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Comment On: NSF-2025-OGC-0001-0001
Request for Information: Development of a 2025 National Artificial Intelligence Research and Development Strategic Plan

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Comment on FR Doc # 2025-07332

Submitter Information

Organization: WestEd

General Comment

Please find WestEd's comment attached.

Attachments

RFI on National AI RandD Strategic Plan_FINAL

May 29, 2025
National Science Foundation
2415 Eisenhower Ave
Alexandria, VA 22314

RE: Docket ID NSF-2025-OGC-0001

WestEd is pleased to respond to the National Science Foundation's [Request for Information on the Development of a 2025 National Artificial Intelligence \(AI\) Research and Development \(R&D\) Strategic Plan](#). As a nonpartisan education research, development, and service organization, WestEd applies rigorous evidence to real-world challenges in learning and workforce development—including growing engagement with AI in instruction, assessment, educator support, and systems improvement.

We offer the following recommendations to inform the 2025 National AI R&D Strategic Plan, based on our work implementing AI in real-world educational settings and designing research that drives innovation for learners. For example, WestEd and the University of Washington co-lead [AmplifyGAIN](#), a new multisector R&D center providing national leadership on the use of generative AI (GenAI) in math and science education. AmplifyGAIN will explore how teachers use GenAI in instruction and apply those insights to develop and refine [Colleague AI](#)—an AI assistant designed to help educators save time, enhance lesson planning, conduct formative assessments, and deliver personalized student feedback.

Initiatives like AmplifyGAIN highlight how federal investments can develop and apply AI thoughtfully in education settings. To ensure continued progress and responsible scaling, we recommend the following federal actions.

Proposed AI R&D Priorities:

- **Support the development of skills for the modern workforce**
 - Identify best practices about how teachers can use AI to stoke creativity, curiosity, student-directed learning, and innovation, and disseminate these innovative classroom uses of AI at scale.
 - Support teachers with AI professional development to guide learners in using the technology as a critical thinking partner, focusing not only on its use but also on evaluating the strengths and limitations of different AI approaches.
- **Support the development and validation of innovative next-generation assessments**
 - Research ways to leverage AI to evaluate more complex competencies such as students' conceptual understanding, applied reasoning, and adaptability. For example, AI could play a role in facilitating competency-based assessments that accurately measure ongoing learning progress and provide deeper insights into student understanding.
- **Ensure responsible AI use in State Education Agencies (SEAs)**

- Support SEAs to implement AI responsibly, ensuring fairness, transparency, and accountability, while maintaining trust and compliance with regulatory requirements. This includes creating robust infrastructure with strict guidelines and governance, including education and training.

Development Challenges:

- **Integrated, context-sensitive research and development**
 - Ensure federal investments embed research throughout the development's life cycle, in addition to the end stage, to facilitate iterative improvement.
 - Study the use of AI aligned to the timeline of children's brain development.
 - Research how to adapt AI innovations to various educational contexts, such as varying infrastructure, demographics, and community goals, to ensure AI can properly support all students.
- **Practical usability for educators**
 - Incentivize research partnership with teachers, students, and parents to identify design features and implementation supports aligned with instructional coherence and flow, which will enable teachers to adopt AI-enhanced practices.

Novel Mechanisms:

- **Foster early technology and research partnerships in schools**
 - Incentivize collaborations between technology developers, practitioners, and experienced educational researchers to yield the most usable, engaging, and effective products. To catalyze improvement, incorporate research and evaluation in classrooms settings early in the development process.
- **Promote AI professional development paired with research**
 - Support pairing AI professional development for educators with a research partner. This partnership can simultaneously help develop sustained, content-rich professional learning for teachers and administrators while also furthering context-specific research needed to advance the field more broadly.

If you have any questions or want to discuss further the response we submitted, please don't hesitate to reach out to Alicia Kielmovitch, WestEd's Director of Policy and Outreach.

Best,

Alicia Kielmovitch, Director of Policy and Outreach
WestEd

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