Human-Centered AI Guidance for K–12 Public Schools

Ethical Considerations for AI:

A Framework for Responsible Use

Artificial intelligence (AI) presents opportunities for innovation and advancement in education. Using AI also comes with risks that must be mitigated to protect student privacy, prevent biases and inequities, and embrace human intelligence and empowerment. This document details the ethical considerations that educators, education leaders, students, information technology and education technology professionals, and community members should consider when using AI.
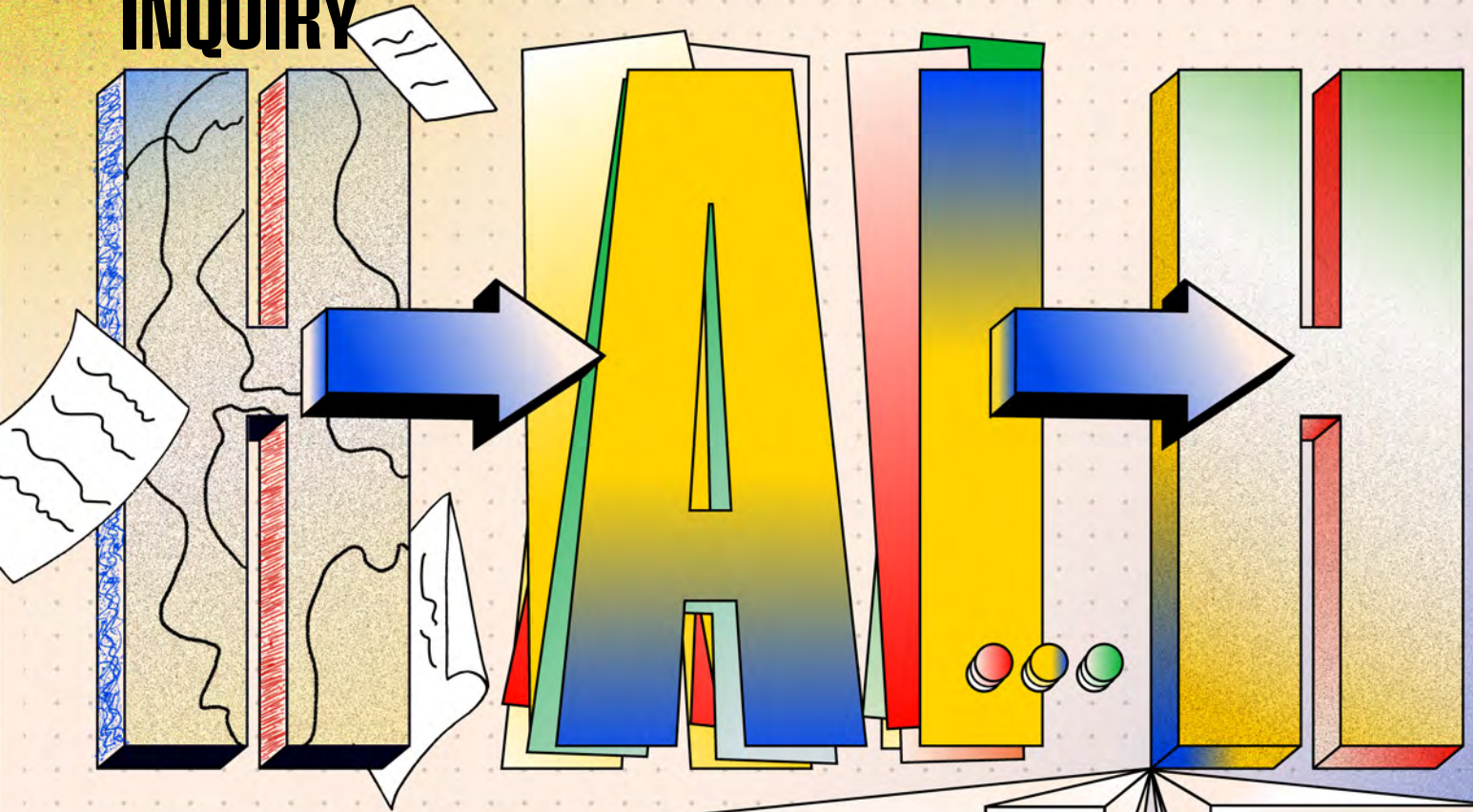
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Human Inquiry
H·A·H
Human Empowerment

Washington Office of Superintendent of
PUBLIC INSTRUCTION

HUMAN INQUIRY

H→AI→H

HUMAN EMPOWERMENT

Watch a video from State Superintendent Chris Reykdal

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

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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

INTRODUCTION

This guidance has been developed to support you as you navigate your AI journey. It is intended to spark conversations that encourage the development of a shared understanding of AI in your educational community and the development of your ethical guidelines around the responsible use of AI in your educational setting. This resource is not intended to be a comprehensive nor dictated checklist of right and wrong ways to use AI. You will find that this document is outlined based on specific audiences for ease of use, and you are encouraged to not only explore the information relevant to your district role but also delve into the broad insights.

As AI is implemented, the fundamental focus is human empowerment. For decades, education has seen technology emerge at a rapid pace, including online grading platforms, collaborative tools (such as Google Docs and Microsoft Office 365), adaptive assessments, and immersive readers, which have changed how we interact with and engage students in learning. Through it all, educators have adapted. AI is a similar tool that requires educator expertise to lead integration to ensure student learning remains at the forefront of the educational journey.

OVERVIEW OF AI ETHICS: UNDERSTANDING THE CONVERSATION

Artificial intelligence often seems to progress rapidly, as though it is a natural phenomenon that unfolds over time. However, AI is unlike the changing of seasons or biological phenomena in that the driving force behind AI is people – developers, researchers, investors, customers, etc. – who collectively fashion the next technological advancement into existence. This human influence introduces various biases, motivations, and incentives into the developmental process. While these innovations could bring great benefits to the creators and the users of AI tools, they also carry potential consequences, ranging from minor inconveniences to profound inequities or harm.

AI ethics examines the impact AI systems have on society and determines how to ensure AI is developed and used responsibly. These issues are not just relevant to those with deep knowledge of AI systems to tackle, but everyone that interacts with these systems. Most people who drive cars, for example, probably do not fully understand the inner mechanics of their vehicles, but that does not preclude them having a moral compass about how cars should be used. The same applies to AI: You don't need to be an AI expert to have a sense of what's morally right or wrong. Furthermore, most of the advanced AI models are much less transparent about how they make decisions. This lack of transparency can make it difficult to know if AI systems are generating outputs ethically. Hence, it's important to think about the ethical implications of AI systems, especially when they are used in decision-making tasks.

Discussion Norms

Ethics is an inherently subjective topic. The values that guide one person's decision-making may conflict with those of another. As such, there is not one correct answer to questions of ethics. If anything should be considered "the answer," it is the discussion itself. Engaging in conversation with one another about these topics is what brings forth critical thinking, personal connection, and human empowerment.

To frame this ethics discussion, we propose the following set of norms be adhered to when considering AI ethics. In your community or context, consider agreeing with and even amending or adding to these norms before beginning the discussion:

- Include everyone in the conversation
- Respect the opinions of others
- Consider the positives and negatives
- Present data and sources as support
- Focus on common goals and solutions
- Expect and accept non-resolution

The Ethics of AI vs The Ethical Use of AI

The Ethics of AI

The ethics of AI focuses on the inherent qualities of and considerations within AI technologies. One of the concerns is the potential for AI to harbor biases derived from the data on which it is trained. Such biases can inadvertently perpetuate and amplify societal inequalities within educational content and tools, thus necessitating a conscientious approach to the selection and implementation of AI technologies. Factors such as this underscore the need for a responsible and informed approach to deploying AI in educational contexts, emphasizing transparency, fairness, potential bias, and environmental sustainability.

The Ethical Use of AI

The ethical use of AI focuses on how AI is used by the end user. This perspective champions a Human Input AI Human Empowerment (H AI H) model, advocating for AI to be employed as a bridge between human intention and enhanced capabilities. In this model, AI tools are not seen as replacements for human effort but as amplifiers of human potential. The ethical use of AI in education revolves around empowering educators and students to leverage these technologies to augment learning, creativity, and problem-solving capacities. It is about making informed and conscientious choices in how AI tools are integrated into the learning environment, ensuring they serve to elevate the educational experience rather than detract from the human elements of empathy, learning, and teaching.

Local Education Agency Leaders

Access to AI tools has rapidly become as ubiquitous for education as the internet is for students and educators worldwide. Washington education leaders face the critical task of balancing the need to mitigate serious risks while enabling Local Education Agencies (LEA) to uphold the values of their communities.

When educators and students are accessing AI tools, it is crucial that these tools protect student data and improve student outcomes while allowing the opportunity for increased efficiency and enhanced educational experiences. Therefore, it is imperative that education leaders are mindful and intentional when implementing AI tools and programs in schools, skill centers, and other institutions. Education leaders are encouraged to consider the following:

AI Policies Review and Updates

- Encourage regular reviews and updates to LEA policies to ensure ethical and responsible AI tool use while complying with regulations like FERPA, COPPA, and CIPA.
- Include diverse community stakeholders (parents/ guardians, educators, staff, students, legal professionals) in policy reviews and updates.
- For further insights, see guidance for educators and students

Equitable Technology Access

- Consider how access to software can impact the digital divide and student preparedness.
- Continue to provide options for low- to no-cost internet access for students.
  - Foster local partnerships to enhance technology access beyond school hours.
  - Consider tools that work on lower bandwidths and mobile devices.
  - Engage Career and Technical Education (CTE) industry partners for software recommendations

Teacher Training and Confidence

- Provide training for educators to build confidence in the use of AI tools.
- Explore funding opportunities to extend training to educators and the wider community.

Ensure Alignment with District AI Vision and Philosophy

- Provide options so that individual schools or classrooms do not ban the appropriate use of new technology.
- Enforce steps in place to prevent students from being left behind their peers due to limited technology access.

Student Privacy and Data Security

- Continue to evaluate the need to balance data demand with student privacy concerns.
- Continue to support technology leadership in addressing risks of data breaches and external sharing of student or staff information.
- Continue to review implemented software that does not promote student profiling and surveillance.
- Provide students with grade-level appropriate instruction in thinking critically about their digital security.

Address Bias

- Consider if the use of AI empowers the user and is the best tool for the purpose.
- Empower educators to teach students to identify and compensate for biases and misinformation when using AI.
- Advocate for creating and adopting bias-aware AI tools.
- Assure diverse tools are catering to various learning styles prioritized during the selection process

Lead the Vetting of AI Tools

- Consider whether adding AI enhances the action or use of the software.
- Ensure software companies' Data Privacy Agreements (DPAs) are verified.
- Validate that companies are COPPA, CIPA, and FERPA compliant.
- Continue to insist on encryption and security measures and verify that LEA IT staff are comfortable with these procedures.
- Partner with community experts in critical evaluation of CTE and other tools needed to prepare students for the workforce.

Information Technology/Education Technology Leaders

IT professionals hold a pivotal role in shaping the digital landscape for students and educators. Just as the Internet, computers, smart phones, and other technology have revolutionized learning, AI and the tools that support its use are becoming essential for enhancing the educational experience. Implementation of this technology comes with great responsibility in selecting the right tools to safeguard student information. Here are some considerations to explore as the technology leader in your LEA:

Educational Goals and Alignment

- Insist the software aligns with the LEA's educational goals, policies, and priorities – especially as it relates to equity of access and bias.
- Assess whether the software supports the curriculum, enhances teaching, and improves student outcomes.

Compatibility and Integration

- Consider how well the software integrates with existing systems (e.g., student information systems, learning management systems).
- Enforce actions that support the compatibility with hardware, operating systems, and network infrastructure.

Security and Privacy

- Prioritize security and data privacy.
- Implement vetting procedures requiring vendors to notify the district when updates include AI changes are made.
- Ensure that the software's security features and encryption comply with regulations (e.g., FERPA, CIPA, and COPPA).
- Confirm that the software vendor follows best practices in protecting student data.

Cost and Budget

- Balance the total cost of ownership, including licensing fees, maintenance, and support, in the evaluation for purchase.
- Consider how leveraging AI tools could replace other costs.
- Research different funds you could use to support implementation of AI.
- Find ways that AI can supplant current budgetary items.
- Lead conversations that assess whether the software provides value and access to all students and/or educators for the investment or options for students who may have challenges accessing the software.

- Direct, when possible, the software to run on a lower bandwidth to allow students with limited home Internet access.

Usability and Training

- Test the software's usability to ensure it is intuitive for teachers, students, and administrators.
- Assess the availability of training resources and professional development for staff.

Vendor Reputation and Support

- Research the software vendor's reputation: read reviews and seek recommendations.
- Learn the range of the vendor's customer support, responsiveness, and willingness to address issues meet the needs of the LEA: Is training available when needed and what is the cost?

Scalability and Futureproofing

- Consider whether the software will scale as the LEA grows to meet the educator's and student's future needs.
- Insist the vendor provide regular updates and adapt to technological advancements.

Licensing Models

- Consider licensing options (e.g., perpetual, subscription-based, concurrent licenses).
- Ensure that the chosen licensing model aligns with the district's financial and operational preferences.

Accessibility and Inclusivity

- Consider how AI tools enhance learning for students, including those with diverse needs.
- Highlight features that promote inclusivity and accommodate diverse learning needs.

Pilot Testing and Feedback

- Create an AI pilot group/committee of users before full implementation of an AI tool.
- Engage and gather feedback from educators, students, and administrators to inform decisionmaking and to provide transparency of decisions.

Educators

As AI becomes more ingrained in our daily life, it is imperative that educators establish clear guidelines and model the ethical and transparent use of AI, as well as support healthy conversations and safe use. It is critical that educators create a classroom culture that empowers both themselves and their students in having conversations around the ethical use of AI within the context of the class, alignment with learning standards, and outcomes being met on an assignment-by-assignment bases. Much like when using a calculator, math educators will support students in understanding which assignments calculators can be used and which assignments they cannot. Educators must have constant conversations and make clear the intended outcomes of assignments to students. In support of this, an educator might consider creating a set of classroom guidelines that lay out the responsibilities that students have in completing assignments.

To support students in understanding the different ways in which AI might be leveraged within a given assignment, it is recommended that educators or a school at large adopt an AI Matrix so that students are clear on how to use AI tools ethically and responsibly on a given assignment. The OSPI AI Matrix is a good starting point for educators to build an understanding of ethical AI use.

Downloadable Scaffolding Scale[1]

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.

[1] Sample classroom-level scaffolding scale for students. https://ospi.k12.wa.us/sites/default/files/2024-03/5-step-scaffolding-scale-students.pdf

Teachers' Considerations Regarding AI Use in Assignments

Clarity: Consider, before assigning any work, clearly stating whether AI is allowed and to what extent. This clarity ensures that all students understand the expectations and can adhere to them, fostering a fair and equitable learning environment.

Rationale: Consider providing reasons behind decisions on AI use in assignments. Understanding why AI is permitted or not helps students see the value in developing their own skills and knowledge as they learn to leverage technology effectively.

Guidance: Consider guiding students on how to use AI responsibly when allowed. This includes teaching students to critically assess AI-generated content and to use AI as a tool for learning enhancement rather than as a shortcut.

Support: Consider providing resources for students to learn about AI and its applications. This support ensures that all students, regardless of their prior exposure to AI, can confidently use these tools in their academic work.

Establishing a classroom culture that empowers students to use AI tools ethically and responsibly is the responsibility of every educator.

Evaluating Student Work

It is highly recommended that educators use caution when leveraging AI tools to evaluate student work. When weighing whether to use AI to evaluate student work, educators are asked to consider the following:

- Make sure the student work does not have personally identifiable student information.
- Communicate with students that you will be leveraging AI to evaluate their work.

Using AI Detection Tools

It is highly recommended that educators do not utilize AI detection software in evaluating student work. Research by both Vanderbilt University and Stanford University have shown these tools to be less accurate than advertised, as well as biased against non-native English speakers and writers. The best way to detect if AI was used inappropriately within a learning experience is to know your students' voice and writing style through samples of work gathered over time. Rather than rely on AI detection software, it is recommended that educators create a classroom culture built on the ethical use of AI within the learning journey.

If the inappropriate use of AI is suspected, it is recommended that educators have a conversation with the student(s), allowing them to explain if they used AI and in what compacity within the assignment. If an AI Matrix has been implemented and clearly communicated within the classroom, it can form the basis for these conversations. Ultimately, the goal of these conversations is for both the educator and student to understand the use of AI.

Students

Artificial intelligence is quickly becoming more capable of doing many incredible things. You, as a student, have an important role in making sure that AI is used for good. Here's why:

You are the ultimate AI tester. Being a student means you are great at exploring new things and using AI in creative ways to learn and grow. It's like playing a game and figuring out all the best moves. You probably already use many applications or websites every day that make use of AI, such as social media, video streaming and recommendation sites, and virtual assistants.

Keep in mind that AI is kind of like a toy robot. In some ways, it can be very sophisticated and can perform some complex tasks, but at the same time it can only do what it is programmed to do. This means AI can be used in the wrong way, sometimes by accident. Plus, the companies that make AI might collect your personal information without you knowing it!

In other words, there are pros and cons to using AI, which is why it is so important that you engage with AI ethically. Think like a detective. You want information from the AI, but you also have questions to ask yourself, such as:

- Is the AI helping you learn or is it just doing the work for you?
- What kind of information is the AI using to learn?
- Does the application ask for personal information that you would not normally give to a stranger?
- Are the results or responses fair or biased? What sort of information might be missing from the results that you think should be considered?
- How could someone misuse this tool, either on purpose or by mistake?

By critically thinking about AI, you can help make sure it benefits everyone. If you are ever unsure, ask your teachers, family, or community members.

Framework for Students on Discussing Their Workflow

When working with AI, it's important to think about people. First, consider how you're using AI. Is it helping you with a task? Maybe suggesting what to write in an essay or creating some cool art to show your friends what you are imagining? Keep people and how they will view your work in mind.

Next, check the work that AI gives you (output). Whatever writing or picture the software gives you, take a close look and evaluate it. Is it accurate? Does it make sense?

If you are unsure, talk to your teacher. When it is time to submit the final project, make sure you have used AI wisely.

Here are some more tips to consider as you use AI to support your learning:

Transparency

Always be clear and honest about how you've used AI in your assignments. Whether you've used it to generate ideas, conduct research, or check your work, your teachers and peers should know how AI tools have contributed to your final submission.

Understanding

You should not only use AI but also strive to understand the concepts and content it helps you create. Be prepared to discuss the reasoning behind your work, how you've used AI to assist you, and the knowledge you've gained through the process.

Reflection

Reflect on your learning process with AI. Consider what you've learned independently and what insights AI has provided. This reflection will help you articulate your workflow and the role AI played in your assignments.

Collaboration

Engage in discussions with your peers and teachers about the use of AI in your work. Sharing your experiences can foster a community of learning where everyone benefits from collective insights and strategies

Family and Community Members

Mentors, friends, family, and all community members who support our students are a hugely important part of the Washington education system. Whether you're picking up and dropping off at school, helping with homework, coaching an after-school team, or cooking dinner, you have an impact on our students' lives. Depending on your level of familiarity, topics like artificial intelligence might seem out of your wheelhouse. Nonetheless, you are encouraged to keep your student's well-being in mind as they navigate the AI landscape.

Try to identify what tools you use regularly that may depend on lots of data. Movie recommendation systems, text autocomplete and grammar checking apps, and web search engines are examples of common tools now based on machine learning AI models. Even without delving into the details of how these models work, you can help guide students' critical thinking and perhaps even bring them on your own journey toward understanding these ethical questions.

Consider the following example: You're on a website shopping for sunglasses and see an option to use their "virtual try-on" tool. After opening the tool, you quickly agree to the lengthy disclaimer, proceed to scan your face with your camera, and very conveniently see how the slick pair of sunglasses looks on your face via a 3D virtual display.

This might be a completely innocuous scenario. But consider what you may have agreed to in the disclaimer. What data is the site extracting when it scans your face? You may have provided biometric data not unlike the facial IDs used to unlock many smart phones. Your likeness may be shared with third party sites. Some form of AI is probably used to align the virtual glasses model with your face and is, as far as you can verify, just a neat, useful tool. But is the convenience worth what you may be giving up? How might these considerations apply to other tools you have used?

Include your student(s) in these conversations. They might realize something they have never considered, reveal other relevant information you may not have been familiar with, and perhaps make connections with other AI tools they are using for their learning. The more everyone in the community is aware of these concerns, the more critically we can all engage with AI.

Outlook

Every technology has historically faced a significant amount of confusion and pushback. Consider, for example, calculators, which initially raised widespread skepticism and concerns about their potential to weaken students' mathematical skills. Similarly, the introduction of computers sparked debates and concerns over increased screen time and decrease in interpersonal interactions.

Just as past educational advancements have brought both challenges and opportunities, the current wave of innovation holds great potential for enhancing student learning. It is our collective responsibility to ensure that human empowerment (H AI H) is a key consideration in our critical evaluation and application of tools that improve educational experiences for all students.

In this era of rapid innovation, it is important to recognize our place at the cusp of change. This guidance serves to shed light on important factors for a diverse group of stakeholders. As AI systems evolve, our guidelines and considerations must also evolve to keep pace with new technologies and the ever-changing cultural and social landscapes in which they are embedded. As our communities' knowledge expands and our societal norms around technology shift, it is imperative that these discussions remain a central focus in our educational institutions, engaging both students in the classroom and the broader school community. Continuing to prioritize these dialogues and maintain a human-centric approach in education—always putting the student experience first—is the most valuable legacy we can pass on to future generations

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 (https://www.oercommons.org/hubs/washington).

ACKNOWLEDGMENTS

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

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