Artificial Intelligence Framework for Utah P-12 Education:

Guidance on the Use of AI in Our Schools
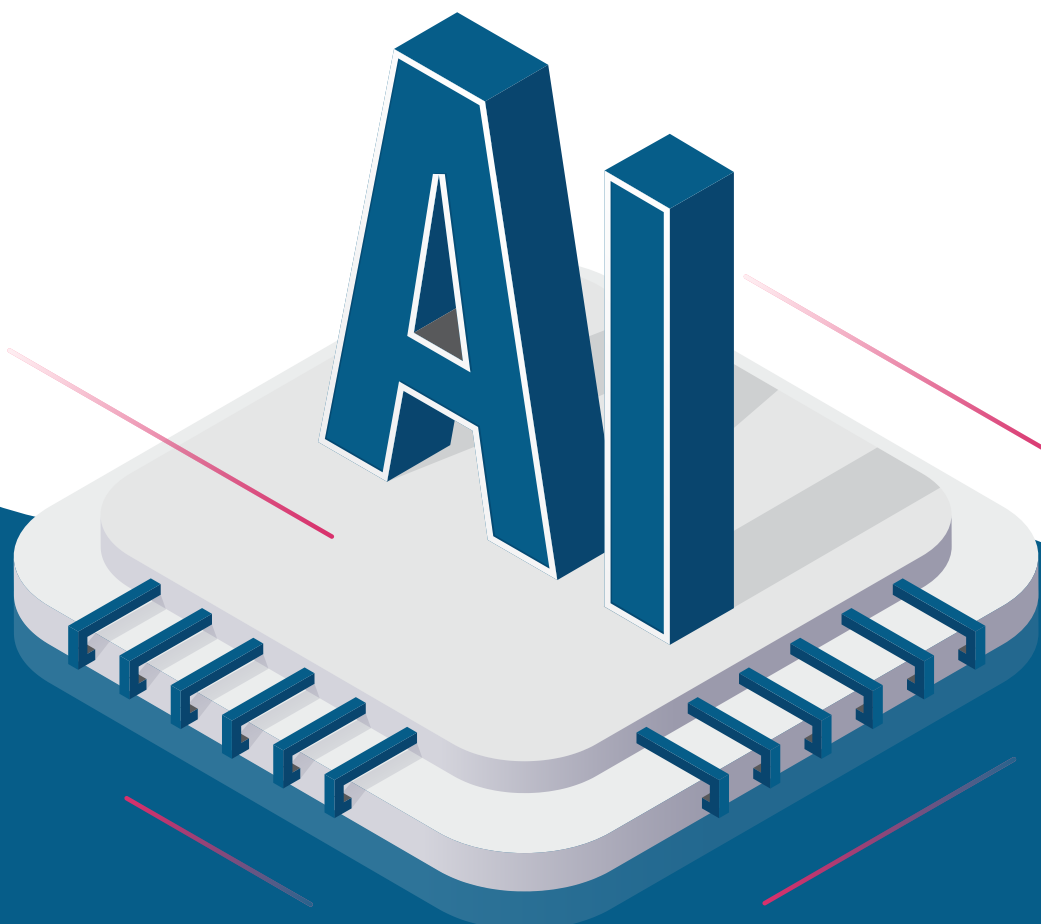
Utah State Board of Education

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Purpose

This document guides Utah students, staff, and school communities on the appropriate and responsible use of artificial intelligence (AI), particularly generative AI tools, in classroom instruction, school management, and systemwide operations where permitted by local policy. Generative AI has potential benefits for education and risks that must be thoughtfully managed. Achieving a balance between delivering leading-edge education and safeguarding student information requires collaboration among experts in education and cybersecurity. Providing unrestricted access falls short of providing needed protection. Conversely, an outright ban on AI in schools impedes the development of essential future workforce skills. Instead, a balanced and informed approach is preferred, encompassing both maximizing learning and attending to security measures. This framework will require subsequent reviews to adapt to changes in technology and usage.

Artificial intelligence refers to computer systems that are taught to automate tasks normally requiring human intelligence. **"Generative AI"** refers to tools that can produce new content, such as text, images, or music, based on patterns they've learned from their training data[1]. This is made possible through "machine learning," a subset of AI where computers learn from data without being explicitly programmed for a specific task. Think of it as teaching a computer to be creative based on examples it has seen. While generative AI tools show great promise and often make useful suggestions, they are designed to predict what is right, which isn't always right. As a result, their output can be inaccurate, misleading, or incomplete.

For a more complete list of definitions, see TeachAI.

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[1] OpenAI. (2023). ChatGPT (September 25 Version) [Large language model]. https://chat.openai.com

Scope

This guidance applies to all students, teachers, staff, administrators, and third parties who develop, implement, or interact with AI technologies used in our education system where permitted by local policy. It covers all AI systems used for education, administration, and operations, including, but not limited to, generative AI models, intelligent tutoring systems, conversational agents, automation software, and analytics tools. This guidance complements existing policies on technology use, data protection, academic integrity, and student support.

Existing Policies

The following existing policies inform this AI Framework:

➤ **Federal Code and Regulations**
- Children's Online Privacy Protection Rule (COPPA):
  - » 47 USC §231
  - » 16 CFR Part 312
- Family Educational Rights and Privacy Act (FERPA):
  - » 20 USC §1232g
  - » 34 CFR Part 99
- Privacy Act of 1974:
  - » 5 USC §552a
  - » 22 CFR Part 1101
- Protection of Pupil Rights Amendment (PPRA):
  - » 20 USC §1232h
  - » 34 CFR Part 98
- Executive Order on AI

➤ **Utah State Code**
- Utah State Code §53G-7-1003 regarding Internet Policy
- Utah State Code §53E-9-3 regarding Student Data Protection
- Utah State Code §53E-9-2 regarding Student Data Privacy aka "Utah FERPA"
- Utah State Code §53G-10-103 Sensitive instructional materials
- Utah State Code §63G-2 Governmental Records and Management Act (GRAMA)

- Government Data Privacy Act

➤ **Utah Administrative Code**
- Utah Admin Code R277-613-2 regarding Cyberbullying
- Utah Admin Code R277-495 regarding Policies for Electronic Devices in Public Schools
- Utah Admin Code R277-487 regarding Student Data Protection

➤ **USBE Policy**
- Digital Literacy Standards
- Library Media Standards
- School Safety and Digital Citizenship Responsibilities for LEAs, School Community Councils and Charter Trust Lands Councils
- Student Data Privacy

➤ **Industry Standards**
- Cybersecurity Frameworks:
  » CIS Critical Controls
  » NIST v1

Guiding Principles for AI Use

The following principles guide the appropriate and safe use of AI and address current and future educational goals, teacher and student agency, academic integrity, and security. We commit to adopting internal procedures to operationalize each principle.

1. **We use AI to help all of our students achieve their educational goals.**
   We will use AI to help us reach our community's goals, including improving student learning, teacher effectiveness, and school operations. We aim to make AI resources universally accessible, focusing especially on bridging the digital divide among students and staff. We are committed to evaluating AI tools for biases and ethical concerns, ensuring they effectively serve our diverse educational community.
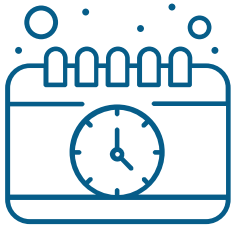
2. **We reaffirm adherence to existing policies and regulations.**
   AI is one of many technologies used in our schools, and its use will align with existing regulations to protect student privacy, ensure accessibility to those with disabilities, and protect against harmful content. We will not share personally identifiable information with consumer-based AI systems. We will thoroughly evaluate existing and future technologies and address any gaps in compliance that might arise.

3. **We educate our staff and students about AI.**
   Promoting AI literacy among students and staff is central to addressing the risks of AI use and teaches critical skills for students' futures. Students and staff will be given support to develop their AI literacy, which includes how to use AI, when to use it, and how it works, including foundational concepts of computer science and other disciplines. We will support teachers in adapting instruction in a context where some or all students have access to generative AI tools.

4. **We explore the opportunities of AI and address the risks.**
   In continuing to guide our community, we will work to realize the benefits of AI in education, address risks associated with using AI, and evaluate if and when to use AI tools, paying special attention to misinformation and bias.

5. **We use AI to advance academic integrity.**
   Honesty, trust, fairness, respect, and responsibility continue to be expectations for both students and teachers. Students and educators should be truthful in giving credit to sources and tools and honest in presenting work that is genuinely their own for evaluation and feedback.

6. **We maintain student and teacher agency when using AI tools.**
   AI tools can provide recommendations or enhance decision-making, but staff and students will serve as "critical consumers" of AI and lead any organizational and academic decisions and changes. People will be responsible and accountable for pedagogical or decision-making processes where AI systems may inform decision-making.

7. **We commit to auditing, monitoring, and evaluating a schools' use of AI.**
   Understanding that AI and technologies are evolving rapidly, we commit to frequent and regular reviews and updates of our policies, procedures, and practices.

Responsible Use of AI Tools

Our school system recognizes that responsible uses of AI will vary depending on the context, such as a classroom activity or assignment. Teachers will clarify if, when, and how AI tools will be used, with input from students and families, while the school system will ensure compliance with applicable laws and regulations regarding data security and privacy. Appropriate AI use should be guided by the specific parameters and objectives defined for an activity[2]. Below are some examples of responsible uses that serve educational goals.

Student Learning

➤ **Aiding Creativity:** Students can harness generative AI to spark creativity across diverse subjects, including writing, visual arts, and music composition.

➤ **Collaboration:** Students can partner with Generative AI tools in group projects by contributing concepts, supplying research support, and identifying relationships between varied information.

➤ **Communication:** AI can offer students real-time translation, personalized language exercises, and interactive dialogue simulations.

➤ **Content Creation and Enhancement:** AI can help generate personalized study materials, summaries, quizzes, and visual aids, help students organize thoughts and content, and help review content.

➤ **Tutoring:** AI technologies have the potential to democratize one-to-one tutoring and support, making personalized learning more accessible to a broader range of students. AI-powered virtual teaching assistants may provide non-stop support, answer questions, help with homework, and supplement classroom instruction.

➤ **Documentation:** Please include the following narrative. "It is suggested that there is need to document AI use for generating ideas. However, for thorough research with AI, request websites when giving the prompt. Verify information and cite in school's preferred format (APA, MLA, etc.). When AI generates a substantial amount of text, give credit in the school's preferred format.

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2 Gallagher, H. A., & Cottingham, B. W. (2023, June). The urgent need to update district policies on student use of artificial intelligence in education [Commentary]. Policy Analysis for California Education. https://edpolicyinca.org/newsroom/urgent-need-update-district-policies-student-use-artificial-intelligence-education

Teaching Support

➤ **Assessment Design and Analysis:** In addition to enhancing assessment design by creating questions and providing standardized feedback on common mistakes, AI can conduct diagnostic assessments to identify gaps in knowledge or skills and enable rich performance assessments. Teachers will ultimately be responsible for evaluation, feedback, and grading, including determining and assessing the usefulness of AI in supporting their grading work. AI will not be solely responsible for grading. Use caution when using AI plagiarism checkers, because they can sometimes produce false positives. Consider using plagiarism checkers as one of several tools in a comprehensive approach to promoting academic integrity and originality.

➤ **Content Development and Enhancement for Differentiation:** AI can assist educators by differentiating curricula, suggesting lesson plans, generating diagrams and charts, and customizing independent practice based on student needs and proficiency levels.

➤ **Continuous Professional Development:** AI can guide educators by recommending teaching and learning strategies based on student needs, personalizing professional development to teachers' needs and interests, suggesting collaborative projects between subjects or teachers, and offering simulation-based training scenarios such as teaching a lesson or managing a parent/teacher conference.

➤ **Research and Resource Compilation:** AI can help educators by recommending books or articles relevant to a lesson and updating teachers on pedagogy, research, and methods.

Managing School Operations

➤ **Communications:** AI tools can help draft and refine communications within the school community, deploy chatbots for routine inquiries, and provide instant language translation.

➤ **Operational Efficiency:** Staff can use AI tools to support school operations and streamline administrative processes, including scheduling courses, automating inventory management, increasing energy savings, and generating performance reports.

➤ **Learning Management Systems (LMS):** AI can analyze student performance data to provide insights to educators, helping them tailor instruction and/or interventions.

➤ **Safety Alerts:** AI could have the ability to monitor written student communications on LEA provided accounts. For instance, when students convey distress in their messages, the technology can analyze these communications and alert designated school personnel to provide timely support.

Supporting Community and Family

➤ **Communication:** Effective communication between schools, families, and communities is essential for establishing a cohesive understanding and implementation of AI policies. This leads to a collaborative approach to navigating the challenges and opportunities presented by AI in education. See sample letter to parents.

➤ **Plan for feedback:** Ensure a plan for community input on AI policy and implementation, including feedback from students, parents, teachers, and other stakeholders.

➤ **Data Collection:** Parents, guardians, and students should be informed of specific data collection initiatives, and where applicable, consent will be sought. All AI-driven data collection will adhere to local data protection regulations and best practices.

Prohibited Use of AI Tools

As we work to realize the benefits of AI in education, we also recognize that risks must be addressed. Below are the prohibited uses of AI tools and the measures we will take to mitigate the associated risks.

Student Learning

➤ **Bullying/harassment:** Using AI tools to manipulate media to impersonate others for bullying, harassment, or any form of intimidation is strictly prohibited. All users are expected to employ these tools solely for educational purposes, upholding values of respect, inclusivity, and academic integrity at all times.

➤ **Over-reliance:** Dependence on AI tools can decrease human discretion and oversight. Important nuances and context can be overlooked and accepted. Teachers will clarify if, when, and how AI tools should be used in their classrooms, and teachers and students are expected to review outputs generated by AI before use.

➤ **Plagiarism and cheating:** Students and staff should not copy from any source, including generative AI, without prior approval and adequate documentation. Students should not submit AI-generated work as their original work. Staff and students will be taught how to properly cite or acknowledge the use of AI where applicable. Teachers will be clear about when and how AI tools may be used to complete assignments and restructure assignments to reduce opportunities for plagiarism by requiring personal context, original arguments, or original data collection. Existing procedures related to potential violations of our Academic Integrity Policy will continue to be applied.

➤ **Unequal access:** If an assignment permits the use of AI tools, the tools will be made available to all students, considering that some may already have access to such resources outside of school.

Teaching Support

➤ **Data Caution :** Users should realize that all data needs to be verfied and not to accept what comes in results as truth. AI tools trained on human data will inherently reflect societal biases in the data. Risks include reinforcing stereotypes, recommending inappropriate educational interventions, or making discriminatory evaluations, such as falsely reporting plagiarism by non-native English speakers. Staff and students will be taught to understand the origin and implications of societal bias in AI, AI tools will be evaluated for the diversity of

their training data and transparency, and humans will review all AI-generated outputs before use. It is helpful to make prompts as specific as possible.

➤ **Diminishing student and teacher agency and accountability:** While generative AI presents useful assistance to amplify teachers' capabilities and reduce teacher workload, these technologies will not be used to supplant the role of human educators in instructing and nurturing students. The core practices of teaching, mentoring, assessing, and inspiring learners will remain the teacher's responsibility in the classroom. AI is a tool to augment human judgment, not replace it. Teachers and staff must review and critically reflect on all AI-generated content before use, thereby keeping "humans in the loop."[3]

➤ **Privacy concerns:** The use of AI is required to adhere to state and Federal privacy laws.

Managing School Operations

➤ **Compromising Privacy:** The education system will not use AI in ways that compromise teacher or student privacy or lead to unauthorized data collection, as this violates privacy laws and our system's ethical principles. See the Security, Privacy, and Safety section below for more information.

➤ **Noncompliance with Existing Policies:** We will evaluate AI tools for compliance with all relevant policies and regulations, such as privacy laws and ethical principles. AI tools will be required to detail if/how personal information is used to ensure that personal data remains confidential and isn't misused.

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3 U.S. Department of Education, Office of Educational Technology, Artificial Intelligence and Future of Teaching and Learning: Insights and Recommendations, Washington, DC, 2023.

Special Consideration: Security, Privacy, and Safety

We will implement reasonable security measures to secure AI technologies against unauthorized access and misuse. All AI systems deployed within the school will be evaluated for compliance with relevant laws and regulations, including those related to data protection, privacy, and students' online safety. For example, providers will make it clear when a user is interacting with an AI versus a human.

Staff and students are prohibited from entering confidential or personally identifiable information into unauthorized AI tools, such as those without approved data privacy agreements. This extends to contracted vendors and other third parties. Sharing confidential or personal data with an AI system could violate privacy if not properly disclosed and consented to.

Review

This guidance will be reviewed annually, or sooner, to ensure it continues to meet the school's needs and complies with changes in laws, regulations, and technology. We welcome feedback on this policy and its effectiveness as AI usage evolves.

[Last updated: 03/07/2024]

Code.org, CoSN, Digital Promise, European EdTech Alliance, Larimore, J., and PACE (2023). AI Guidance for Schools Toolkit. Retrieved from teachai.org/toolkit. [Jan. 5, 2024].