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Your Question:

You asked about policies regulating the use of artificial intelligence (AI) technologies in education.

Our Response:

The recent proliferation of generative Al applications has raised questions over the role of this type of technology in education. Student privacy and plagiarism concerns have led some K-12 districts to limit access to Al-driven tools in school settings and institutes of higher education to initiate discussions about its appropriate and ethical use. Others are advocating for Al-driven tools' potential as a personalized learning tool to benefit both students and educators.

While artificial intelligence presents challenges, including for student privacy, plagiarism, accuracy and bias, many observers also agree that AI tools offer several opportunities for postsecondary education. AI has implications for admissions, student retention, teaching and learning, curriculum and administrative efficiency, according to one **opinion piece**. Similarly, **another author** suggests that AI will disrupt higher education in at least four areas of support: administrative, teaching, learning and research. The author also recommends strategic approaches for institutions as AI applications continue to evolve.

<u>Al-driven tools</u> can deliver pre-written information to students, detect plagiarism and check spelling and grammar. More powerful applications can offer answers to academic questions, grade assignments, recommend classes, and assist colleges with admissions and financial aid decisions.

Currently, there are few policies addressing AI in education. The Center for Reinventing Public Education <u>found</u> that only two departments of education have issued guidance on AI: <u>California</u> and <u>Oregon</u>. Another 11 states are in the process of developing guidance. Our response includes examples of federal actions, state legislation, governors' executive orders and guidance for postsecondary institutions.

Federal Action

In fall 2022, the White House Office of Science and Technology <u>announced</u> a series of steps to address the rise of Aldriven tools across a variety of sectors. This included a charge for the U.S. Department of Education to develop guidance and recommendations for the use of AI in teaching and learning; the <u>first report</u> was published in May 2023. The guidance and recommendations focus on the use of AI to:

- leverage automation.
- support education systems, teachers and classroom planning.
- interrogate data and examine inequities.
- protect student privacy and assess student learning.

On page 51, the report notes a desired National R&D Outcome: "creating and studying effective programs for Al literacy for students, teachers and educational constituents in general, including literacy with regard to the ethics and equity issues specific to Al in educational settings."

In October 2023, President Biden issued an <u>executive order</u> on AI, calling for greater oversight of the development and use of AI, with an emphasis on data privacy, especially for children.

The National Science Foundation and Institute for Education Sciences recently <u>announced</u> grant awards to establish two new research institutes focused on AI in education. The <u>National AI Institute for Exceptional Education</u> is tasked with developing AI technology to address the need for speech and language interventions for students with developmental delays or disabilities, and the <u>INclusiVe Intelligent Technologies</u> for <u>Education (INVITE)</u> Institute will develop AI-driven tools to promote fairness in technology-enhanced K-12 STEM learning, especially among groups historically underrepresented in STEM fields.

State Action

A few states are in the early stages of developing policies and guidance related to AI in education. Below are some examples of state policy action.

Colorado SB22-113 requires government agencies, including institutions of higher education, that use or intend to use facial recognition services, to file with its reporting authority an intent to develop, use or procure facial recognition services. Public schools, school districts and charter schools are prohibited from contracting for facial recognition services until July 1, 2025.

Georgia is piloting an <u>elective course</u> for middle school students called Living and Working with Artificial Intelligence. Initial <u>findings</u> discuss the collaborative curriculum development process, the role of professional development and supports for teachers, and best practices for engaging students. The <u>curriculum is available</u> online.

Georgia State University says its <u>version of a chatbot</u> has delivered hundreds of thousands of answers to questions from potential students since it launched in 2016 and reduced "<u>summer melt</u>" by 20%. Georgia State was also among the first institutions to develop inexpensive <u>Al teaching assistants</u>.

Illinois <u>H.B. 3563</u> establishes the Generative AI and Natural Language Processing Task Force, which includes representation from the K-12 and higher education agencies and tasks the group with developing model policies for AI use by students in and out of the classroom.

North Dakota <u>H.B. 1003</u> requires a legislative management study during the 2023-24 interim session addressing the potential impacts of AI. The study must include findings and recommendations on the effects of AI on student learning.

Utah <u>S.B. 96</u> (2020) requires the Board of Regents to develop and oversee a deep technology talent initiative that includes providing funding for expanded programs. Deep technology may lead to new products and innovations related to artificial intelligence, augmented and virtual reality, robotics and other areas.

Governors' Executive Orders

California Gov. Gavin Newsom signed an <u>executive order</u> in September 2023 to study the development, use and risks of generative AI by state agencies.

New Jersey Gov. Philip Murphy signed an <u>executive order</u> in October 2023 establishing the Artificial Intelligence Task Force to identify appropriate government actions for the ethical and responsible use of artificial intelligence technologies.

Oklahoma Gov. Kevin Stitt signed an <u>executive order</u> in September 2023 establishing a Task Force on Emerging Technologies.

Oregon Gov. Tina Kotek signed an <u>executive order</u> in November 2023 establishing an advisory council to provide a recommended plan framework to the governor.

Pennsylvania Gov. Josh Shapiro signed an <u>executive order</u> in September 2023 to establish responsible standards and governance frameworks for the use of generative artificial intelligence by Commonwealth agencies.

Virginia Gov. Glenn Youngkin signed an <u>executive order</u> in September 2023 that, in part, directs the office of regulatory management to work with the department of education, State Council of Higher Education for Virginia and institutions of higher education to develop plans for the use of and teaching about AI.

Wisconsin Gov. Tony Evers signed an <u>executive order</u> in September 2023 creating the Governor's Task Force on Workforce and Artificial Intelligence, which must include representatives from the University of Wisconsin System and the Wisconsin Technical College System. The task force must recommend polices related to workforce development and educational systems.

Postsecondary Education Guidelines

The WICHE Cooperative for Educational Technologies (WCET) held a webinar in early 2023 on artificial intelligence and higher education. The webinar recording and slides are available on this webpage. Panelists discussed the following topics:

- Types of generative AI that are most likely to impact higher education.
- Pedagogical issues related to generative AI and coursework.
- Academic integrity and artificial intelligence.

A WCET <u>survey of postsecondary leaders</u> regarding the use of generative AI found that only 8% had implemented policies around artificial intelligence. Most of those policies, 21%, are about academic integrity. Of the 57% of respondents at institutions planning or developing policies:

- 70% were planning academic integrity policies.
- 51% policies about instructional use.
- 32% policies about data security.
- 27% regarding intellectual property policies.
- 26% regarding privacy policies.
- 0.04% regarding accessibility policies.

WCET developed initial, general recommendations for institutions related to generative AI that include:

- Create an institutional taskforce comprised of all campus stakeholders including faculty, instructional design staff, educational technology professionals, IT representatives and students.
- Determine your institution's greatest challenges and biggest questions regarding generative AI. Once you
 have determined these, you can make an informed decision as to what challenges should be addressed with
 institutional policies versus what should be addressed with course level policies.
- Review what other institutions are doing.
- Make sure to take equity into consideration. For a general overview of ethics and equity in generative AI, consult WCET's blog post "Equity in a World of Artificial Intelligence."

• Artificial intelligence is here to stay, and institutions need to address the challenges that it poses head on.

WCET staff suggest that institutions will need to revisit their policies on intellectual property, privacy, data security, academic integrity and accessibility in the context of emerging generative AI technologies.

Similar to the WCET survey results, research by the <u>Primary Research Group</u> found that only 14% of college administrators reported that their institutions had guidelines on the use of generative AI. And only 18% of instructors reported having policies and guidelines for their classes.

In an opinion piece, "A Guide to Generative Al Policy Making," the authors recommend that institutions should respond to generative Al with speed, strategic purpose and inclusive focus on equitable student value. With respect to strategic purpose, the authors suggest that institutions engage multiple stakeholders, including faculty and students, to identify key questions related to Al. The goal should be to develop guidelines that can respond "with agility to emerging shifts and advances in generative Al capabilities over time."

Additional Resources

- Artificial Intelligence Applications to Support K-12 Teachers and Teaching RAND, 2023.
- Study: How Districts are Responding to AI & What It Means For the New School Year The 74, 2023.
- ChatGPT and Artificial Intelligence in Higher Education UNESCO, 2023.
- <u>Teach AI</u> a newly-established collaborative of education leaders committed to providing policy guidance, a framework for using AI, and stakeholder engagement.