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Your Question:

You asked about policies regulating the use of artificial intelligence in education.

Our Response:

The recent proliferation of generative artificial intelligence (AI) applications has raised questions over the role of this technology in education. Concerns around student privacy and plagiarism have led some K-12 districts to <u>limit access</u> to AI in school settings and higher education institutions to initiate <u>discussions</u> about its appropriate and ethical use. Others are advocating for AI's potential as a <u>personalized learning</u> tool to benefit both students and educators. Guidance and regulation at the federal and state level are expected to be forthcoming, but currently there are few policies addressing AI in education.

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 <u>opinion piece</u>. Similarly, <u>another author</u> 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 the future of AI continues 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 answer academic questions, grade assignments, recommend classes, and assist colleges with admissions and financial aid decisions.

Our response includes examples of federal actions, state and postsecondary institution actions, and guidelines and policies related to AI.

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 AI 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 research and development outcome: "creating and studying effective programs for AI literacy for students, teachers and educational constituents in general, including literacy with regard to the ethics and equity issues specific to AI in educational settings."

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. The Inclusive Intelligent Technologies for Education Institute will develop AI 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 legislation and state agency initiatives:

Georgia is currently 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.

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>AI teaching assistants</u>.

Illinois <u>H.B. 3563</u> establishes the Generative AI and Natural Language Processing Task Force, which includes representation from 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.

Postsecondary Education Guidelines and Policies

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 <u>webpage</u>. 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 on artificial intelligence. Most of those policies, 21%, are on academic integrity. Of the 57% of respondents at institutions planning or developing policies:

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

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• .04% were planning accessibility policies.

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

- Create an institutional task force comprised of all campus stakeholders including faculty, instructional design staff, educational technology professionals, information technology 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, <u>Equity in a World of Artificial Intelligence</u>.
- Don't pretend that the challenges surrounding generative AI are going away. 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, <u>A Guide to Generative AI Policy Making</u>, the authors recommend that institutions respond to generative AI 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 AI. The goal should be to develop guidelines that can respond "with agility to emerging shifts and advances in generative AI capabilities over time."

Additional Resources

- Artificial Intelligence Applications to Support K-12 Teachers and Teaching RAND, 2023.
- <u>ChatGPT and Artificial Intelligence in Higher Education</u> UNESCO, 2023.
- <u>Teach AI</u> is a newly established collaborative of education leaders committed to providing policy guidance, a framework for using AI and stakeholder engagement.