

Al Innovations Panel

September 2025



Zachary Rossmiller, AVP & CIO, University of Montana



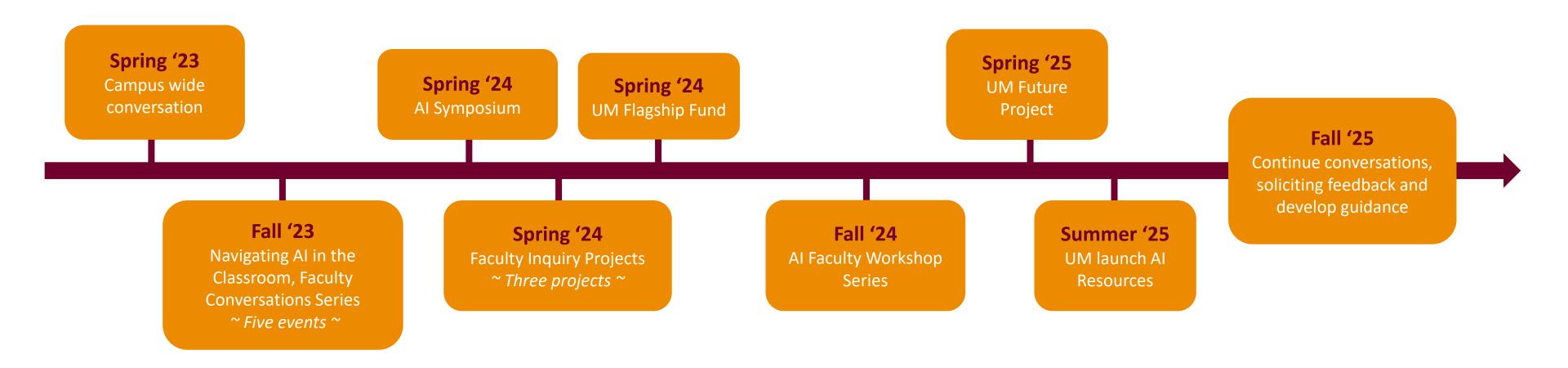
Caitlin Byers, Director, MTDA Frontier Learning Lab



Van Davis, Vice President of Digital Learning, WICHE

OUR DELIBERATE PATH FORWARD:

UM Has Thoughtfully Approached Al Adoption Through Engagement and Intentional Planning



BUILDING UM'S AI STRATEGY:

Flagship Fund 2024 Momentum



Interdisciplinary & AI-Driven Education

- Al Playdates: Informal, collaborator-led Al exploration events for educators.
- College of Business Al Initiative: Al integration in curriculum, faculty grants, workshops, and tool subscriptions.

Student Support & Well-being



- Curry Health Center "Enhance Mental Health Care Efficiency": Use of AI to automate documentation, easing clinician workload and improving capacity.
- Well-Being Support Coordinators Expansion: Embedded coordinators scaled to serve more students, thanks to Flagship support.

Creative, Curricular, and Interdisciplinary Innovation



- Generative AI in Arts & Media: Faculty-developed course enabling students to explore AI as artists and storytellers, assessed via creative problem solving.
- Al Bridging Biology & Computer Science: Graduate student pair worked across disciplines using Al tools to annotate and package code—leading into a Fall 2024 computational biology course integration.



BUILDING UM'S AI STRATEGY:

The Future Project: Overview

- Launched in 2025 with support from Craton, a Montana-based industry partner.
- **Purpose:** Guide UM's role in teaching, learning, and working with generative AI.

Organized around four interconnected pillars:

- How We Teach: Exploring faculty experiences, needs, and perspectives regarding AI
- What We Teach: Examining how students perceive and use generative Al
- How We Work: Investigating how UM employees can use AI to enhance their work
- **Industry Demands:** Engaging directly with MT employers to understand workforce needs



BUILDING UM'S AI STRATEGY:

The Future Project: Outcomes

1,500+ Faculty, Staff, and Students Engaged

• Al survey, MTDA Playdates, Big Sky Experience, Al Symposium, Lecture series

Overarching Theme:

• The need for training, resources, and guidance - regardless of sentiment.

~30 Industry Partners Engaged

• 58% of respondents report that their organizations are currently looking for specific AI skills or competencies in open roles

UM AI Resources:

Website: UMontana.ai

Amplify GenAl: Chat.UMontana.ai



University of Montana Leading the Way

collaboration with Alumni

Amplify the UM Approach to Public x Private Collaboration Statewide to Accelerate Our Competitive Al Advantage

EXECUTIVE ORDER ON REMOVING BARRIERS TO LEADING IN AI (JAN 23, 2025) MT HJ4 HOUSE JOINT RESOLUTION ON AI (JAN 27, 2025) **UM ANNOUNCES FUTURE PROJECT (JAN 30, 2025)** MT UNIVERSITY **SYSTEM Amplify across Montana** 2 yr- students **GOV GIANFORTE** HJ4 Working Group MISSOULA COLLEGE MT CIO Kevin Gilbertson AG | CIO + 11 MT 2YR COLLEGES **UM CIO Zach Rossmiller** DLI | DC | OPI Amplify across Federal and UNIVERSITY OF Statewide initiatives MONTANA K - 12 MONTANA MONTANA **BUSINESSES MT** Digital OFFICE OF THE PRESIDENT SCHOOL **Accelerate MT** WORKFORCE THE FUTURE PROJECT Academy **SYSTEM** DEV Amplify across Montana Amplify across Montana F&C HLS EDU LAW BUS **JRN ARTS** SCI K-12 Education **Businesses** ALUMNI PRIVATE INDUSTRY Shepherd grads to local and Continuous education &

national hiring companies

Why This Matters

Strategic Significance for UM and Montana

For Our Students

Ensures academic programs evolve to prepare graduates with both Al competencies and essential human skills—critical thinking, adaptability, ethical reasoning—that employers increasingly demand.

Solution For Our Staff

Explores ways to use AI to improve workflows and reduce administrative burden.

⊘ For Our Faculty

Provides support in adapting teaching practices, identifying effective Al tools, and maintaining academic integrity while preserving the human dimensions of education.

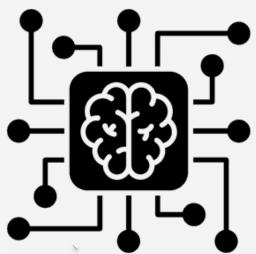
Government For Montana

Strengthens UM's role as a convener of statewide collaboration, creating a coordinated AI strategy that serves Montana's educational and economic needs.

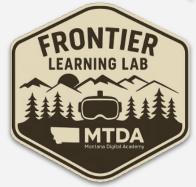


Welcome to the Frontier Learning Lab!

Exploring What's Next... Together!







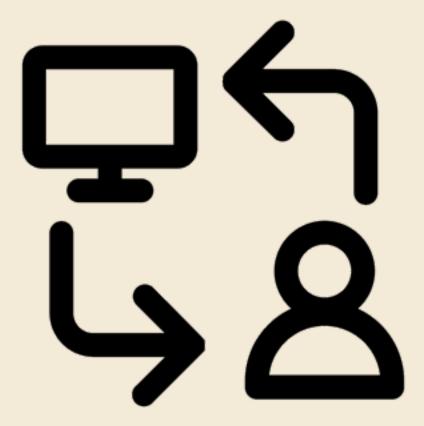


Why is MTDA in this space?





Strategies: Professional Learning





- Training
- ✓ Schedule with MTDA
- ✓ Based on capacity

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Webinars and Online Training

- Regular webinars on topics of interests to all educators
- Asynchronous
 training leading to
 "stackable"
 credentials in
 partnership with the
 University of Montana

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PLCs

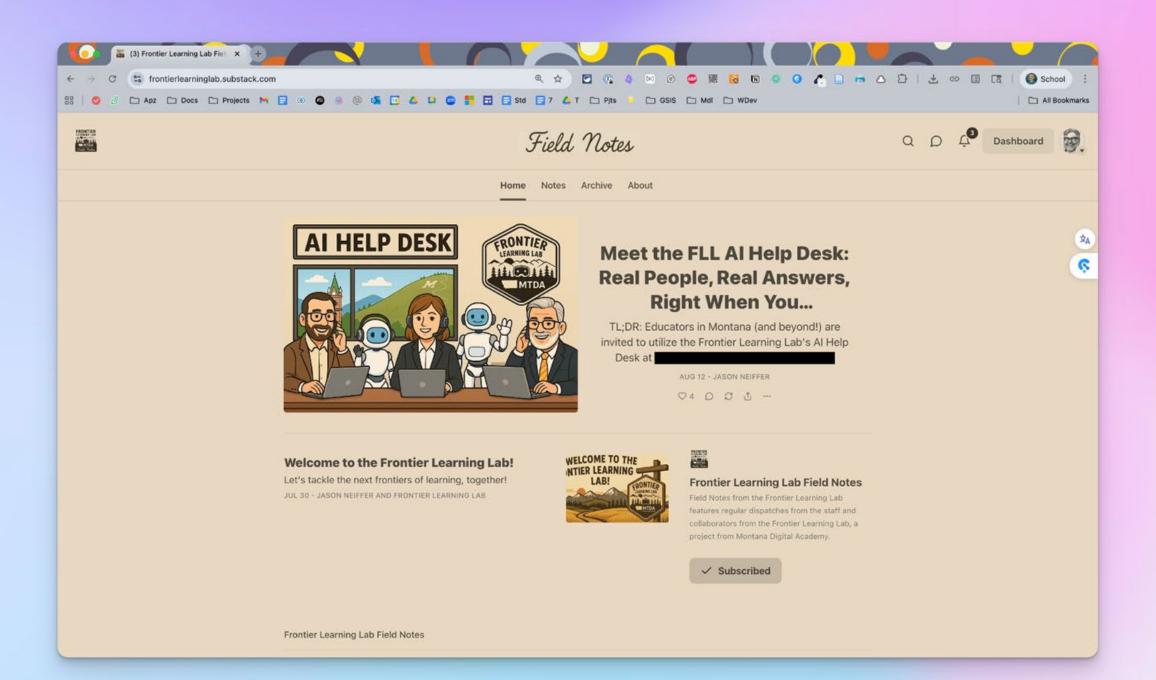
✓ Online PLCs to provide support and connection to educators at all levels of "edge" technologies

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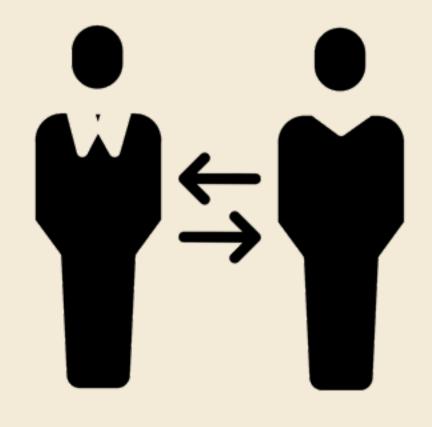


Substack

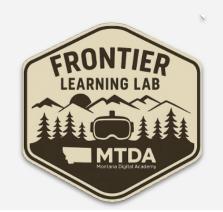
Regular
 newsletter with
 reports from the
 field



Strategies: Direct Support for Schools/ Classrooms

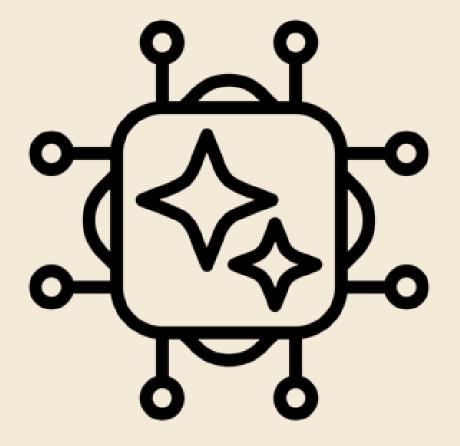


ai.help@mtda.org





Strategies: Vetted Access for Teachers





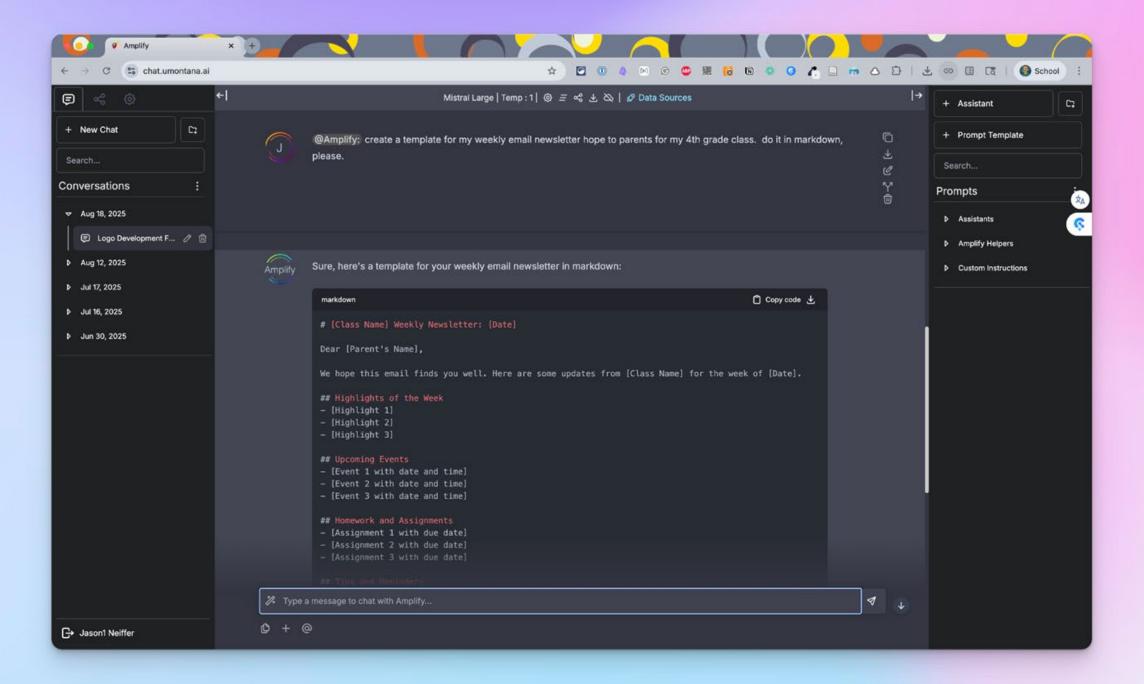


Education Tool

Provide DPA-friendly access to a teacher facing AI tool

Amplify

Provide private access to major models like GPT5, Claude, Mixtral, and Llama



Strategies: Buying Consortiums

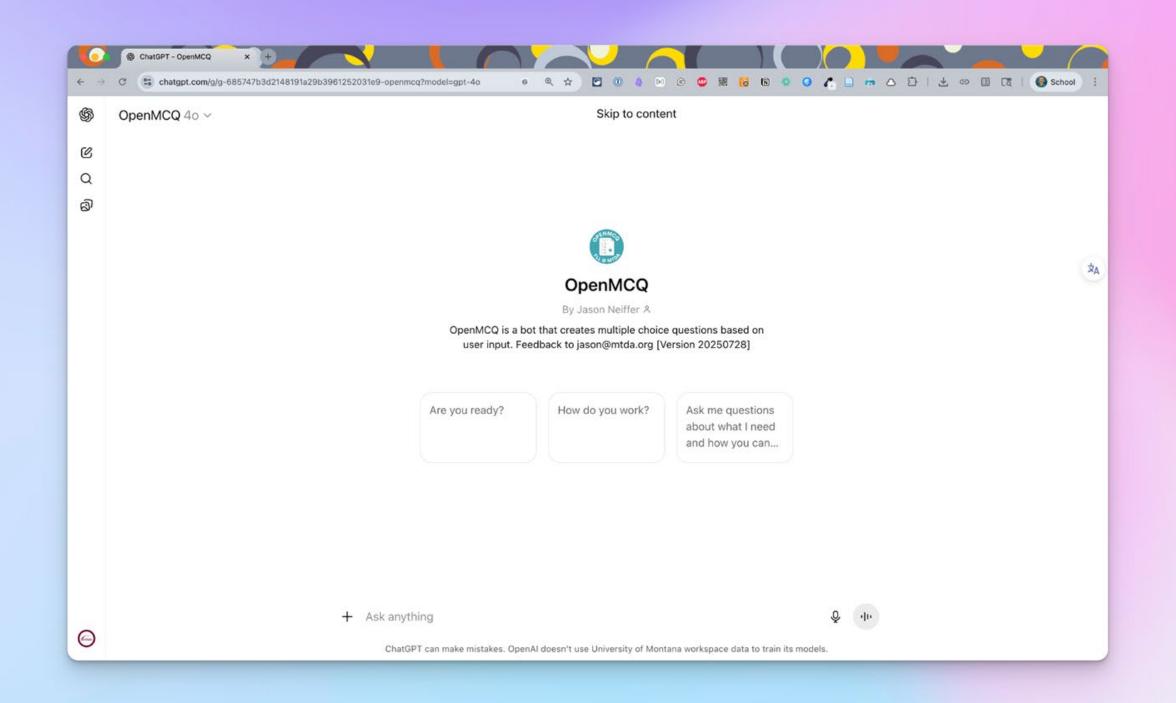


Fall 2025 Launch Partners

- SchoolAI
- Scrible
- TrueMark
- Eddi Inc
- Megaminds
- Vocareum
- QuantHub, Inc

Strategies: Tool Development and Release!





Strategies: Experimentation! Playing! Fun!



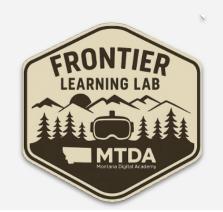


Al Playdate Website
 aiplaydate.org

Phyllis J. Washington College of Education University of Montana

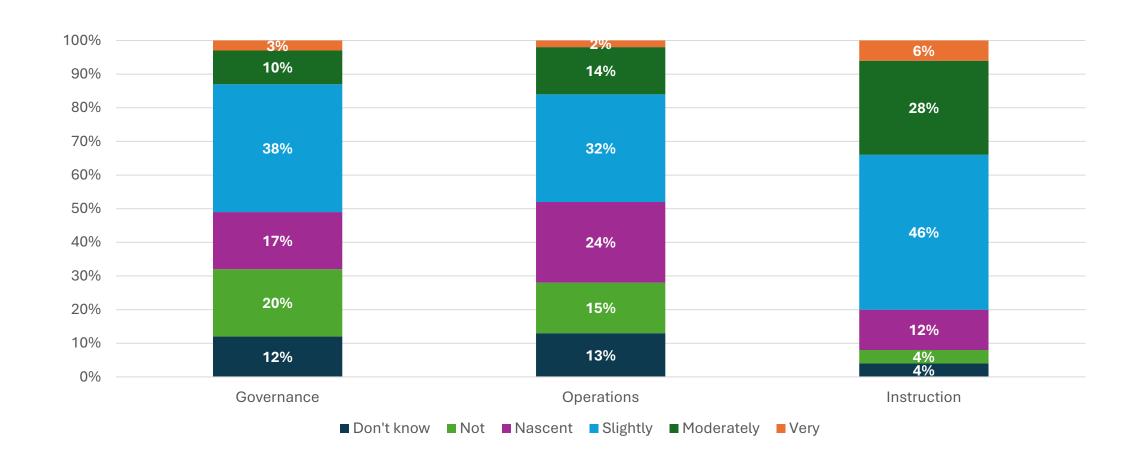
Imagine a professional learning experience that feels less like a conference and more like a playground for students, educators, and professors to learn together! That's PLAYDATE — People Learning and Asking "V" - Digital Age Teacher

ai.help@mtda.org





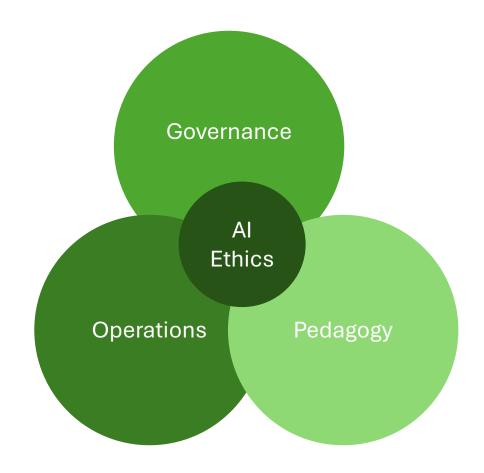
Institutional Maturity



WCET AI Policy and Practice Framework

Adapted from: Chan, Cecilia Ka Yuk (2023, April). "A Comprehensive Al Policy Education Framework for University Teaching and Learning." arXiv:2305.00280v1 [cs.CY]. Licensed CC BY-NC-SA 4.0.

AI Education Policy & Practice Ecosystem Framework is Licensed CC BY-NC-SA 4.0 by WCET – the WICHE Cooperative for Educational Technologies.



Ethical Components for Consideration

Jobin, lenca, and Vayena

"The Global Landscape of AI Ethics Guidelines." *Nature Machine Intelligence*, 2019.

Transparency

Justice, Fairness, & Equity

Non-maleficence

Responsibility & Accountability

Privacy

Accessibility*

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WCET AI Policy & Practice Framework

GOVERNANCE

- Data governance
- Evaluation of AI use across the institution
- Promoting and monitoring faculty and staff usage of AI, including research
- Inclusive, equitable access
- Intellectual property
- Al use in promotion, tenure, and re-appointment practices

OPERATIONS

- Professional development (training and support)
- Developing and maintaining infrastructure for Al
- Review and recommend Al implementation to improve operational practices

PEDAGOGY

- Academic integrity
- Assessment practices
- Clear communication to students
- Developing student Al competencies & workforce development
- Understanding AI algorithmic bias
- Regular & substantive interaction
- Learner accessibility

Dimensions of Al Literacies (Gunder, Herron, Weber, Chelf, & Birdwell)

Cultural

 Recognizing the connections between people, Alinformed resources and tools, and points of engagement within AI tools and AI-enabled environments.

Cognitive

• Expanding intellectual capabilities by engaging with AI-enabled processes and environments.

Constructive

 Utilizing AI tools to build, remix, and generate new content, applying AI capabilities.

Communicative

 Leveraging AI technologies to convey ideas effectively, recognizing the sociocultural practices and nuances that AI interprets and influences in different settings

Confident

 Developing the ability to solve problems and manage learning within Al-driven environments by understanding and harnessing their unique features and potentials

Creative

 Engaging in ideation and generative actions using AI, focusing on how AI can add value and introduce new possibilities within specific contexts

Critical

 Evening the power dynamics and ethical considerations inherent in AI practices by reflecting on the broader societal impacts of AI-driven decisions and actions

Civic

 Employing AI knowledge and skills to contribute positively to society, using AI to foster community empowerment, engagement, and progress