyed by you draws substantially on nonpublic information that you obtained by working on NAGB; (3) the invitation was extended to you by an organization or person who has interests that may be substantially affected by your performance on NAGB; or (4) the subject of your work deals in a significant way
with a matter involving specific parties that you worked on while on NAGB. Again, there are some exceptions to this rule that are outlined in more detail in the accompanying memorandum.

**Required Filing of a Financial Disclosure Report By SGEs**

As a member of the NAGB, you are required to file a confidential financial disclosure report (also referred to as a “450” Report) when you are first appointed, and annually thereafter if you are reappointed. The purpose of the financial disclosure form is to protect you from inadvertently violating any of the criminal conflict of interest statutes and so that NAGB can know that your advice is free from any real or perceived conflicts of interest.

Please do not rely solely on this “Executive Summary” before undertaking your duties. There are many subtle nuances that are not discussed in this summary that may apply to your specific situation. The attached expanded summary provides additional detail that will help you better understand the ethics rules. Please feel free to call or e-mail Marcella Goodridge in the Ethics Division of the Office of the General Counsel at the U.S. Department of Education at (202) 401-8309, or Marcella.Keiller@ed.gov, for answers to any specific ethics questions that may arise in the course of your service on NAGB.
ETHICS LAWS AND RULES APPLICABLE TO SGES

I. INTRODUCTION

Although the ethics rules are numerous and detailed, a single, simple principle underlies these rules: *You should never use your public office for private gain, either for yourself, or for any third party.* In addition, you must refrain not only from engaging in any activity that violates the ethics rules, but you must also refrain from any activity that creates the appearance of a violation of any of these rules. The summary below is designed to help you avoid violating any ethics rules covering your activities as a member of NAGB.

II. YOUR STATUS AS A SPECIAL GOVERNMENT EMPLOYEE

A. What is a “special Government employee”?

Because you have been appointed to be a member of the NAGB and you are expected to perform your duties for not more than 130 days during the 365 days subsequent to the date of your appointment, you are, by law, a “special Government employee” (SGE). As an SGE, you are a federal government employee. This means that upon appointment, you assume the responsibilities, obligations, and restrictions that are part of public service. Because SGEs are not full-time employees, several of these restrictions apply only in limited circumstances.

B. Do the ethics restrictions apply when I am not working for NAGB?

Yes, any restrictions concerning your private activities (representational services, expert witness activities, etc.) apply equally on days when you serve the federal government through your position on NAGB and on days when you do not, except with respect to political activity. If you have not provided any services for the federal government for some time, but have not received a termination date for your appointment, you must seek a formal resolution of the matter before engaging in conduct prohibited by the ethics rules.

III. CONFLICTS OF INTEREST

A. What criminal conflict of interest statutes apply to SGES?

While you are employed as an SGE, you need to pay particular attention to four criminal conflict of interest laws found in Chapter 11, Title 18 of the United States Code: 18 U.S.C. Sections 203, 205, 207 and 208. These criminal laws include some special provisions for the treatment of SGEs. A discussion of these laws and certain related requirements found in other laws and regulations follows.
B. What financial conflicts of interest may arise for SGEs under section 208?

Section 208 prohibits you from participating personally and substantially in any particular matter that has a direct and predictable effect on your financial interests, including certain interests of others that are imputed to you under the statute. This means that you may not work on NAGB matters if you have certain connections – through the ownership of stock, through employment, or by virtue of other circumstances – with an organization that has a financial interest in the matter. For example, you may not work at all on a contract competition if you own stock valued at a certain amount in a company competing for the contract. You may not participate in a discussion of whether to modify an existing contract with a company if you work for that company. And, you may not assist in the development of a scope of work for a contract competition if you know that an organization on which you serve on the Board of Directors plans to compete for that contract.

In addition to your own personal financial interests, the financial interests of the following persons or organizations are imputed to you and also disqualify you from participating in a particular matter:

1. your spouse;
2. your minor child;
3. your general partner;
4. an organization for which you serve as an officer, director, trustee, general partner or employee; and
5. any prospective employer.

Example 1 You are on the governing board of ABC, a nonprofit organization. ABC’s financial interests are imputed to you under the statute. This means that for the purpose of determining whether you have a conflict of interest, ABC’s financial interests are treated as if they were your own. Accordingly, you may not participate in any NAGB matter in which ABC has a financial interest. Similarly, if you were in the process of discussing employment with ABC, you would be barred from participating in any NAGB matter affecting the financial interests of ABC.

Example 2 You are on the governing board of ABC (or employed by ABC, own stock in ABC, seeking employment with ABC, etc). You are asked to participate in the process of reviewing and scoring contract proposals for a contract competition for a NAGB project. Fifteen organizations have submitted a bid. When you open the proposal from one organization, you note that ABC’s name is one of the organizations that has submitted a bid. Or, perhaps ABC is listed as a subcontractor in one of the proposals. This contract competition is a “particular
matter” that will have a “direct and predictable effect” upon the financial interests of ABC. In other words, as a result of the contract competition, ABC will either gain business or not, and this decision will affect ABC financially – either negatively or positively. The amount of financial interest is not relevant – as long as ABC’s finances will be affected, unless a regulatory exemption or waiver permits you to do so, you may not work on this competition. And, because each proposal is competing against all of the others, your evaluation of competing proposals will affect the chances ABC has of winning the contract. Accordingly, you may not review any of the proposals.

You must recuse yourself from a matter as soon as you realize that you have a conflict. If, for example, you notice that you have a conflict when you are in the middle of reviewing contract proposals, you put the proposal back in its envelope and call up an NAGB staff member and let that person know that you think that you are disqualified from working on the competition. If there is any question, you should contact the U.S. Department of Education Office of the General Counsel’s Ethics Division for guidance. Once you have determined that you may not work on this matter, send the proposal back to NAGB staff.

You are permitted to participate in a particular matter affecting one campus of a multi-campus institution of higher education, where the disqualifying interest arises from your employment with a separate campus of the same institution, provided that you have no multi-campus responsibilities at the institution. If you are employed with a large university with multiple campuses and you do not have any multi-campus responsibilities, you may participate in official matters--such as grants, contracts, applications, and other particular matters--that affect the financial interests of another campus in the same university system where you are employed. Below are some examples of how section 208 may apply to your activities.

**Example 3** You are employed as a professor at the University of California-Berkeley. NAGB is planning to evaluate the impact of computer-based testing on students with disabilities and English language learners. UC-Berkeley’s science and technology department has submitted a bid. NAGB’s actions will have a direct and predictable effect on the university’s financial interest. Therefore, you may not participate in any way on this matter.

**Example 4** You are employed as a researcher at the University of California-Berkeley. NAGB is planning to evaluate the impact of computer-based testing on students with disabilities and English language learners. The University of California-Los Angeles (UCLA) has submitted a bid to be the contractor for NAGB’s evaluation. You may participate in this matter because it will not have a direct and predictable effect on either your financial interests or UC-Berkeley’s.
C. How do I resolve a conflict of interest?

1. Disqualification

A common method of resolving a conflict of interest is to disqualify yourself from participating in the matter.

Example 5 You are serving on NAGB’s Ad Hoc Committee that will examine issues related to computer-based testing for students with disabilities and English language learners, including developing a study of computer-based testing methodologies. The Request for Proposals has been disseminated. One of the bids submitted is from ABC Corporation (ABC). You own $20,000 worth of stock in ABC. You must advise the U.S. Department of Education Office of the General Counsel’s Ethics Division that you own stock in ABC and you will not be able to participate in any way in the entire contract competition. If ABC is awarded the contract, you will also need to disqualify yourself from the entire matter.

2. Divestiture

Divestiture of a disqualifying interest (usually through the sale of stock) is another remedy available to avoid a potential violation of section 208. SGEs are not eligible for a Certificate of Divestiture (CD). A CD is a tax benefit that allows the deferral or nonrecognition of capital gain where an employee divests a financial interest in order to comply with conflict of interest requirements. Unfortunately, Congress specifically excluded SGEs from eligibility to receive CDs. 26 U.S.C. § 1043(b)(1)(A).

3. Resignation

On some very rare occasions when none of the aforementioned options are available or feasible, an SGE may need to resign from participating in an outside activity with an entity if his or her official activities as an SGE have a direct and predictable effect on the financial interest of that entity creating an irreconcilable conflict.

4. Waiver or Authorization

Another remedy to avoid a conflicting financial interest is to request and obtain a statutory waiver by contacting the Department of Education’s Ethics Division (an authorization is similar to a waiver, but only applies to non-statutory conflicts of interest - what are often referred to as “appearances of a conflict”). You may be granted a waiver only if your financial interest is not so substantial as to be deemed to be likely to affect the integrity of your services.

Example 6 In the scenario described in Examples 1 and 2 above, you are granted a waiver permitting you to participate in a general policy matter that affects ABC’s financial interests as

Any waiver or authorizations that you receive will be limited. It is very important that you read it carefully, as it will often contain detailed information about the types of matters from which you remain disqualified, despite the waiver or authorization.
long as the matter affects all similarly situated entities in the same manner. But you would remain disqualified from participating in a matter that specifically involves ABC, which in this case means the entire contract competition.

D. What restrictions apply to my representation of third parties under sections 203 and 205?

With regard to particular matters in which you have participated personally and substantially while serving NAGB, you are prohibited from representing a third party on those particular matters, with or without compensation, before any court or agency, when the United States is a party or has a direct and substantial interest in the matter. See 18 U.S.C. Sections 203 and 205.

In addition, if you serve the federal government for more than 60 days during the immediately preceding period of 365 consecutive days, you are prohibited from representing a third party on any matter involving specific parties pending before NAGB, even if your work at NAGB did not involve these matters. These restrictions do not apply to particular matters of general applicability, such as broadly applicable policies, rulemaking procedures or legislation that does not involve specific parties.

IV. POST-EMPLOYMENT

After your appointment terminates at NAGB, you need to pay particular attention to one more criminal statute that subjects you to restrictions regarding certain matters that you may have worked on as a member of NAGB. Pursuant to 18 U.S.C. Section 207, you may never represent any third party, other than in the performance of your official government duties, in connection with the same particular matter involving specific parties in which you participated personally and substantially as a member of NAGB. This is a lifetime prohibition. For example, if you participated in a NAGB discussion concerning a contract to State University, you may never represent State University with respect to that same contract before any official of the Executive Branch of the federal government and you may never represent State University with respect to that contract in any federal court.

Further, if you serve on NAGB more than sixty days and are compensated above a certain level, you may be subject to a one-year “cooling-off” period during which you would be barred from representing before NAGB certain third parties in connection with any matter. There are some exceptions to this law as well, and you should contact the Department of Education’s Ethics Division for guidance.

V. STANDARDS OF ETHICAL CONDUCT AND OTHER ETHICS RULES

The Standards of Ethical Conduct for Employees of the Executive Branch (Standards), 5 C.F.R. Part 2635, are regulations that apply both to regular federal government employees and to SGEs. Although you are treated generally the same as regular employees under the Standards, a few
exceptions do exist for SGEs in recognition of the fact that SGEs are working for the government only in a very limited way. In addition, there are other rules that govern your conduct as an SGE, including the Hatch Act, anti-lobbying rules, the Federal Acquisition Regulation, and rules about accepting gifts and compensation from foreign governments. A brief synopsis of some of these rules follows.

A. What restrictions apply if I want to engage in fundraising?

You may not use your NAGB title, position or authority to solicit funds for any organization. In addition, you may not personally solicit funds or other support from persons whose interests may be affected substantially by the performance or nonperformance of your official duties.

B. What restrictions are there on my acceptance of gifts?

You are prohibited from accepting gifts (almost anything of monetary value) from a “prohibited source” or gifts given because of your official position as a member of NAGB, unless a specific exception applies. The definition of “prohibited source” includes any person:

- seeking official action from NAGB;
- doing or seeking to do business with NAGB; or
- having interests that may be substantially affected by your official duties at NAGB.

The definition also includes organizations the majority of whose members fall within any of these categories. You may accept various benefits resulting from your outside business or employment activities, if a reasonable person would conclude that such benefits are not offered or enhanced because of your official position. The most commonly applicable exceptions to the gift rule allow you to accept:

- Modest items of food other than a meal, such as coffee, soft drinks, or donuts;
- Most plaques, certificates and trophies;
- Discounts available to all Government employees;
- Anything for which you pay market value;
- Gifts valued at $20 or less per occasion, totaling no more than $50 in a calendar year from any one source;
- Gifts clearly motivated by friendship or family relationship;
- Gifts resulting from your outside business activities, including those of your spouse; and
- Free attendance or meal which is provided by:

1. the sponsor of the event for the day on which you are speaking at the event, or for a widely-attended gathering of mutual interest to a number of parties when the necessary determination of agency interest has been made; or

2. someone other than the sponsor of a widely-attended gathering of mutual interest to a number of parties when more than 100 people are expected to attend, the
aggregate value of the gift is under $335, and the necessary determination of agency interest has been made.

C. What restrictions apply if I want to “lobby” Congress?

NAGB and its members are permitted to communicate directly with Congress in their official capacity on matters that are related to legislation or appropriations deemed necessary to conduct NAGB’s “public business” (i.e., the NAGB’s statutory functions and responsibilities). However, the Anti-Lobbying Act, 18 U.S.C. Section 1913, prohibits you, in your official capacity at NAGB, from engaging in “grass-roots lobbying” (i.e., directly or indirectly suggesting or requesting that others contact Congress or a state legislature to urge the passage or defeat of proposed or pending legislation), even if it is related to the NAGB’s public business. The Anti-Lobbying Act also requires that any permissible direct communications with Congress in your official capacity at NAGB be made only through official channels.

None of these restrictions prohibit you from lobbying members of Congress or state legislatures, or urging others to do so, on your own time in your personal capacity. If you lobby Congress or state legislatures in your personal capacity, and the issue is related to NAGB’s business, you should make it clear that you are not representing NAGB and not acting in your official capacity as a member. Also, please note that when you are lobbying as a private citizen, you are not permitted to use government resources or equipment (including, but not limited to, computers, telephones, fax machines, copy machines, stationery), or seek assistance from NAGB staff.

D. What does “misuse of position” mean?

You may not use your position on NAGB to seek advantage for yourself or others. You also may not use nonpublic information gained through your service at NAGB to seek advantage for yourself or others. Finally, you may not use your NAGB title in a manner that makes it appear that the NAGB is sanctioning your views, products, services or personal enterprises. Of course, you may list your membership on NAGB on your curriculum vitae, but you may never use your status as an NAGB member to advertise or promote your personal activities. Please seek advice from the Department of Education Office of the General Counsel’s Ethics Division if you have any questions in this area.

E. May I keep my day job and still serve on NAGB?

Yes, you may continue to collect your regular salary from an outside employer for days on which you are providing services to the federal government (whether your federal government service is paid or unpaid). However, if you have another consultant or advisory position with NAGB or any other federal department or agency, you may not receive per diem or salary from NAGB for the same day for services performed for the two positions.

F. Are there any restrictions on my political activities?

You may not engage in any political activities while you are on duty (i.e., performing
government services) or when you are in a government building or vehicle. Although you are not subject to any restrictions on your political activities when you are not performing government services, you may never use your official title as a member of NAGB in connection with any political activities.

G. What restrictions do I face if I want to teach, speak, or write on matters that are related to the duties I perform for NAGB?

You may not receive compensation for teaching, speaking, or writing if:

- the activity is performed as part of your official duties (e.g., a speech on behalf of NAGB);
- the invitation to engage in the activity was extended primarily because of your official position at NAGB, rather than expertise in the subject matter;
- the invitation or offer of compensation was extended to you by someone with interests that may be affected substantially by your duties;
- the information conveyed through the activity draws substantially on nonpublic information obtained through your service at NAGB; or
- the activity deals, in significant part, with a matter involving specific parties to which you are currently assigned or had been assigned during your current NAGB appointment.

Notwithstanding the restrictions in bold type you may accept compensation for teaching a course requiring multiple presentations offered as part of: (a) the regularly established curriculum of various specified types of educational institutions; or (b) educational or training programs sponsored and funded by federal, State, or local government. However, if you teach at an educational institution, you must not participate in any NAGB matters that involve that institution.

H. What restrictions apply if my government duties involve the awarding of contracts?

If you are involved in the awarding of any contracts, please seek advice from the Ethics Division. There are special provisions that cover your involvement in the awarding of contracts. For example, you may not accept compensation as an employee, officer, director, or consultant of a contractor within the one-year period after leaving Government service where you participated in certain procurement matters pertaining to that contractor. In addition, if you disclose certain information pertaining to Federal procurements that you obtained during your service on a committee, you may face sanctions, including criminal penalties.
I. What restrictions apply to my interaction with foreign entities?

The emoluments clause of the U.S. Constitution prohibits you from receiving any emolument, office or title of any kind from a foreign government, including political subdivisions of a foreign government. An emolument is compensation received by virtue of holding an office or having employment with a foreign government and includes, for example, salary, honoraria, transportation, per diem allowances, household goods, shipment costs, and housing allowances. This clause has been interpreted to be broader than the traditional notion of employment and includes, for example, income received through a partnership when an identifiable portion of the partnership draw can be attributed to the partnership’s fees from such foreign government. This provision has particular relevance to positions with foreign universities that are government-operated, as opposed to private institutions. United States Constitution, art. I § 9, cl. 8. There are also statutory provisions restricting acceptance of gifts from foreign governments. 5 U.S.C. § 7342. You should seek advice from the Ethics Division regarding the details about these restrictions. Additionally, a criminal statute bars employment or consultation with a foreign entity for the purpose of providing foreign agent representation or lobbying. 18 U.S.C. § 219.

The ban on participating in foreign agent activities covered by the Foreign Agents Registration Act (FARA) prohibits representation of foreign governments or foreign political parties before the United States Government, as well as a number of other activities conducted within the United States on behalf of such entities. There are certain FARA exceptions related to trade or commerce, legal representation, humanitarian fundraising, and religious, scholastic, or scientific pursuits. The Lobbying Disclosure Act of 1995 requires certain covered Federal officials who serve as agents of foreign principals (other than foreign governments or foreign political parties) to register if they work on behalf of foreign corporations, associations, or other organizations.

Finally, certain restrictions apply after your position with NAGB terminates. Specifically, 18 U.S.C. § 207 includes restrictions on former employees who participated in trade or treaty negotiations on behalf of the United States (18 U.S.C. § 207(b)) and on former senior employees who wish to represent, or aid or advise in the representation of, a foreign entity with the intent to influence a decision of a Federal employee or agency (18 U.S.C. § 207(f)).

J. What do I do if I am called to be an expert witness?

Government employees generally may not participate as an expert witness, with or without compensation, other than on behalf of the United States, in any proceeding before a federal court or agency in which the United States is a party or has a direct and substantial interest. This restriction applies to most SGEs only if the SGE actually participated officially in the same proceeding or in the particular matter that is the subject of the proceeding. If you are appointed by the President, serve on a commission established by statute, or serve (or are expected to serve) for more than 60 days in a period of 365 days, the restriction on expert service also applies to any proceeding in which NAGB is a party or has a direct and substantial interest.
K. May I keep and use frequent flyer miles that I earn when I am on official NAGB travel?

Yes, you may use frequent flyer miles or other airline awards or promotions accumulated on official NAGB travel for your own personal use.

VI. CONCLUSION

We understand that these laws are complex and may not be intuitive. Again, we caution you that this summary is merely an introduction to the ethics laws and rules that apply to you. You should always feel free to contact the Department of Education Office of the General Counsel’s Ethics Division with any questions or concerns.

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<td>NAEP Alliance contractors: ETS and Westat</td>
<td>NCES Liaison: Pat Etienne</td>
<td>Sharyn Rosenberg</td>
<td>SV #2</td>
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</table>

Updated July 2018
The Nation’s Report Card, also known as the National Assessment of Educational Progress (NAEP), was developed in 1969 to answer the important question: “How are our nation’s students doing?” The National Assessment Governing Board established this Strategic Vision to not only answer the first question, but also to expand NAEP’s impact by addressing a second question: “How can NAEP provide information about how our students are doing in the most innovative, informative, and impactful ways?”

Congress created the independent, bipartisan Governing Board in 1988 to set policy guidelines for The Nation’s Report Card, which is the largest nationally representative, continuing evaluation of the condition of education in the United States. In statute Congress charged the Governing Board to identify NAEP subjects to be tested, determine the content and achievement levels for each assessment, approve all test questions, and take steps to improve the form, reporting, and use of results.

The Governing Board partners with the National Center for Education Statistics, which administers the NAEP program, to inform a wide range of stakeholders—including policymakers, educators, researchers, business leaders, the media, and the general public—about what America’s students know and can do in various subject areas, and compare achievement data over time and among student demographic groups. This allows the nation to understand where more work must be done to improve learning among all students.

The Governing Board fulfills its statutory mission by continuously reviewing and revising its policies and practices to ensure The Nation’s Report Card measures and reports meaningful information to the public.

The educational landscape of the 21st century demands increased academic ambition, greater technological sophistication, improved civic participation, and expanded global perspectives for all students. In this time of rapid and accelerating change, it is essential for The Nation’s Report Card to support innovation and address the need to improve student achievement, while maintaining its timeless promise to serve as the constant and unassailable measure of student achievement for our nation.

To increase the value of The Nation’s Report Card as a resource to impact student achievement, the Governing Board adopted this Strategic Vision with a dual focus on innovating to enhance NAEP’s form and content and informing stakeholders to expand NAEP’s dissemination and use.
The National Assessment Governing Board will promote The Nation’s Report Card’s wealth of information to facilitate the awareness and uses of NAEP in appropriate, timely, new, and meaningful ways. Examples of NAEP resources include: results; trends; test questions and tasks; studies; measurement innovations; frameworks that specify the content and design of NAEP assessments; and contextual variables about student demographics and educational experiences collected from students, teachers, and schools. The Governing Board will:

Inform

- Strengthen and expand partnerships by broadening stakeholders’ awareness of NAEP and facilitating their use of NAEP resources.
- Increase opportunities to connect NAEP to administrative data and state, national, and international student assessments.
- Expand the availability, utility, and use of NAEP resources, in part by creating new resources to inform education policy and practice.
- Promote sustained dissemination and use of NAEP information beyond Report Card releases with consideration for multiple audiences and ever-changing multi-media technologies.

Innovate

- Develop new approaches to update NAEP subject area frameworks to support the Board’s responsibility to measure evolving expectations for students, while maintaining rigorous methods that support reporting student achievement trends.
- Continue improving the content, analysis, and reporting of NAEP contextual variables by considering the questions’ relevance, sensitivity, and potential to provide meaningful context and insights for policy and practice.
- Research policy and technical implications related to the future of NAEP Long-Term Trend assessments in reading and mathematics.
- Research assessments used in other countries to identify new possibilities to innovate the content, design, and reporting of NAEP.
- Develop policy approaches to revise the NAEP assessment subjects and schedule based on the nation’s evolving needs, the Board’s priorities, and NAEP funding.
- Develop new approaches to measure the complex skills required for transition to postsecondary education and career.

This Strategic Vision will focus the work of the Governing Board through the year 2020. By pursuing these priorities, the Governing Board will ensure that The Nation’s Report Card provides the country with valuable data that measure and contribute to the improvement of student progress in achieving important knowledge and skills necessary for success as citizens in our democratic society.

Unanimously approved November 18, 2016
### National Assessment of Educational Progress

#### Schedule of Assessments

Approved November 21, 2015

The National Assessment of Educational Progress (NAEP) Authorization Act established the National Assessment Governing Board to set policy for NAEP, including determining the schedule of assessments. (P.L. 107-279)

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<th>State Grades Assessed</th>
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<td>Geography*</td>
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<td>Long-term Trend</td>
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</table>

**NOTES:**

*Assessments not administered by computer. Beginning in 2017 all operational assessments will be digitally based.

**Science in 2015 consisted of paper-and-pencil and digital-based components.

~Long-term Trend (LTT) assessments sample students at ages 9, 13, and 17 and are conducted in reading and mathematics.

Subjects in **BOLD ALL CAPS** indicate the year in which a new framework is implemented or assessment year for which the Governing Board will decide whether a new or updated framework is needed.
History of Changes to the NAEP Schedule of Assessments

Historical Schedule Changes
The major schedule changes adopted by the Board since 2000 are listed below:

1. Added grade 4 and 8 state-level Reading and Mathematics every two years. (2002) [Prior to the 2002 ESEA reauthorization (NCLB), state assessments at grades 4 and 8 were given every two years with reading and writing in one biennium and mathematics and science in the next, i.e., these subjects and grade 12 subjects were tested once every four years.]

2. Added the High School Transcript Study (HSTS) as a regularly scheduled study. (2005)


4. Added Technology and Engineering Literacy (TEL) to the NAEP subjects assessed. (2010)

5. Added grade 12 state-level Reading and Mathematics for volunteer states with a periodicity of every four years. (2008)

6. Adjusted the periodicity of science to correspond to the periodicity of TIMSS to conduct international benchmarking studies in mathematics and science. (2010)

7. Scheduled Writing as a technology based assessment, beginning with national data collections only and delaying fourth grade in order to complete a special study. (2010)

Other schedule changes and program adjustments from 2000 through 2015 have been due primarily to budget constraints and/or technical challenges, considering options such as:

- Assessing fewer grade levels in non-required subject areas (e.g., U.S. History, Civics, and Geography; Writing; TEL).
- Postponing a state-level assessment.
- Postponing a full assessment/study (e.g., World History, Foreign Language, HSTS).

Guiding Principles for Schedule Changes
The Governing Board’s guiding principles and priorities for schedule changes are to:

- follow the requirements in the National Assessment of Educational Progress Authorization Act, which includes the mandate to assess reading and math at the state level every two years and additional subjects as time and resources allow;
- adhere to the Governing Board’s General Policy: Conducting and Reporting the National Assessment of Educational Progress; and
- reflect the current priorities of the Governing Board to:
  - Administer all assessments using technology beginning in 2017,
  - Continue to assess broad-based curricular areas with a priority for science, technology, engineering, and mathematics (STEM); and
  - Provide state-level data in curricular areas beyond reading and mathematics.

Guidance for the schedule is found in NAEP Authorization Act Sec. 303(b)(2) which addresses the use of random sampling (A), testing in reading and mathematics at grades 4 and 8 once every two years (B), and testing in reading and mathematics at grade 12 at regularly scheduled intervals (at least as often as prior to NCLB) (C).

After this initial guidance, Sec. 303(b)(2)(D) provides guidance for including other subjects in grades 4, 8, and 12 to the extent time and resources allow. It says, including assessments “… in regularly scheduled intervals in additional subject matter, including writing, science, history, geography, civics, economics, foreign languages, and arts, and the [long term] trend assessment described in subparagraph (F).”
Overview of NAEP Assessment Design

The content and format for each NAEP subject-area assessment is determined by a NAEP assessment framework, developed under the Governing Board’s direction. General details about the structure of NAEP assessments include:

Long Test, Short Student Test Booklet
- Each student gets a small part of the test
- No individual student scores

Common Block Structures Across Subjects
- Items are within blocks, blocks are within booklets
  Example:
  At grade 4: Reading has 10 blocks and Math has 10 blocks

Test Question Types
- Multiple-choice
- Open-ended
- Computer-based tasks (Writing, Science, TEL)

Contextual Questions
- Student, teacher, administrator questionnaires

Student Booklet Block Design

While some NAEP assessments are conducted on a technology-based platform (TEL, Writing), for paper-based assessments NAEP uses a focused balanced incomplete block (BIB) or partially balanced incomplete block (pBIB) design to assign blocks or groups of cognitive items to student booklets. Because of the BIB and pBIB booklet designs and the way NAEP assigns booklets to students, NAEP can sample enough students to obtain precise results for each test question while generally consuming an average of about an hour and a half of each student's time.

The "focused" aspect of NAEP's booklet design requires that each student answer questions from only one subject area. The "BIB" or "pBIB" design ensures that students receive different interlocking sections of the assessment forms, enabling NAEP to check for any unusual interactions that may occur between different samples of students and different sets of assessment questions.

In a BIB design, the cognitive blocks are balanced; each cognitive block appears an equal number of times in every possible position. Each cognitive block is also paired with every other cognitive block in a test booklet exactly the same number of times. In a pBIB design, cognitive blocks may not appear an equal number of times in each position, or may not be paired with every other cognitive block an equal number of times. NAEP booklet design varies according to subject area (e.g., geography, mathematics, reading, science, U.S. history, writing).
Once the instrument developer has laid out the configuration of all blocks for each booklet in a booklet map shown here with the following column headings,

<table>
<thead>
<tr>
<th>Booklet number</th>
<th>Cognitive block 1</th>
<th>Cognitive block 2</th>
<th>Contextual question directions</th>
<th>General student contextual questions</th>
<th>Subject-specific contextual questions</th>
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</table>

the number of rows (booklet numbers) provides the booklet spiral design information needed for the bundling of the student booklets.


**NAEP Assessment Sample Design**

Each assessment cycle, a sample of students in designated grades within both public and private schools throughout the United States (and sometimes specified territories and possessions) is selected for assessment. In addition, in state assessment years, of which 2007 is an example, the samples of public schools and their students in each state are large enough to support state-level estimates. In all cases, the selection process utilizes a probability sample design in which every school and student has a chance to be selected, and standard errors can be calculated for the derived estimates.

**Public School Selection in State Assessment Years**

The selection of a sample of public school students for state assessment involves a complex multistage sampling design with the following stages:

- Select public schools within the designated areas,
- Select students in the relevant grades within the designated schools, and
- Allocate selected students to assessment subjects.

The Common Core of Data (CCD) file, a comprehensive list of operating public schools in each jurisdiction that is compiled each school year by the National Center for Education Statistics (NCES), is used as the sampling frame for the selection of sample schools. The CCD also contains information about grades served, enrollment, and location of each school. In addition to the CCD list, a set of specially sampled jurisdictions is contacted to determine if there are any newly formed public schools that were not included in the lists used as sampling frames. Considerable effort is expended to increase the survey coverage by locating public schools not included in the most recent CCD file.

As part of the selection process, public schools are combined into groups known as strata on the basis of various school characteristics related to achievement. These characteristics include the physical location of the school, extent of minority enrollment, state-based achievement scores, and median income of the area in which the school is located. Stratification of public schools
occurs within each state. Grouping schools within strata by such selected characteristics provides a more ordered selection process with improved reliability of the assessment results.

On average, a sample of approximately 100 grade-eligible public schools is selected within each jurisdiction; within each school, about 60 students are selected for assessment. Both of these numbers may vary somewhat, depending on the number and enrollment size of the schools in a jurisdiction, and the scope of the assessment in the particular year. Students are sampled from a roster of individual names, not by whole classrooms. The total number of schools selected is a function of the number of grades to be assessed, the number of subjects to be assessed, and the number of states participating.

**Private School Selection in State Assessment Years**

In years in which state-level samples are drawn for public schools, private schools are classified by type (e.g., Roman Catholic, Lutheran, etc.), and are grouped for sampling by geography (Census region), degree of urbanization of location, and minority enrollment. About 700 private schools, on average, are included, with up to 60 students per school selected for assessment. These samples are not large enough to support state-level estimates for private schools. Thus, inferences for private schools are limited to the national level, even in years when public school assessments are state-specific.

A national sample of private schools in all grades is then drawn from a list compiled through the Private School Universe Survey (PSS), which is a mail survey of all U.S. private schools carried out biennially by the U.S. Census Bureau under contract to NCES. The PSS list is updated for new schools only for a sample of Roman Catholic dioceses.

**National-Only Assessment Years**

In years when the NAEP samples are intended only to provide representation at the national level and not for each individual state, the public and private school selection process is somewhat different. Rather than selecting schools directly from lists of schools, the first stage of sampling involves selecting a sample of some 50 to 100 geographic primary sampling units (PSUs). Each PSU is composed of one or more counties. They vary in size considerably, and generally about 1,000 PSUs are created in total, from which a sample is selected. Within the set of selected PSUs, public and private school samples are selected using similar procedures to those described above for the direct sampling of schools from lists. The samples are clustered geographically, which results in a more efficient data collection process. The selection of PSUs is not necessary when the sample sizes are large in each state, as in state assessment years.


**NAEP Alliance Contractors**

NAEP is conducted by the Assessment Division of NCES, which also works with a series of contractors. The following chart presents the structure of the collaboration between these contractors.
To learn more about NAEP contractors in addition to the NAEP Alliance contractors, visit: http://nces.ed.gov/nationsreportcard/contracts/history.aspx
National Assessment Governing Board’s Response to the National Academies of Sciences, Engineering, and Medicine 2016 Evaluation of NAEP Achievement Levels

Legislative Authority

Pursuant to the National Assessment of Educational Progress (NAEP) legislation (Public Law 107-279), the National Assessment Governing Board (hereafter the Governing Board) is pleased to have this opportunity to apprise the Secretary of Education and the Congress of the Governing Board response to the recommendations of the National Academies of Sciences, Engineering, and Medicine evaluation of the NAEP achievement levels for mathematics and reading (Edley & Koenig, 2016).

The cited legislation charges the Governing Board with the authority and responsibility to “develop appropriate student achievement levels for each grade or age in each subject area to be tested.” The legislation also states that “such levels shall be determined by... a national consensus approach; used on a trial basis until the Commissioner for Education Statistics determines, as a result of an evaluation under subsection (f), that such levels are reasonable, valid, and informative to the public; ... [and] shall be updated as appropriate by the National Assessment Governing Board in consultation with the Commissioner for Education Statistics” (Public Law 107-279).

Background

NAEP is the largest nationally representative and continuing assessment of what our nation’s elementary and secondary students know and can do. Since 1969, NAEP has been the country’s foremost resource for measuring student progress and identifying differences in student achievement across student subgroups. In a time of changing state standards and assessments, NAEP serves as a trusted resource for parents, teachers, principals, policymakers, and researchers to compare student achievement across states and select large urban districts. NAEP results allow the nation to understand where more work must be done to improve learning among all students.

For 25 years, the NAEP achievement levels (Basic, Proficient, and Advanced) have been a signature feature of NAEP results. While scale scores provide information about student achievement over time and across student groups, achievement levels reflect the extent to which student performance is “good enough,” in each subject and grade, relative to aspirational goals.
Since the Governing Board began setting standards in the early 1990s, achievement levels have become a standard part of score reporting for many other assessment programs in the US and abroad.

Governing Board Response

Overview

The Governing Board appreciates the thorough, deliberative process undertaken over the past two years by the National Academies of Science, Engineering, and Medicine and the expert members of the Committee on the Evaluation of NAEP Achievement Levels for Mathematics and Reading. The Governing Board is pleased that the report concludes that the achievement levels are a meaningful and important part of NAEP reporting. The report states that, “during their 24 years [the achievement levels] have acquired meaning for NAEP’s various audiences and stakeholders; they serve as stable benchmarks for monitoring achievement trends, and they are widely used to inform public discourse and policy decisions. Users regard them as a regular, permanent feature of the NAEP reports” (Edley & Koenig, 2016; page Sum-8). The Governing Board has reviewed the seven recommendations presented in the report and finds them reasonable and thoughtful. The report will inform the Board’s future efforts to set achievement levels and communicate the meaning of NAEP Basic, Proficient, and Advanced. The recommendations intersect with two Governing Board documents, the Strategic Vision and the achievement levels policy, described here.

On November 18, 2016, the Governing Board adopted a Strategic Vision (https://www.nagb.org/content/nagb/assets/documents/newsroom/press-releases/2016/nagb-strategic-vision.pdf) to guide the work of the Board through 2020, with an emphasis on innovating to enhance NAEP’s form and content and expanding NAEP’s dissemination and use. The Strategic Vision answers the question, “How can NAEP provide information about how our students are doing in the most innovative, informative, and impactful ways?” The Governing Board is pleased that several of the report recommendations are consistent with the Board’s own vision. The Governing Board is committed to measuring the progress of our nation’s students toward their acquisition of academic knowledge, skills, and abilities relevant to this contemporary era.

The Governing Board’s approach to setting achievement levels is articulated in a policy statement, “Developing Student Performance Levels for the National Assessment of Educational Progress” (https://www.nagb.org/content/nagb/assets/documents/policies/developing-student-performance.pdf). The policy was first adopted in 1990 and was subsequently revised in 1995,
with minor wording changes made in 2007. The report motivates the revision of this policy, to add clarity and intentionality to the setting and communication of NAEP achievement levels.

The seven recommendations and the Governing Board response comprise a significant research and outreach trajectory that the Governing Board can pursue over several years in conjunction with key partners. The Governing Board will implement these responses within resource constraints and in conjunction with the priorities of the Strategic Vision.

**Evaluating the Alignment of NAEP Achievement Level Descriptors**

**Recommendation #1:** Alignment among the frameworks, the item pools, the achievement-level descriptors, and the cut scores is fundamental to the validity of inferences about student achievement. In 2009, alignment was evaluated for all grades in reading and for grade 12 in mathematics, and changes were made to the achievement-level descriptors, as needed. Similar research is needed to evaluate alignment for the grade 4 and grade 8 mathematics assessments and to revise them as needed to ensure that they represent the knowledge and skills of students at each achievement level. Moreover, additional work to verify alignment for grade 4 reading and grade 12 mathematics is needed.

The report’s primary recommendation is to evaluate the alignment, and revise if needed, the achievement level descriptors for NAEP mathematics and reading assessments in grades 4, 8, and 12. The Governing Board intends to issue a procurement for conducting studies to achieve this goal. The Governing Board has periodically conducted studies to evaluate whether the achievement level descriptors in a given subject should be revised, based on their alignment with the NAEP framework, item pool, and cut scores. The Governing Board agrees that this is a good time to ensure that current NAEP mathematics and reading achievement level descriptors align with the knowledge and skills of students in each achievement level category. In conjunction with the response to Recommendation #3, the updated Board policy on NAEP achievement levels will address the larger issue of specifying a process and timeline for conducting regular recurring reviews of the achievement level descriptions in all subjects and grades.

The Governing Board agrees strongly with the recommendation that, while evaluating alignment of achievement level descriptors is timely, it is not necessary to consider changing the cut scores or beginning a new trend line at this time. The NAEP assessments are transitioning from paper-based to digital assessments in 2017, and current efforts are focused on ensuring comparability between 2015 and 2017 scores. The Governing Board articulated this in the 2015 Resolution on Maintaining NAEP Trends with the Transition to Digital-Based Assessments ([https://www.nagb.org/content/nagb/assets/documents/policies/resolution-on-trend-and-dba.pdf](https://www.nagb.org/content/nagb/assets/documents/policies/resolution-on-trend-and-dba.pdf)).

**Recommendation #2:** Once satisfactory alignment among the frameworks, the item pools, the achievement-level descriptors, and the cut scores in NAEP mathematics and reading has been
demonstrated, their designation as trial should be discontinued. This work should be completed and the results evaluated as stipulated by law: (20 U.S. Code 9622: National Assessment of Educational Progress: https://www.law.cornell.edu/uscode/text/20/9622 [September 2016]).

Ultimately, the Commissioner of Education Statistics is responsible for determining whether the “trial” designation is removed. The Governing Board is committed to providing the Commissioner with the information needed to make this determination in an expedient manner.

**Regular Recurring Reviews of the Achievement Level Descriptors**

**Recommendation #3:** To maintain the validity and usefulness of achievement levels, there should be regular recurring reviews of the achievement-level descriptors, with updates as needed, to ensure they reflect both the frameworks and the incorporation of those frameworks in NAEP assessments.

The Board’s current policy on NAEP achievement levels contains several principles and guidelines for setting achievement levels but does not address issues related to the continued use or reporting of achievement levels many years after they were established. The revised policy will seek to address this gap by including a statement of periodicity for conducting regular recurring reviews of the achievement level descriptors, with updates as needed, as called for in this recommendation. The Governing Board agrees that it is important to articulate a process and timeline for conducting regular reviews of the achievement level descriptors rather than performing such reviews on an ad hoc basis.

**Relationships Between NAEP Achievement Levels and External Measures**

**Recommendation #4:** Research is needed on the relationships between the NAEP achievement levels and concurrent or future performance on measures external to NAEP. Like the research that led to setting scale scores that represent academic preparedness for college, new research should focus on other measures of future performance, such as being on track for a college-ready high school diploma for 8th-grade students and readiness for middle school for 4th-grade students.

In addition to the extensive work that the Governing Board has conducted at grade 12 to relate NAEP mathematics and reading results to academic preparedness for college, the Governing Board has begun research at grade 8 with statistical linking studies of NAEP mathematics and reading and the ACT Explore assessments in those subjects. This work was published while the evaluation was in process and was not included in the Committee’s deliberations. Additional studies in NAEP mathematics and reading at grades 4 and 8 are beginning under contract to the National Center for Education Statistics (NCES). The Governing Board’s Strategic Vision includes an explicit goal to increase opportunities for connecting NAEP to other national and
international assessments and data. Just as the Board’s previous research related grade 12 NAEP results in mathematics and reading to students’ academic preparedness for college, the Governing Board anticipates that additional linkages with external measures will help connect the NAEP achievement levels and scale scores to other meaningful real-world indicators of current and future performance.

**Interpretations and Uses of NAEP Achievement Levels**

*Recommendation #5: Research is needed to articulate the intended interpretations and uses of the achievement levels and collect validity evidence to support these interpretations and uses. In addition, research to identify the actual interpretations and uses commonly made by NAEP’s various audiences and evaluate the validity of each of them. This information should be communicated to users with clear guidance on substantiated and unsubstantiated interpretations.*

The Governing Board’s Strategic Vision emphasizes improving the use and dissemination of NAEP results, and the Board’s work in this area will include achievement levels. The Governing Board recognizes that clarity and meaning of NAEP achievement levels (and scale scores) are of utmost importance. The Governing Board will issue a procurement to conduct research to better understand how various audiences have used and interpreted NAEP results (including achievement levels). The Governing Board will work collaboratively with NCES to provide further guidance and outreach about appropriate and inappropriate uses of NAEP achievement levels.

**Guidance for Inferences Made with Achievement Levels versus Scale Scores**

*Recommendation #6: Guidance is needed to help users determine inferences that are best made with achievement levels and those best made with scale score statistics. Such guidance should be incorporated in every report that includes achievement levels.*

The Governing Board understands that improper uses of achievement level statistics are widespread in the public domain and extend far beyond the use of NAEP data. Reports by the Governing Board and NCES have modeled appropriate use of NAEP data and will continue to do so. This recommendation is also consistent with the goal of the Strategic Vision to improve the dissemination and use of NAEP results. The Governing Board will continue to work with NCES and follow current research to provide guidance about inferences that are best made with achievement levels and those best made with scale score statistics.
Regular Cycle for Considering Desirability of Conducting a New Standard Setting

Recommendation #7: NAEP should implement a regular cycle for considering the desirability of conducting a new standard setting. Factors to consider include, but are not limited to: substantive changes in the constructs, item types, or frameworks; innovations in the modality for administering assessments; advances in standard setting methodologies; and changes in the policy environment for using NAEP results. These factors should be weighed against the downsides of interrupting the trend data and information.

When the Board’s achievement levels policy was first created and revised in the 1990s, the Board was setting standards in each subject and grade for the first time and had not yet considered the need or timeline for re-setting standards. To address this recommendation, the Governing Board will update the policy to be more explicit about conditions that require a new standard setting.

Board’s Commitment

The Governing Board remains committed to its congressional mandate to set “appropriate student achievement levels” for the National Assessment of Educational Progress. The Board appreciates the report’s affirmation that NAEP achievement levels have been set thoughtfully and carefully, consistent with professional guidelines for standard setting, and based on extensive technical advice from respected psychometricians and measurement specialists. The Board also takes seriously the charge to develop the current achievement levels through a national consensus approach, involving large numbers of knowledgeable teachers, curriculum specialists, business leaders, and members of the general public throughout the process. This is only fitting given the Governing Board’s own congressionally mandated membership that explicitly includes representatives from these stakeholder groups.

The Governing Board remains committed to improving the process of setting and communicating achievement levels. The Governing Board is grateful for the report recommendations that will advance these aims.

Reference

## Glossary of Acronyms and Other Terms

The following acronyms and terms are commonly used in the work of the National Assessment Governing Board.

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AASA</td>
<td>American Association of School Administrators</td>
</tr>
<tr>
<td>ACT</td>
<td>Formerly American College Testing</td>
</tr>
<tr>
<td>ADC</td>
<td>Assessment Development Committee (Board Committee responsible for test development on all NAEP subjects)</td>
</tr>
<tr>
<td>AERA</td>
<td>American Educational Research Association</td>
</tr>
<tr>
<td>AFT</td>
<td>American Federation of Teachers</td>
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<tr>
<td>AIR</td>
<td>American Institutes for Research</td>
</tr>
<tr>
<td>ALDs</td>
<td>Achievement Level Descriptions</td>
</tr>
<tr>
<td>ALS</td>
<td>Achievement Levels Setting</td>
</tr>
<tr>
<td>ARRA</td>
<td>American Recovery and Reinvestment Act of 2009</td>
</tr>
<tr>
<td>AYP</td>
<td>Adequate Yearly Progress (From the No Child Left Behind Act)</td>
</tr>
<tr>
<td>BOTA</td>
<td>Board on Testing and Assessment, National Academy of Sciences</td>
</tr>
<tr>
<td>CCSS</td>
<td>Common Core State Standards</td>
</tr>
<tr>
<td>CCSSO</td>
<td>Council of Chief State School Officers</td>
</tr>
<tr>
<td>CGCS</td>
<td>Council of the Great City Schools</td>
</tr>
<tr>
<td>COSDAM</td>
<td>Committee on Standards, Design and Methodology (Board committee responsible for technical issues)</td>
</tr>
<tr>
<td>CRESST</td>
<td>Center for Research on Evaluation, Standards, and Student Testing (Research Center at UCLA)</td>
</tr>
<tr>
<td>DAC</td>
<td>Design and Analysis Committee (Advisory panel to ETS on technical issues in NAEP operations)</td>
</tr>
<tr>
<td>ECS</td>
<td>Education Commission of the States (First NAEP contractor and organization supporting state policy leaders)</td>
</tr>
<tr>
<td>EIMAC</td>
<td>Education Information Management Advisory Consortium (Advisory committee to CCSSO, mostly state testing directors)</td>
</tr>
<tr>
<td>ELs or ELLs</td>
<td>English Learners or English Language Learner (Pronounced &quot;Ls&quot;; formerly called Limited English Proficient or LEP)</td>
</tr>
<tr>
<td>ELPA</td>
<td>English Language Proficiency Assessment (Also ELPA21)</td>
</tr>
<tr>
<td>EPIC</td>
<td>Education Policy Improvement Center</td>
</tr>
<tr>
<td>ESEA</td>
<td>Elementary and Secondary Education Act</td>
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<tr>
<td>ETS</td>
<td>Educational Testing Service</td>
</tr>
<tr>
<td>FAR</td>
<td>Federal Acquisition Regulations</td>
</tr>
<tr>
<td>GAO</td>
<td>Government Accountability Office</td>
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<tr>
<td>GPO</td>
<td>Government Printing Office</td>
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<tr>
<td>GSA</td>
<td>General Services Administration</td>
</tr>
<tr>
<td>HSTS</td>
<td>High School Transcript Study (A special NAEP data collection)</td>
</tr>
<tr>
<td>IEP</td>
<td>Individualized Education Plan (A required document under the Individuals with Disabilities Education Act, which specifies learning objectives for an individual student found with a disability)</td>
</tr>
<tr>
<td>IES</td>
<td>Institute of Education Sciences (The Department of Education office in which NCES is located. The Director of IES is an ex-officio member of the Governing Board.)</td>
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<tr>
<td>IRA</td>
<td>International Reading Association</td>
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<tr>
<td>IRT</td>
<td>Item Response Theory&lt;br&gt;<em>(A theory for design, analysis, and scoring of tests)</em></td>
</tr>
<tr>
<td>KaSA</td>
<td>Knowledge and Skills Appropriate&lt;br&gt;<em>(A series of NAEP research studies to improve measurement precision)</em></td>
</tr>
<tr>
<td>KSA</td>
<td>Knowledge, Skill, and/or Ability&lt;br&gt;<em>(A statement describing a subset of academic content)</em></td>
</tr>
<tr>
<td>LEP</td>
<td>Limited English Proficient&lt;br&gt;<em>(Term formerly used for an English Language Learner)</em></td>
</tr>
<tr>
<td>LTT</td>
<td>Long Term Trend Assessment&lt;br&gt;<em>(Series of NAEP tests that began in the early 1970’s)</em></td>
</tr>
<tr>
<td>MST</td>
<td>Multi-stage Testing&lt;br&gt;<em>(A testing format where subsets of test items are presented to students based on item difficulty and student performance)</em></td>
</tr>
<tr>
<td>NAE</td>
<td>National Academy of Education</td>
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<tr>
<td>NAEP</td>
<td>National Assessment of Educational Progress&lt;br&gt;<em>(Pronounced &quot;nape&quot;)</em></td>
</tr>
<tr>
<td>NAESP</td>
<td>National Association of Elementary School Principals</td>
</tr>
<tr>
<td>NAGB</td>
<td>National Assessment Governing Board&lt;br&gt;<em>(Pronounced &quot;nag bee&quot;)</em></td>
</tr>
<tr>
<td>NAS</td>
<td>National Academy of Sciences</td>
</tr>
<tr>
<td>NASBE</td>
<td>National Association of State Boards of Education</td>
</tr>
<tr>
<td>NASSP</td>
<td>National Association of Secondary School Principals</td>
</tr>
<tr>
<td>The Nation’s Report Card</td>
<td>Alternate reference for NAEP assessments</td>
</tr>
<tr>
<td>NCES</td>
<td>National Center for Education Statistics&lt;br&gt;<em>(Project office for NAEP in the U.S. Department of Education and IES)</em></td>
</tr>
<tr>
<td>NCLB</td>
<td>No Child Left Behind Act of 2001</td>
</tr>
<tr>
<td>NCME</td>
<td>National Council on Measurement in Education</td>
</tr>
<tr>
<td>NCTE</td>
<td>National Council of Teachers of English</td>
</tr>
<tr>
<td>NCTM</td>
<td>National Council of Teachers of Mathematics</td>
</tr>
<tr>
<td>NEA</td>
<td>National Education Association</td>
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<tr>
<td>NEA</td>
<td>National Endowment for the Arts</td>
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<tr>
<td>NEH</td>
<td>National Endowment for the Humanities</td>
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<tr>
<td>NGSS</td>
<td>Next Generation Science Standards</td>
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<tr>
<td>NRC</td>
<td>National Research Council</td>
</tr>
<tr>
<td>NSBA</td>
<td>National School Boards Association</td>
</tr>
<tr>
<td>NSLP</td>
<td>National School Lunch Program</td>
</tr>
<tr>
<td>NVS</td>
<td>NAEP Validity Studies Panel</td>
</tr>
<tr>
<td>OGC</td>
<td>Office of the General Counsel&lt;br&gt;<em>(in the U.S. Department of Education)</em></td>
</tr>
<tr>
<td>OMB</td>
<td>Office of Management and Budget</td>
</tr>
<tr>
<td>PARCC</td>
<td>Partnership for Assessment of Readiness for College and Careers</td>
</tr>
<tr>
<td>PIRLS</td>
<td>Progress in International Reading Literacy Study</td>
</tr>
<tr>
<td>PISA</td>
<td>Program for International Student Assessment</td>
</tr>
<tr>
<td>POC</td>
<td>Principal Operating Components&lt;br&gt;<em>(Divisions of the U.S. Department of Education)</em></td>
</tr>
<tr>
<td>PTA</td>
<td>Parent Teacher Association</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Description</td>
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<tr>
<td>R&amp;D</td>
<td>Reporting and Dissemination Committee (Board Committee responsible for NAEP reporting issues)</td>
</tr>
<tr>
<td>RFP</td>
<td>Request for Proposals</td>
</tr>
<tr>
<td>RP</td>
<td>Response probability (<em>probability of correct response on a test question</em>)</td>
</tr>
<tr>
<td>RTT</td>
<td>Race to the Top (also referred to as RTTT)</td>
</tr>
<tr>
<td>SBAC</td>
<td>SMARTER Balanced Assessment Consortium</td>
</tr>
<tr>
<td>SD</td>
<td>Students with Disabilities</td>
</tr>
<tr>
<td>SES</td>
<td>Socio-economic Status</td>
</tr>
<tr>
<td>TBA</td>
<td>Technology-based Assessment</td>
</tr>
<tr>
<td>TEL</td>
<td>Technology and Engineering Literacy (<em>A content area assessed by NAEP</em>)</td>
</tr>
<tr>
<td>The Department</td>
<td>United States Department of Education</td>
</tr>
<tr>
<td>The Secretary</td>
<td>Secretary of Education (<em>Honorable Arne Duncan during the Obama administration</em>)</td>
</tr>
<tr>
<td>TIMSS</td>
<td>Trends in International Mathematics and Science Study</td>
</tr>
<tr>
<td>TUDA</td>
<td>Trial Urban District Assessment (<em>NAEP component that measures students in large urban districts</em>)</td>
</tr>
<tr>
<td>DATE AND TIME</td>
<td>EVENT</td>
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<tr>
<td>------------------------</td>
<td>---------------------------------------------------------</td>
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<tr>
<td><strong>Thursday, August 2</strong></td>
<td><strong>9:00 am – 12:30 pm</strong></td>
</tr>
<tr>
<td><strong>1:30 – 4:00 pm</strong></td>
<td><strong>Ad Hoc Committee on Measures of Postsecondary Preparedness</strong></td>
</tr>
<tr>
<td><strong>4:00 – 5:00 pm</strong></td>
<td><strong>Poster Gallery: Spotlight on NAEP Secondary Research</strong></td>
</tr>
<tr>
<td><strong>5:00 – 6:00 pm</strong></td>
<td><strong>Executive Committee</strong></td>
</tr>
<tr>
<td><strong>6:30 – 9:30 pm</strong></td>
<td><strong>Board Informal Dinner</strong></td>
</tr>
<tr>
<td><strong>Friday, August 3</strong></td>
<td><strong>8:30 am – 5:00 pm</strong></td>
</tr>
<tr>
<td><strong>Committee Meetings</strong></td>
<td><strong>9:30 am – 12 pm</strong></td>
</tr>
<tr>
<td><strong>Working Lunch</strong></td>
<td><strong>12:15 – 1:30 pm</strong></td>
</tr>
<tr>
<td><strong>Small Group Discussions</strong></td>
<td><strong>3:15 – 4:15 pm</strong></td>
</tr>
<tr>
<td><strong>Friday, August 3</strong></td>
<td><strong>5:30 – 6:30 pm</strong></td>
</tr>
<tr>
<td><strong>Friday, August 3</strong></td>
<td><strong>6:45 pm</strong></td>
</tr>
<tr>
<td><strong>Saturday, August 4</strong></td>
<td><strong>7:30 – 8:15 am</strong></td>
</tr>
<tr>
<td><strong>8:30 am – 12:00 pm</strong></td>
<td><strong>Full Board Meeting</strong></td>
</tr>
</tbody>
</table>
Ground Transportation Options

Park Hyatt Washington Hotel
1201 24th Street, NW
Washington, DC  20037
(202) 789-1234

Shared Ride Service
Super Shuttle provides shared ride service to and from BWI Thurgood Marshall Airport (BWI), Dulles International Airport (IAD) and Washington Reagan National Airport (DCA) to the hotel. For pick up, claim your luggage and proceed to Ground Transportation/Shared Ride Vans. Reservations are not required for transportation to the hotel. However, reservations are required for transportation to the airport. 24-hour notice is preferred, and reservations can be made on-line at www.supershuttle.com or call 1-800 BLUEVAN/ (800) 258-3826. The one-way fare is approximately $49 from BWI, $33 from Dulles and $19 from Reagan.

Taxi Service
Arrivals and Departures via BWI Thurgood Marshall and Ronald Reagan National Airports
Several taxi companies provide service from BWI Thurgood Marshall Airport (BWI) and Ronald Reagan National Airport (DCA). The one-way trip from BWI takes approximately one hour and the fare is approximately $80 - $120. The one-way fare from Reagan is approximately $20 and travel time is approximately 15 minutes. Taxi stands are located outside the airport and hotel.

Arrivals and Departures via Dulles International Airport
Washington Flyer Taxi Service (703) 661-6655 provides taxi service from Dulles International Airport. The one-way fare is approximately $60 per person and travel time is approximately 45 minutes. Upon arrival at Dulles, proceed to the baggage claim/arrivals area on the lower level of the main terminal and proceed to the Washington Flyer taxi stand. A curbside representative will assist you with coordinating service.

Public Transportation-Metrorail
The Park Hyatt Washington is accessible by Metrorail via the Foggy Bottom – GWU Metro Station on the Blue, Orange and Silver Lines. Exit the Foggy Bottom – GWU metro station at 23rd & I Street. Walk west on Pennsylvania Avenue. Turn right on 24th Street and walk approximately 2 blocks north to the Park Hyatt Washington.

Parking
Valet parking is available in the hotel's parking garage. The rates are $52 (tax inclusive) daily/overnight with in and out privileges.