

## **Board Charge to the Science Assessment Framework Panels**

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 the content to be assessed by NAEP. For each NAEP assessment, the Board conducts a framework development process resulting in a NAEP assessment framework that outlines what is to be measured and how it will be measured. The framework development process also results in assessment and item specifications with more detailed guidance for NCES in operationalizing the assessment.

The [NAEP Assessment Schedule](#) indicates that the Board will update the NAEP Science Framework for administration of the assessment in 2028 and beyond. In order to meet NCES' operational timeline for implementing the framework, all documents associated with the science framework must be adopted by the Board no later than January 2024. This would require that the 2028 NAEP Science Framework be adopted at or before the November 2023 quarterly Board meeting, with action on the Science Assessment and Item Specifications being taken concurrent with the framework action or shortly thereafter.

Following extensive discussion of the framework update process during the past year, the Board adopted a revised version of the [Assessment Framework Development](#) policy for NAEP during the most recent quarterly Board meeting in March. The update of the NAEP Science Assessment Framework is the first framework revision based on this new policy statement.

One of the primary goals of the policy revision was related to how the Board surfaces and provides direction on important policy issues upfront and at key points throughout the process rather than waiting until a draft of the new framework is complete. One activity to achieve this goal is to seek broad-based public comment on the current framework upfront, and the Board did seek public comment on the [current NAEP Science Framework](#) between August 20 – October 15, 2021. Thirty submissions were received from a variety of individuals, groups of individuals, and organizations. In addition, Board staff sought input from NCES on operational issues and challenges associated with the current framework and assessment. The raw comments, along with a summary of specific points raised by major theme, were included in the [November 2021 Board meeting materials on this topic](#).

The November 2021 Board discussion of the public comments received and potential policy considerations highlighted a particular need to focus on: 1) determining whether maintaining the existing trend lines should be the highest priority for the framework update (i.e., whether that should constrain decisions made about other policy considerations); 2) understanding more about the current state and future directions of science education, standards, instruction, and assessment; and 3) better defining what equity means within an assessment context for NAEP.

In [preparation for the March 2022 Board meeting](#), Board staff assembled a panel and commissioned short papers from representatives of the Council of State Science Supervisors, the National Association of Research in Science Teaching, the NAEP Validity Studies Panel, and the National Science Teaching Association, in addition to an individual with extensive experience working with science assessments. Following the panel discussion, Board members engaged in

small group discussions to reflect on potential policy priorities and other next steps related to the role of equity for NAEP.

In late February, Board staff issued a Request for Proposals to seek a contractor to support the update of the 2028 NAEP Science Assessment Framework; the proposal evaluation process is currently underway and is expected to be completed by early summer. Prior to the award of the framework development contract, Board staff will launch a panelist nominations process. In addition, a contract was recently awarded to Widmeyer/Finn Partners to support the Board with strategic communications for the science framework update. One of the first tasks of this specialized contract will be to provide support to Board staff for implementing the new requirement in the updated policy statement to use a nominations process to seek broad input on recommendations for well-qualified framework panelists who represent diverse demographic characteristics, stakeholder groups, and perspectives on the key issues identified in the Board charge to the panels (Principle 2e). Consistent with the Board policy, the Assessment Development Committee (ADC) will review panelist nominations materials and recommend a slate of panelists, which will be subject to Executive Committee approval (Principle 2f).

The Board charge to the framework panels is a necessary precursor to kicking off the panelist nominations process. The charge is intended to reflect any policy guidance for which the Board has sufficient information to reach consensus at the outset of the process; it is not intended to be comprehensive of all policy issues that might emerge throughout the process nor to reflect guidance for which content expertise is necessary. For example, Board discussions thus far have surfaced a general consensus that the Board does not wish to make an a priori determination that new trend lines should be started, without having more information on whether it might be possible to maintain trends depending on the degree of alignment between the current and revised frameworks. On the other hand, the Board has discussed the need to provide additional direction on the role of equity for NAEP generally and assessment frameworks in particular but has not yet reached consensus on that direction so the specific details cannot be included in the initial charge (but can be communicated upon decision). Finally, the Board has expressed an openness to considering whether and how content from the [NAEP Technology and Engineering Literacy Framework](#) might be incorporated into the 2028 NAEP Science Framework. Such a change would require specialized content and assessment expertise from the framework panels. Similar to how equity in the science framework can be addressed later when the Board has reached consensus, members can provide general guidance now and the panels will come back to the Board with a specific proposal for accomplishing this goal.

The initial Board charge is not the only opportunity for Board to provide direction to the framework panels. Board staff will be closely involved in all stages of implementing the framework update process, including attendance at panel meetings. In addition, updates will be provided from the panels to the Board throughout the process, with additional opportunities for updating existing guidance based on new information or providing guidance on new issues.

Based on the Board discussions thus far, ADC has drafted the following charge for the Board's consideration at the upcoming quarterly Board meeting on May 12. The following morning, May 13, the ADC will consider any necessary edits based on the Board discussion. ADC anticipates bringing the charge forward for full Board adoption on the afternoon of May 13.

**The National Assessment Governing Board Charge to the Steering and Development  
Panels for the 2028 National Assessment of Educational Progress (NAEP)  
Science Assessment 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 established in its [Assessment Framework Development Policy](#) that the Board shall conduct “a comprehensive, inclusive, and deliberative process that involves active participation of stakeholders” to determine and update the content and design of all NAEP assessments;

**Whereas**, the Governing Board’s Assessment Framework Development Policy states, “NAEP framework development shall be informed by a broad, balanced, and inclusive set of factors. Frameworks 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”;

**Whereas**, the Governing Board received upfront input from stakeholders on potential changes to the current NAEP Science Framework via an [initial public comment period](#) on the current [NAEP Science Framework](#) (conducted from August – October 2021) and [brief papers from science education experts](#) who participated in a moderated discussion with the Board in March 2022;

**Whereas**, most of that stakeholder input focused on the importance of updating the NAEP Science Framework to account for greater (but not full) convergence in state standards and alignment to the National Academies Framework for K-12 Science Education – and yet NAEP cannot endorse the standards of any particular state or group of states, including the Next Generation Science Standards;

**Whereas**, much of the stakeholder input focused on the increasing role of equity in science education and educational assessment generally, and the Board has been engaged in ongoing discussions about how to most appropriately demonstrate its continuing commitment to equity;

**Whereas**, participation in the NAEP science assessment is voluntary and is conducted at the national level, and for states and select urban districts in some grades and years as indicated by the [NAEP Assessment Schedule](#);

**Whereas**, based on initial stakeholder input and Board discussions, the Board concludes that a Steering Panel shall be convened (with a subset of members continuing as the Development Panel) to recommend updates to the NAEP Science Framework at grades 4, 8, and 12 (last adopted in 2005 for implementation in the 2009 assessment) for implementation in 2028 and beyond;

**Therefore**, the Governing Board charges the Steering and Development Panels (hereafter, the “framework panels”) with prioritizing the following considerations when formulating recommendations for the 2028 NAEP Science Assessment Framework:

- **The NAEP Science Framework should be informed by but not determined by state science standards and the implementation of those standards. The framework panels should grapple with how to reflect greater convergence among state standards while also accounting for science education in states that diverge from the Next Generation Science Standards.**
- **The NAEP Science Framework should be forward-looking and consider what students should know and be able to do in science to be successful in college and careers.**
- **The framework panels should consider what aspects, if any, of the current [NAEP Technology and Engineering Literacy \(TEL\) Framework](#) should be incorporated into the NAEP Science Framework to reflect an updated definition of student achievement in science.**
- **The Governing Board values the current NAEP trend lines in science and would like to allow the greatest possible chance that they can be continued if supported by content alignment and bridge studies to be conducted following framework adoption. Updates to the NAEP Science Framework should prioritize relevance, utility, and validity over the need to maintain trend lines with results from the current science framework, but the framework panels should provide strong justification for changes.**
- **The framework panels should grapple with the extent to which scientific reasoning skills are independent of content versus based on content.**
- **The framework panels should be bound by considerations of feasibility when developing recommendations, including technical issues (i.e., ensuring that the framework can be operationalized in an assessment), cost (e.g., accounting for scenario-based tasks being much more expensive than other item types) and constraints imposed by the NAEP legislation (including but not limited to the requirements for NAEP to be non-ideological and avoid assessing personal or family beliefs and attitudes).**

- **The NAEP Science Framework should support the development of assessment items across a wide range of student performance at each assessed grade level, including lower-achieving students.**

The framework panels should periodically report to the Board on the status of addressing the considerations articulated above, in addition to other policy-relevant issues that emerge during deliberations. The Board will communicate relevant decisions that impact the development of the NAEP Science Framework to the framework panels when they occur, including how equity should be conceptualized in NAEP generally and the assessment frameworks in particular.