Human-Centered AI

Guidance for K–12 Public Schools

Version 2.0

Date of publication: March 27, 2024
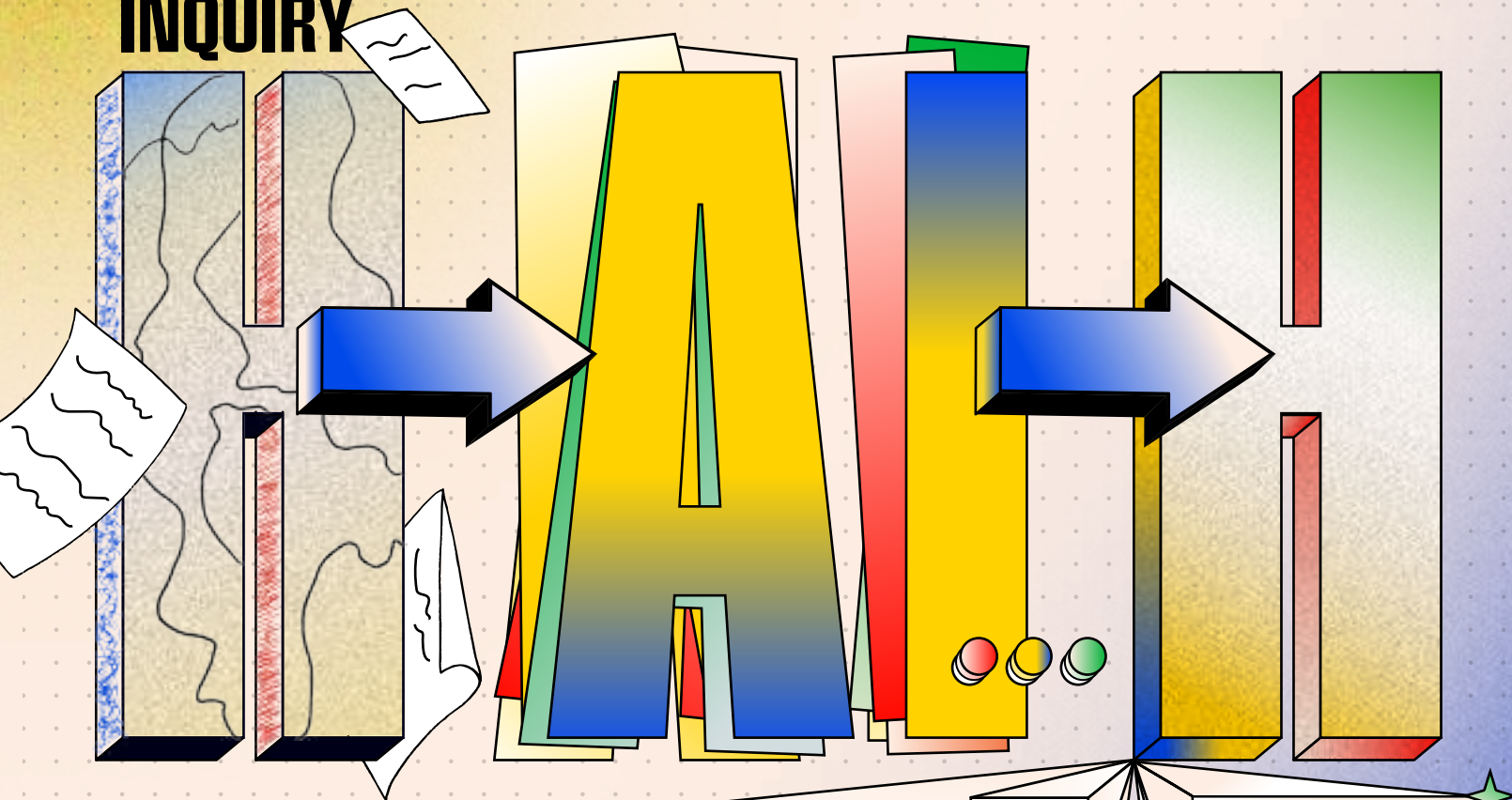
Updates: Practical Implementation Guide, FAQ, Key AI Terms, and Leadership Checklist.

https://ospi.k12.wa.us/ai

HUMAN INQUIRY

H → AI → H

HUMAN EMPOWERMENT

Our Philosophy:
Embracing a Human-Centered Approach

In K–12 education, uses of AI should always start with human inquiry and always end with human reflection, human insight, and human empowerment. This model, abbreviated as "Human→AI→Human" or "H→AI→H" throughout this guidance, offers pathways for educators, school district administrators, and students to engage with AI responsibly, ethically, and safely.
https://youtu.be/m9Fkw9PWPiM

Watch a video from
State Superintendent
Chris Reykdal

Table of Contents

Message from State Superintendent Chris Reykdal

In the last year, Washington's teachers delivered over a billion hours of instruction to our students – and technology held an important role in that delivery, as it has every year. Particularly during the pandemic, our schools took on the massive effort of establishing a technological infrastructure that allowed for each and every student and teacher to have their own device. Artificial Intelligence (AI) is emerging rapidly into the various aspects of teaching, learning, and school district operations. Washington state is remarkably positioned to integrate AI in our classrooms and campuses across our state.

It is with great excitement and appropriate caution that we distribute guidance to schools and districts now. Like many of the innovations in technology that came before it, the world of AI is evolving at lightning speed. Also like many of the technology innovations that came before it, young people are accessing these tools and wanting to use them in their daily lives. In other words, AI is here and slowing down isn't an option. Students and educators are already engaging with AI, but the key question remains: How will we use it in a way that empowers critical thinking? As this technology revolutionizes industries, communities, sciences, and workplaces, our responsibility is to prepare students and educators to use these tools in ways that are responsible, ethical, and safe.

Schools across Washington are already pioneering efforts to integrate AI into classrooms. With a full embrace of AI, Washington's public education system will be at the forefront of innovation and excellence. This initiative is not just about staying current with technology—it's about enriching the learning journey of every student and empowering our educators with the most effective tools available.

I encourage all stakeholders—caregivers, families, teachers, education partners, and community members—to join us in this groundbreaking journey. Your insights and participation are invaluable as we chart this path and learn together. Our state leads by example, setting a standard for how technology and human ingenuity can work hand in hand to prepare the next generation of leaders for success in careers, jobs, and communities that don't yet exist.

Our commitment is not just to integrate AI into the classroom; it's to do so with a vision that places our educators and students at the center of this digital revolution with a priority for human inquiry that uses AI for production, but never as the final thought, product, or paper. AI is a powerful tool, but it only enhances learning if students and educators embrace an "H→AI→H" approach. Start with human inquiry, see what AI produces, and **always** close with human reflection, human edits, and human understanding of what was produced. It is imperative that we empower our teachers to utilize AI as a responsible and transformative tool. This means providing educators with the necessary resources, training, and support to incorporate these technologies in ways that enhance their instruction and, more importantly, nurture our students' critical thinking.

Together, we will create an educational environment where technology supports, but where human control and inquiry lead to boundless learning, and where our children are ready to lead in a world augmented by artificial intelligence.

Chris Reykdal
Superintendent of Public Instruction

Executive Summary

Artificial Intelligence (AI) is emerging rapidly across industries—including K–12 education. To support educators and education leaders in equitable and inclusive uses of AI in classrooms across Washington, the Office of Superintendent of Public Instruction (OSPI) presents this initial guidance, which emphasizes a human-centered approach to using this ever-evolving tool.

In This Guidance

- **Understanding AI:** Provides context about the emergence of AI and a framework for public education systems to address it.
- **Definitions:** Explains what generative AI (or "Gen AI") is and is not, and identifies potential opportunities and risks for using AI in public education.
- **Principles and Values:** Lists the guiding principles that OSPI supports, including that uses of AI in public education should be equitable and inclusive, safe and secure, understandable, and purposeful and beneficial.
- **Guidance:** Provides considerations for creating human-centered AI learning environments, implementing AI in student learning, and protecting sensitive and confidential data.
- **Policy:** Details key components of AI usage policies, including acceptable use policies and requiring both human input and review of AI outputs.
- **Academic Integrity and AI Assistance:** Indicates academically honest ways to use AI, how to cite AI, and when using AI could be classified as plagiarism.
- **Professional Development:** Lists the topics and subjects on which local education agencies (LEAs) should provide training.

How to Use This Guidance

OSPI's guidance on integrating AI into Washington classrooms is designed to be used by stakeholders across public education:

- **School district administrators** should integrate this guidance into their district and school policies on AI use.
- **Educators** should use this guidance for recommendations on implementing AI in their classrooms.
- **Students and families** can refer to this guidance for suggested uses of AI and to gain a deeper understanding of Washington's statewide approach to and understanding of AI.

This guidance is designed to evolve with advances in AI and adapt to the unique needs of school communities across Washington. With the transformative power that AI presents, the overarching goal of this guidance is to empower Washington's students to lead in the world they are helping to create.

Understanding Artificial Intelligence

The integration of Artificial Intelligence (AI) in education starts with the fundamental understanding that AI is not a replacement for human intelligence or humanitarian presence in education. According to UNESCO, AI in education is expected to be a $6 billion worldwide industry in 2024[1] with estimates of growth reaching $19.9 billion by 2028[2]. LinkedIn's Economic Graph Research Institute estimates that, by 2030, the skill sets needed for jobs will change by 65%, affecting not just tech, but all industries[3]. Corporate entities are moving fast to meet the need and demand for products that streamline the delivery of education, but not all products are the same. It is the responsibility of the education community to carefully and strategically understand how these products work, what data is collected, and where information is sourced.

While AI is an emerging innovation in education, Local Education Agencies (LEAs) can utilize and build on existing policies that are based on educational integrity, student safety, and proven instructional practices. In conversation, AI tools are often discussed as a holistic, outside influence on education, yet policy regarding AI should not be separately written. Key facets of these tools already apply to concerns such as student data privacy, plagiarism, cyberbullying, and digital literacy, and can be called out within existing and corresponding policies.

Whether updating policies, adopting software, delivering instruction, or analyzing outputs, the vital role each of us plays in understanding what AI is and is not cannot be overemphasized. The first step in AI integration is realizing the opportunity for AI to transform the way we access and use information as we learn and work in our world today, as well as into the future. The next step is to ensure all guidance, policies, systems, and instructional practices are grounded on ethical, equitable, and inclusive uses of AI throughout our Washington communities. LEAs must ensure educational and technology standards are applied to meet the needs of all students so that AI tools enhance education. Finally, state and local policymakers and education leaders must act to build an ethical framework of funding to support policies around every student that embraces each student's unique abilities and allows them to use existing and emerging AI tools in a safe learning environment.

[1] United Nations Educational, Scientific and Cultural Organization. (2021). *AI and education: guidance for policy-makers.* https://doi.org/10.54675/PCSP7350

[2] International Market Analysis Research and Consulting Group. (2023). *Size, Share and Trends.* https://www.imarcgroup.com/ai-in-education-market

[3] LinkedIn Economic Graph. (2023). *Preparing the Workforce for Generative AI: Insights and Implications.* https://economicgraph.linkedin.com/content/dam/me/economicgraph/en-us/PDF/preparing-the-workforce-for-generative-ai.pdf

AI in Education: A Human-Centered Approach

A human-centered AI learning environment is one that prioritizes the needs, abilities, and experiences of students, educators, and administrators. An educational leader can support a human-centered learning environment by considering the following:

- **Developing students' AI literacy** by helping them understand the concepts, applications, and implications of AI in various domains, and empowering them to use AI as a tool for learning and problem-solving.

- **Ensuring ethical, equitable, and safe use of AI** by protecting the privacy and security of data, addressing potential biases and harms, and promoting digital citizenship and responsibility.

- **Providing professional development** and support for educators by helping them integrate AI into their pedagogy, curriculum, and assessment, and by facilitating their collaboration and innovation with AI.

- **Applying human-centered design principles** to the development and implementation of AI solutions, such as involving stakeholders in the design process, testing and iterating the solutions, and evaluating the impact and outcomes.

- **Aligning AI solutions with the best practices and principles of learning,** such as supporting learner agency, fostering collaboration, enhancing feedback, and promoting critical thinking.

Definitions: What AI Is and What It Is Not

Generative Artificial Intelligence (also abbreviated as Gen AI) refers to software tools modeled on large amounts of data to produce text, images, videos, or other digital artifacts. Common, general-purpose examples include a wide range of software known for text generation through Large Language Models (LLMs) and image generation. Tools more tailored to an educational setting include personal AI tutoring programs, virtual assistants, and software with the capability to generate lesson plans within seconds or grade tasks in real-time.

As with all new tools and technologies, it is important to understand the tool itself in order to use it responsibly. Generative AI has a place in the classroom when educators and students remain at the center of instruction and learning.

| Generative AI is...	Generative AI is not...
... a means to augment teaching and learning.	... a replacement for student development.
... already embedded into many technologies, as is AI more broadly speaking.	... something that can plausibly be avoided or "turned off."
... permeated with flaws such as algorithmic bias that must be considered when utilized.	... a source of unquestionable, factual information.
... a product of companies led by teams of humans with their own values, agendas, limitations, bias, and organizational needs.	... produced in a vacuum free of societal influence.
... an algorithm that enables users to generate new content based on a pre-trained Large Language Model.	... a sentient being with untethered superhuman capabilities. ... a replacement for highly qualified educators.

Potential Opportunities for Using AI in Education

- Personalize learning and feedback in real time
- Lesson plan and assessment design with customized planning for differentiation
- Translation between languages
- Develop critical thinking through human input, data output, and elevated human analysis
- Aid in creativity, simulation, and skill development
- Streamline operational and administrative functions

Potential Risks That Need to Be Mitigated When Using AI in Education

- Increasing and/or creating inequitable learning environments
- Unauthorized access to protected user information and unauthorized data collection
- Perpetuating institutional and systemic biases
- Plagiarism and academic dishonesty
- Over-relying on technology and undermining the importance of human intelligence in education

Artificial Intelligence tools provide opportunities, benefits, and potential risks. It is the responsibility of every parent/guardian, policymaker, teacher, administrator, and support staff member to ensure that the use of this transformative new technology and its future is regularly reviewed to ensure equity of access, data privacy, and safe and ethical usage are maintained at all levels. It is equally critical that LEAs embrace and teach students what AI is and isn't and how to use AI technologies to enhance learning – not prevent students from developing critical skills needed to graduate with technological literacy.
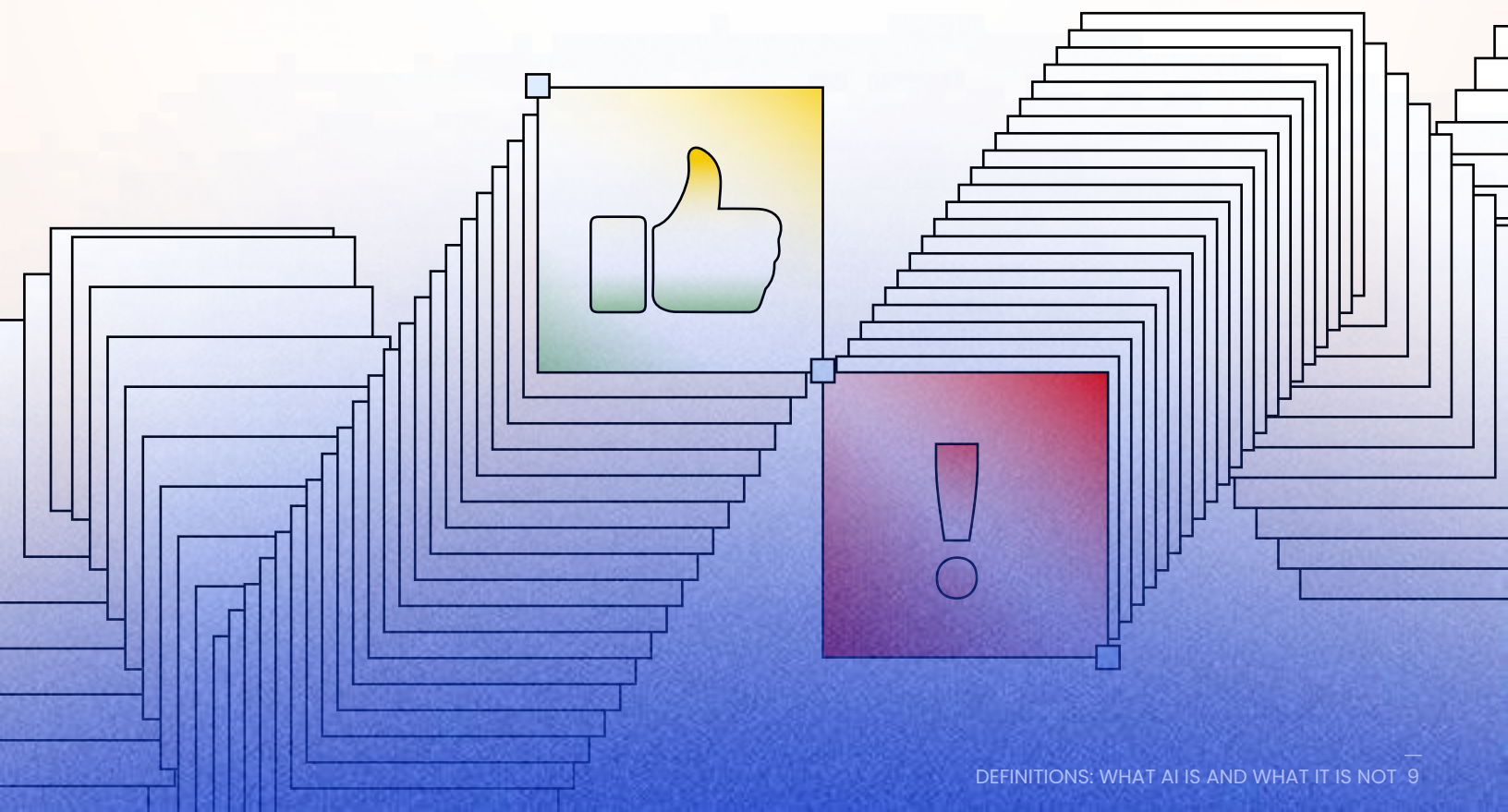
Principles and Values

The National Institute of Standards and Technology [(NIST) AI Risk Management Framework](#)[4] outlines guiding principles regarding the trustworthiness of systems that use AI, referenced in Washington Technology Solutions' (WaTech's) own [guidelines](#)[5] . Similarly, the [TeachAI Toolkit](#)[6] outlines principles for the use of AI in education. With these resources as foundations, OSPI supports the following principles and values for the use of AI in education in Washington:

- **New Level of Education:** Artificial Intelligence brings a new level of hope and opportunity to the delivery of education in Washington. The onset of technological tools using AI provides a new way for educators to think about how we, as humans, learn, create, and process information.

- **Equitable and Inclusive:** All students should have access to AI tools which are inclusively designed with all students in mind.

- **Safe and Secure:** Students should not be put at further risk by using AI nor should their personally identifying information be unlawfully shared.

- **Consistent and Compliant:** AI tools should be consistent in their expected capabilities and meet the needs of the education system.

- **Accountable and Transparent:** The companies partnering with schools to provide AI tools should be accountable for their products, just as schools and LEAs should be accountable for student use of AI.

- **Interpretable and Understood:** Though many AI systems are black boxes (too mechanically complex to be human interpretable), at a practical level students and educators should be literate in how AI works and why it produces the results that it does.

- **Purposeful and Beneficial:** All use of AI should ultimately provide a positive experience with intentional use in teaching and learning.

- **Human and Machine:** AI should aid in (not replace) decision-making, creativity, learning, development, growth, and productivity.

- **Continuous Learning and Development:** AI has permeated society faster than technologies of the past and it is essential that Washington educators, technology specialists, and partners in school services provide access to AI tools, while continuing to engage in conversations to learn how to effectively manage and develop the role AI plays in shaping the future of education.

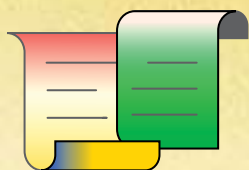[4] National Institute of Standards and Technology. (2023). *Artificial Intelligence Risk Management Framework (AI RMF 1.0).* U.S. Department of Commerce. https://nvlpubs.nist.gov/nistpubs/ai/NIST.AI.100-1.pdf

[5] Washington Technical Solutions. (2023). I*nterim Guidelines for Purposeful and Responsible Use of Generative Artificial Intelligence.* https://watech.wa.gov/sites/default/files/2023-09/State%2520Agency%2520Generative%2520AI%2520Guidelines%25208-7-23%2520.pdf

[6] TeachAI. (2023). *AI Guidance for Schools Toolkit.* https://www.teachai.org/toolkit

Guidance

A Human-Centered Approach to AI

A human-centered AI learning environment always starts with human inputs and inquiry, and always concludes with human reflection and edits. It should prioritize the needs, abilities, and experiences of students, teachers, and administrators. An education leader can support a human-centered learning environment by considering the following:

- **Developing students' AI literacy** by helping them understand the concepts, applications, and implications of AI in various domains, and empowering them to use AI as a tool for learning and problem-solving.
- **Ensuring ethical, equitable, and safe use of AI** by protecting the privacy and security of data, addressing potential biases and harms, and promoting digital citizenship and responsibility.
- **Providing professional development** and support for teachers by helping them integrate AI into their pedagogy, curriculum, and assessment, and by facilitating their collaboration and innovation with AI.
- **Applying human-centered design principles** to the development and implementation of AI solutions, such as involving stakeholders in the design process, testing and iterating the solutions, and evaluating the impact and outcomes.
- **Aligning AI solutions with the best practices and principles of learning,** such as supporting student agency, fostering collaboration, enhancing feedback, and promoting critical thinking.
- **Avoiding sole reliance on the use of "AI detection" tools** in checking for student plagiarism. These tools often use data that is biased against students who are multilingual/English language learners.

Implementing AI in Student Learning

When integrating AI into student learning, it's important to empower students in how and to what degree AI is utilized in their learning journey. By doing so, students can actively participate in shaping their educational experience with AI.

- Co-create and share an AI decision-making rubric with students (example rubric).
- Support students in taking a human-centered approach to using AI.
- Empower students in leveraging AI in scaffolding understanding, feedback, and reflection.
- Support students in critically thinking about the role of AI within their learning journey and within their preparation for college, career, and life.
- Empower students receiving special education services to use AI to personalize and increase their access to learning.
- Integrate ethics and critical thinking activities that align with grade-level and subject-level instruction.
- Use AI for differentiation and assessment, including intelligent tutoring systems that allow text to speech, translation, personalized learning, and inquiry-based learning.
- Prepare students for jobs of the future, including those in career and technical education (CTE) programs, by partnering with industry to update and integrate learning standards.

Sensitive and Confidential Data

Ensure that your LEA AI use complies with student/personal privacy and data protection laws. Be aware of and follow any age restrictions for the use of all AI tools and resources.

- Before sharing private data, ensure that the AI tool meets the following requirements:
    - Family Education Rights and Privacy Act (FERPA) requires that schools not disclose personal identifying information of a minor or eligible student without express written consent of the parent or eligible student.
    - Children's Online Privacy Protection Act (COPPA) requires schools to obtain parental consent before allowing students under 13 to use online services that collect, use, or disclose personal information.
    - Children's Internet Protection Act (CIPA) requires that schools implement an internet safety policy that includes protective measures to block or filter access to obscene or harmful content.
- Have a clear understanding of your data collection processes. Update policies to include the use of and considerations for using AI.
- Give users options to opt-out or delete their data if they want.

Policy

AI policies must promote equitable and inclusive access to AI. Education policymakers must focus on ensuring the use of AI increases the public good, with emphasis on empowering students who are members of communities that have been historically underserved. It is important that policies, by design, enhance a human-centered approach to pedagogy and learning, and respects ethical norms and standards. AI policy and use should be geared to improving learning for every student, empowering teachers, and strengthening learning management systems.

Building Human-Centered AI Policies

Incorporate the need for human intelligence and responsibility into AI usage policies. All AI use should start, and end, with human insight.

- **Responsible Use Policy:** Known as an acceptable use policy (AUP) or technology use policy, this describes what any person authorized to utilize the district's technology system may do and not do. It describes the terms and conditions for educational institutions and should be updated to include the safe and appropriate use of AI tools. (A separate AI AUP is not needed.)

- **AI Inquiry and Input Review:** Require human input of data with clear mandates that staff and students should never input personal, sensitive, or confidential data, including any data related to student education records, into any AI system without first ensuring that the system meets FERPA, COPPA, and CIPA requirements. Emphasize the need for review prior to finalizing any information into a system that learns from data entered.

- **Embrace the Use of Data and the Evaluation of AI Output:** Invest in systems that create streamlined opportunities for staff and students to enter information efficiently and safely, allow them to improve instruction, and draw connections to better understand student thinking and learning.

- **AI Output Review:** AI users should review and critically assess outputs from AI tools before sharing or publicizing results, including in the classroom. Staff and students should not rely exclusively on AI-generated content without fact-checking and evaluating results. Ultimately, it is up to human users to determine how AI information is shared and used.

  - **Bias and Misinformation:** AI-generated content is based on datasets or data models that may contain biases, false information, or other inaccuracies. AI systems do not have the ability to think or verify accuracy. Therefore, verifying AI results to ensure the source is credible must occur before considering an AI output in academic work.

  - **Safety and Respect:** Users must never use AI tools to create misleading or inappropriate content, take someone's likeness without permission, or harm humans or the community at large. (Note: This may also be added to a student code of conduct or bullying/cyberbullying/harassment policy.)

Updates for Existing Policies

- **Data Collection:** Parents, guardians, and students must be informed of specific data collection activities or potential risk, where applicable, with consent required. All AI-driven data collection must adhere to local data protection regulations, best practices, and community standards.

- **Third-Party AI Tools:** The district's approved list of AI software and tools should always be reviewed and updated. Unauthorized AI software and tools (including updates) might not adhere to the district's data privacy standards and practices.

- **Personal Information:** Staff and students should never input personal, sensitive, or confidential data into any AI system without prior parental or guardian authorization, including any data related to student education records. Personnel must adhere to the FERPA, COPPA, and CIPA when entering information.

Academic Integrity and AI Assistance[7]

- **Assessments:** Teachers are encouraged to allow students to use AI tools as a personal tutor or studying buddy to prepare for assessments. When students are completing exams or quizzes, it should be at the teacher's discretion to determine whether an AI tool is used, and it should be explicitly stated whether this is allowed.

- **Assignments:** Teachers should have the responsibility of clarifying appropriate or inappropriate uses of AI tools when students are completing assignments. Teachers might allow the limited use of generative AI on entire assignments, parts of assignments, or as a brainstorming tool. Teachers should be encouraged to articulate why they do or do not allow its use in other assignments or parts of assignments.

- **Bias and Critical Thinking:** All users of AI software should review and evaluate AI output for accuracy and potential bias. Students must develop the critical thinking skills needed to successfully use and navigate the world of AI. Limitations of AI systems and the data used to develop AI content can, and sometimes do, amplify human bias. Use caution and human review prior to using AI outputs in classrooms, publications, data analysis, etc.

- **Citations, Disclosures, and Attributions:** AI-generated content is considered plagiarism, unless appropriately cited in assignments or publications; any use must be referenced. Instruction should emphasize the importance of ethical use of AI and the role of using sources in assignments.

- The following resources provide a sample of how to appropriately cite the use of AI in any publication or assignment:
    - [MLA Style - Generative AI](#)
    - [APA Style - ChatGPT](#)
    - [Chicago Style - Generative AI](#)

- **Plagiarism:** Staff and students should be encouraged to use AI tools for brainstorming, creative stimulations, or preliminary research. Using AI tools to generate answers, stories, essays, or other publications, and/or complete assignments without proper citation, is plagiarism.

- **Use of AI Detection Tools:** Software companies that claim products can detect content developed by another AI tool, or its own AI tool, are currently not reliable and should not be used as the sole way to determine whether cheating and plagiarism have occurred.

---

[7] Adapted from TeachAI. (2023). *AI Guidance for Schools Toolkit.* https://www.teachai.org/toolkit

Implementing AI: Practical Guide for Classroom & Student Considerations

Implementing AI: Classroom & Student Considerations outlines a comprehensive approach for integrating Artificial Intelligence (AI) into K-12 education, with a focus on maintaining a human-centered instructional framework. It explains how the H→AI→H (Human Inquiry, AI Use, Human Empowerment) methodology can foster personalized learning experiences that cater to individual student needs, including those with disabilities. This document emphasizes the essential role of educators in guiding AI integration. It also addresses considerations across various grade levels, the importance of equity in AI access, and the development of critical thinking skills when using AI.
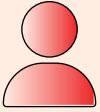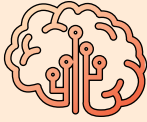
OSPI's hope is that this implementation guidance assists school leaders and educators in navigating the complexities of AI integration into teaching and learning environments. It highlights the importance of a strategic approach to the adoption of AI tools, ensuring that technology enhances rather than replaces human interaction and pedagogical principles. By detailing best practices for embedding AI within curriculum design, and student engagement strategies, it aims to maximize the educational benefits of AI. Furthermore, this guidance underscores the necessity of continuous professional development for teachers, equipping them with the knowledge and skills to effectively implement AI technologies. It also advocates for inclusive participation in AI-related activities, ensuring that all students, regardless of their background, can benefit from the transformative potential of AI in education.

Guidance for Integrating AI in Education: A Human-Centered Approach

5 Step Scaffolding Scale for Students

The following 5 step implementation framework can be a practical tool to help students understand the various ways and levels at which AI can support their learning journey. This framework, designed to categorize AI integration from basic support to advanced interactive learning, serves as a roadmap for students to visualize how AI technologies can be progressively utilized in their education. Starting with foundational AI assistance, such as personalized study aids, the scale moves through increasing levels of complexity, including collaborative problem-solving with AI and culminating in creative projects that blend AI insights with human creativity. By introducing this scale in the classroom, educators can guide students through each level, encouraging them to explore and experiment with AI tools that match their current learning needs and aspirations. This approach not only supports the understanding of AI for students but also empowers them to take control of their learning, recognizing AI as a valuable ally that can be tailored to support their educational goals across a variety of activities, from enhancing study habits to facilitating innovative project work.

Level 1 No AI Assistance	Level 2 AI -Assisted Brainstorming	Level 3 AI-Supported Drafting	Level 4 AI-Collaborative Creation	Level 5 AI as Co-Creator
No AI tools are used at any point. Students rely solely on their knowledge and skills.	AI tools can help generate ideas. Final content must be created by the student without direct AI input. AI assistance must be cited.	AI can help with drafting initial versions. The final version must be significantly revised by the student. Clear distinction between AI input and student's contributions.	AI-generated content can be included. Student must critically evaluate and edit AI contributions. AI usage must be transparent and cited.	Extensive use of AI in content creation. Student provides a rationale for AI use and ensures original thought. Work adheres to academic integrity with proper citations.

Essential Role of the Educator

Educators play a crucial role in the integration of Artificial Intelligence (AI) within classroom environments, focusing on a human-centered approach to AI usage, as illustrated by the OSPI's adoption of the H→AI→H (Human Input → AI → Human Empowerment) framework. By grounding their instruction in a philosophy that begins with human inquiry and culminates in human empowerment, educators are encouraged to weave AI into the fabric of learning in a way that respects and uplifts the human dimension of education. This approach not only navigates the complexities of integrating AI into teaching and learning but also underscores the educators' indispensable role in moderating the influence of AI, ensuring that it augments rather than replaces the nuanced processes of human teaching and learning. Through this initiative, Washington champions a forward-thinking stance on educational innovation, spotlighting the educator's essential contribution to harnessing AI as a tool for enhancing educational outcomes while safeguarding ethical standards and promoting inclusivity.

Example AI Assignment Scaffolding Matrix for Educators

The AI Scaffolding Example Matrix is designed as a resource to help teachers integrate AI tools into their assignments in a way that enhances learning outcomes and student engagement. This rubric provides a structured approach for incorporating AI at various levels of complexity and for different educational purposes, ranging from basic understanding and application of AI tools to more advanced analysis and creation tasks using AI technologies. Teachers can use and adapt this rubric to carefully plan and scaffold assignments, ensuring that students not only engage with AI as a subject matter but also apply AI tools to facilitate their learning process. This approach encourages students to critically assess the role and impact of AI in their assignments while progressively building their skills in navigating AI tools. By aligning assignment objectives with the rubric's criteria, educators can provide a clear framework for students, guiding them through a graduated learning path from introductory exposure to AI to proficient use and understanding of AI's capabilities and limitations in various contexts. Educators are encouraged to create a copy of this matrix and adapt and update it as needed to fit the needs of their classroom and students.

Dowload Sample Classroom-level Matrix:

[Link to downloadable matrix](#)

Sample Classroom-level Matrix

Assignment	Level 1 No AI Assistance	Level 2 AI –Assisted Brainstorming	Level 3 AI–Supported Drafting	Level 4 AI-Collaborative Creation	Level 5 AI as Co-Creator
Reading, and/or reading plus preparation for discussion, completed for homework Example: Phil/Rel: Read "The Ones who Walk Away from Omelas." Be prepared to discuss: LeGuin says there is no guilt in Omelas. What are the "Ones who Walk Away" walking away from? What are they walking towards? Were the people who walked away from Omelas heroes or cowards? Why?	Read assigned material and prepare for class discussion without AI tools.	Use AI to generate questions for discussion, but final input must be student's own.	AI can help draft initial discussion points, student refines for final submission.	Integrate AI-generated content with student's analysis for in-depth discussion.	AI generates comprehensive discussion insights, student leads in-class conversation.
Longform drafting of writing (essays, lab reports, etc.) completed over the course of multiple days Example: History: How has the debate over the removal of Richmond's Confederate statues and the future of this public space highlighted both tensions about the telling of the American story and shifting definitions of American identity?	Independently conduct research and write essay drafts without AI help.	AI can help brainstorm essay topics and outlines, student writes the drafts.	Use AI for a first draft, but substantial student revision is required for final work.	Collaborate with AI on essay drafts, but student ensures original analysis and argument.	AI and student co-write essay, student ensures academic integrity and original thought.
Reflective or creative writing completed for homework Example: English: Butler-inspired Flash Fiction - Drop us right into a scene with a character, in a highly specific location. Emulate Butler's writing style however you can. Examples include: a first-person point of view, spare prose, genre-bending plot. Example: Any Discipline: Write a reflective journal entry about the process of composing your essay. In the process, you read sample pieces, brainstormed, drafted, workshopped, drafted again, conferenced, drafted yet again, and, ultimately, shared the piece with an audience. How did the process feel to you? What did you learn along the way? What are your areas of strength and areas for growth in your final draft? Take some time to reflect and self-assess.	Write a reflective journal entry or creative piece using personal insights only.	Generate prompts with AI, but the reflective or creative writing is student's own.	Draft creative writing with AI support, but student personalizes the final piece.	Create a story with AI, student adds unique perspective and revises for final version.	AI aids in crafting a narrative, student refines and adds creative elements.
Student-created podcasts or video recordings Example - Spanish: En equipos, piensen en un tema central para la experiencia humana de los que hemos desarrollado en clase (la soledad, la amistad, la tristeza, el miedo, el lenguaje, la comunicación, la creatividad, la ciencia, la tecnología, la diversidad, etc). Identifiquen en un problema relacionado con el tema escogido y comenten una situación que necesitaba ser resuelta. Desarrollen un diálogo en el que: Cuentan la historia de un problema realizan preguntas de aclaración inspirar de forma explícita	Record and edit podcasts or videos without using AI for planning or editing.	Brainstorm podcast/ video topics with AI, but content is created by students.	Develop a podcast/ video script with AI, student edits and records the final version.	Design podcast/ video content with AI, student contributes original dialogue or commentary.	Produce a podcast/ video with AI taking a lead in scripting, student adds creativity.
Research on a given topic, completed for homework Example: Science: Choose a biological topic we have not covered this year. Explore the fundamentals of the topic Find an interesting spin on that topic Plan a brief interactive experience for the class You should make a clear claim that you want the class to engage with, offer them evidence to support your claim, and compel them to engage in reasoning to make sense of that claim.	Investigate a new biological topic and design a class activity without AI.	Utilize AI to explore topic ideas, but the interactive class plan is student-designed.	AI compiles research sources, student synthesizes information for class engagement.	Conduct research using AI, student engages class with their interpretation and presentation.	AI provides in-depth research and analysis, student presents and leads class activity.
Worksheets with word problems/short answers, completed for homework Example: History: How has the debate over the removal of Richmond's Confederate statues and the future of this public space highlighted both tensions about the telling of the American story and shifting definitions of American identity?	Solve math problems and articulate reasoning without AI assistance.	AI assists with initial problem setup, but solution process is done by the student.	AI proposes problem-solving methods, student demonstrates understanding independently.	AI helps formulate complex word problems, student completes and explains their approach.	AI suggests multiple solution paths, student evaluates and teaches their chosen method.

AI Considerations Across K-12

Teaching AI across the K–12 spectrum is crucial for preparing students for a future where AI literacy is a fundamental skill. As children grow, their encounters with AI in daily life and the classroom will shape their understanding of technology and its implications. Introducing AI at an age-appropriate pace ensures students develop critical thinking skills alongside their technical abilities. Educators are key in guiding students through the ethical, practical, and innovative uses of AI, ensuring that as they mature, they are not only proficient in using AI but also in understanding its impact on society and individual identity.

Elementary School Students

"Artificial Intelligence" importantly includes the term "artificial." Understanding AI is predicated on understanding that AI is not sentient, but that can be difficult for young kids to discern as virtual assistants like Amazon Alexa and Apple's Siri are designed to engage with users in a human-like fashion. Furthermore, many children under the age of 13 have access to these technologies and social media platforms – even though there may be usage policies in place prohibiting children from using these tools. Because young children using these tools may be exposed to the same risks as teenagers and adolescents, educators should also be aware of the considerations listed below for middle and high school students.

Elementary educators have tools available to mitigate the risks associated with young children using tools that come with AI features. Interactive tools like Google's Quick, Draw! or Instrument Playground can be fun ways to engage with AI-based technology and bridge foundational understanding about how the tools work. When educators guide students in asking questions of and submitting prompts to large language models, students can receive answers while avoiding potentially inappropriate content. Categorizing the tools kids are already familiar with as AI can be a great starting point to build toward deeper conversations down the road.

Middle and High School Students

Middle school is a time of significant development for students. As learners, middle school students develop curiosity and critical thinking skills while engaging with challenging subjects. AI tools can complement this developmental stage by engaging students in critically thinking about content and how they can leverage AI tools within their own personal learning journey. Students can analyze output generated by a large language model to discern what flaws the model or even the model's argument may have.

As students progress through high school, they may pursue more advanced studies about how AI is incorporated into society, industry, and policy. Knowledge of AI is increasingly becoming a sought-after skill in workplaces across a variety of fields. Digital literacy, including deeper understanding of the technical and ethical aspects of AI, is an important skill for all students to learn as they consider their post-secondary pathways.

Framework for Student Critical Thinking about AI

Utilizing the SHIFT framework with middle and high school students offers a structured approach to developing critical thinking skills, particularly in the context of leveraging AI tools in their work. By starting with curiosity, students are encouraged to explore AI's potential and limitations, fostering a questioning attitude toward technology. Honing in on specific details allows them to understand the intricacies and implications of AI applications, encouraging deeper learning. Identifying the context helps students recognize the relevance and impact of AI in various situations, promoting awareness of its societal and ethical dimensions. Framing issues from new perspectives encourages creativity and problem-solving skills, while discussing what's missing challenges students to identify gaps in AI capabilities, leading to a more comprehensive understanding of technology's role and limitations. This holistic approach not only enhances their cognitive abilities but also prepares them for responsible and informed use of AI in their future endeavors.

SHIFT Framework	Statement	Question to Consider
S	Start your curiosity engine	What intrigues me about the output AI gives me?
H	Hone in on a detail	What specific details did AI get right or wrong and how do I know?
I	Identify your Context	How does AI fit into the bigger picture of my work?
F	Frame it from a new perspective	Can I think of a different perspective that AI could help me uncover?
T	Talk about what's missing	What limitations or challenges of AI should I consider?

Policy Samples

What follows are samples of policy frameworks that serve as valuable starting points for LEAs to consider when creating their own internal policies. These samples illuminate approaches to harnessing AI's potential while addressing ethical, safety, and privacy considerations inherent in its use. By examining these templates, LEAs can gain insights into the balance between innovation and responsibility, ensuring that the deployment of AI technologies enriches the educational landscape in a manner that is both effective and respectful of the rights and welfare of all stakeholders.

This section aims to equip leaders and educators with the knowledge and inspiration needed to craft comprehensive policies that align with their unique contexts and educational objectives. It is also strongly recommended that LEAs visit the WSSDA site for the most up-to-date policies.

Sample Language to ADD to your district's existing Responsible Use Policy (RUP) Edmonds SD
(District Policy Section 2000 - Instruction)

ARTIFICIAL INTELLIGENCE

Artificial Intelligence is a rapidly-advancing set of technologies for capturing data to detect patterns and automate decisions. Artificial Intelligence (AI) has become an increasingly important part of our lives, and it is essential for students to understand when and how to use it effectively and ethically. AI tools can enhance classroom learning, and their implementation should be guided with proper training, ethical considerations, and responsible oversight. When utilizing generative AI tools to create or support the creation of texts or creative works, students are expected to adhere to these guidelines, the Student AI Code of Conduct, and any additional guidance provided by their classroom teacher.

A. Purpose

The district has maintained staff and student access to generative Artificial Intelligence tools for the following purposes:

- Ensuring all students have equitable access to leverage these technologies, regardless of what learning technology devices may be available to them.
- Providing all students with an opportunity to engage in current technologies in a learning environment, to better prepare them for the world they will live and work in.
- Extending the benefits of these tools to the workplace, where appropriate, to leverage efficiencies and productivity.

B. Appropriate Use

Student and staff use of generative Artificial Intelligence technologies should be used to support and extend student learning and workplace productivity, in accordance with the expectations outlined in Policy #, as well as the guidelines in this document (#). Appropriate student use is further outlined in the attached AI Code of Conduct.

C. Inappropriate Use

In addition to those uses which violate this document (#), the following are prohibited uses of Artificial Intelligence:

- Any use of Artificial Intelligence which does not align with expectations outlined by a classroom instructor or building administrator. It is ultimately the teacher's responsibility to determine the appropriate level of use of Artificial Intelligence in each classroom, and for each assignment or project.
- Use of Artificial Intelligence to complete an assignment in a way that represents the assignment as one's own work.
- Use of Artificial Intelligence to purposefully create misinformation or to misrepresent others for the purpose of harming or bullying groups or individuals.
- Use of Artificial Intelligence with confidential student or staff personal information.

D. Violating these Guidelines

In the event that these guidelines are not followed, schools will be following their normal disciplinary procedures regarding disruptive or inappropriate behavior. Consequences may include discipline outlined in Sample District Procedure 2000, as well as restrictions placed on a student or staff member's use of generative Artificial Intelligence.

Sample Classroom Protocols (Peninsula School District)

In our class, I encourage you to use Artificial Intelligence (AI) tools such as ChatGPT, Google Gemini, Canva, Midjourney, and others. Some of our activities and projects will even require these tools. Understanding and using AI is a new and essential skill, and I will provide lessons and help using these tools.

Some of our activities and projects will even require these tools. However, you must understand a few things about using AI, particularly generative tools like ChatGPT:

- Effort matters. If you don't take the time to think through and carefully write your prompts to the AI, you may not get excellent results. It will require practice and patience to get better results.
- Don't blindly trust the AI's responses if the AI gives you a fact or a number. Remember, you will be responsible for the accuracy of the information you use in your work, even if it comes from the AI.
- Always remember to acknowledge when you've used AI in your work. At the end of any project or assignment where you've used AI, include a short explanation about how and why you used it and what prompts you used. Not doing this could be considered as not being honest about your work.
- Lastly, use AI thoughtfully. It can be a great tool, but it's not always the right tool for the job. Consider whether it's the best choice for the task at hand.

Using AI tools in class can be a fun and exciting way to learn. I look forward to seeing how you use these tools in your work!

Sample Student AI Code of Conduct

Student Pledge for AI Use

I, [STUDENT NAME] as a student of [NAME OF SCHOOL] school, pledge to:

1. Use AI Responsibly: I will use AI tools responsibly and for educational purposes only. I understand that misuse or malicious use of AI tools will not be tolerated and may result in disciplinary action.
2. Respect Others: I will not use AI to harm, deceive, or disparage others. I will always respect others' privacy and dignity.
3. Maintain Academic Integrity: When using AI to assist with my schoolwork, I will always give proper credit. I understand that any work generated by AI should be clearly indicated.
4. Protect Privacy: I will be mindful of my own and others' privacy when using AI. I will not share personal information with AI without appropriate consent and understanding of how the data will be used.
5. Learn Continuously: I understand that AI is a rapidly evolving field. I will continuously learn about AI, its implications, and how to use it ethically.
6. Report Concerns: I will report any concerns or potential breaches of this pledge to a teacher or school administrator immediately.

By signing this pledge, I commit to adhering to these principles and understand the importance of ethical AI use in our school community.

Sample Professional Ethics for Educators When Implementing AI Tools

1. Fairness and Unbiased AI Systems
   a. Ensure all AI tools and software used in classrooms allow equal access and outputs are unbiased.
   b. Verify data or any output generated from an AI prompt is void of language and data that is bias or defamatory.
2. Protect Student Privacy and Data
   a. Establish safeguards to make certain that student data collected, used, and stored is secure and with appropriate consent.
   b. Confirm that any data collected does not violate current regulations relevant to education and student data privacy. (See below)
3. Avoid Overreliance on AI
   a. Use AI tools to enhance teaching and not a substitute for good teaching pedagogy.
   b. Continue professional development to remain up to date with emerging AI tools and resources.
4. Plagiarism and Integrity
   a. Model the same level of integrity as outlined for students.
   b. Cite use of AI in development of materials provided to students when appropriate.
5. Ensure Equal Access
   a. Consider with intention that some students may not have access to digital resources outside of the classroom and assign work that aligns with equal access.
   b. Avoid creating projects that rely implicitly on AI for completion, unless this is a course specifically designed for AI instruction.

Considerations: When kids are not quite ready to speak up for themselves or handle AI tools alone, schools should establish strong partnerships with parents to proactively encourage the development of students' critical thinking skills. Together, parents and school communities should help kids understand how their data is collected and used by AI, whether it's at school, home, or even with toys meant for learning and fun. It's all about making sure kids stay safe and develop critical thinking skills around their personal data privacy.

Current regulations relevant to the use of AI in education

United States
1. FERPA – AI systems must protect the privacy of student education records and comply with parental consent requirements. Data must remain within the direct control of the educational institution.
2. COPPA – AI chatbots, personalized learning platforms, and other technologies collecting personal information and user data on children under 13 must require parental consent.
3. IDEA – AI must not be implemented in a way that denies disabled students equal access to education opportunities.
4. CIPA – Schools must ensure AI content filters align with CIPA protections against harmful content.
5. Section 504 – The section of the Rehabilitation Act applies to both physical and digital environments. Schools must ensure that their digital content and technologies are accessible to students with disabilities.

Source: AI Guidance for Schools Toolkit (teachai.org)

Considering AI in Specific Subject Areas

While AI plays a role in many areas of education, there are some subjects in which AI plays a more prominent role in the classroom or in course materials. Below are some examples of how AI can be integrated into different subject areas — in some cases as a tool, in others as a topic of discussion.

Career and Technical Education

Career and Technical Education (CTE) is crucial in preparing students for the AI workforce, not just as software developers but as proficient users of AI tools and digitally literate graduates. CTE courses equip students with transferable skills and familiarity with the latest software used across various sectors. As AI influences diverse industries, CTE can widen AI-related career paths, encourage cross-training, and increase attainment of multiple industry-recognized credentials in a single pathway. This mindset is key to supporting more students entering the workforce with AI proficiency.

Computer Science

As a field of research, artificial intelligence is considered a subset of the broader field of computer science (Map of Computer Science video and infographic) and is called out in the Computer Science K-12 Learning Standards. Discussions about societal impact of technology, algorithmic bias, user experience, and much more can be naturally incorporated into computer science coursework alongside programming languages, data structures, and other technical material.

Core Subjects

English Language Arts (ELA)

Perhaps the prototypical example when it comes to concerns about plagiarism using AI tools, ELA educators are seeing first-hand the power of large language models. Understanding the limitations of AI tools can help educators distinguish and facilitate student critical thinking versus generated text and images.

Mathematics

At the heart of machine learning, the key subfield of AI upon which many state-of-the-art tools are based, are statistics, linear algebra, and calculus. Neural networks are effectively an application of the chain rule from calculus. Confidence scores generated by machine learning algorithms are essentially probabilities. The way the tool is manifested as a program comes from computer science, while the logical insights produced by the tool come from mathematics.

Climate and Environmental Science

A critical component of all intensive computing, including widely available AI models, is the energy expended by the servers performing these complex computations. Recent studies have shown that making a single image with generative AI uses as much energy as fully charging a smart phone (MIT). At the same time, AI can be a beneficial tool for related areas such as predicting weather patterns (MIT).

Physics and Engineering

A continually burgeoning field of AI is robotics, which combines logic and reasoning with engineering principles. From robot vacuum cleaners navigating the floor of a living room to the increasingly more human-like movements articulated by the robots at Boston Dynamics, robotics spans many applications including commerce, disaster relief, and human prosthetics.

Special Education

AI can greatly enhance special education by catering to each student's unique strengths and challenges. This includes students customizing their own learning materials and experiences, educators offering interactive and personalized learning experiences to provide feedback, and specialized supports to students and parents.

English Language Learners (ELL)

AI can play a significant role in supporting ELLs by providing them with personalized, interactive, and adaptive learning experiences that may include pronunciation feedback, vocabulary and grammar assistance, reading comprehension support, and speaking practice and interaction.

World Languages

AI-powered chatbots can simulate conversations while adapting to a student's learning level, interests, and goals. GenAI can create customized and dynamic content—such as stories, dialogues, and learning exercises—customized on a learner's preferences and needs.

References:

- What Is Age-Appropriate Use of AI? 4 Developmental Stages to Know About (edweek.org)
- Australian Framework for Generative AI in Schools
- DOE AI Report
- Teach AI Guidance for Schools Toolkit
- UNESCO AI Ethics Guide
- Holland, Beth (July 2022). From Digital Access to Digital Equity: Critical Barriers That Leaders and Policymakers Must Address to Move Beyond "Boxes & Wires": https://practices.learningaccelerator.org/artifacts/from-digital-access-to-digital-equity-critical-challenges-that-leaders-and-policymakers-must-address-to-move-beyond-boxes-wires
- Peninsula School District: https://ospi.k12.wa.us/sites/default/files/2024-03/psd-philosophy-guidance-around-ai-usage-classroom-1.pdf
- "Effective Prompts for AI: The Essentials - MIT Sloan Teaching & Learning Technologies." MIT Sloan Teaching & Learning Technologies.
- 100 Prompts for Teachers to Ask ChatGPT
- What Is Age-Appropriate Use of AI? 4 Developmental Stages to Know About (edweek.org)
- University of Oxford: Users of Amazon's voice assistant Alexa are employing three strategies to manage distrust in the technology, a new study by researchers at the University of Oxford and Stanford University finds.

Professional Development

As Gen AI continues to evolve and impact all aspects of industry, LEAs need to provide training on and understanding of Gen AI for all educational stakeholders. The appropriate use of AI always begins with human inquiry and ends with human engagement with the AI output. LEAs must ensure users of Gen AI understand the safe, responsible ways to utilize these tools in a human-centered approach.

LEA leadership should prioritize staff understanding of how to utilize the technology in the following areas:

- Improve organizational awareness, productivity, and effective use of AI tools
- Understand the pedagogical changes that Gen AI has for learning
- Promote student empowerment in the use of AI in work and assessments
- Establish a shared understanding about the importance and equity concerns when using AI
- Promote access to appropriate AI tools for learning
- Create a shared understanding of academic integrity in the era of AI
- Emphasize ethical use of AI
- Promote understanding of AI and AI tools across the wider educational community
- Empower teachers to generate curriculum using open educational resources provided by OSPI ([Washington OER Hub](#))

Human Inquiry-AI-Human Empowerment: AI in Education FAQ

This FAQ dives into the transformative role of AI in education, shedding light on how it's reshaping teaching and learning. It highlights AI's potential to tailor education to individual needs, streamline educator tasks, and enhance school operations. Alongside the excitement, OSPI cautions about issues such as privacy and equity. Essentially, OSPI envisions AI as a powerful ally in education by embracing a human-centered approach, focusing to make learning more effective and accessible, while also acknowledging the challenges that come with integrating technology into educational environments.

What is AI in Education?

Some key aspects of AI in education include:

- Personalized learning, intelligent tutoring systems, and increased access to learning for students from all backgrounds
- Leveraging automation in grading and administrative tasks
- Utilizing unprecedented access to data and knowledge to inform instructional decision-making

How Can AI Improve Teaching and Learning?

AI can improve teaching and learning by increasing efficiency, personalization, and accessibility.

Some examples of improvements include:

- Early identification of learning disabilities and opportunities for interventions
- Language translation and support
- Assisting with curriculum development
- Continuous professional learning for educators
- Facilitating collaborative learning and enhanced engagement in class

How Does AI Personalize Learning?

AI can use data-driven approaches and adaptive technologies to personalize educational experiences to individual needs.

Some examples include:

- Analysis of student learning and customized feedback
- Intelligent tutoring systems and adaptive course content
- Personalized learning schedules and study guides
- Guidance for further study, skills development, and career interests

What Role Can AI Play in Assessing Student Performance?

AI can enhance efficient assessment of student performance, though it may not be appropriate for assessing all student outputs.

Some appropriate uses of AI in assessment include:

- Creating assessments that are adaptive and interactive
- Automated grading of multiple-choice tests
- Performance tracking over time, identification of knowledge gaps, and personalized feedback
- Analysis of skills and competency, sentiment, and engagement

How Can AI Support Educators?

AI can support educators by enhancing their efficiency and effectiveness.

Some examples include:

- Automating administrative tasks
- Language translation
- Supporting the creation of learning materials and development of curricula
- Enhancing accessibility of classroom content
- Analysis of student performance
- Professional learning plans

How Is AI Integrated into Educational Curricula?

Integrating AI into educational curricula should take a multifaceted approach that includes not only teaching about AI itself, but also using AI as a tool in the classroom.

Some ways to integrate AI into curricula include:

- Teaching AI concepts
- Incorporating AI into STEM (science, technology, engineering, and mathematics) education
- Project-based learning
- Educational games, simulations, and virtual or augmented reality experiences. Enhancing accessibility of classroom content

How Can AI Improve Education Systems?

AI—when used responsibly—has the potential to improve educator and student experiences.

Some examples of improvements include:

- Making educational resources scalable
- Enhanced research capabilities, including processing and analyzing large datasets
- Fostering global learning communities by transcending language barriers and geographical boundaries
- Efficiency and cost-effectiveness

Are There Any Risks or Challenges Associated with AI in Education?

Yes. As with other technology that came before it, there are risks and challenges that need to be managed when integrating AI in education.

Some concerns include:

- Data privacy and security
- Bias in algorithms and other AI tools
- Inequitable access to technology
- Over-reliance on technology, including effects on student interactions and social skills
- Academic honesty and plagiarism
- Quality controls and fact-checking

What Are the Ethical Considerations of Using AI in Education?

Using AI ethically means using AI in ways that are responsible, safe, and beneficial.

Some considerations include:

• Bias, fairness, and cultural sensitivity and inclusion
• Data privacy and security
• Potential impacts on psychology and development
• Autonomous AI as a replacement for human decision-making
• Potential long-term consequences

What Is the Future of AI in Education?

The future of AI in education looks promising and is expected to transform how education is delivered and experienced.

Some key trends that are likely to shape the future of AI in education include:

• Advanced adaptive learning systems with greater personalization
• AI literacy and skills training
• Emotion recognition and mental health support
• Collaborative AI
• Smart campus infrastructures
• AI as a research assistant
• Combatting educational disruption

AI Integration: Leadership Checklist

There are important steps that Local Education Agencies (LEAs) should take when implementing the use of artificial intelligence (AI) in schools. Like technology that came before it, AI presents opportunities for enhanced learning experiences, creative and innovative thinking, and personalized instruction that supports all learners. Also like technology that came before it, AI must be used in ways that are responsible, ethical, and safe.

Having clear and updated LEA policies will support the appropriate use of AI in the classroom. Below, find a checklist to guide your process of integrating AI into your LEA. All draft AI policies should be reviewed and approved prior to adoption.

Step 1: Identify Stakeholders

✓ Make a list of key stakeholders within your LEA that will support your LEA with developing and adopting AI policies. Consider including:
  - School district leaders
  - IT Directors
  - Educators
  - Students
  - Communications staff

✓ Make a list of key stakeholders in your LEA community that should be consulted and informed throughout your LEA's process of developing and adopting AI policies. Consider including:
  - School board members
  - Families
  - Students
  - Community members
  - Community partners (such as advisory committees, school board members, CTE advisory committees, businesses, or nonprofit organizations that your LEA works with regularly)

Step 2: Discussions with Stakeholders

✓ Use OSPI's AI guidance, AI terms, and FAQ as resources to provide a basis of understanding for conversations.

✓ Work with stakeholders within your LEA to identify AI tools that your LEA will support. Consider:
  - The availability of technological infrastructure at your LEA
  - The data privacy policies of the AI tools under consideration
  - How teachers will engage in professional learning opportunities to integrate AI into their classrooms

✓ Give families, students, community members, and community partners multiple opportunities to engage in the process. This engagement could look like:
  - Town hall meetings
  - Open houses
  - Question-and-answer sessions

Step 3: Develop AI Policy

✓ Collaborate with stakeholders to develop your LEA's AI policy.

✓ Develop a process for updating your LEA's AI policy as technology advances and the needs of your LEA community change.

✓ Ask stakeholders to review and provide feedback on your LEA's AI policy. Ask multiple types of stakeholders to engage in the review process, including:
- Administrators
- Educators
- Students
- Families

✓ Partner with your LEA's communications staff to:
- Ensure that your LEA's AI policy is written in "Plain Talk."
- Ensure that the document is compliant with the Americans with Disabilities Act.
- Make the document available to the public.
- Identify the process for updating the document and housing its updated versions.

Step 4: Update Other Policies

✓ Using the processes in place at your LEA, work with committees, appointed staff, and/or others to review and update current LEA policies to be in alignment with your AI policy. Policies to consider including:
- Technology Responsible Use Policy (RUP)
- Integrate LEA academic integrity policy
- LEA student code of conduct or HIB (harassment, intimidation, bullying) policy
- Staff policies
- Classroom academic policies and syllabi

✓ Partner with your LEA's Communications staff to coordinate messaging to students, families, and other stakeholders regarding these updated policies.

Definitions of Key AI Technology Terms OSPI AI Advisory Group

Audience: Education Leaders

Version 5: *03/27/2024*

Term	Definition	Resources
Algorithm	An algorithm is a structured series of steps or rules formulated to process information and achieve desired outcomes.	[Explainer: What Is an Algorithm?](#)
Artificial Intelligence (AI)	Artificial Intelligence (AI) is a computer system that can learn, make decisions, and perform tasks typically needing human intelligence.	[What is Artificial Intelligence?](#)
Large Language Model	Large Language Models are advanced AI systems designed to understand, interpret, and generate human language, imagines, audio and video products.	[How Chatbots and Large Language Models Work](#)
Generative AI	Generative AI is an AI algorithm capable of creating text, images, videos, or other content using generative models, in reponse to prompts.	[Generative AI: what is it good for?](#)
GPT AIs	"GPT" (generative pre-trained transformer) includes: ChatGPT, ImageGPT, MusicGPT, VideoGPT and more to come. **Generative:** The AI generates materials based on an input. **Pre-Training:** The AI is pre-trained on a set of data (Large Language Model). **Transformer:** The underlying technology code and algorithm that makes the AI work in a particular way.	

Term	Definition	Resources
Human empowerment (AI)	Humans use AI technologies to enhance human capabilities, well-being, and autonomy, ensuring that AI systems are designed to support, augment, and elevate human abilities, experiences, and values across diverse domains of life.	[The Future of Human Empowerment](#)
Algorithmic Bias	Algorithmic bias is the systematic and unfair distortions in the output of algorithms.	[Machine Learning and Human Bias](#)
Hallucination (AI)	AI hallucination is the phenomenon where AI systems produce fabricated or inaccurate information.	[Why Large Language Models Hallucinate](#)
AI Ethics	AI ethics are the set of guiding principles that stakeholders use to ensure artificial intelligence technology is developed and used responsibly.	[Ethics of AI: Challenges and Governance](#)

Conclusion and Next Steps

OSPI is committed to leading Washington state in AI education and preparing the next generation of learners and leaders for a future that is built with and alongside AI. This guidance is intended to be a living document; OSPI recognizes that AI tools are constantly evolving and expanding and will regularly review this guidance to determine if and when updates are appropriate.

OSPI, at the guidance of the AI Advisory Group and in partnership with stakeholders across Washington, will also continue to develop tools and resources for use by educators, education leaders, and students and families.

Over the coming months, the following will be made available:

- Guidance on using AI to improve internal district operations, such as data management, resource allocation, and decision-making
- Resources on how to promote ethical, responsible, and inclusive use of AI in K–12 education
- Resources that address the challenges of privacy, security, bias, and equity
- High-quality, equity-based professional learning opportunities about AI integration for educators and administrators

Acknowledgements

OSPI is grateful for the work of the AI Advisory Group for collaborating to develop this guidance, as well as for their continued work in leading Washington state's approach to integrating AI in K–12 classrooms.

AI Advisory Group:

- Adam Aguilera, Teacher at Evergreen Public Schools
- Cindy Cromwell, Principal in Kelso School District
- Dr. Trevor Greene, Superintendent of Yakima School District
- Kris Hagel, Executive Director of Digital Learning for Peninsula School District
- Travis Rush, Technical Education Lead for the Association of Educational Service Districts (AESD)
- Dr. Min Sun, Associate Professor at the University of Washington's College of Education
- Maxwell Richards, student representative from the Bainbridge Island School District

OSPI Staff:

- Mikhail Cherniske, Senior Policy Analyst at OSPI
- Terron Ishihara, Computer Science Program Supervisor at OSPI
- Holli Kalaleh, Business and Marketing Program Supervisor at OSPI
- Dr. Jon Ram Mishra, Assistant Superintendent of Elementary, Early Learning, and Federal Programs at OSPI
- Zac Murphy, Director of Multimedia and Information Strategy at OSPI
- Bre Urness-Straight, Director of Educational Technology at OSPI
- Rebecca Wallace, Assistant Superintendent of Secondary Education and Postsecondary Pathways at OSPI

OSPI also extends recognition to Tammie Schrader and Jeff Utecht for their contributions as facilitators.

AI Use Statement

In the spirit of fostering an educational environment where technology amplifies human potential and capability, this guidance is anchored in the "Human → AI → Human" model. It is designed to direct the responsible, ethical, and safe engagement with AI technologies. Educators are encouraged to use AI as a tool to augment, not replace, human insight and creativity in the learning process. This guidance provides a framework to integrate AI into student learning, ensuring that it is used to enhance educational outcomes while upholding principles of equity and inclusion. As AI continues to evolve, this document will serve as a living reference, evolving to meet the needs of Washington's diverse and dynamic educational landscape.

References

Chen, C. (2023). *AI Will Transform Teaching and Learning. Let's Get it Right.* Stanford University Human-Centered Artificial Intelligence. https://hai.stanford.edu/news/ai-will-transform-teaching-and-learning-lets-get-it-right

Dimitriadis, Y., Martínez-Maldonado, R., Wiley, K. (2021). *Human-Centered Design Principles for Actionable Learning Analytics.* In: Tsiatsos, T., Demetriadis, S., Mikropoulos, A., Dagdilelis, V. (eds) Research on E-Learning and ICT in Education. Springer, Cham. https://doi.org/10.1007/978-3-030-64363-8_15

International Market Analysis Research and Consulting Group. (2023). *Size, Share and Trends.* https://www.imarcgroup.com/ai-in-education-market

LinkedIn Economic Graph. (2023). *Preparing the Workforce for Generative AI: Insights and Implications.* https://economicgraph.linkedin.com/content/dam/me/economicgraph/en-us/PDF/preparing-the-workforce-for-generative-ai.pdf

Michigan Virtual. *Planning Guide for AI: A Framework for School Districts.* https://michiganvirtual.org/resources/guides/ai-guide/

National Institute of Standards and Technology. (2023). *Artificial Intelligence Risk Management Framework (AI RMF 1.0).* U.S. Department of Commerce. https://nvlpubs.nist.gov/nistpubs/ai/NIST.AI.100-1.pdf

United Nations Educational, Scientific and Cultural Organization. (2021). *AI and education: guidance for policy-makers.* https://unesdoc.unesco.org/ark:/48223/pf0000376709?posInSet=2&queryId=1efdaf06-9c18-4a9c-84e3-78ce779984bf

TeachAI. (2023). *AI Guidance for Schools Toolkit.* https://www.teachai.org/toolkit

The University of Melbourne. (2023). *Keep education human-centered in an AI, digital teaching world: report.* https://www.unimelb.edu.au/newsroom/news/2023/july/keeping-education-human-centered-in-an-ai,-digital-teaching-world-report

Washington Technical Solutions. (2023). *Interim Guidelines for Purposeful and Responsible Use of Generative Artificial Intelligence.* https://watech.wa.gov/policies/interim-guidelines-purposeful-and-responsible-use-generative-artificial-intelligence-ai-washington

Legal Notice

This resource may contain links to websites operated by third parties. These links are provided for your convenience only and do not constitute or imply any endorsement or monitoring by OSPI.

If this work is adapted, note the substantive changes and re-title, removing any Washington Office of Superintendent of Public Instruction logos. Provide the following attribution:

"This resource was adapted from original materials provided by the Office of Superintendent of Public Instruction. Original materials may be accessed at https://ospi.k12.wa.us/ai."

OSPI provides equal access to all programs and services without discrimination based on sex, race, creed, religion, color, national origin, age, honorably discharged veteran or military status, sexual orientation including gender expression or identity, the presence of any sensory, mental, or physical disability, or the use of a trained dog guide or service animal by a person with a disability. Questions and complaints of alleged discrimination should be directed to the Equity and Civil Rights Director at 360-725-6162 or P.O. Box 47200 Olympia, WA 98504-7200.

This material is available in alternative format upon request. Contact the Resource Center at 888-595-3276, TTY 360-664-3631.