

Artificial Intelligence Policy Considerations for State Education Agencies

The potential of artificial intelligence (AI) is not yet known, but the technology is expected to impact most aspects of our lives and work in the next 20 years.ⁱ AI will be able to help solve complex problems, help with investment and business development, support medical and health care, and substantially impact the field of education. State education agencies (SEAs) that move quickly to provide guidance on how to adopt and implement AI effectively may be better positioned to improve academic outcomes for students as well as better prepare students for a future certain to include and be impacted by AI.ⁱⁱ Recent guidance from the U.S. Department of Education’s Office of Educational Technology states “It is imperative to address AI in education now to realize key opportunities, prevent and mitigate emergent risks, and tackle unintended consequences.”ⁱⁱⁱ

This checklist, the second of a three-part series to support SEAs in preparing for AI in the field of education, provides considerations for beginning to address AI and develop policies and guidance. The checklist is meant as a starting point—it does not address all possible scenarios.

Determine what drives work related to AI and education in your state

- Define a system-wide vision of AI in education
- Assess the system’s readiness to achieve the vision
- Identify strategic priorities
- Define strategic objectives informed by readiness and available resources



Engage relevant stakeholders in developing policies and plans

- Engage many stakeholders of varying expertise to inform policy planning
 - Educators
 - Learning scientists
 - Learners
 - Parents
 - State policy makers
 - AI experts
 - Interagency representatives
- Set up a system-wide approach to planning and governance of policies within the SEA
- Develop policies to support AI in your state
- Engage stakeholders in a continuous review and improvement process for AI policies

Ensure policies are inclusive, ethical, and meet the unique needs of all users

- Develop a plan to monitor measurable targets for inclusion, diversity, and equity in teaching and developing AI services and supports
- Develop a system to review AI's risks and consequences for individual populations
- Establish data protection laws that make educational data collection and analysis visible, transparent, and reviewable by teachers, students, and parents

Develop implementation and review plans for AI in education management, teaching, learning, and assessment

- Determine how AI technology can improve educational management information systems (EMIS; e.g., early indicator systems)
- Work to holistically integrate EMIS and learning management systems (LMS; e.g., students receive personalized lessons based upon analysis of EMIS data)
- Determine how to reduce the cost barriers for schools to adopt and integrate AI-powered EMIS and LMS systems
- Develop policies to protect student agency in learning (e.g., a best practices guide)

- Adjust curricula to reflect pedagogical and assessment changes resulting from AI integration
 - Integrate AI-related skills into educational curricula and standards
- Provide guidance to ensure teachers' role in facilitating learning, human interaction, critical thinking, and human values is maintained
- Define skill sets teachers need to best use AI tools in their learning environments
 - Provide training to meet the skill needs
- Determine how to address imbalances in access to AI across settings and age groups for students and teachers
- Support higher education to foster local AI talent
- Retain local AI talent to support SEA initiatives

Pilot testing, monitoring, and building an evidence base

- Select, test, and scale up AI that aligns to current agency priorities
- Establish criteria specific to AI-related products to verify vendors' claims about a product's potential
- Facilitate local evaluations of pilot implementation
- Consistently review the impact of implemented AI on student outcomes
- Encourage investment and provide funding, when possible, to build a local evidence base to support AI adoption, implementation, and continuous improvement
- Foster innovations and incubate local development of AI technologies and tools

Endnotes

ⁱ Makridakis, S. (2017). The forthcoming Artificial Intelligence (AI) revolution: Its impact on society and firms. *Futures*, 90, 46–60.

ⁱⁱ Lee, G., & Lind, M. R. (2011). Information technology diffusion: Impact on student achievement. *Information Systems Education Journal*, 9(3), 35.

ⁱⁱⁱ U.S. Department of Education, Office of Educational Technology. (2023) *Artificial Intelligence and Future of Teaching and Learning: Insights and Recommendations*.

