

Contextualizing and Extending the Reach of Open Education

Brandon Muramatsu

Massachusetts Institute of Technology
Massachusetts, United States

**James Glapa-Grossklag &
Joy Shoemate**

College of the Canyons
California, United States

Dr. DeLaina Tonks

Mountain Heights Academy
Utah, United States

Open Educational Resources (OER) have become essential infrastructure worldwide

We can learn from the varying contexts at different types of institutions with different learner and instructor populations:

- Community Colleges: College of the Canyons
- Secondary Schools: Mountain Heights Academy
- Worldwide Learning Opportunities: MIT



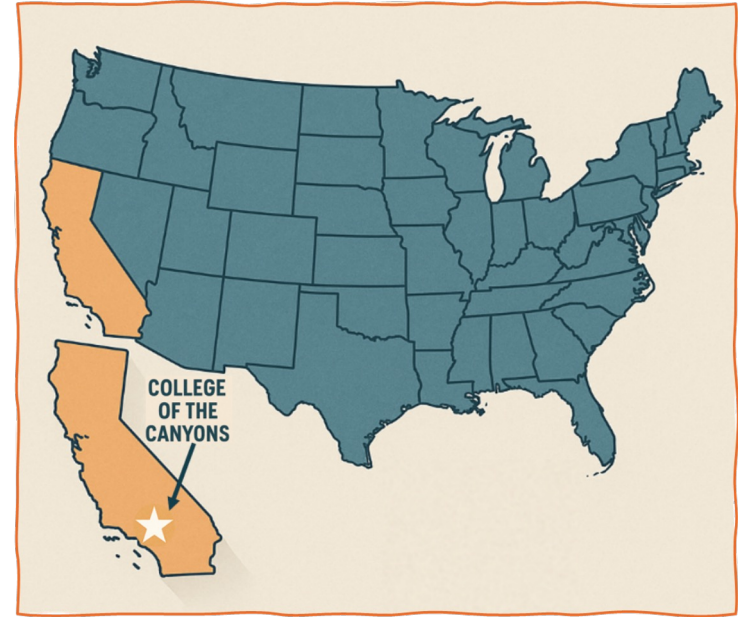
Building AI Literacy Through Open Educational Practices: Empowering Faculty and Students

**James Glapa-Grossklag &
Joy Shoemate**

College of the Canyons
California, United States

Our Context

- Community college
 - Located in Los Angeles, California, serving over 39,000 students annually
 - Offers over 100 associate degree programs and nearly 200 certificate programs
 - 1 of 116 California Community Colleges, serving nearly 2 million students annually
- Broad access and under-funded
- Need to develop and offer our own PD
- PD in AI falls to Online Education department by default





Developing AI Literacy at College of the Canyons

- Professional development for faculty
- Non-credit courses for students
- Goal: Equip both groups with practical and ethical AI competencies
 - **Faculty:** Examine and evolve pedagogical practices
 - **Students:** Gain academic and professional AI competencies

Faculty 'AI Series' Professional Development

Four week-long online facilitated courses

- **Promoting**

- Understanding of generative AI capabilities and limitations
- Evaluation of ethical considerations
- Development of Student-Centered AI Policies
- Thoughtful integration of AI tools

- **Encouraging**

- Critical examination of pedagogical practices
- Innovation and reflective teaching
- Collaborative exploration, experimentation, and resource-sharing



Student 'AI Literacy' Course Series

Two-week-long, online facilitated Non-Credit Certificate courses

- **In Gen AI Research & Study Skills, students explore:**
 - How to effectively use AI tools in studying, research, and projects across various disciplines.
- **In Gen AI Bias and Ethical Considerations, students:**
 - Critically evaluate AI tools and content
 - Explore strategies for recognizing and mitigating biases.
 - Consider copyright, privacy, accuracy, and academic integrity.





Student and Faculty Courses: Rooted in Open Educational Practices (OEP)

- **Dedicated faculty support to evaluate teaching practices, emphasizing:**
 - Collaborative projects
 - Student-centered learning
 - Transparency and knowledge sharing
- **Leverages open pedagogy and student co-creation through:**
 - Opportunities to share resources and suggest edits
 - Course Revisions based on input from participants

Leveraging Generative AI to Update OER

- Career Technical Education (trades) programs are Zero Textbook Cost (ZTC) pathways:
 - Land Surveying
 - Water Technology
- Developed OER in consultation with industry professionals
- OER appreciated as an important tool for program viability
- AI integration provides:
 - Opportunity to enhance existing OER creations AI integration
 - Ability to better meet students' needs



AI for Learning

- Self-paced, asynchronous course designed to
 - Help academic learn how to effectively employ AI in the classroom
 - Recognize AI as a new partner in teaching
 - Apply custom chatbots and prompt engineering skills
 - Evaluate AI-generated responses
- Co-designed by educators for educators
- Carnegie Mellon University and College of the Canyons, supported by the Axim Collaborative





AI 4 Learning Network (AI4LN)

Start learning at
<https://oli.cmu.edu/courses/ai-for-learning/>





OER-Enabled Pedagogy Supported by Generative AI

Dr. DeLaina Tonks

Mountain Heights Academy

www.mountainheightsacademy.org

Utah, United States



Mountain Heights Academy

Public, online charter school in Utah, USA

1,700 students statewide

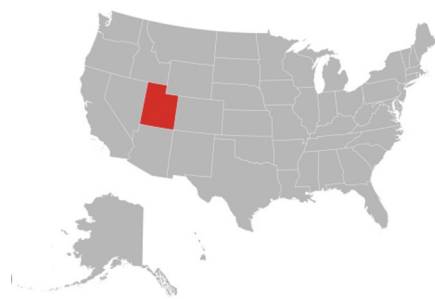
7th to 12th grades (secondary school)

130 faculty/staff

Vision: To be the leaders in digital education

Mission: To develop connected and successful learners

First secondary school globally to implement a 97% OER curriculum in 2009.



Mountain Heights Academy

- Asynchronous courses with content for each week due Friday at 6pm
- Teachers have 4 office hours available to help students and 4 hours for reaching out to students and parents, grading, tinkering with course content, reviewing data, etc.
- Students are provided a laptop to work on
- Curriculum aligns with Utah's state standards





OER Evolution at Mountain Heights Academy

- Full course release in MoodleRooms
- Lessons added to OER Commons
- Open pedagogy OER released for leadership, ed tech, teacher competency, and instructional design
- Reset using generative AI, reteaching ID principles/processes



OER-Enabled, AI-Supported Pedagogy

- AI Tool: SchoolAI.com, a walled garden, safer for students under 18
- PD on grading and ethical use
- How to communicate appropriately if a student is suspected of using AI inappropriately
- Using data to create AI-resilient, process-based, or AI-inclusive assignments that deepen critical thinking skills





AI Panel Handout

November 3, 2025

This document summarizes key takeaways, strategies, and expectations from the recent AI Panel discussions regarding the ethical and effective integration of Artificial Intelligence into our courses.



Core Philosophy

- **AI is Here to Stay:** AI is not going anywhere. The focus must be on finding the best ways to **embrace it** for educational benefit.
- **A Collective Responsibility:** It is **every teacher's responsibility** to determine how to utilize AI in their specific classroom context effectively. This is the core focus of the **assignment redesign** work this year.
- **We Are All Learning:** Don't be afraid to try something; if an assignment bombs, revamp it for the next one.



School AI: Your Primary Tool

School AI is the main tool the school is investing in for educational needs.

- **Walled Garden:** School AI is a "**walled garden**," meaning everything inside is **secure and private**, you can use it for student data.
- **Pacing & Practice:** Use it regularly and consistently. The more you use it, the better you get.
- **Dot (2.0):** The new AI assistant that **streamlines your workflow** and is the unified place for resource creation and problem-solving.
 - **Action:** Ask **Dot** any questions you have about 2.0.



Grading & Ethical Use

Using School AI to assist with grading is ethical because it's a closed garden, ensuring student privacy.

Using AI as a Grading Tool

- **Tool, Not Final Outcome:** Use AI as a **tool**, not the final outcome. You must always **read through, verify, and tweak** the feedback and grade before assigning it.
- **2.0 Strategy: Use Threads for Efficiency:** For big, grading-intensive assignments, create a **separate thread (conversation)** in Dot. Put your **full, extensive setup** prompt (rubric, key) in the first message. The prompt is saved, so subsequent student submissions can be graded quickly using the command: *"Grade it the same way."*
- **Grading Time Shift:** Grading process-based assignments can be more intensive upfront, but using Dot **counteracts that extra time**, leading to significant savings from not worrying about cheating.





Confronting Suspected AI Use & Plagiarism

- **Curiosity Over Consequence:** Always go into the conversation with a **curious mindset** rather than a consequential one. Frame it as a **learning experience**.

Tactics for Verification

1. **Establish a Baseline:** Get an initial **writing sample** from every student early in the course.
2. **Revision History:** Use **Revision History** to see time spent and whether students copied/pasted.
3. **Real-Time Chat:** Use a **real-time chat conversation** with the student to verify if their spontaneous writing style matches their submitted work.
4. **Focus on Requirements:** Instead of saying, "You cheated," say, "*You didn't use the resources (or follow the process) in your answer. Please redo this.*" This forces them to engage with the core goals of the assignment.
5. **Use Policy:** Follow steps in SOP: AI Integration Guide for Teachers



Addressing Cheating

- **AI Detection is Flawed:** AI checker tools (like Zero GPT, PlagiarismCheck.org) are **not completely accurate** and can be wrong. Treat them as one piece of information, not definitive proof.
- **Cheating Rate Unchanged:** Studies suggest that the **percentage of students cheating has remained largely unchanged** since the emergence of AI. If a cheater is going to cheat, they will find a way.
- **Reduce Incentive, Not Eliminate Risk:** Acknowledge you cannot make things **100% AI-proof**. Your goal is to **reduce the incentive** and make **authentic engagement the easiest path** for students.
- **Final Responsibility:** Do your best to design engaging, process-based assignments, and then **let go of the stress** of catching every cheater. Students and parents bear the ultimate responsibility for their own learning.
- **Parent Communication:** When discussing inappropriate use with a parent, **email them all the evidence/data first** before calling. Then, call and maintain a curious tone, asking: "Is there any data that I am missing?"



★ **AI-Resilient Assignments**

AI-Resilient Assignments are not just hard for AI; they focus on skills that emphasize **uniquely human capabilities**. See the “AI-Resilient Assignments” section of the playbook for examples of what this looks like.

AI-Resilient assignments should aim to do one of two things:

1. **Process-Based (Emphasizing Human Skills)**

These tasks require students to log their steps, show iterations, and reflect.

1. **Deepen Critical Thinking (Using AI for Deeper Learning)**

These tasks require students to critique AI outputs and build AI literacy.

5-star Assignments and AI-Ready Best Practices

- See the “Teacher Final Checks: AI-Ready Best Practices” section of the playbook for a checklist of items that 5-star assignments have.





Teacher Workflow & Examples



AI & Teacher Workflow

How AI can streamline your overall teaching process, communication and collaboration.

Assessment & Feedback

Quiz Creation. Auto-generate quiz questions and specific feedback for each answer.

Personalized Feedback. Generate rough-draft feedback on student submissions.

Course Organization

Content Summarization. Summarize or reorganize materials for clarity and flow.

Tiering. Adapt and scaffold assignments, readings, or assessments for tiers.

Communication

Newsletters & Announcements. Draft communications with AI-generated templates.

Translation. Translate content for multilingual students/families.

Positive Messaging. Suggest constructive phrasing for sensitive/crucial conversations.

Collaboration

Brainstorming. Generate project-based learning ideas, cross-curricular activities, etc.

Meeting Support. Summarize meeting notes and creation action item lists for PLCs or department meetings from meeting transcripts.

Efficiency Tips

Prompt Logging. Keep a list of effective prompts for future use.



Using AI for Content Creation

How AI can help you create instructional materials, assessments, and differentiated resources directly for student use.

Utilize SchoolAI to draft assignments, then review for accuracy and tone to ensure the content matches your voice and course style. Examples of what AI can help you with:

Exemplars & Models. Create sample assignments and model responses for students.

Content Generation. Create effective content for a Genially Hotspot, slideshow, assignment instructions, or video script.

Activity Creation and Lesson Planning. Plug in a standard and have AI draft a related activity, outlines, unit plans, or activity instructions.

Assessment Items. Incorporate MAP-style questions or create quick, non-graded formative assessments.

Differentiation. Reduce word count and Lexile level for tiered students, or generate prompts at different difficulty levels.



Video-to-Question. Create questions from videos.

Tiered Rewrites. Rewrite materials at a #th-grade reading level (or other levels as needed).

Course Outlines. Generate rough drafts of a 10-week course outline based on your standards.

Assignment Prompts. Differentiate assignments with varied writing prompts on the same content.

Rubric Creation. Draft rubrics for summative assessment or final projects.

Real-World Applications. Brainstorm examples that connect academic concepts to authentic, real-life situations.



Resources

**OER + Generative AI
Overview**

[LINK](#)



OER-enabled AI

[LINK](#)





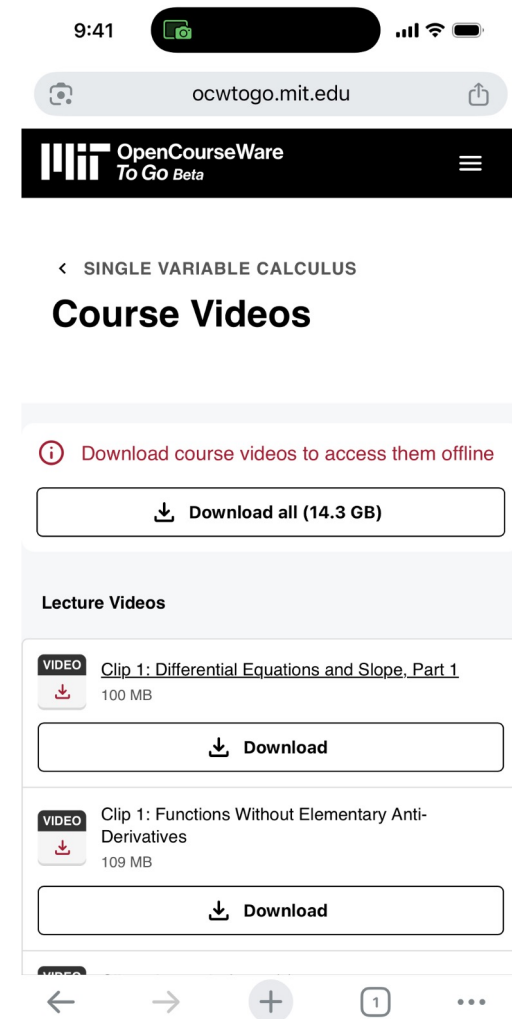
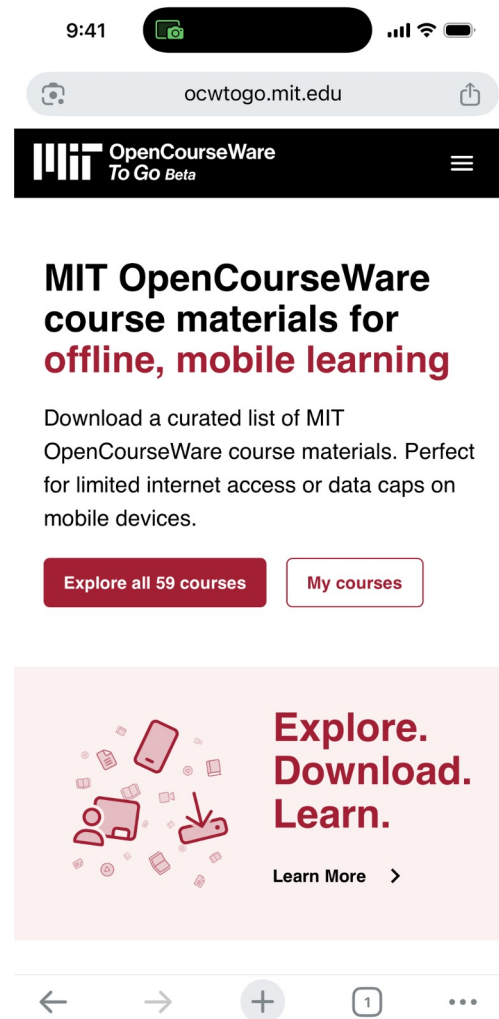
Improving Worldwide Learning Opportunities: Mobile, Universal AI & AI Tutors, AI+OER

Brandon Muramatsu

Massachusetts Institute of Technology
Massachusetts, United States

MIT OpenCourseWare To Go

- Designed for mobile
- Offline, download
- Curated list of courses



Universal AI in Pilot Now

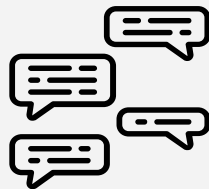
Universal AI is a comprehensive curriculum that spans both theoretical foundations and practical applications of artificial intelligence.

Main topics

- Basic Python
- Data analytics and machine learning
- Predictive, prescriptive, and multimodal AI
- Generative AI
- Large language models
- AI ethics and the future of work

Key takeaways

- Gain a practical understanding of real-world applications of AI, including:
 - The underlying technologies powering AI
 - The different types of AI
 - How AI systems function and make decisions
- Develop the skills to identify opportunities for AI to increase efficiency and improve decision making
- Explore the ethical implications of AI
- Understand domain-specific uses and applications of AI



AI-Enabled Learning

Gen AI tutors and guides

Universal AI

AI Tutors

- Video tutors
- Assessment tutors
- And more

Experiments

- Machine Translation
- Customization

The screenshot displays the MIT Open Learning website on a mobile device. The top navigation bar includes the URL 'courses.learn.mit.edu' and a 'Chat' button. The main content area features a video player for 'L1.1 Introduction to Data Analytics and Machine Learning' by Ana Trisović. Below the video, there are links to download the video file, subtitles, and transcripts, as well as a button to 'AskTIM about this video'. To the right, a chat interface is visible with a cartoon character icon and a text input field. A red 'Feedback' button is located at the bottom right of the chat area.

9:41 courses.learn.mit.edu

L1.1 Introduction to Data Analytics and Machine Learning

Introduction to Data Analytics and Machine Learning

Instructor: Ana Trisović

0:00 -8:27

Video

Download video file

Transcripts

Download SubRip (.srt) file

Download Text (.txt) file

AskTIM about this video

Slides: [Lecture 1.1 \(PDF\)](#)

9:41 courses.learn.mit.edu

Chat Summary

What do you want to know about this video?

Feedback

What are the most important concepts introduced in the video?

What examples are used to illustrate concepts covered in the video?

What are the key terms introduced in this video?

MIT Open Learning

AI + Open Education Initiative

- Launched to explore **AI's impact on open education** (July 2024)
- Published **9 papers** from international authors on how AI accelerates and complicates open education (January 2025)
- Hosted a **speaker series** (April/May 2025) and **field update** event (October 2025)
- Now planning **in-person events to advance the field** through collaborations between AI researchers and open education experts



<https://aiopeneducation.pubpub.org>



Thanks and Contact Us

James Glapa-Grossklag

James.Glapa-Grossklag@canyons.edu

Joy Shoemate

Joy.Shoemate@canyons.edu

Dr. DeLaina Tonks

dtonks@mountainheightsacademy.org

Brandon Muramatsu

mura@mit.edu