Cultivating Teaching and Learning with Generative AI

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Agenda

- **Introduction**
- **Teaching how AI learns and how it can easily make mistakes.**
- **How to use AI tools for a variety of teaching and learning purposes.**
- **Additional AI tools**

A Useful Reminder

 "Problems are things or states that someone thinks are worthy of attention or investigation. They might be visualized from two very different perspectives.

The first sees a problem as an issue that needs to be resolved, the second that there is an opportunity for something different."(Jackson, 1996, p. 3)

Introduction

- Educators are currently experiencing rollercoaster emotions and reactions: excitement and fear about the use of AI in education.

- This collection captures a variety of AI applications that can cultivate teaching and learning.

- Experimentation is at the heart of learning, teaching and scholarship.

- The ideas shared may be in their embryonic stage, half-baked, but they are worth exploring further through active and creative inquiry.

Using QuickDraw to Explain AI Machine Learning easily

- Use QuickDraw to help students understand how AI learns and has biases.

- Students can understand some of what AI can do and how it uses user data as part of training.

- QuickDraw: https://quickdraw.withgoogle.com

Using AI to Teach Implicit Biases and Stereotypes

Using AI tools like Dall.E for Teaching/Learning about implicit biases despite the variety of legislation and social desirability that makes inclusivity a must.

Using AI to Teach Implicit Biases and Stereotypes and how AI reproduces the same biases

- The bias in various online sources is reflected in the data gathered by AI tools. For example, the image created by Dall.e for the prompt "Robotics Engineer" predominantly features male engineers:

Implicit Biases and Stereotypes: Easier to Teach with AI

- Similarly for a prompt for nurses, AI has created an image that shows only female nurses.

Using Visual Metaphors to Create Images as Lesson Resources

- There are different AI tools for data visualization

- It helps students develop visual literacy and create new opportunities for arts-based communication.

- DALL-E: OpenAI DALL-E
  - ➤ Generates images from textual descriptions, useful for visual aids in lectures.

Adding Audio and Music

descript.com

➢ Offers audio and video editing tools powered by AI, for creating lecture recordings or educational podcasts

aiva.ai

➢ An AI composer that creates original music scores, useful for multimedia educational content.

Speech Coaching

Yoodli AI

➢ Enhance online meeting job interviews with private, real-time speech coaching.

➢ https://app.yoodli.ai/

Utilizing excel

Numerous.ai

> ➢ Best tool to handle everything with AI + Excel
>
> ➢ https://numerous.ai/

Asking Students to create Avatars for their Brightspace

- Turn Your Selfies Into Professional Photos

- Getavatars.ai

    This is my Avatar crated by Getavatars!

Creating Video from Text

- Sora
  - ➤ Creating video from text
  - ➤ Sora can generate videos up to a minute long while maintaining visual quality and adherence to the user's prompt.
  - ➤ **Example**

  A stylish woman walks down a Tokyo street filled with warm, glowing light. She wears a black leather jacket, a long red dress, black boots, and a black purse. She also wears sunglasses and red lipstick. She walks confidently and casually. Many pedestrians walk about.

  Link to more information: https://openai.com/sora?video=tokyo-walk

Writing and Content Generation

- ChatGPT4 and COPILOT powered by ChatGPT
  - ➢ Create diagrams
  - ➢ Create case studies/scenarios for learning assessment
- Cover letter copilot: https://coverlettercopilot.ai/?ID=Hasan
- Claude.AI

Enhancing Accessibility through AI-Enhanced Transcription

- In-Class Video Transcription is hard to capture because adults 'um' and 'er'

- After video is recorded, it can be pasted to AI and make it will make it grammatically correct and then added to teaching resources.

- Write the voice from YouTube Transcriptions (toggled timestamps)

- ADD the pic from the original file

Writing Assistance

- The superpowers of AI can be harnessed to improve writing skills.
- Provide suggestions for phrasing and vocabulary, and even offer proofreading assistance, making the writing process more efficient and streamlined.

Link to more information:

https://stianchrister.medium.com/how-to-use-chatgpt-for-writing-7c3caccab178

Ways to Develop Students Critical and Moral Reasoning Using ChatGPT

An example in HRM programs:

1. Ask students to go to ChatGPT and paste two case studies about a harassment case and areas that breached human rights and ask for the solution. One case study detailed and the other case study missing a lot of required information.

2. Then, ask students to compare inconsistencies and differences in the quality of responses of ChatGPT

3. Students are advised to critically analyze where AI did not do a good job and how to improve it.

Aim: The purpose is to direct student towards critically engage with ChatGPT and develop their own critical thinking. It is essential for the responsible use of the ChatGPT.

AI as a Conversation Buddy

- Exploring the use of AI as a conversational buddy to develop critical reading and inquiry skills through developing our own questioning, challenge and being challenged.

- Ask ChatGPT to talk about inclusive strategies and talking to it like a human, challenge it and be challenged by it.

Link to more information: https://chrissinerantzi.wordpress.com/2023/01/29/a-chat-between-chrissi-and-chatgpt-on-inclusive-feedback-29jan23/

Branching Virtual Reality Scenarios using AI-generated Case Studies

- Leveraging AI as a thought partner in the authoring of branching scenarios.

Link to more information:

https://www.cvtc.edu/landing-pages/grants/open-rn

Developing Students criticality using ChatGPT as a stimulus

- Each student individually asks Chat to write 200 words on a question, such as: What does diversity and inclusion mean in HRM?

- Then, each assesses the quality of English, quality of references, correct referencing style, quality of argument, etc.

- They then get into groups of 5 and discuss their pieces and their pro forma reflections.

- This teaches students to encourage students to use AI in a critical way that will help them develop critical thinking and referencing and assessing AI work like other resources before use.

Link to more information:

https://betterhumans.pub/chatgpt-tips-for-becoming-better-writer-d60137a09e8

Directing students to Write Prompts for ChatGPT for Active Learning

- Think-Pair-Share activity where students individually tackle a topic through the lens of three different types of ChatGPT prompt-driven uses.

- Then, students pair up to exchange what surprised them in the process and share those insights with the group.

Link to more information:

example

Human: *So show me 3 emoji that have colors*
ChatGPT:
💜 *Purple Heart*
💙 *Blue Heart*
💛 *Yellow Heart*
Human: *What is 💜 ?*
ChatGPT: *Indigo heart*
Human: *What color is 💜 ?*
ChatGPT: *Violet*

Encourage Students to Use Metaphors/Analogies for AI

- Invite students to think about metaphors for AI: "When AI is working for us, it is like…" and "When AI is working against us, it is like…"

- Find analogies for AI that can help them discuss its impacts . This can make the discussion light and fun at first while deepening their understanding of it.

- AI is like fast food—it is quick and tasty but not healthy; however, occasionally, it saves us!

Use ChatGPT for Critical Thinking (and referencing)

- Stimulate critical thinking by letting students figure out a question in a particular domain and ask the ChatGPT to answer it.

- Then write a mini-essay providing (both positive and at least one negative) criticism on ChatGPT work.

- Stop preventing students from using ChatGPT and instead allow them to do so so that they can learn to think critically and interrogate AI outputs.

Use ChatGPT for Critical AI Literacy

- Invite students to annotate an article written by a human against and one by ChatGPT.

- Then ask them to critique the ChatGPT work and find examples of sentences that sound plausible but are wrong or do not quite make sense.

- Or ask students to check AI output sources and references.

- Ask students to identify if ChatGPT missed anything and what their observations are about the language used.

- What lessons do students draw from the exercise?

- Ask them to think if the human article would have been different if they had started with a ChatGPT answer and then revised it.

Link to more information
Canvas Commons

Use ChatGPT for Critical AI Literacy (Continued)

- Just like with finding information on the web, students need to critically evaluate
- the resource, and ChatGPT is no different. I wanted to encourage students whilst using ChatGPT to be aware of its
- shortcomings, whilst at the same time supporting students in developing learning outcomes around critical analysis and summary.

Additional AI tools

✓**SLIDESGO**: AI presentation maker

https://slidesgo.com/ai-presentations#rs=menu

✓**PROFBOT**: AI-powered chatbot developed by the University of Toronto, School of Management, that helps students become better learners by providing personalized feedback in real-time.

ProfBot: Your Personal Digital Tutor

Additional AI tools (Continued)

✓ **Claude.ai**: Similar to ChatGPT but with distinct capabilities and focus.

✓ **YOU.COM**: an innovative and creative AI writing assistant.

✓ **Spikes**: Generative AI video editor that repurposes long videos to shorter clips exactly to your needs. https://www.spikes.studio/

✓ **CHATPDF**: enables students and researchers to interact with PDF documents by asking questions directly from the PDF content. https://www.chatpdf.com/

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