

How might we leverage AI to enhance instructional practices?

Nice to Meet you!





Session Format (120 min)

Welcome	5 min	Facilitator & Expert introductions & Session overview
Learn	30 min	Session EXPERTS to share their experience / learning
Reflect & Share	30 min	Facilitated table sharing of expertise and prior knowledge
Deep Dive	20 min	Facilitated deep dive into a session sub questions.
Consolidate & Record	30 min	Participants consolidate with the infographic exit ticket
Gallery Walk	5 min	Conversations and connections during the coffee break.



Core Agreements

- **Respect your own air-time**, and that of your fellow participants
- We are all experts:
 - Experts in how to collaborate
 - Experts in how to support one another
 - Experts in how to be generative in our dialogue
 - Experts in generous listening

• We don't know it all:

- \circ $\,$ We all have room to grow, we benefit most when we $\,$ listen with an open mind $\,$
- We all come from different schools and different cultural contexts,

Network & Connect

• Continue the conversation during the breaks and over lunch



Al in the Classroom: Enhancing Instructional Practices

"How might we leverage AI to enhance instructional practices?"



Al in the Classroom: Enhancing Instructional Practices

- Explore the use of AI tools to support personalized learning experiences and differentiation
- Discuss strategies for integrating AI into curriculum design and lesson planning process
- Showcase successful case studies and best practices for implementing AI in the classroom



Your Conference Placemat

This is the key to effective learning from today's session:

- Follows the flow of the session
- Provides you with prompts and space to ask questions, write ideas, and document your learning.

It is the artifact of the session. Use it, write on it, doodle, sketch note, whatever helps you learn the most from the the day.





Prepare & Learn

Prepare

- 5 min solo reflection and expertise inventory.
- What do you know already and what are you curious about?

Learn

- 20 min presentation from your facilitators.
- Take notes
- Write down questions and ideas





Future Design School

What does Les tell you about the role of the educator in a GAI learning environment?

How might the FDS Portrait of a Graduate inform your own PoG at your school?

How might it inform your Portrait of an Educator?

What is the biggest impact of AI on the role of the teacher in the learning experience of your students?

THE IMPACT OF AI ON THE FUTURE* OF EDUCATION

****THE FUTURE IS NOW**

future design school





what are the Risks?

THE LONDON NTERDISCIPLINARY SCHOOL Why You Shouldn't Mix **Barbie** with Biased Al Image Generators

Think Critically: Bias Is Likely Perpetuated

- How Al Image Generators Make Bias Worse (The London
 Interdisciplinary School)
- How To Eliminate Racial Bias In Artificial Intelligence
 (Fortune Magazine)

• <u>Curriculum for Grade 5-8 about the Ethics of Artificial</u> <u>Intelligence</u> (*MIT Media Lab in 2019 so basic but thought-provoking*)

Think Critically: Truth is Limited

Hallucinations happen... links to nowhere, untrue facts, sources that don't exist

You NEED to fact check and confirm sources

The free version of ChatGPT only has information until Jan 2022



Analytical Thinking: What Is AI & How Does it Work?

- ISTE article: Is It AI or Not?
- Examples of AI for kids (from Stanford grads)
- <u>Google Teachable Machine</u> gets at the basics of how computers "learn"
- <u>Teachable Machine with micro:bit</u>
- <u>Designing Interactive AI Systems</u> a middle school project-based curriculum



• <u>AI Literacy Lessons for Grades 6–12</u> (*Common Sense Media lessons*)



Academic Integrity



Ethan Mollick in • 3rd+ Associate Professor at The Wharton School 10mo • 🔇

Teachers should be wary of AI detection tools for five reasons:

1) They aren't very good. For example, OpenAI's detector only identifies GPT output 26% of the time. (Also, never ask ChatGPT if something was created by ChatGPT - it will make up an answer, it doesn't know)

2) All the current tools were made for GPT-3.5 or earlier, not the newer GPT-4 models, which are much more capable

3) Even small changes to the text (including asking the AI to revise its own text) can break detectors. I actually had students in my class "cheat" on an assignment, and those who did any iteration at all fooled detectors.

4) There often are false positives. Even the OpenAI tool has a 9% false positive rate.

5) A new paper shows that, in the end, Als can always beat detectors

Can AI-Generated Text be Reliably Detected?

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"does the integration of AI into education, present a crisis for academic integrity, or actually an opportunity to enhance it?"

-Phillippa Hardman

The AI Gap: Equity, Access & the Risks of Standing Still

CLASSROOM AI USE: WHAT'S CHIEATING? WHAT'S OK?

Questions to ask: What's OK? What's not? For whom? For what work? Under what circumstances? What work best prepares students for THEIR future? Where do you draw the line for your students? At what point is it student's work and no longer AI? Al does student work for them with no thought by the student

Al writes content but student edits it based on learning from class

Student re-writes Al-generated content with own improvement ideas

Al generates multiple drafts; student chooses best parts of Al drafts

Student writes bullet points to include but AI writes the draft

Al guides student through writing process as a "writing coach"

Student creates content until stuck; asks AI for help to get "unstuck"

Student writes a draft; AI writes a draft; student adds best AI ideas

Student gathers stats/research via AI but creates all content on own

Student consults internet/Al for writing ideas but creates content on own

Student writes all content but asks AI for feedback to improve

Student does all work without any assistance from AI, the internet, etc.

Graphic created by Matt Miller of Ditch That Textbook. For more, visit DitchThatTextbook.com/ai-cheating



More Human Work

More Al

Creation





Source: World Economic Forum, Future of Jobs Survey 2023.



Source: World Economic Forum, Future of Jobs Survey 2023.

Harvard, Wharton, BCG Study



Source: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4573321



AI For Education

What resources might AI for Education provide that have value for you, and your team?

What do you notice about how Amanda is working with Chat GPT 3.5?

What more would you like to explore from this organization?

How might Amanda's approach inform your own?





Become a Prompt Master

- <u>AI For Education Prompt Library</u> for your chatbot of choice
- Principled Instructions are all you need for Questioning...[ChatGPT]
- <u>Practical AI for Instructors and Students</u> (Wharton School, Ethan & Lilach Mollick)



Differentiate Texts to Access Content

Diffit (free and paid)

- Start with your own text, a URL to an article or video or just a specific topic, theme, or question
- Diffit will create a text about your topic at any reading level (Grade 2+)
- It can also create activities for students to respond to the text



- Seems geared towards slightly older students
- More traditional literacy engagements



G5 Text About Climate Change Causes & Impacts

Climate change is happening because of things that people do. One big cause of climate change is burning fossil fuels like coal, oil, and gas. When we burn these things, they make greenhouse gases that trap heat from the sun and make the Earth warmer. This is called the greenhouse effect. The Earth is getting warmer faster than ever before, and this is changing the weather and making things harder for plants and animals. It's not good for us either, because it can make it harder to grow food and cause big storms and floods.

Another cause of climate change is cutting down forests. When we cut down trees, they release carbon dioxide, which is a greenhouse gas. Trees also help take carbon dioxide out of the air, so when we cut them down, there is more carbon dioxide in the atmosphere. This is not good because it makes the Earth even warmer.

Using transportation is also a big cause of climate change. Cars, trucks, ships, and planes all use fossil fuels, which make greenhouse gases. These gases make the Earth warmer and cause climate change. We need to find ways to use less fossil fuels and use cleaner energy sources like wind and solar power.

Climate change is a big problem, but there are things we can do to help. We can use less energy by turning off lights and using less water. We can also plant trees to help take carbon dioxide out of the air. And we can tell our parents and friends about climate change and ask them to help too. If we all work together, we can make a difference and help protect our planet for the future.

Use a Planning Assistant to Create Presentations

• <u>Gamma</u> - create slide deck on any topic from pasted text, a one-line prompt or importing a file





Understanding Climate Change

Climate change is caused by human activities such as burning fossil fuels, cutting down forests, and using transportation. These activities produce greenhouse gases that trap heat from the sun, making the Earth warmer.

by Lara Jensen Last edited 2 minutes ago

Use a Planning Assistant to Create All You Need

- Educide create many resources and instructional materials (free and paid)
- <u>Magic School AI</u> AI assistant for all things teaching-related e.g. create a rubric in less than 2 minutes (free and paid)



First Attempt At a Rubric

Climate Change Animation Rubric

	Criteria	Advanced (4)	Proficient (3)	Basic (2)	Below B (1)
-	Code Execution and Functionality	The animation effectively conveys the causes and impacts of climate change using code. The animation runs smoothly and all elements function as intended.	The animation effectively conveys the causes and impacts of climate change using code. The animation runs smoothly, but some elements may have minor functionality issues.	The animation partially conveys the causes and impacts of climate change using code. The animation may have some technical issues, causing interruptions or inconsistencies in the presentation.	The anim does not effectivel convey th causes ar impacts c climate change u code. The animatior experienc significan technical issues tha disrupt th presentat
1		1	1		1



Math Education With Large Language Models: Peril or Promise?

U of T and Microsoft

Source: Math Education With Large Language Models: Peril or Promise?





Source: Math Education With Large Language Models: Peril or Promise?

AI Tutors

Create your own with ChatGPT

- Negotiation Tutor
- Language Tutor
- What tutor would you like to create for your students?

Use an App

- Instage (paid) for Presentation and Interview Practice
- <u>Flint</u> (paid) Converse with an Expert OR Get feedback on your writing according to a rubric created by your teacher



Simple Procedural Prompt in Flint

3.

Expert Prompt to Student:

Please describe the process of creating a paper circuit with one LED, 2 strips of copper tape and a 3V battery.

2.

Student Response:

Stick 2 pieces of copper tape on the paper. Put a battery on one of them. Bend the legs of the LED and place them on the copper tape. Fold the longer piece of tape over the shorter one to touch the top of the battery



You've made a good start, but there are a few details missing. Could you please elaborate on the following points:

- 1. How do you ensure that the copper tape is adhered properly to the paper?
- 2. How do you position the battery in relation to the copper tape?
- 3. How do you determine which leg of the LED to connect to which strip of copper tape?
- 4. How do you secure the LED and battery to the copper tape to ensure a good electrical connection?

Also, think about what might happen if the LED doesn't light up. How would you troubleshoot this issue?

A Avatars



Elevenlabs





Social Emotional Learning: AI and Relationships

CBC News: <u>Amid rise in AI deepfakes, experts urge school curriculum updates for</u> <u>online behaviour</u>

"Replika is the AI for anyone who wants a friend with no judgment, drama, or social anxiety involved. You can form an actual emotional connection, share a laugh, or chat about anything you would like! Each Replika is unique, just like each person who downloads it. Reacting to your AI's messages will help them learn the best way to hold a conversation with you & what about!" - <u>Replika, an AI companion</u>

character.ai's founders have emphasized that their platform displays the message "Remember: Everything Characters say is made up!" above every chat.



2013 movie: a man develops a relationship with his Al personal assistant

Planning for Al in Schools

Resources: Planning for Al in Schools

- Educator guides, courses and a beta version of an AI Coach for Educators from <u>ISTE</u>
- <u>Developing Your School's Vision for AI</u> questions surrounding AI usage, checklist for evaluating AI tools, curriculum suggestions for teaching about AI, and ensuring academic integrity when using AI - from Toddle
- <u>Artificial Intelligence and the Future of Teaching and Learning May 2023</u> report from US Department of Education Office of Educational Technology
- <u>5 Ethical Implications of AI in Education: A Guideline for Responsible</u> <u>Classroom Implementation</u> - blog post from Quizalize
- <u>Al Guidance for Schools</u> from Code.org, CoSN, Digital Promise, European EdTech Alliance, Larimore, J., and PACE (2023)

Leverage Adaptive Learning Platforms

comprehension (paid)

paid)

C common sense media	SplashLearn	ZEARN	Chan Academy Kids
List of <u>adaptive Math</u> <u>platforms</u> shared by Common Sense Media	<u>SplashLearn</u> - K-5 reading and math (free)	Zearn - explore math through images (free & paid)	<u>Khan Academy Kids</u> - preK - 2 math, literacy and SEL (free)
Lexia	lalil ö	Foundations A-Z	duolingo for schools
<u>PreK-12 blended</u> <u>learning</u> : phonics, word study, grammar and	Lalilo - K-2 phonics, word recognition and comprehension (free and	<u>Foundations A–Z</u> (formerly Headsprout) - K-5 decoding, phonics	Duolingo For Schools - additional language learning (free)

and sight words (paid)

Reflect & Share (35 min)

Reflect on all of the three questions

• 6 min (solo)

Share Your answers back to the group

- 24 min (group share)
- 8 min each question





Deep Dive (20 min)

Reflect on all of the three questions

- 5 min (solo)
- Share Your answers back to the group
- 15 min (group share)
- 5 min each question





EXIT TICKET: Inform the Infographic

Inform yourself:

- 5 min solo reflection
- Consolidate your learning on your placemat

Inform the Infographic:

• 20 mins group synthesis to create the table infographic

Cisontario	Synthesis: Inform the Infograp	hic
What is your draft answer to ye	our session guilding question?	
What is one resource were sha table group that you will read a	red by your nd follow up role and school?	What schools, experts or colleagues will yo connect with and/or follow up with?
What is one resource were sho table group that you will read a with (blogs, books, etc)	red by your nd follow up What tips and advice are applicable to your role and school?	What schools, experts or colleagues will ye connect with and/or follow up with?
What is one resource were sho table group that you will read a with (blogs, books, etc)	red by your ind follow up V/hat tips and advice are applicable to your role and tacheo?	What schools, experts or colleagues will ye connect with and/or follow up with?
What is one resource were she table group that you will read a with (blogs, books, etc)	red by your What Hips and advice are applicable to your role and tachoa?	What schools, experts or colleagues will yo connect with and/or follow up with?
What is one resource were sho table group that you will read o with (blogs, books, etc)	red by your nd follow up	What schools, expanse or colleagues will y connect with and/or follow up with?



Gallery Walk

