

PUBLIC SUBMISSION

Received: May 29, 2025 Tracking No. mb9-rjtp-nfwh Comments Due: May 28, 2025 Submission Type: API
--

Docket: NSF-2025-OGC-0001
NITRD_FRDOC_0001

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

Document: NSF-2025-OGC-0001-DRAFT-0241
Comment on FR Doc # 2025-07332

Submitter Information

Organization: Edmentum

General Comment

See attached file(s)

Attachments

Docket ID No. NSF-2025-OGC-0001 Edmentum Comment

May 29, 2025

Subject: Edmentum Response to Request for Information on the 2025 Development of a National Artificial Intelligence Research and Development Strategic Plan (Docket ID No. NSF-2025-OGC-0001)

[Edmentum](#) is pleased to offer feedback in support of the development of a National Artificial Intelligence (AI) Research and Development (R&D) Strategic Plan. As a provider of digital curriculum and assessments serving millions of K-12 students, we recognize the transformative potential of AI in education — and the responsibility to ensure it is implemented ethically, effectively, and in support of all educators and learners.

We have co-signed the EDSAFE AI Alliance's response and support the goals laid out in its recommendations. We would like to offer further insights focused explicitly on AI's use in K-12 education, informed by our experience and ongoing research and development with generative AI in schools.

Edmentum's Recommendations for K-12 AI Research and Development:

1. Invest in Applied Research in Personalized Learning and Early Literacy

- Invest in targeted R&D to explore how AI can support K-12 literacy development, including early screening, real-time scaffolding, multilingual support, and progress monitoring.
- Research should also explore how AI can power personalized learning pathways, helping students receive instruction that adapts to their needs, interests, and pace, while ensuring alignment with rigorous academic standards.
- Ensure these innovations are tested in wide-ranging school contexts with educator feedback guiding iteration to assess what works, for whom, and under what conditions.
- National R&D should focus on scalable AI innovations that align with existing standards, integrate high-quality instructional materials, and support whole-child development.
- AI should support adaptive learning, formative assessment, early warning systems, and language support tools that reflect evidence-based learning science.

2. Prepare Students for a Workforce That Integrates AI

- Invest in curricula and tools that help students become informed and ethical users of AI and introduce foundational AI and data literacy skills as part of broader digital literacy and STEM pathways. Curricula should include the knowledge, skills, and attitudes students need to acquire so that they can not only engage and create with AI but also manage and design AI.
- The strategy should invest in research and development in the use of AI to support assessment of mastery with safeguards to ensure academic integrity, including assessment

of authentic student portfolios and performance tasks, and including assessment of durable skills such as creativity, critical thinking, and collaboration.

- The plan should support research and pilots on how AI tools can connect K–12 learning with real-world applications, career pathways, and emerging technologies.

3. Build Capacity Across the Education Ecosystem

- A national strategy should invest in AI literacy for teachers, school leaders, and education agencies. Pre-service preparation, in-service training, and technical assistance should be widely available.
- Local and state education agencies need clear guidance and resources to build internal capacity around AI adoption, including procurement, usage policies, and instructional integration.

4. Prioritize Fair Access and Guard Against Bias

- AI tools must be designed and evaluated for fairness and bias mitigation. National strategy should establish clear methodologies for evaluating AI in education, ensuring reliability, validity, and fairness across student populations, while supporting the use of comprehensive data sets, community-oriented design, and transparent model outputs..
- Enable responsible sharing of relevant student outcome data while protecting individual privacy with improvements in privacy-preserving technologies, such as differential privacy, federated learning, and secure data-sharing protocols.
- To prevent rural and under-resourced schools from being left behind, the implementation strategy must prioritize access to AI tools and digital infrastructure.

5. Encourage Public-Private Partnerships for Scalable, Research-Aligned Innovation

- Collaboration between federal agencies, industry education providers, research institutions, and technology developers is essential for creating scalable, standards-aligned AI tools grounded in evidence and practice.
- Public-private partnerships can help accelerate development while ensuring tools meet real classroom needs, adhere to ethical principles, and undergo rigorous validation.
- Encourage partnerships that support third-party research on AI's impact on student learning, fair access, and engagement.

AI holds significant potential to improve learning, promote fair access, and prepare students for an increasingly digital world—but only if its development is guided by educators, grounded in research, and driven by student needs. We urge the National AI R&D Strategic Plan to reflect these priorities and center the voices of those closest to the classroom.

Edmentum is committed to helping students thrive and welcomes collaboration with federal agencies, researchers, and the broader education community to advance responsible AI development in education.

Sincerely,

Dr. Michelle Barrett
SVP, Research, Policy, and Impact
Edmentum

Dr. Jayne C. Lammers
Director, Learning Design
Edmentum

For any questions, please contact:
Michelle Barrett, SVP Research, Policy, and Impact, Edmentum.

This document is approved for public dissemination. The document contains no business-proprietary or confidential information. Document contents may be reused by the government in developing the 2025 National AI R&D Strategic Plan and associated documents without attribution.