

AI Innovations Panel

September 2025



Zachary Rossmiller, AVP & CIO, University of Montana



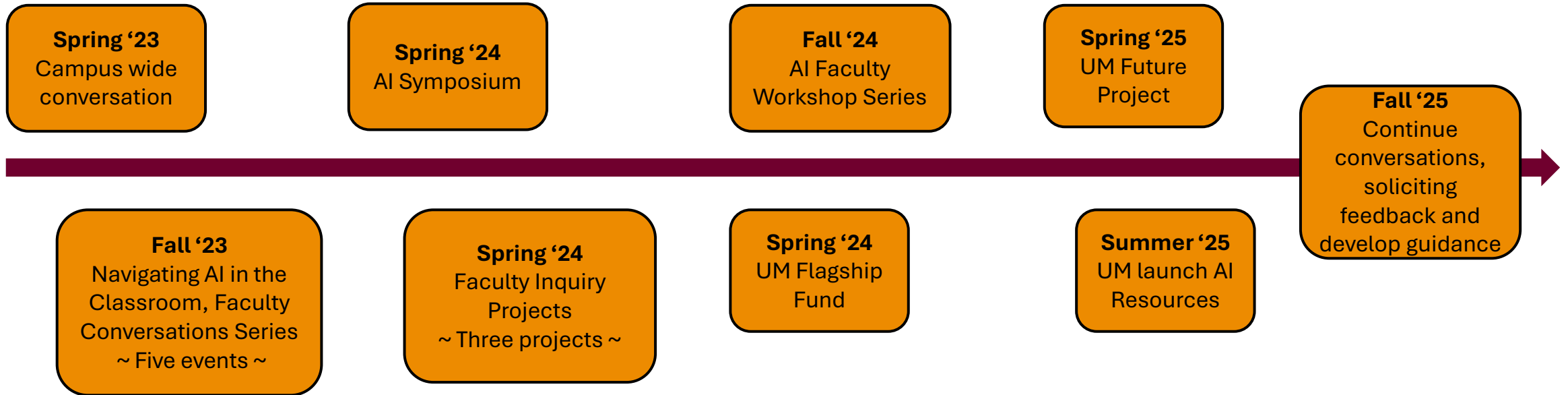
Caitlin Byers, Director, MTDA Frontier Learning Lab



Van Davis, Vice President of Digital Learning, WICHE

Our Deliberate Path Forward

UM has thoughtfully approached AI adoption through engagement and intentional planning



Flagship Fund 2024 Momentum



Interdisciplinary & AI-Driven Education

- **AI Playdates:** Informal, collaborator-led AI exploration events for educators.
- **College of Business AI Initiative:** AI 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.
- **AI Bridging Biology & Computer Science:** Graduate student pair worked across disciplines using AI tools to annotate and package code—leading into a Fall 2024 computational biology course integration.

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 AI
- **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

The Future Project – Outcomes

- **1,500+** faculty, staff, and students engaged
 - AI survey, MTDA Playdates, Big Sky Experience, AI 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 GenAI: Chat.UMontana.ai

University of Montana Leading the Way

Amplify the UM Approach to public x private collaboration statewide to accelerate our competitive AI 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 THE FUTURE PROJECT (JAN 30, 2025)

Amplify across
Montana 2 yr- students

**MT UNIVERSITY
SYSTEM**

**MISSOULA COLLEGE
+ 11 MT 2YR COLLEGES**

HJ4 Working Group
MT CIO Kevin Gilbertson
UM CIO Zach Rossmiller

GOV GIANFORTE
AG | CIO
DLI | DC | OPI

Amplify across
Federal and
Statewide initiatives

**K - 12
MONTANA
SCHOOL
SYSTEM**

**MT Digital
Academy**

**OFFICE OF THE PRESIDENT
THE FUTURE PROJECT**

AccelerateMT

**MONTANA
BUSINESSES
WORKFORCE
DEV**

Amplify across
Montana K-12
Education

EDU

LAW

BUS

JRN

F&C

HLS

ARTS

SCI

ALUMNI

PRIVATE INDUSTRY

Continuous education &
collaboration with Alumni

Shepherd grads to local and
national hiring companies

Amplify across
Montana Businesses

Why This Matters

Strategic Significance for UM and Montana

✓ For Our Students

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

✓ For Our Staff

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

✓ For Our Faculty

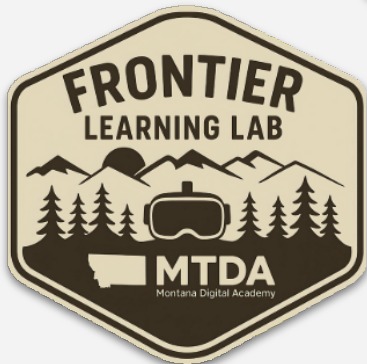
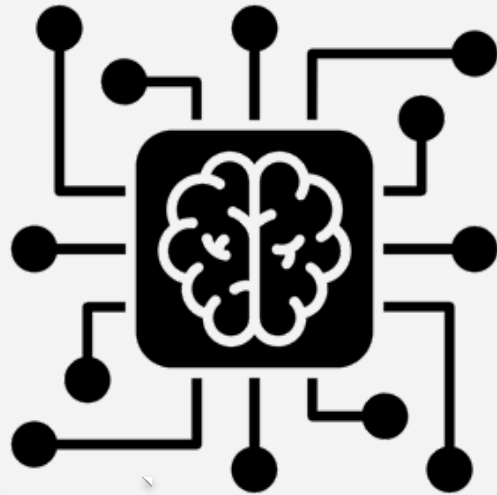
Provides support in adapting teaching practices, identifying effective AI tools, and maintaining academic integrity while preserving the human dimensions of education.

✓ 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!



MTDA
Montana Digital Academy

Why is MTDA
in this space?

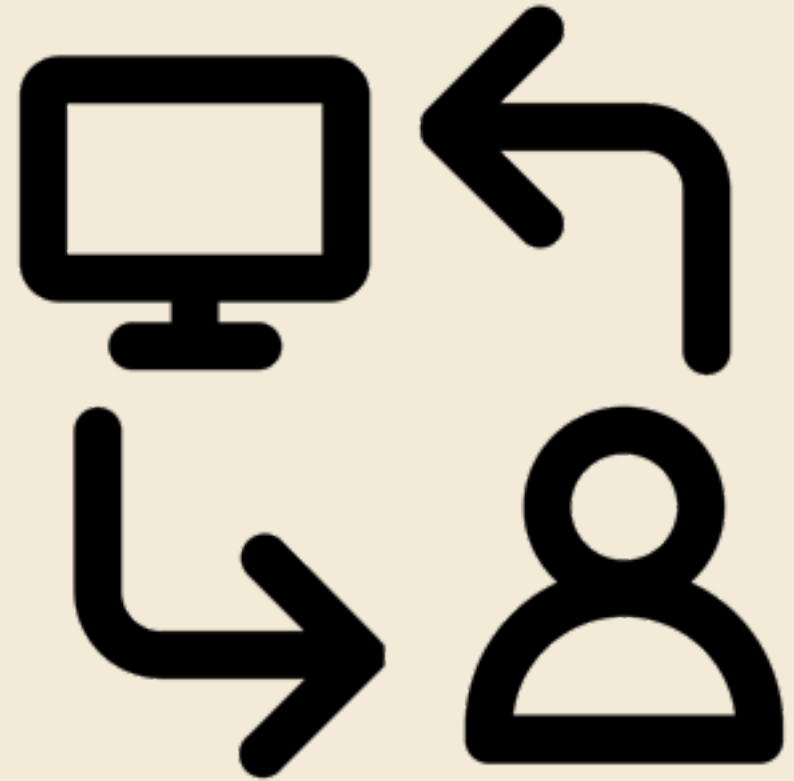


AI LILTBAR DS

AI Teacher-o-Matic



Strategies: Professional Learning



1



Face-to-Face Training

- ✓ Schedule with MTDA
- ✓ Based on capacity

2



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

3



PLCs

- ✓ Online PLCs to provide support and connection to educators at all levels of “edge” technologies

4



Substack


- ✓ Regular newsletter with reports from the field

(3) Frontier Learning Lab Field Notes

frontierlearninglab.substack.com

School

All Bookmarks




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AI HELP DESK





Meet the FLL AI Help Desk: Real People, Real Answers, Right When You...

TL;DR: Educators in Montana (and beyond!) are invited to utilize the Frontier Learning Lab's AI Help Desk at [REDACTED]


AUG 12 • JASON NEIFFER


4

Welcome to the Frontier Learning Lab!

Let's tackle the next frontiers of learning, together!

JUL 30 • JASON NEIFFER AND FRONTIER LEARNING LAB





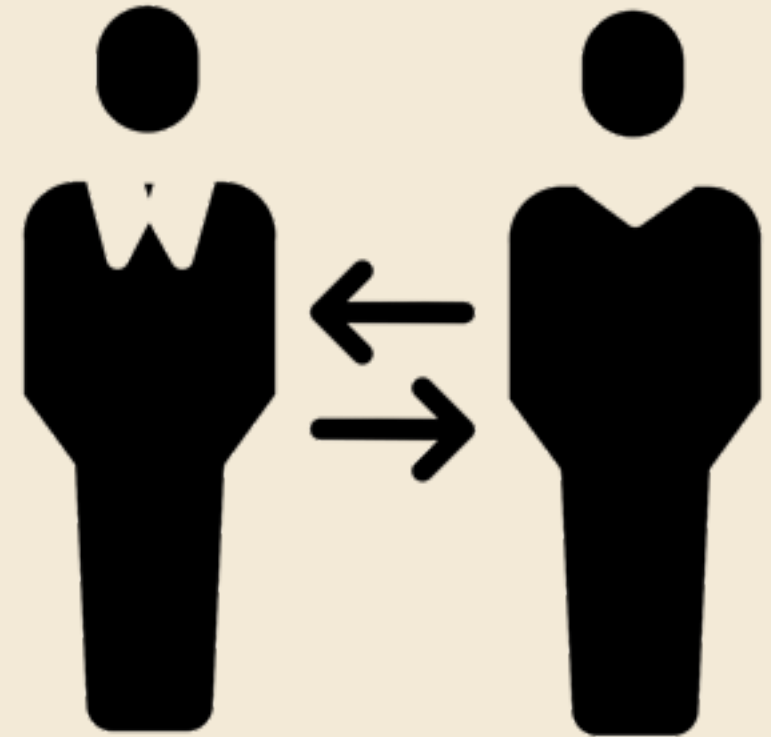
Frontier Learning Lab Field Notes

Field Notes from the Frontier Learning Lab features regular dispatches from the staff and collaborators from the Frontier Learning Lab, a project from Montana Digital Academy.

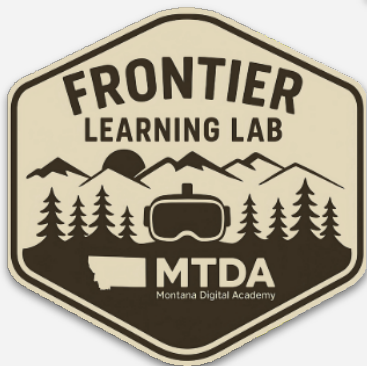
✓ Subscribed

Frontier Learning Lab Field Notes

Strategies: Direct Support for Schools/ Classrooms

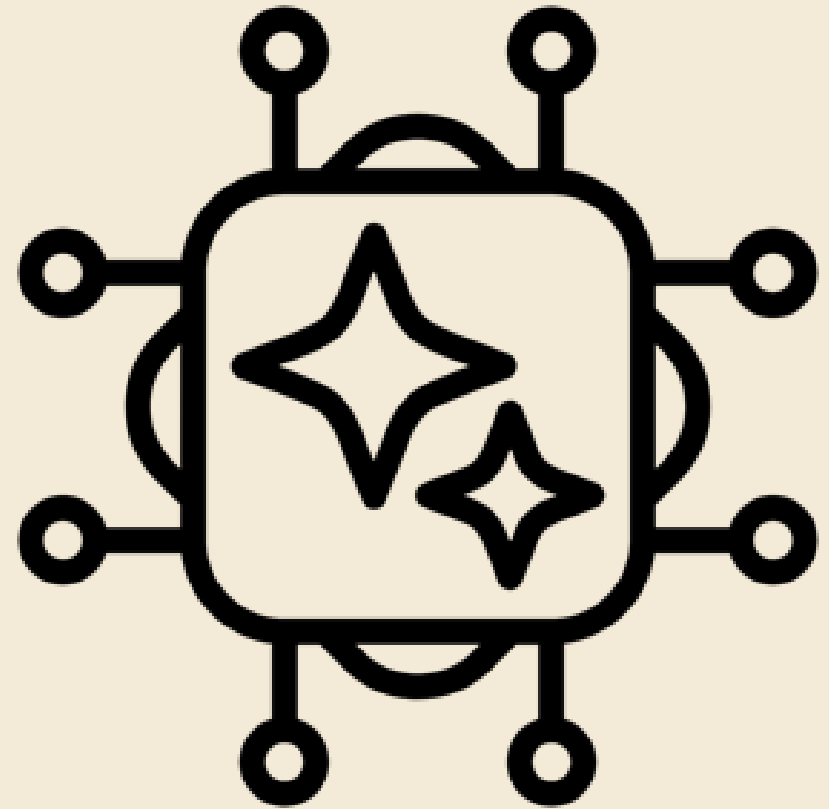


ai.help@mtda.org



MTDA
Montana Digital Academy

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

Amplify

chat.umontana.ai

School

+ New Chat

Search...

Conversations

Aug 18, 2025

Logo Development F...

Aug 12, 2025

Jul 17, 2025

Jul 16, 2025

Jun 30, 2025

Mistral Large | Temp : 1 | Data Sources

@Amplify: create a template for my weekly email newsletter hope to parents for my 4th grade class. do it in markdown, please.

Amplify

Sure, here's a template for your weekly email newsletter in markdown:

markdown

Copy code

```
# [Class Name] Weekly Newsletter: [Date]

Dear [Parent's Name],

We hope this email finds you well. Here are some updates from [Class Name] for the week of [Date].

## Highlights of the Week
- [Highlight 1]
- [Highlight 2]
- [Highlight 3]

## Upcoming Events
- [Event 1 with date and time]
- [Event 2 with date and time]
- [Event 3 with date and time]

## Homework and Assignments
- [Assignment 1 with due date]
- [Assignment 2 with due date]
- [Assignment 3 with due date]

## Tips and Reminders
```

Type a message to chat with Amplify...

+ Assistant

+ Prompt Template

Search...

Prompts

Assistants

Amplify Helpers

Custom Instructions

Jason1 Neiffer

Strategies: Buying Consortiums



Fall 2025 Launch Partners

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

**Strategies:
Tool
Development
and Release!**




ChatGPT - OpenMCQ

chatgpt.com/g/g-685747b3d2148191a29b3961252031e9-openmcq?model=gpt-4o

School

OpenMCQ 4o

Skip to content



OpenMCQ

By Jason Neiffer



OpenMCQ is a bot that creates multiple choice questions based on user input. Feedback to jason@mtda.org [Version 20250728]

Are you ready?

How do you work?

Ask me questions about what I need and how you can...

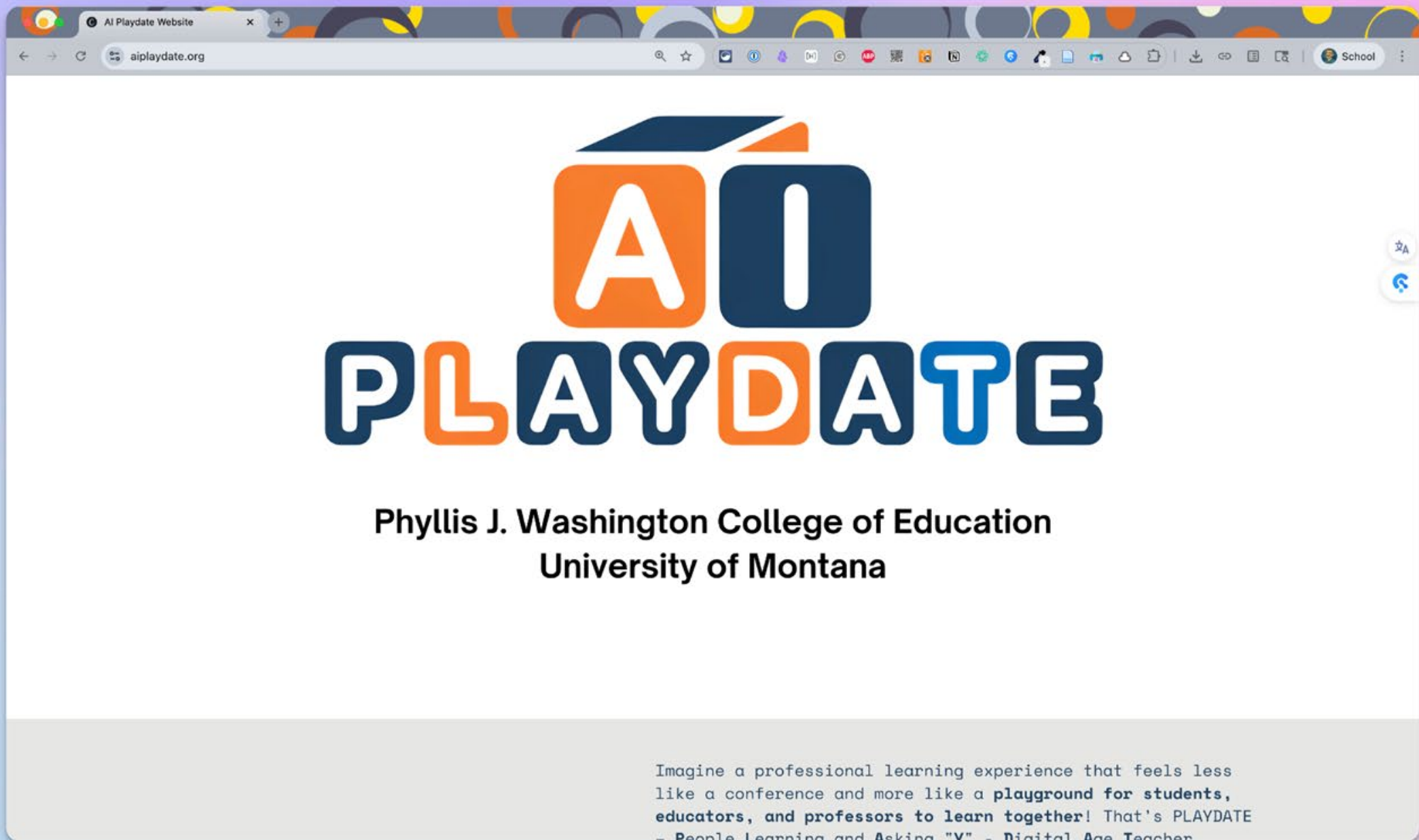
+ Ask anything



ChatGPT can make mistakes. OpenAI doesn't use University of Montana workspace data to train its models.

Strategies:
Experimentation
! Playing! Fun!

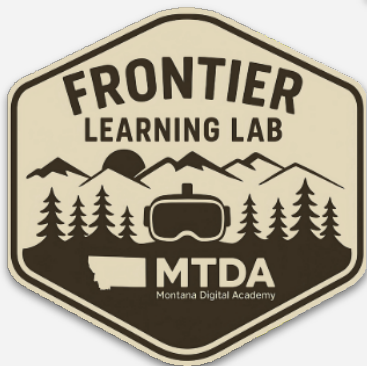




Phyllis J. Washington College of Education
University of Montana

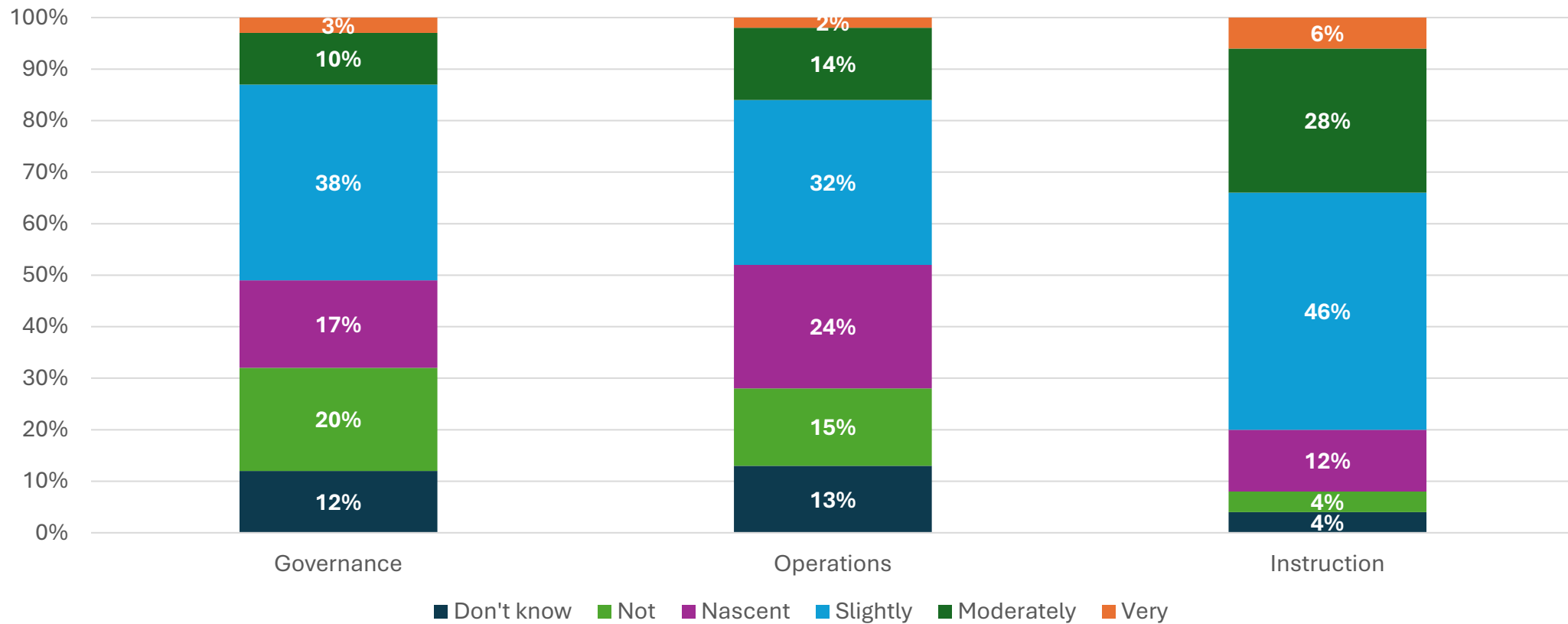
Imagine a professional learning experience that feels less
like a conference and more like a **playground for students,**
educators, and professors to learn together! That's PLAYDATE
- People Learning and Asking "Y" - Digital Age Teacher

ai.help@mtda.org



MTDA
Montana Digital Academy

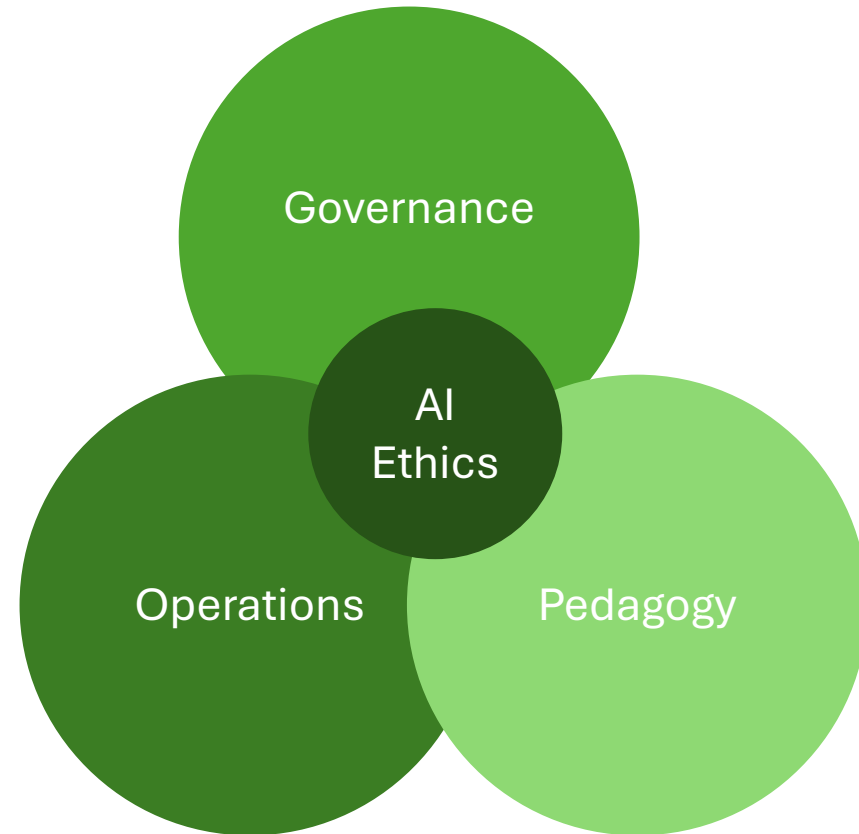
Institutional Maturity



WCET AI Policy and Practice Framework

Adapted from: Chan, Cecilia Ka Yuk (2023, April). “A Comprehensive AI 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, Ienca, and Vayena

“The Global Landscape of AI Ethics
Guidelines.” Nature Machine
Intelligence, 2019.

Transparency

Justice, Fairness, & Equity

Non-maleficence

Responsibility & Accountability

Privacy

Accessibility*

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
- AI use in promotion, tenure, and re-appointment practices

OPERATIONS

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

PEDAGOGY

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

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

- **Cultural**
 - Recognizing the connections between people, AI-informed 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 AI-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