Human-Centered AI Guidance for K–12 Public Schools

Implementing AI: A Practical Guide for the Classroom

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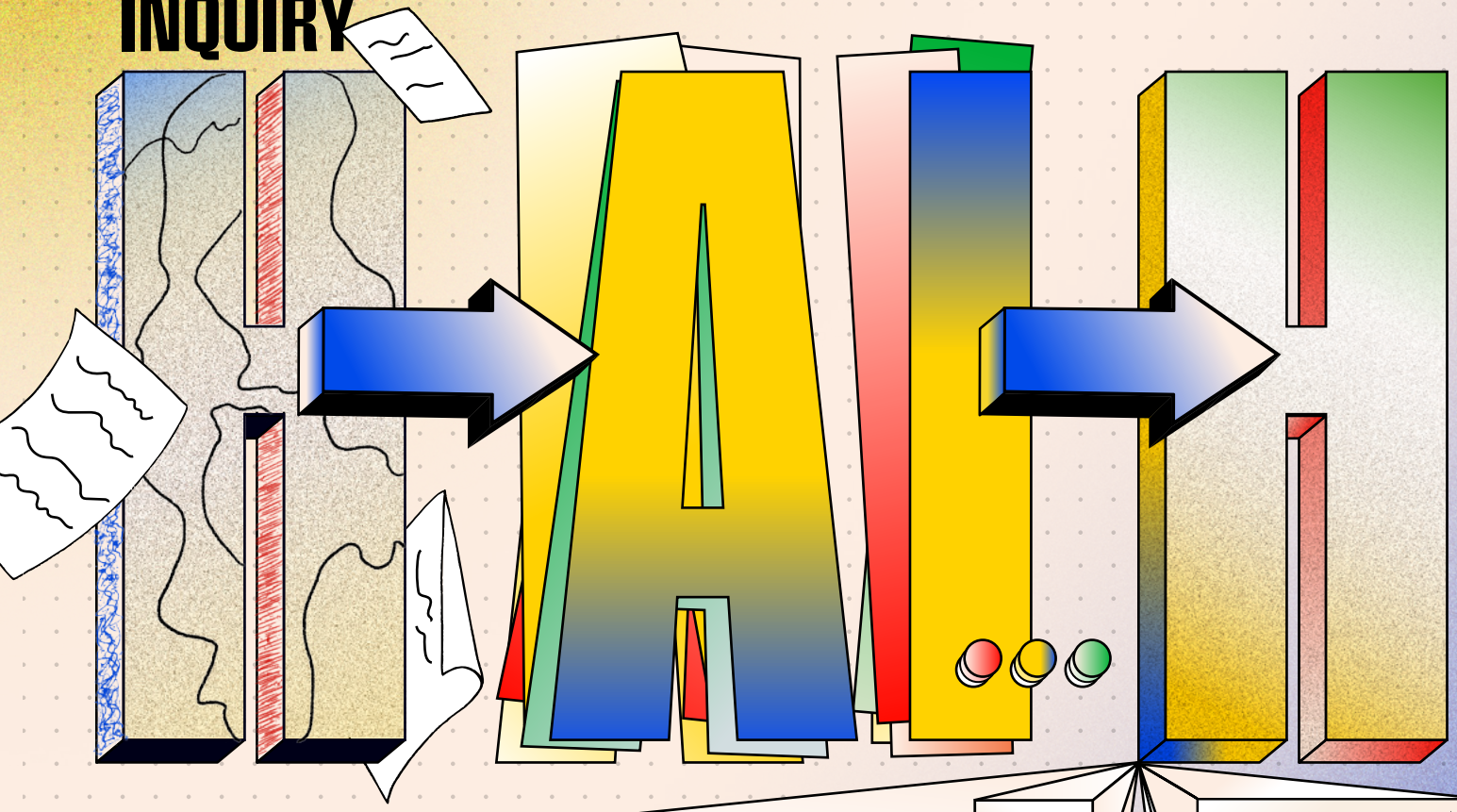
Building on the "Human inquiry → AI → Human empowerment" framework, this document explains how to integrate artificial intelligence into the classroom. It includes tools to determine the level of AI use in various classroom assignments, differentiation for AI uses across grade levels and subject areas, and example policies.

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

Human Inquiry HAH Human Empowerment

Washington Office of Superintendent of PUBLIC INSTRUCTION

HUMAN INQUIRY



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

HUMAN EMPOWERMENT

Watch a video from State Superintendent Chris Reykdal

Human Inquiry
HAH
Human Empowerment

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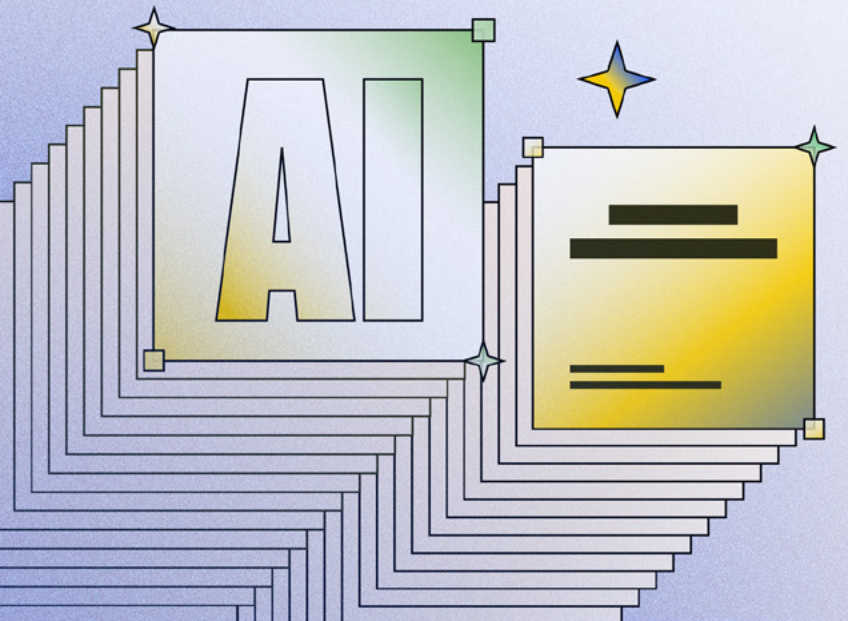

Human Inquiry
H→AI→H
Human Empowerment

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

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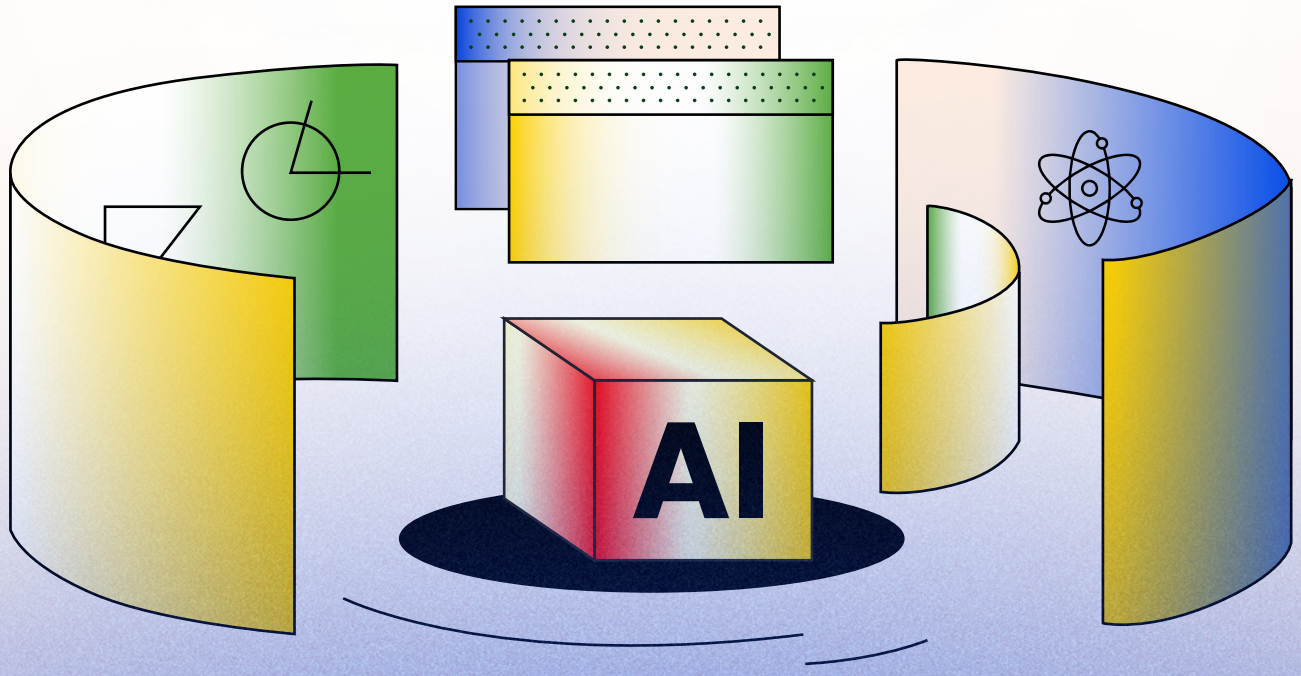
Introduction

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.

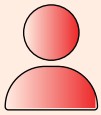
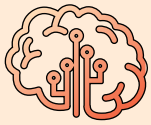
OSPI's hope is that this implementation guidance assists school leaders and educators in navigating the complexities of AI integration into teaching and learning environments. It highlights the importance of a strategic approach to the adoption of AI tools, ensuring that technology enhances rather than 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 wth 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**
				Human Inquiry HAH Human Empowerment
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.

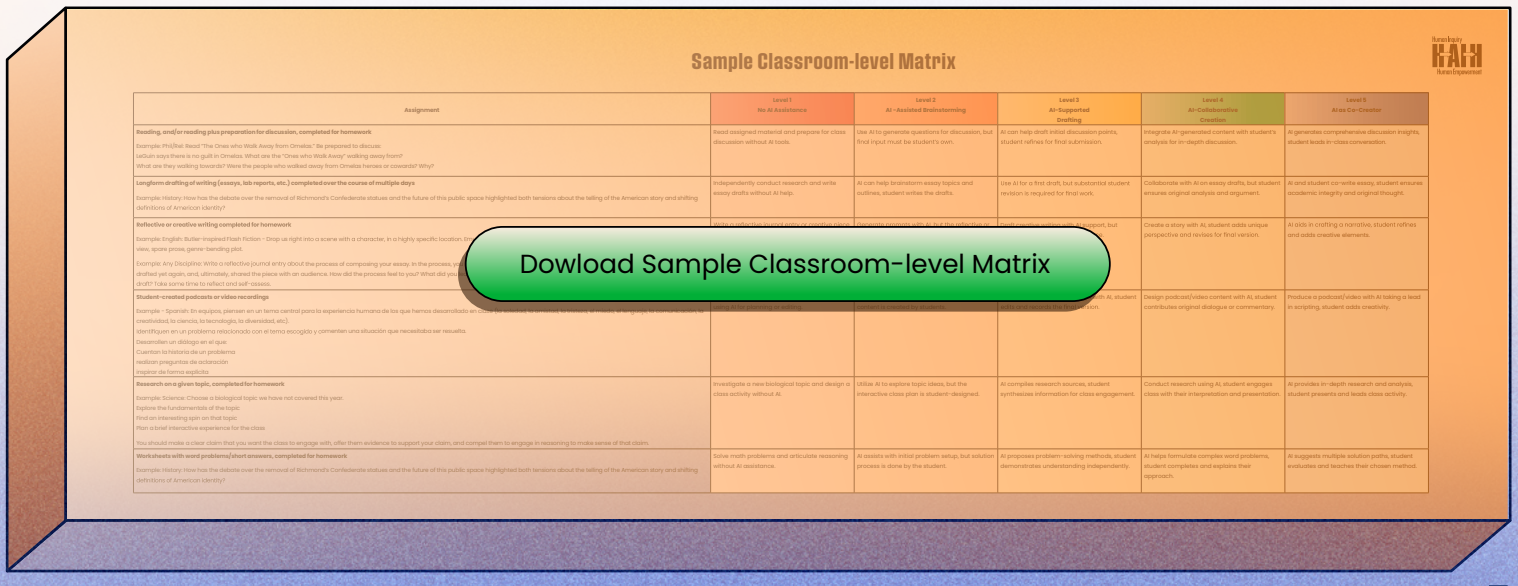
Dowload 5 Step Scaffolding Scale

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.



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.

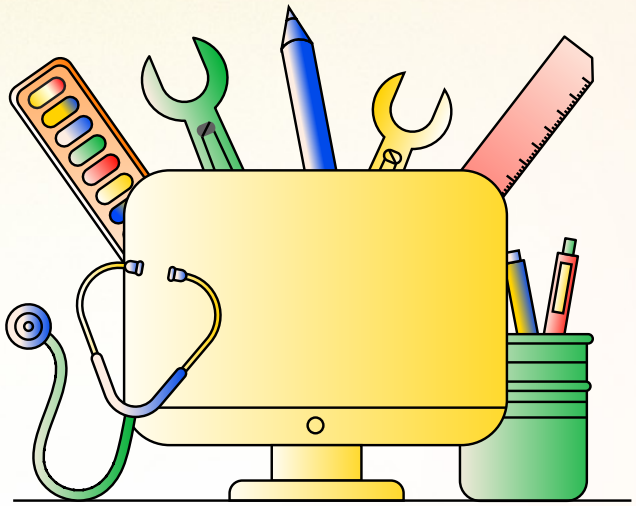
Source: AI Guidance for Schools Toolkit (teachai.org)

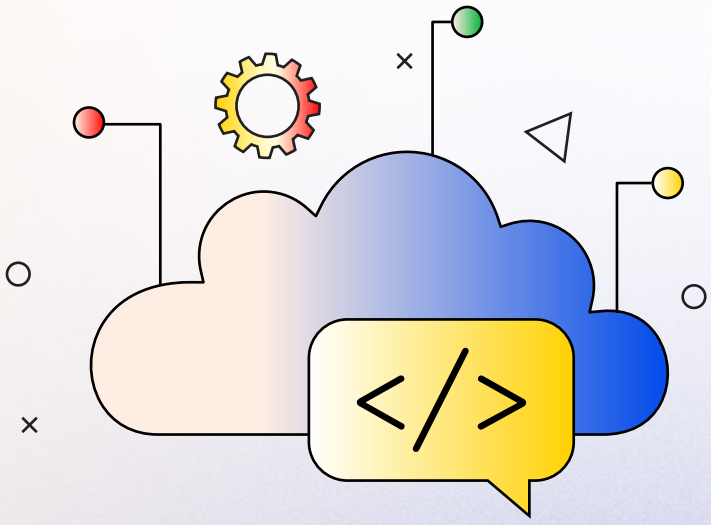
Considering AI in Specific Subject Areas

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.

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.

Social Studies

Social discourse is increasingly contending with company-designed, bias-promoting algorithms as well as user-side bots that exacerbate the spread of disinformation and misinformation. Use of deepfakes (fake, digital representations of someone's likeness) can range from comical jabs to malicious attempts at influencing public knowledge, belief, and behavior. Social networks have for years served as platforms for civic engagement and AI has and will introduce new concerns that students need to be aware of as digital citizens.

Please note: Additional subjects will be included in the fourth version of the guidance.

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).

Additional Considerations for Students with Unique Needs

Special Education

AI can support agency, self advocacy, and improved outcomes for students with disabilities through personalized instructional supports to leverage individual strengths, interests, and preferences while addressing needs and closing opportunity gaps.

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.

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)

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:

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AI Use Disclaimer

In crafting this guidance, OSPI harnessed the power of Large Language Models (LLMs). Anchored in the "Human → AI → Human" paradigm, this document aims to foster and model responsible and ethical engagement with AI technologies. Educators are encouraged to leverage AI as an augmentation tool, preserving human insight and creativity.

References

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

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

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

Washington Technical Solutions. (2023). *Interim 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

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

MLA Style Center. (n.d.). *How do I cite generative AI in MLA style?* [Website]. Retrieved Mar 21, 2024, from style.mla.org

OpenAI. (2023). *ChatGPT* [Large language model]. Retrieved from Mar 21, 2024, https://openai.com/blog/chatgpt/

Chicago Manual of Style Online. (n.d.). *Citation, documentation of sources - FAQ item* [FAQ item]. Retrieved Mar 21, 2024, from https://www.chicagomanualofstyle.org/help-tools/faq.html

Edweek,(n.d.). *What Is Age-Appropriate Use of AI? 4 Developmental Stages to Know About.* https://www.edweek.org/technology/what-is-age-appropriate-use-of-ai-4-developmental-stages-to-know-about/2024/02

Department of Education, Australian Government. (2023). *Australian Framework for Generative Artificial Intelligence (AI) in Schools.* https://www.education.gov.au/schooling/resources/australian-framework-generative-artificial-intelligence-ai-schools

US Department of Education, Office of Educational Technology. (2023, May). *Artificial intelligence and the future of teaching and learning: Insights and recommendations.* https//tech.ed.gov/ai/

UNESCO. (n.d.) (2023). *AI Ethics Guide.* https://www.unesco.org/en/artificial-intelligence/recommendation-ethics

References

Peninsula School District, 2024, March. *PSD Philosophy: Guidance Around AI Usage in the Classroom.* https://ospi.k12.wa.us/sites/default/files/2024-01/human-centered-ai-guidance-k-12-public-schools.pdf

MIT Sloan Teaching & Learning Technologies. *"Effective Prompts for AI: The Essentials,"* n.d.. MIT Sloan Teaching & Learning Technologies. https://mitsloanedtech.mit.edu/ai/basics/effective-prompts/

Holland, B. (2022, July). *From digital access to digital equity: Critical barriers that leaders and policymakers must address to move beyond "boxes & wires"*. Learning Accelerator Practices. https://www.igi-global.com/chapter/introduction/232534

Hertog, E., & Fetterolf, E. (n.d.). *She's not listening, they are: New research investigates why we trust Amazon's Alexa in our homes* [University of Oxford, Oxford Internet Institute]. https://www.oii.ox.ac.uk/news-events/shes-not-listening-they-are-new-research-investigates-why-we-trust-amazons-alexa-in-our-homes/

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