Alaska's Strategic Framework Artificial Intelligence for K-12

Recommendations and Considerations for Districts

Vision Statement

To empower every Alaskan student and educator to ethically and effectively engage with Artificial Intelligence, fostering critical thinking, creativity, and responsible digital citizenship, thereby providing all learners with the opportunity and comprehensive support to thrive in an evolving, Al-driven world.

Alaska Al K12 Advisory Group

The purpose of this advisory group is to provide advice and support to the Division of Innovation and Education Excellence as they develop the AK Strategic Framework for Artificial Intelligence in K-12. Direction and resources are the outcomes from this workgroup. Your time and service are deeply appreciated.

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Artificial Intelligence + Education

Artificial Intelligence (AI) refers to machine-based systems capable of making predictions, recommendations, or decisions that influence real or virtual environments for a given set of human-defined objectives. These systems can perform tasks that typically require human intelligence, such as learning, problem-solving, decision making, and receptive and expressive language.

Within the realm of AI, Generative Artificial Intelligence (GenAI) has rapidly emerged as a transformative technology. GenAI is a broad category of AI models that can generate novel content, including text, images, audio, video, and code, in response to user prompts.

Large Language Models (LLMs) are a powerful type of GenAl, and many of the most accessible and widely used applications, such as chatbots like ChatGPT, Microsoft CoPilot, and Google Gemini, are powered by them. These tools are increasingly integrated into various aspects of daily life, including education.

Popular AI Chatbots







Microsoft CoPilot



Google Gemini



Claude by Anthropic



Perplexity AI

The Cognitive Industrial Revolution

"Al [is] affecting everything we do that uses language - be it communication, reasoning, analysis, selling, marketing, support, and services. And what makes it even bolder than the Industrial Revolution or the printing press is obviously the speed at which it will be moving..."

-Reid Hoffman, LinkedIn co-founder

Al tools are rapidly transforming various sectors, and education is no exception. From streamlining administrative tasks to offering personalized learning experiences and reimagining instructional methods, Al presents a spectrum of possibilities. This framework acknowledges the profound impact of Al on the modern workforce, where proficiency in ethical and effective Al engagement is becoming a fundamental skill. By fostering critical thinking, creativity, and responsible digital citizenship through Al education, Alaska aims to prepare its students to thrive in an evolving Al-driven world.

Purpose and Scope

This framework provides comprehensive guidance on the appropriate and responsible integration of Artificial Intelligence (AI) tools, particularly Generative Artificial Intelligence, within Alaska's K-12 education system. It is designed to serve as a flexible resource for school boards, administrators, educators, and students, offering recommendations and considerations rather than strict mandates.

The overarching principle is that AI should serve to **augment human capabilities**, **critical thinking**, and **creativity**, never replacing essential human interaction, judgment or decision making in educational contexts. A balanced and informed approach to advancement of AI is preferred, as an outright ban impedes skill and career development, while unrestricted access falls short of needed protections.

This framework aims to foster innovation, enhance learning outcomes, and safeguard student well-being and data privacy, ultimately contributing to the state's overarching goal of providing an excellent education for every student every day.

This guidance applies to all students, teachers, staff, administrators, and third parties who develop, implement, or interact with AI technologies used in Alaska's education system, where permitted by local and state policy. It covers all current AI systems used for education and administration, including, but not limited to, generative AI models, intelligent tutoring systems, conversational agents, automation software, and analytics tools.

This framework complements existing local policies on technology use, data protection, academic integrity, and student support.

How to Use this Framework

This framework is designed as a strategic and ever-evolving guide for Alaska's educational partners.

- School Boards can use the Guiding Principles to inform policy development.
- District Administrators can use the key areas of focus to direct implementation and professional development.
- Educators can use this document to inform their classroom practices and pedagogical approach to Al.

Guiding Principles for AI Integration



Human-Centered

Al must augment human capabilities, critical thinking, and creativity, never replacing human judgment or decision-making in educational contexts. All Al use should begin with human inquiry and culminate in human reflection and insight.



Fair Access

Al tools and education should be accessible to all students, actively mitigating broadband disparities and device availability challenges across Alaska's diverse regions.



Transparency

The functionalities, limitations, and potential biases of AI tools must be clearly communicated to all stakeholders. Explicit disclosure is suggested when AI is used in educational materials or assessments.



Oversight

Clear lines of responsibility for AI tool selection and outcomes are vital. Robust human oversight is mandatory for any decisions that directly impact students, such as grading or disciplinary actions.



Security

Rigorous protection of student data and digital well-being is non-negotiable. This includes protocols against unauthorized sharing of Personally Identifiable Information (PII) and compliance with local, state, and federal laws.



Ethical Use

Promote responsible and ethical engagement with AI, fostering an understanding of intellectual property rights, preventing misuse, and building critical evaluation skills for all AI-generated content.



Cultural Responsiveness

Al tools should be critically evaluated and used to affirm, rather than diminish, the diverse cultures of Alaska. Proactive measures must be taken to mitigate algorithmic biases and prevent misinterpretation, misappropriation, or the exclusion of crucial local context.

Human-Centered

Al must augment human capabilities, critical thinking, and creativity, never replacing human judgment or decision-making in educational contexts. All Al use should begin with human inquiry and culminate in human reflection and insight. A human-centered approach ensures that technology serves educational goals, empowering individuals rather than overpowering them.

Approach to Generative Al

Districts should move beyond outright bans and instead develop a balanced approach that allows for responsible implementation of generative AI tools.

Empowering Educators

Educators must have the autonomy to make professional decisions regarding AI use in their classrooms. Districts should support educators in updating syllabi and classroom policies to include AI integrity guidelines.

Rethinking Education

Al should be leveraged to enhance problem-solving, innovative design, and creative expression, aligning with existing <u>Digital Literacy Standards</u>.

Research and Evidence Base

Districts should engage in ongoing research and evaluation of AI initiatives. While robust, large-scale independent evidence on AI's effectiveness in education is still limited, districts should continuously evaluate the impact of AI tools and methodologies. This includes assessing student engagement, motivation, cognition, and deep learning, as well as AI's impact on educator roles and professional development.

"The future of AI lies not in machines that think like humans but in creating systems where human and machine intelligence work together in ways that enhance our collective capacity to address the complex challenges we face as a society."

-Luis Gonzalez, <u>Symbiotic AI: The Future of Human-AI Collaboration</u> (2025)

Principles into Practice

To put these human-centered principles into action, our resource website provides tailored support for every role. Find policy roadmaps for leaders, classroom strategies for educators, and responsible use guides for students to help build a safe, equitable, and effective AI ecosystem.

Fair Access

Al tools and education should be accessible to all students, actively mitigating broadband disparities and device availability challenges across Alaska's diverse regions. Ensuring fair access is fundamental to preventing a new digital divide and promoting equity for all learners, regardless of their location or background.

Addressing the Digital Divide

Districts should acknowledge and actively work to mitigate the digital divide, particularly concerning equitable broadband access and device availability in Alaska's diverse and often remote regions. Al tools inherently demand substantial and reliable internet connectivity.

Student Access to Technology Data

Districts should actively seek and analyze current data regarding student access to technology and home internet connectivity to ensure AI integration strategies are evidence-based. Note a <u>2023 DEED survey</u> to determine student device access and internet connectivity

Procurement and Funding

Districts should strategically leverage state and federal funding opportunities that include the option to purchase digital instructional materials and provide professional development.

Al Literacy for All

It is imperative that all schools and districts develop and implement an AI Literacy program that provides all staff and students with an understanding of this powerful technology. Access to education and training is as critical as access to the tools themselves.

This literacy includes:

- An understanding of basic Al principles and applications.
- The skills to recognize when AI is employed and an awareness of its limits.
- Knowledge of ethical and responsible AI use, including topics of safety, bias, and disinformation

Resources for Educators ISTE | AI in Education Common Sense Media | AI Literacy TEACHAI | AI Literacy MIT | Day of AI

Transparency

The functionalities, limitations, and potential biases of Al tools must be clearly communicated to all stakeholders. Explicit disclosure is suggested when Al is used in educational materials or assessments. Transparency builds trust and empowers users to be critical consumers of Al-generated content.

Rethinking Plagiarism and Academic Integrity

Policies should clarify how to appropriately attribute Al-generated content and require students to disclose when and how Al was utilized in their work. This includes requiring students to cite Al-generated content appropriately.

Data Governance

Districts should carefully review Al vendors to ensure tools meet rigorous privacy and security standards before adoption. This includes ensuring vendors provide clear privacy and compliance documentation for review.

Addressing Bias and Misinformation

Al systems can unintentionally amplify bias or produce misleading outputs. To ensure transparency, districts must help staff and students evaluate Al critically by training them to identify bias, misinformation, and "hallucinations". <u>Learn more about bias and the ethics of generative artificial intelligence</u>.

Communication Strategy

Districts should develop a clear communication plan for disseminating AI guidelines to all stakeholders, transparently outlining benefits, safety measures, privacy protocols, and data management procedures.

Sample District Board Policy

Provides the foundational, board-approved guidelines for Al integration, ensuring a clear and official framework for the entire district.

School Handbook Language

Offers adaptable language for school handbooks, translating district policy into clear, actionable expectations for students and families.

Academic Integrity Guidelines

A detailed guide for educators and students on how to ethically use and properly cite AI in assignments, promoting honesty and clear standards in the classroom.

Family & Community AI FAQ

A ready-to-use FAQ template that addresses common questions from parents and community members about AI in schools, helping to build trust through open communication.

Oversight

Clear lines of responsibility for Al tool selection and outcomes are vital. Robust human oversight is mandatory for any decisions that directly impact students, such as grading or disciplinary actions. While Al can offer powerful support, humans remain accountable for student learning and well-being. This principle ensures that technology is used as a tool to inform, not replace, professional judgment for impactful student matters.

Evaluating, Procuring, and Scaling AI EdTech Tools

Districts should form a dedicated team to evaluate AI tools and their effectiveness in supporting teaching and learning. A key evaluation criterion must be the level of human oversight the tool requires and allows, ensuring that educators remain in control of impactful decisions.

District-Wide Guidelines

Accountability begins with clear expectations. Districts must develop clear, district-wide guidelines detailing the acceptable and responsible use of generative AI by all stakeholders. These policies establish the standards to which everyone in the educational community is held accountable.

Vendor Accountability and Review

Accountability extends to the partners and vendors who provide AI tools. Districts should carefully review AI vendors to ensure tools meet rigorous privacy and security standards before they are adopted for classroom use.

Empowering Educators

Districts should provide teachers with the autonomy and support needed to make professional decisions about AI use in their classrooms. This autonomy is directly linked to professional accountability, trusting educators to implement AI in ways that are pedagogically sound and in the best interest of their students.

Security

Rigorous protection of student data and digital well-being is non-negotiable. This includes protocols against unauthorized sharing of Personally Identifiable Information (PII) and compliance with local, state, and federal laws. The integration of AI introduces new opportunities and potential vulnerabilities. A proactive and robust security posture is essential to protect student data, maintain the integrity of district systems, and build trust within the community.

Cybersecurity

Districts must prioritize cybersecurity to protect computer systems and networks from information disclosure, theft, or damage to data, and disruption of services. This demands a strategic approach to building necessary skills for IT managers and establishing effective security monitoring.

Protecting Personally Identifiable Information (PII)

Users must be taught the importance of protecting data privacy when using generative AI tools. Explicit prohibitions against entering sensitive student data, PII, or confidential information into publicly accessible AI tools are essential.

Compliance with Laws

Districts must ensure that any AI tools procured or used comply rigorously with federal laws such as the Family Educational Rights and Privacy Act (FERPA), and the Children's Internet Protection Act (CIPA).

Vendor Vetting

Districts must establish a robust vetting process for AI tools, requiring schools and districts to review terms of service, privacy policies, and compliance documentation from vendors. Proactive guidance helps ensure that recommended tools adhere to high data privacy and security standards.

Actionable Steps for Districts

To translate these security principles into practice, districts should take actionable steps to create a robust security posture for generative AI.

- Review and amend existing data privacy and acceptable use policies to explicitly address the unique risks of generative AI.
- Mandate the use of Privacy Impact Assessments (PIAs) to formally evaluate AI tools.
- Establish simple "Do's and Don'ts" for daily AI use, such as using anonymized data in prompts and never uploading documents containing confidential school or district information.

Ethical Use

Promote responsible and ethical engagement with AI, fostering an understanding of intellectual property rights, preventing misuse, and building critical evaluation skills for all AI-generated content. Ethical use of AI goes beyond policy to instill a culture of responsibility in every user. It requires fostering an understanding of digital citizenship, preventing misuse, and empowering students and staff to critically evaluate both the AI tools and the content they produce

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Rethinking Plagiarism and Academic Integrity

Ethical use begins with honesty about how AI tools are used. Policies must clarify how to appropriately attribute AI-generated content and require students to disclose when and how AI was utilized in their work. Submitting AI-generated work as original without proper citation is considered plagiarism. Districts can utilize an AI Acceptable Use Scale to build clear expectations for AI use on specific assignments.

Comprehensive Training Strategy

A culture of ethical use is built through education. Districts should develop a comprehensive training strategy covering ethical and responsible AI use, including data privacy and academic integrity. Training should also include information about safety, bias, fake content, disinformation, and malicious use to equip users with the skills to navigate AI safely and ethically.

Al Limitations

Ethical use requires a critical awareness of an AI model's limitations. AI models can inherit biases from their training data, leading to inaccurate, misleading, or discriminatory outputs. Districts should empower all users to ethically engage with AI by teaching them to identify, question, and compensate for biases and misinformation in AI outputs.

Effective Prompting

Part of using AI ethically is using it responsibly. Frameworks like EVERY (Evaluated, Verify, Edit, Revise, You are responsible) or PREP (Prompt, Role, Explicit Information, Parameters) can guide responsible and effective AI use, reinforcing that the user is ultimately accountable for the final product.

Learn More

- <u>Ethical AI for Teaching and Learning</u> | Cornell University
- Education and AI | Center for Technology Innovation at Brookings
- Ethics and AI | Association of California School Administrators

Cultural Responsiveness

Al tools should be critically evaluated and used to affirm, rather than diminish, the diverse cultures of Alaska. Proactive measures must be taken to mitigate algorithmic biases and prevent misinterpretation, misappropriation, or the exclusion of crucial local context. Technology is not culturally neutral. To serve all of Alaska's students, Al tools must be implemented in ways that respect and reflect the rich diversity of the state's communities, languages, and histories, aligning with the <u>Alaska Standards for Culturally Responsive</u> Schools.

Addressing Bias and Misinformation

Al models can inherit biases from their training data (racial, cultural, gender, political), leading to inaccurate, misleading, or discriminatory outputs. Districts should empower all users to identify, question, and compensate for biases and misinformation in Al outputs, while continuing to advocate for the development and adoption of more culturally responsive and equitable Al tools.

Stakeholder Engagement

To ensure AI guidelines are culturally responsive, districts should involve diverse stakeholders—including educators, students, parents/caregivers, administrators, elders, and community members in their development and ongoing review. This collaboration ensures that local knowledge and cultural values are integral to the implementation process.

Rethinking Education

Al can support a shift towards student-driven personalized learning that focuses on developing each student's learning needs rather than a one-size-fits-all approach. This provides an opportunity to create learning experiences that are more relevant and affirming by integrating students' cultural backgrounds, languages, and experiences.

District-Wide Guidelines

When developing district-wide guidelines, a key consideration must be how AI can support students with diverse learning needs. Policies should be designed to ensure that AI tools are used to create inclusive learning environments that value and accommodate every student's unique background and identity.

Al Use Disclaimer

This policy document was drafted with the assistance of artificial intelligence and generative models, including Gemini and ChatGPT, while noting that the provided sources generally refer to Large Language Models (LLMs) in the crafting of such guidance. Aligned with a foundational human-centered approach, which dictates that AI tools should augment rather than replace human capabilities, its development prioritized extensive human oversight, critical reflection, and human judgment. This approach aims to model responsible and ethical engagement with AI technologies, leveraging them as augmentation tools that preserve and enhance human insight, creativity, and decision making in education, emphasizing that human judgment remains the ultimate arbiter in student-centered matters

Definitions

Academic Integrity: The commitment to core values of honesty, trust, fairness, respect, and responsibility in all academic pursuits.

Al Literacy: The comprehensive knowledge and skills that enable individuals to critically understand, use, and evaluate Al systems and tools, including their capabilities, limitations, and ethical implications.

Algorithmic Bias: Systematic and repeatable errors in an AI system that create unfair or discriminatory outcomes, often stemming from biases in the data used to train the AI or the design of the algorithm itself.

Artificial Intelligence (AI): Machine-based systems capable of making predictions, recommendations, or decisions influencing real or digital environments.

Authorized AI Use: The use of AI tools in ways that align with district policies, classroom expectations, and applicable laws.

Chatbots: Online software applications or web interfaces that use generative artificial intelligence systems capable of maintaining conversations with a user in natural language by simulating the way a human would behave as a conversational partner.

Conversational Agents: Conversational agents leverage Natural Language Processing (NLP) and Artificial Intelligence (AI) to interact with users through text or voice.

Culturally Responsive: Educational practices or tools that recognize, value, and integrate students' cultural backgrounds, languages, and experiences into the learning process to make education more relevant and effective for diverse learners.

Deepfake Technology: Digital alteration or fabrication of images, videos, or audio to misrepresent reality.

Digital Citizenship: The understanding of appropriate, responsible, and ethical behavior when using technology and engaging in online environments, encompassing digital literacy, safety, and etiquette.

Digital Divide: The gap in access to and proficiency with information and communication technologies, particularly concerning internet connectivity and device availability, often correlated with socioeconomic status, geographic location, or other demographic factors.

Generative AI (GenAI): The class of AI models, often known as chatbots, that emulate the structure and characteristics of input data to generate derived novel content, including text, images, audio, video, and code.

Hallucinations: A phenomenon where an AI model, particularly large language models (LLMs) or generative AI tools, produces outputs that are nonsensical, inaccurate, or not based on the training data. This can occur in various AI applications, including chatbots, computer vision tools, and natural language processing systems.

Intelligent Tutoring Systems: Computer-based educational tools that leverage artificial intelligence to provide personalized instruction and support tailored to individual learners' needs.

Large Language Models (LLM): Neural networks trained on large datasets to understand and produce human language, leveraging advanced architectures, such as Transformers, to process and generate text, capturing intricate patterns and nuances in languages.

Misinformation: False or inaccurate information that is spread, regardless of intent. (Often contrasted with "disinformation" which implies intent to deceive.)

Personally Identifiable Information (PII): Information that directly or indirectly identifies an individual (e.g., name, student ID, address).

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