

#### Opportunities for Integrating AI in Career Technical Education

April 17, 2025





### Clock Hour Available!

Drop your name & local education agency (LEA) in the chat so we know who's here today!



1. Rename your Zoom name (First & Last Name) so we have an accurate attendance list.



2. Register for clock hours by using the link below or the link in the chat.



3. Take the pdEnroller survey that is automatically emailed to you.



4. OSPI will enter attendance, and the hour will show up on your transcript!

Registration Link: <a href="https://www.pdenroller.org/ospi/catalog/186375">https://www.pdenroller.org/ospi/catalog/186375</a>

Note: You must register by April 24, 2025, at 5pm to be awarded the clock hour for this session.



## Tribal Land Acknowledgement

I would like to acknowledge the Indigenous people who have stewarded this land since time immemorial and who still inhabit the area today, the Steh-Chass Band of Indigenous people of the Squaxin Island Tribe.



## Legal Disclaimer

The Office of Superintendent of Public Instruction (OSPI) does not endorse or recommend any commercial product over another. We are experiencing a paradigm shift;

Al will redefine our interaction with knowledge.



## Key Trends in Artificial Intelligence (AI)

State Guidance

What are we watching

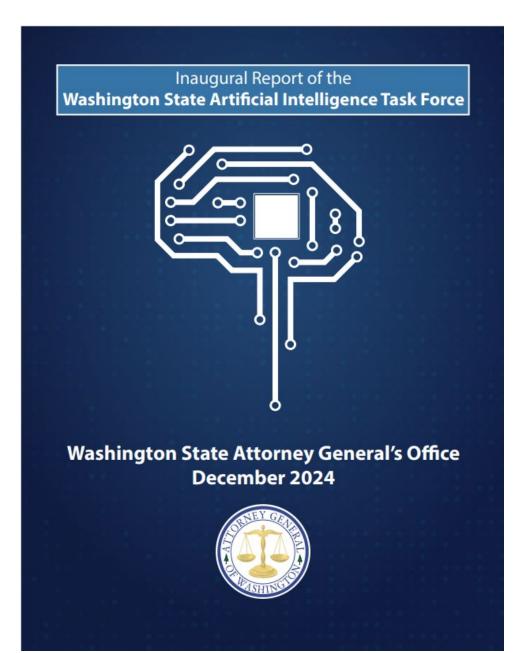


### **Washington State**

ESSB 5838: Passed in 2024, established the Artificial Intelligence Task Force. The task force is responsible for assessing AI trends and making recommendations to the Legislature regarding guidelines and potential legislation for AI systems

RCW 43.105.365: This section of the RCW outlines the responsibilities of the Washington Technology Solutions (WaTech) agency, including the development of guidelines for the ethical and transparent use of Al in state operations

RCW 49.60.030: This section includes provisions related to preventing discrimination in the use of Al, ensuring that Al systems do not perpetuate biases or discriminatory practices





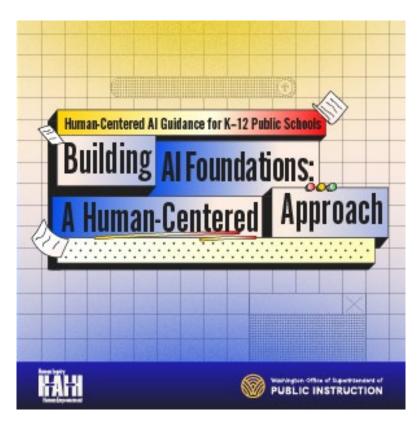
### Washington State AG's Office

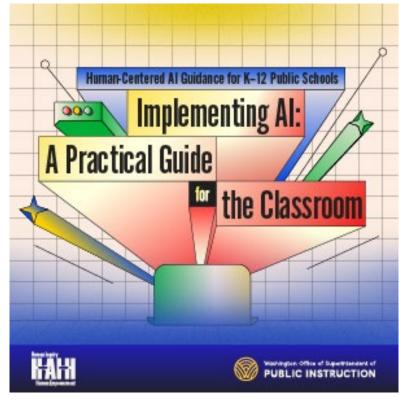
- Inaugural Report of the Washington State Artificial Intelligence Task Force, Dec 2024
- Outlines the establishment, structure, and initial activities of the Task Force, which was created through SB 5838
- Includes background information on Al technologies and their applications
- Details about the Task Force's membership & eight subcommittees
- One formal recommendation—to expand liability for AI-generated child sexual abuse material by removing the requirement that fabricated images depict an "identifiable" minor
- Previews the Task Force's focus areas for 2025, including developing AI principles and addressing transparency issues, with plans to deliver two more reports by July 2026

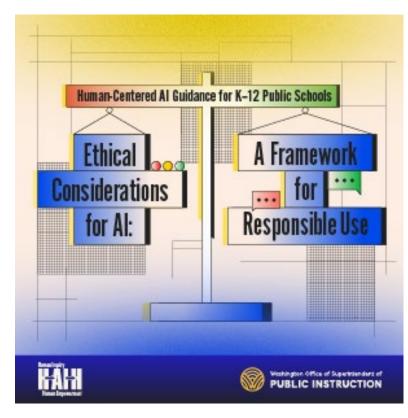




## **OSPI** Guidance







The state's responsibility is to provide students, educators, and school district administrators with the resources and tools they need to understand how to use these technologies effectively, ethically, and safely.



# 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
- 2. Have a clear understanding of your data collection processes. Update policies to include the use of and considerations for using Al
- 3. Give users options to opt-out or delete their data if they want

FERPA: Family Education Rights and Privacy Act requires that schools not disclose personal identifying information of a minor or eligible student without express written consent of the parent or eligible student

COPPA: Children's Online Privacy Protection Act requires schools to obtain parental consent before allowing students under 13 to use online services that collect, use, or disclose personal information

CIPA: Children's Internet Protection Act requires that schools implement an internet safety policy that includes protective measures to block or filter access to obscene or harmful content

## Artificial Intelligence & Computer Science

This overlap is becoming larger over time.

Where / how much literacy overlaps with CS/AI is a little ambiguous.

Digital **Computer Science** Literacy Computational **Artificial** Thinking Intelligence Al Literacy

CS encompasses many topics.

Computational thinking is the cognitive foundation behind the study of CS.

Washington Office of Superintendent of PUBLIC INSTRUCTION

Generative Al is getting a lot of attention.

Al is a subfield of CS but also lends itself to interdisciplinary applications.

## Artificial Intelligence & Computer Science

## **Al Literacy**

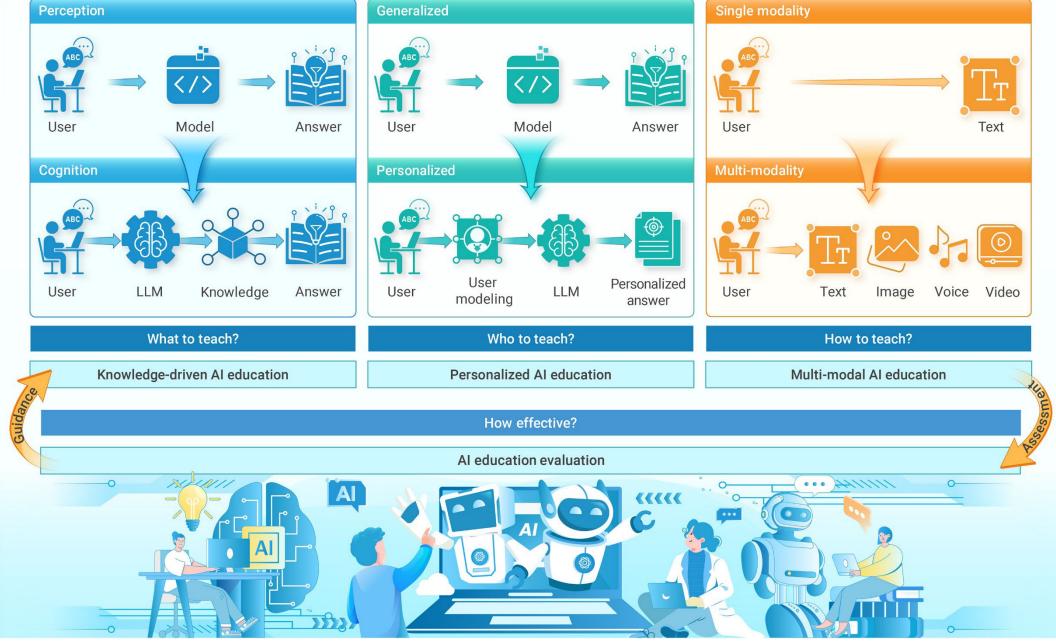
- Al is ubiquitous. Generative Al is rapidly becoming a default tool for use in many applications
- Al can be easily identifiable or purposefully or otherwise – difficult to point out
- Al's prevalence in society and the ethical concerns surrounding such applications are why students greatly benefit from learning Al literacy

## **Artificial Intelligence**

- More applications for AI means more jobs and academic research related to AI
- As a subfield of computer science, students interested in Al as a career or field of study must develop fundamental computer science skills









### A Best Practice

#### **Integrating AI in Career Technical Education Pathways/Clusters**



"We are teaching students what their future looks like. Teaching them those critical skills, and this [CTE] is their platform for that. Students must be able to defend what they do, what they write, how they gather information, and their choices in a world that is quicker, faster, and processes faster than we have ever seen before."

- Gretchen Maliska Director of Career Connected Learning Shelton School District



### A Best Practice

#### **Integrating AI in Career Technical Education Pathways/Clusters**



- 7<sup>th</sup> 12<sup>th</sup> Grade Pathway with frameworks aligned equitably and in equity
- Enhancing the product using AI in all areas
- Partnership approach with all teachers
- Reduction in force & binding conditions support
- Professional development!
- Basic AI training for all CTE teachers, on how to prompt to enhance lesson plans & communication, event planning designed to increase targeted non-trad participation in career clusters



### A Best Practice

#### **Transferable Skills Emphasis:**

- Critical thinking to evaluate AI outputs and identify potential biases
- •Creative problem-solving that AI cannot replicate
- •Ethical decision-making when deploying or working alongside AI
- Adaptability as technologies rapidly evolve
- Effective communication between technical and non-technical stakeholders
- Collaboration with both human teams and Al systems

#### **Technical Skills Focus:**

- Data literacy to understand what data Al systems use and how
- Basic Al literacy to comprehend capabilities and limitations
- •Fundamental programming concepts, though not necessarily advanced coding
- Prompt engineering and effective Al interaction



#### Accessible Tools



**Washington OER** 

How Al Works | Code.org

<u>aiEDU</u>

Cyber.org

**TeachAl.org** 

raise.mit.edu

Microsoft Al Skills Fest



### Credentials in AI and Digital Literacy

Currently available through legislative funding!

Contact: Kathy Schmit kschmit@ccilearning.com

Critical Career Skills: The Generative Al Foundations exam provides a solid grounding in generative Al, enhancing their ability to adapt in a tech-driven job market, and gives them a competitive edge with employers.

<u>ITS – Artificial Intelligence</u>: Candidates for this exam are Al enabled learners and are prepared for the professional use of Al by understanding how Al can be used to solve problems.

Asure Fundamentals (AI-900): Candidates for this exam should have foundational knowledge of machine learning (ML) and artificial intelligence (AI) concepts and related Microsoft Azure services.



### Self Learning



#### **Artificial Intelligence LinkedIn**

Introduction to Artificial Intelligence Coursera

Microsoft Learn

**Google AI Essentials** 

Generative AI for Business by Alison.com

**WASA Leading District Al Integration** 

**WA-ACTE Summer Conference!** 



## OSPI Theory of Action

#### When OSPI...

- Courageously and equitably stewards federal and state policy and resources;
- Leverages financial, human resources, and student data for school district support and advocacy;
- Drives high-quality professional learning and support, resource allocation, data, research, learning standards, and continuous improvement expectations with a culturally affirming lens;
- Makes decisions anchored in equity; and
- Intentionally focuses on interdepartmental collaboration and coordination...



## OSPI Theory of Action

#### Then districts will...

- Authentically engage their students, families, and communities in a culturally affirming manner for the academic, social, and emotional success of all students.
- Use data, research, and student need to drive decision-making, resulting in equitably managed financial and human resources; safe facilities; and high-quality instruction, materials, and professional learning.
- Have systems in place to ensure students, educators, and staff are provided differentiated academic, social, and emotional supports that cultivate belonging and identity.

#### Then all students will...

- Feel seen, safe, supported, challenged, and culturally affirmed.
- Be engaged in learning that is rigorous and aligned to their goals and interests and have agency and voice in their learning.
- Understand the expectations and learning objectives, as well as their progress toward meeting them.





## Contact Us! cte@k12.wa.us 360-725-6245

- OSPI CTE Website
- CTE Staff Contacts
- OSPI Computer Science

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