

Demonstration and Discussion: AI Implications for NAEP Content Generation, Reporting and Policy

Goal

This session is intended to illustrate what is possible with current technologies, to present challenges and policy considerations, and to generate Board discussion of how these advancements might be relevant to NAEP and NAEP policy. This information is intended to help the Board consider how AI should be incorporated into its work in a manner that reflects its overarching goals of increased efficiency, utility and relevance of NAEP, specifically: (1) how it may impact work of the standing committees as advancements result in new opportunities for scoring and analysis, content generation, and reporting; (2) if and when AI advancements may require updates to Board policies and procedures; and (3) if and how AI should be reflected in the refresh of the Board's strategic vision.

Overview

John Bailey, Senior Fellow with the American Enterprise Institute (AEI), will demonstrate examples of how generative artificial intelligence (AI) can be used for content generation and reporting. Board members will have the opportunity to ask questions and discuss between each demonstration.

Background

In May 2023, the Board expressed a desire to embark on a learning agenda to better understand advancements in AI and implications for NAEP. Since that time, the Board has engaged with various presenters internal and external to NAEP to understand how advancements in AI are currently being used and explored in NAEP and other education assessments, and examples of how AI is being used for personalized learning. Below is a list of those individuals. November 2023 quarterly Board materials included [background information on AI](#) that may be useful to review for new members, or those who need a refresher.

August 2023

- Kristen DiCerbo, the Chief Learning Officer from Khan Academy, shared innovations for student learning using generative AI.
- Susan Lottridge of Cambium Assessment described the current state of the field regarding AI use for automated scoring, including implications for NAEP.
- Matthias Von Davier of the TIMSS & PIRLS International Study Center at Boston College, shared plans for using AI in the TIMSS and PIRLS international assessments.
- Peggy Carr and Emmanuel Sikali from NCES presented high-level plans for using AI for various aspects of NAEP.

November 2023

- Nadia McLaughlin and Ebony Walton from NCES presented on current and near-term plans for using AI in NCES operations, including to assist with Passage selection and reporting.

At the committee level, COSDAM has received updates and offered input regarding exploration into the use of AI for automated scoring of constructed response items for NAEP Reading and Mathematics.