Transcript - Strategies for Success: Marc Watkins

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NORMA HOLLEBECK: Welcome, everyone to the Strategies for Success webinar series 2024. It's a pleasure to have you with me today. My name is Norma Hollebeck, and I'm the senior manager of Network Programs and Services with Every Learner Everywhere. Before I introduce our speaker, I'd like to take just a few minutes out to tell you about Every Learner Everywhere the mission of our network. Every Learner Everywhere is a collaboration of higher education organizations with the expertise in evaluating, implementing, scaling, and measuring the efficacy of digital learning and its integration into pedagogical practice.

Every Learner Everywhere is sponsored by the Bill and Melinda Gates Foundation, and here at Every Learner, we work with colleges and universities to build capacity among faculty and instructional support staff to improve student outcomes with digital learning.

Our mission is to help institutions use new technology with the ultimate goal of innovating, teaching and learning to increase student success, especially for first-generation college students, poverty-impacted students, and racially minoritized students.

Quick housekeeping note before the presentation, we welcome your questions in the Q&A section. If participants raise their hand, however, we will not be able to unmute you. We will be monitoring the Q&A section as well as the chat.

And now to our esteemed guest. Marc Watkins is an academic innovation fellow, lecturer of writing and rhetoric, and serves as the director of the AI Summer Institute for teachers of writing at the University of Mississippi. He cochairs the AI working group with his department and serves as the liaison with other departments on campus, exploring generative AI impact on teaching and learning.

In addition to being awarded a Pushcart Prize, Marc has been awarded a 2018 Blackboard Catalyst Award for Teaching and Learning, a WOW Fellowship, And a Sarah Isham fellowship. His research includes OER, open educational pedagogy, creative

writing, digital humanities, AI and education, and grant writing.
Please help me welcome our guest speaker, Marc Watkins.
MARC WATKINS: Thank you so much. That's a wonderful welcome too. Much of that was just invented this past year in terms of titles and things because of generative AI. And what we're going to talk about today is how to build AI literacy with students and really rethinking how we do professional development in higher education to not necessarily match the pace of generative AI, because that is, of course, almost out of control, but to really develop resiliency and sustainability within our own faculty and our own educational practices so that with every new update we don't become so overwhelmed with the actual issue at hand, which in this case is how AI is impacting teaching and learning.
So I'm going to share my slides. OK, it's asking me for my Zoom password. A little bit interesting here. Didn't know that would be the case. OK, hopefully, this works. OK, let me do it in presentation mode. So generative AI is obviously changing rapidly. I wanted to give you all an example just to start off with of just showing what's actually there. And I was putting the final touches on my slideshow yesterday, and we had two major announcements from Google and OpenAI. So OpenAI released a new model just yesterday called Sora, which is a text-to-video transformer model that builds off their research with GPT and DALLE-3.
The prompt that I use this from their example, because it's not publicly available, but the demos are in the actual link that I believe Patty shared to the chat, is a 3D animation of a small, round, fluffy creature with big expressive eyes, explores a vibrant enchanted forest.
There's no sound because it's just text to video, but this was just released yesterday. So we've now gone from text generation with ChatGPT from image generation. Some of you have seen some other versions of this with music software as well. We now have video generation that is going to be available to people too. So lots of implications to think about.
Well, that wasn't the only one. Not to be outdone, so a week earlier, Google had announced that they were rebranding Bard as Gemini and launching it with GPT-4 level model called Ultra 1.0. Well, yesterday, they made the announcement that they were releasing Ultra 1.5. So that's two back-to-back announcements from Google in under a week.

Ultra 1.5 can read up to 1 million tokens in its context window, and there are people speculating that this model is actually going to be better than GPT-4. Show you a very brief demo from their actual launch of this. In this case, they're using an out of copyright Buster Keaton comedic black and white silent film, and they're going to ask the actual language model to find some specific items within the video.

[VIDEO PLAYBACK]

- This is a demo of long context understanding, an experimental feature in our newest model, Gemini 1.5 Pro. We'll walk through a screen recording of example prompts using a 44 minute Buster Keaton film, which comes out to over 600,000 tokens.

In Google AI Studio, we uploaded the video and asked find the moment when a piece of paper is removed from the person's pocket, and tell me some key information on it with the timecode? This screen capture is sped up, and this timer shows exactly how long it took to process each prompt. And keep in mind that processing times will vary.

The model gave us this response explaining that the piece of paper is a pawn ticket from Goldman and Company Pawnbrokers with the date and cost, and it gave us this timecode, 12:01. When we pulled up that timecode, we found it was correct. The model had found the exact moment the piece of paper is removed from the person's pocket, and it extracted text accurately.

Next, we gave it this drawing of a scene we were thinking of and asked, what is the time code when this happens? This is an example of a multimodal prompt where we combine text and image in our input. The model returned this time code, 15:34. We pulled that up and found that it was the correct scene.

Like all generative models, responses vary and won't always be perfect, But notice how we didn't have to explain what was happening in the drawing. Simple drawings like this are a good way to test if the model can find something based on just a few abstract details like it did here. These are just a couple examples of what's possible with a context window of up to 1 million multimodal tokens in Gemini 1.5 Pro.

[END PLAYBACK]

MARC WATKINS: I'll stop the video there. Hopefully, you all can hear that. If not, it is included in the resource sheet too that will be available in the chat and on the website. The big takeaway from this is what I've just done right now is served as the town crier telling you that these changes are here.

And we've all had different faculty and different professional development situations in the past year and a half since ChatGPT was released where someone was doing that. They would announce something, or they would do a lunch and learn, or you do some type of activity that would let you know what was going on. What we found is that that's not necessarily the most effective means of training faculty and building their AI literacy, so they can then go meet this example for their students and build their students literacy as well too. So we tried something a little bit different here at the University of Mississippi, and we started to establish the Mississippi AI Institute back in May of 2023.

We basically, partnered-- my department, the Department of Writing and Rhetoric, partnered with the Institute for Data Science and began funding an in-person training Institute designed to help faculty focus and explore generative AI and how that is applied AI and the context of what they teach and what their students are learning.

So it's designed to train faculty in critical AI literacy, which I'll define here in a minute, to help them navigate the changing nature of what it means to teach and students to learn in our new digital age. The Summer AI Institute was June of 2023, and we were able to train 23 faculty members in 1 and 1/2 days.

Most recently, we've gone from the Summer Institute to the recent Winter Institute in January, where we partnered with our Center for Excellence in Teaching and Learning in our Academic Innovation group, and we were able to extend that from 1 and 1/2 days to 3 full days of training, where we were able to train almost 60 faculty members in a lot of different AI topics.

So we had over 26 different people from different departments and schools in the three-day event. We talked about AI literacy basics during one day. We talked about applying different types of AI assistants, and then we looked at advanced AI frontiers. The two example videos you just saw at the beginning of this are versions of AI frontiers where the things are actually going and changing.

So the whole idea with this is it's in-person training with a Zoom follow-up. We believe that getting people together in the same room over extended periods of time from different disciplines and different points of view about generative AI is very important. We wanted people who were skeptics that were not really wanting to adopt generative AI, who wanted to try to protect their traditional teaching methods, and we wanted them

sitting across from people who are AI advocates so they can have an actual debate, a discourse about what this was doing with their fields.

We were able to provide stipends for people to attend in the summer version of it. We were able to pay 23 members $1,000 apiece for attending. They changed that a little bit in January since we went from 23 to over 60 faculty members. And we were able to secure stipends with the help of Stephen Monroe, the chair of the Department of Writing and Rhetoric to fund writing faculty to produce a deliverable related to AI and teaching. Now, these are projects where it could be something like a course policy, an activity assignment, or a publication where the teacher begins to explore how AI is impacting what they're doing with their writing students.

We have quite a few of them in the process right now, and we will eventually, hopefully, by the end of May, have a open access resource hub available showing you about all the different faculty members and what they've created from these different deliverables based off of what they're doing with their classes.

The whole point is that it's immersive, up to date, and hands-on with AI tools. We try to keep it as up to date as possible. To underscore how much of a struggle this is, from the June AI Institute to the January 1, I was only able to reuse about 20% of the curriculum that I made for the June Institute for the January 1.

I had to recreate and redesign much of the activities and assignments for that, which is obviously a challenge. But it is now an open source curriculum, and you may use it, obviously, understanding that there is that caveat that it does not have the greatest shelf life in the world. But it is a great starting point to see what is most recently available for faculty and students, and to start seeing how different fields and disciplines are incorporating AI and AI literacy into their everyday teaching.

So AI literacy, broadly defined is an offshoot and a build-out of existing media literacy. It's not anything necessarily new. We needed to know media literacy when we started going to computers and having the internet. Now, AI is just another tool that fits underneath that broad category umbrella of media literacy.

To understand AI literacy, you need to understand having the skills and competencies required to use AI technologies and applications effectively. We also hope that students develop their critical AI literacy that explores challenges with accuracy, bias, ethics, and all the different things from training data hallucinations.

I can go ahead and say that is one of the biggest challenges that we have is just making a list of all the different things we'd like to train our faculty and our students for critical literacy.

So AI and education. And this is the former Meta VP Jerome Pesenti talking about why AI literacy matters. Students are obviously adopting these systems at an unprecedented pace. If we just even talk to our faculty in our home departments right now, you could probably mention dozens, if not more, stories of students coming across different types of AI tools, sometimes trying to use that openly, oftentimes, not using that openly and not ethically.

But when we try to build AI literacy with our students, what we're really trying to do is what he's actually citing here too, is helping billions of users in case all of our students in the world. Remember, AI's limitations while using it every day is going to have to be a top priority for education. It's also going to be in most business fields as well too.

So what I'm going to show you is probably going to be upsetting, but it's important that you understand how students are running across a lot of these different types of AI tools in the world and that's through social media. And what I'm going to do is show you these tools in quick succession and show you brief clips here from TikTok, from Instagram and Snapchat, just so you can see how these students are basically being inundated with these different technologies.

And what I'm going to do is try to show how you can reframe this, if you can talk about this from a literacy standpoint and why building that literacy matters a great deal. So we're going to talk about the influencers selling AI. So we have dozens of third-party apps, and they're selling students on generative AI.

They are not from Microsoft. They are not from OpenAI's ChatGPT. They're using the OpenAI's API access and other open models to build various forms of generative AI. Most pitches from influencers on social media that students see are geared towards saving time and offloading work. Many students don't understand what AI means outside of ChatGPT, which becomes a major problem both for our students and for our faculty, which is why AI literacy matters so much. And students increasingly come across these apps all across social media.

So this is Olivia Dunne. She is an influencer. She also happens to be a student at Louisiana State University. She is the highest paid NCAA female athlete in the country right now. Her name, image, likeness, deals, gear her millions of dollars of

endorsements from different apps. And I don't know if there's audio with this clip or not to, but this is her selling Caktus AI as an influencer.

[VIDEO PLAYBACK]

- What you looking for? We got what you looking for.
- What you looking for? We got what you're looking for. What you looking for? We got what you looking for?

[END PLAYBACK]

MARC WATKINS: So again, if you're a student or anyone scrolling very quickly through your actual social media, you come across these very short little clips that try to sell you something. And I think Olivia Dunne is a good example of this, because she really does fit the mold of influencer that a lot of these companies are trying to find.

That's usually something young about the age of a college student, attractive, generally speaking, female, and also white, which is all the key factors they're looking at. Well, again, so if you can actually intervene and talk about this, there are different tools that could be actually helpful, but we want to get past that pitch that students are finding out these to actually understand

Not only can AI generate text, it can also augment reading and research. There's an app that's very popular that's going around on social media called Unridlle AI. It uses Retrieval Augmented Generation or RAG to summarize documents. It can be really helpful for a researcher or for a student to explore vast amounts of information.

It can also assist with students that have reading difficulties. It can help them form new connections and synthesize information. But unfortunately, though, it's marketed as a tool to offload close reading when you see it run across it on social media.

So this is a TikTok influencer. Her call sign is My Legal Era, and she is a former Yale undergrad student who is now a L1 law student at Berkeley. And here she is advertising Unriddle AI.

[VIDEO PLAYBACK]

- I know we hate spending hours to do research for a paper worth literally 10% of your grade, so I have a hack for you. Using Unriddle, you can upload as many documents as you want, and the AI will summarize for you. You can also ask it questions that it'll answer based on your text.

It can also simplify really complicated topics. And you can start writing your assignment directly next to your research. If you ever get stuck, you can use the Plus Plus function

to generate the next sentence, or give you ideas on what to write about. Now you can spend more time writing and editing and less reading research.
[END PLAYBACK]
MARC WATKINS: OK, yeah, that's a little bit upsetting to me, to say the least. Probably a lot upsetting to other people too.
Again, if you were a faculty member focusing on building and developing your students AI literacy, something that you could do is pause this situation and say to the student, or talk to you about this as an ad, bring it up in front of your classes, to say, look this form of retrieval augmented generation could help you with reading, but you actually have to know and have knowledge about the actual sources you're using to actually understand if the AI is being accurate.
It can hallucinate and make up facts, and you are then the one who is responsible to go through that and put that into your paper, or click Plus Plus to generate a response too. So that's why AI literacy is so important and crucial is because we want to actually put the brakes on the generative output, the speed of it, and be able to intervene with our students and talk with them.
And again, we've gone through text generation now reading and research. Well, that's not all that generative AI is being sold to our students on social media. It's also about note taking and lecture. This is an app called TurboLearn AI. It uses augmented speech recognition to capture your lecture. It can automate note taking from any number of instances, and from that it can synthesize your information to create quizzes and flashcards.
This could be an absolutely game-changing tremendous help for students. So many students that have issues with falling complex material in class, I would love to deploy this if I go to an in-person conference to actually have this. But it's got a lazy sales pitch behind it too. I've never listened to a single lecture.
[MUSIC PLAYING]

So part of the literacy we're trying to teach students is that we don't want to fully offload the skill that the AI is augmenting in this case. We want you to use this in conjunction with taking notes in conjunction with listening actively to lecture. We want you to be able to learn how to balance using these tools effectively and ethically.

And part of that is just breaking down the pitches that they're seeing from these social media companies and talking with them face to face and being honest about that these tools exist, and understanding from our own perspective as faculty members what these tools are capable of doing.

So even more interesting, there's been some new developments about using AI to scan questions. So Answers.AI is a fairly new app. It uses multimodal AI, likely GPT-Vision. I don't know if you guys are aware of GPT-Vision, but it came out about four months ago. With GPT-4's latest update, you can now take a picture of any text-based document, and the AI will then scan it and put it into the actual system as a prompt.

This means that going to in-person exams as a method of trying to stop students using AI to commit academic dishonesty is probably not going to work. But there are other problems with that too, and we'll unpack this here. Obviously, this could be tremendously helpful for students with disabilities and other learning challenges.

Again, if I'm going into an in-person conference or something and someone hands me a piece of paper, I would love to be able to scan that immediately and be able to input that into my digital notes or use it for email or something else. Unfortunately, though, as we've found with the theme so far, we get the lazy sales pitch.

[VIDEO PLAYBACK]

- This app has been a lifesaver, helping me catch up with my schoolwork since I've been out with a concussion. All you need to do with this app is just take a picture of your question, send it to the app, and use AI to get the most efficient answer.

Also, it's not just giving you the answers. This app also gives you an explanation, so it's genuinely helping me learn. It's going to help me catch up on my work. And for that one class with that one teacher that doesn't know how to teach, you know who you are, I can finally understand what you're supposed to be teaching now. And now you can too. Just download Answers AI.

[END PLAYBACK]

MARC WATKINS: Oh, boy. Lots to unpack here. Deeply upsetting for me. If I was going to talk with Ashley-- very happy that she's recovered from her concussion to make wonderful content selling stuff on TikTok, by the way.

If I was going to talk with Ashley, I would say, look, generative AI models like GPT or Google's Gemini model now too, or Microsoft's Copilot, they can be very helpful tools for

different instances, but the one that they're very bad at is math problems and math questions.

And your example here is you're actually using this to try to teach you about math, and all the comments underneath her actual TikTok video, there are dozens of students saying, I just used this and I failed my math exam. So that's again why it's important to actually try to intervene with students to and teach them about the limitations of this technology.

I think the other thing to unpack from this video too, is something that we've seen from a lot of students is there is this overwhelming feeling that they're not being served by their teachers. And I think I want to push back against that a great deal, because what we're trying to do when we look at this with our students, whether it's AI or normal subjects that we teach, we're trying to challenge our students to go past their actual-- I'm sorry, I'm having a moment myself. We're trying to stay on students to go past what is their plateau that they're reaching in their learning to go beyond this and to actually start to actually think on their own. That's a challenging thing for a lot of students. That's going to be very much so an issue. And when you have an app like generative AI in this case that can basically do that for you or provide you an answer, even if it's not the correct answer, that's very tempting to use as a way to offload labor.

So these are all moments that you can actually take and turn them into teachable moments with your students to actually help understand their AI literacy. And these tools could have good profound effect on learning too if they're used transparently and with ethical guardrails, which we'll talk about here in a few minutes.

The last example is not just students using AI or ethical issues around AI with students. It's also teachers trying to deal with this. So out of frustration, many educators are inserting Trojan horses into assignment prompts to try to catch students using AI. This is not a good idea because it's a form of deceptive assessment, and it's not ethical. And watch a brief video where the actual influencer, in this case, a teacher, explains how to do so.

[VIDEO PLAYBACK]

- If you've never heard of using a Trojan horse in your essay prompt, this might just be the trick to help you identify AI-generated essays in your classroom. On my page, I've mentioned a few different things that don't work in terms of identifying AI, but the tech

is pretty clever and can show you exactly what to look for without the use of any software or special programs.

The term Trojan horse comes from Greek mythology, and it's basically a metaphor for hiding a secret weapon to defeat your opponent. In this case, the opponent is plagiarism. Let me show you what I mean. So I split my essay prompt into two paragraphs, because I'm going to enter my Trojan horse at the end of the first paragraph.

You can write whatever you want here. Just make sure you change the font color to white and make the font size teeny tiny. So if this essay prompt is copied and pasted directly into ChatGPT, you can then just search for your Trojan horse when the essay is submitted.

[END PLAYBACK]

MARC WATKINS: Yes, so please don't do this. I know why people are doing it. It's out of frustration. It's out of fear that the students are going to be using this to cheat. But it is a deceptive assessment practice. You want to be transparent about what you are assessing students onto and not trying to trap them in that as well.

So from my perspective, AI literacy is not just important to teach this to your students about ethical frameworks for using these tools. It's also important that we own ourselves adapt to an ethical framework of putting guidelines in place to actually try to establish this with tools as well. And we'll show you some ways we can do that here in a few minutes.

So let's just do a brief recap of what we've gotten to so far, then we'll talk about developing some frameworks. We are in a period of acceleration in generative AI, especially in education. We're moving well beyond ChatGPT. We just saw how Answers AI could scan images on a piece of paper and do so for math questions or writing.

We saw that for Unreal AI too for research and reading. We've seen that from TurboLearn where it can actually capture lecture. So we are well beyond text generation and text generation technologies. Generative AI is definitely going to be moving into a lot of these different fields very quickly, and tons of developers are now using the API access from OpenAI and Google and Microsoft to build different versions of these tools.

We want students to be using these tools with transparency in mind. We want to model that transparency for them so to use that effectively, openly, and ethically. That means

we want to go ahead and start thinking about ways to do statements where we do assignments. If I use generative AI in creating assignment 2 for my students, I want to include a transparency statement to that talks about why I use generative AI and how I use generative AI.

If I used a program like ChatGPT, I want to include a link to that to shows the actual prompt that was used. And I expect my students to do the same. That sort of modeling of transparency is going to be very important going forward, because we are going to be having to teach our students how to use these tools. They're not going away. And the way to do so is with openness in mind and an ethical idea.

More to our side of the equation too for faculty, we want to make sure that we focus on thinking about different ways about professional development. We want to start thinking about if the one-off professional development that many of us have in most higher education settings is going to be effective.

From my perspective, it's probably not with generative AI. It doesn't mean that you can't go to a workshop or Zoom like this one and get some wonderful information. I think that those are all very helpful. But if we want to actually establish a framework that is forward thinking, we're going to have to go beyond these sort of skills that we're talking about today and build up a sustainable and resilient training structure for our faculty.

I'm not saying what I have with the AI Institute is there yet. It's still got its own issues there as well. But I do think it is a step in the right direction, and hopefully, others will start following, because we're going to have to start thinking strategically about what learning is going to look in the next five or 10 years.

Showing you those two videos that just were released yesterday on Thursday from OpenAI and Google, it's pretty shocking to me how quickly that we are going toward a place and time where virtually anything in our digital landscape can be either evaluated, researched by the AI, or created with different types of generative AI tools. So we are really going to have to think about what teaching and learning is going to look like much further down the road than just this simple moment right now.

So with that in mind, we're going to think about framing how to develop AI literacy. And this is how I became the director of the AI Institute for Teachers. We basically started a little bit earlier than other folks. And this article here too, which is also in the Google Doc, it just came out from Computers and Composition.

I was a co-author on the paper here with Robert Cummings and Steven Monroe. We started working with different types of text generation technology well before ChatGPT was actually released. We actually started working with it in August of 2022, four months beforehand.

And we came together as a team in May of that year. We had our freak out moment because we had a colleague of mine who was using an earlier version of the technology called GPT-3. And there was an app called Jasper AI, which was one of the very first OpenAPI users of it.

And I ran across that in May of that year and started bringing my laptop to every meeting I could to show faculty what was going on. And their reaction is much like our own reaction when we saw ChatGPT many months later. We were able to start a little bit earlier. We were able to come together and create a good team here at our university to start IRB-level research about what these tools do to students.

So we've now used it for three solid semesters. This is the fourth one we're in right now. And data from over 80,000 words of student reflection so far suggests that students are very cautious adopters of generative AI, even when you give them solid framework, when you give them permission to use this within their actual assignment.

So it's not like the world of the influencers I just saw you. You guys can calm down. It's not everyone is going to be doing this. That's because the skills that we learn are not always easily offloaded completely to generative AI technologies. But we want to start thinking about what these new tools can do to help them within their process of learning and think about what that means as we go forward.

One of the ways we looked at was thinking about different interfaces. I'm going to show you an interface in just a few minutes that's also LinkedIn the Google Doc that you all will be able to explore if you sign up too and think about if more humanistic interfaces are better than just chatbot interfaces exploring generative AI.

With this in mind, we hope this can demystify the tool and help build students' generative AI literacy. So we didn't just jump into this and throw the tools into students hands. We really did come together for quite a few meetings and think about developing a process or a praxis of integrating these tools effectively so that they supported our students learning outcomes.

Bob Cummings, who is a co-author of our paper too came up with the D.E.E.R. praxis. And I'll briefly show you what this is. The D talks about clearly defining the stages of the

project and enumerating each stages purpose and achieving a student learning outcome. That project could be a full essay.

It could be an entry where they go into a brainstorming assignment, where they generate several different counterarguments, and they start writing organically counterarguments on their own to and they're comparing them to each other. What we're doing is starting to think about what we want from the tool, and what we want from the learning experience before we just launch into the actual tool itself.

So for each stage, we want to evaluate a specific generative AI technology to pair that with a learning activity. That really is a little bit of a challenge, because even back in the day when we were trying to set this up before ChatGPT, there were dozens upon dozens of third party apps that were trying to establish different types of interfaces.

But those interface designs and what the actual generative technology can do is more important than anything else to the actual students learning outcome than the type of model that they're using. And we'll explore that here in a minute when I show you the tool.

But after we set up the phase where we define what we want our students to explore, we want them to then evaluate it. We then want them to go ahead and explore using that specific generative technology for that stage. And there's our student learning outcomes and for their actual project.

And then we get to the most important phase is the reflection phase. We want to provide students lots of space to reflect on what this is doing to their learning, what it's doing to their writing process, what it's doing for other skills that we're having them look at too. So this is our define, evaluate, explore and reflection praxis and a little bit more of an explanation about why reflection is so important.

So for the D.E.E.R. praxis to be essential in this, and several levels for engaging emerging writing technologies, writers want to understand why the tool from their perspective, that's utility and reaching the goals of the writing project. If the writing task was brainstorming, did the tool introduce new ideas that challenged the writer's thinking by providing counterarguments? Did the tool help the writer place ideas in the context of conversation with other ideas?

There are going to be goals for that writing project that we, obviously, don't necessarily want AI to be impacted with too. So we want to think about that when we design this D.E.E.R praxis about what skills we want students to explore with AI, what skills we

want them to keep organically that's not defined by technology,
and giving students the space to reflect on that is going to be crucially important to them.
So what I'm going to do is I'm going to go ahead and share with you a tool, one interface that we've been using. There's lots of different interfaces out there too. And really what we're going to do is show you a test drive of how you can establish some guardrails and boundaries and introduce this interface with your students.
And that interface is called Lex.page. And it's a writing processor program. It looks a lot like Google Docs, but it has generative AI baked into it. So what I'm going to do is I'm going to share my screen here one more time. All right. So this is also linked here. It's the "Introduction to Lex, an AI-powered Writing Assistant." It's also released under CC by essay license, so you can reuse and remix this as you like.
Lex has lots of cool features to help students and help with their writing to think about. And what I do this is the guideline that I hand to my students and that we developed as faculty, and it comes up with some different tutorials, which I will show you all these things in just a second. But most importantly, before we go into the tool itself, we have some guidelines, some policy to talk about with students.
You have to come up, and you have to say to your students too when you're designing this for, what you think is going to be acceptable, what do you think you're going to allow with maybe some certain attribution, and what you're going to think is not going to be acceptable. And you're going to have to explain that to your students very clearly.
And hopefully, if you pick a good interface like Lex, it's going to have some built in tools that will help you enforce some of those things.
So for me, what was acceptable for this tool that we're talking about for our students is that they can use it to augment their writing process with AI but not replace it. They can use AI to help them brainstorm, check their grammar, spelling. They can also generate some feedback. That is, it's contentious in some ways too. We'll talk about that.
They can explore different counterarguments to their ideas, and they can use AI to help them revise. If they want to use it as a writing system, they can do so, but they need to properly attribute what was generated by AI to so they can keep track of it to begin reflecting on it. The nice thing about Lex is it actually has a built-in feature that will track what was generated by AI from the program itself. And I'll show you how that works here in just a minute.

What I absolutely is not acceptable, though, and you have to make this clear to students, is that you cannot use Lex or any other AI tool to generate portions of your writing without acknowledgment or attribution. You can't use AI to offload the recursive process of writing, and you cannot uncritically adopt an AI tool or technique without reflection.

Again, the D.E.E.R. Practice is all about reflecting about what this is doing to your process. Is it helping you? Is it hindering you? And we have some ways that they can identify both through the MLA and APA guidelines. And there's also the built-in feature within Lex itself. But it's important to always have students look at reflection to and guide them along.

And I always give them different types of reflective questions once they get done to submit assignment. I generally do this holistically after they get done with a major project. We do lots of snap reflections in our classes.

So if I'm teaching in-person, generally speaking, the last 5 minutes of class, I tell my students to either pull open their laptops and open up a journal entry on Blackboard, or if they're writing by hand, I want them to write about the next 5 minutes or so of class of just what they learned.

And those snap reflections are not AI proof, but it's very difficult for students in that time frame to go into generative AI and try to make it sound like themselves and also trying to talk about what they just learned in class. So it's a lot easier for them just to do this.

In mixing different types of reflection too, we not only have those snap reflections. We go into much more detailed, in-depth reflections that ask students to write 400, 500 words about a major essay project, or other type of project they're working on that they might be spending several weeks, and then they would submit these questions too if they use generative AI, they use generative AI.

So this is just the framework too. It is there and available for you all to look at and think about. Let's look at Lex, though, and show you what this looks like in practice. So I already have this pulled up here from Lex. This is my test piece on AI literacy that I keep around with me. And Lex is just like a normal Google document. You write in it normally as you would. It has lots of similar features, but there are some AI features built into it as well too be aware of.

Some of the most simple ones are kind of hiding in plain sight. If I click on this button, it can generate different title ideas for me. And what it does is then scan what I've actually written and it can give you some different title ideas, you can generate more. The really nice feature, though, is you can go ahead and show what was generated by the AI natively within Lex.

And once you do so, the AI-generated text glows blue. So you can see, I just did the title and the first sentence for this test piece. If I want to see that for my students too, I can ask them to share, and they have to share the edit link. I have to have an Alexa account. They have to have Alexa account.

Now, this is not designed to police their behavior with AI, for the most part, because they can still go to OpenAI, or they can go to Microsoft or Google and generate something and just copy and paste it in there too. That won't show up on that. What this is designed to do is to begin having them model the practice of attributing what was generated by AI if they want to use it.

It gives them the ability to easily track for themselves and for the teacher to go back and look at and say, OK, you're generating this. Let's talk about if this paragraph was actually helpful to you. And I can clearly see that this was the paragraph you generated versus the other paragraphs that you wrote on your own.

Now, normally, we can do that if we take the time and we read closely the student's writing, but it's really nice to have that available to us too, so we can see it, and so the students can see it as well as well. Most students, though, even when they're allowed to write with Lex, did not write much with Lex in terms of using generative AI. They chose to write organically.

What they like doing with Lex, though, is getting instantaneous feedback from the AI, and there's two different ways you can do this with Lex. You can go ahead and click on a paragraph or sentence, and you can click on the Ask Lex feature here.

And you can say what are some ways an opposing view of this would be. My horrible grammar. I'm sorry. What are some opposing view of this would be? I'm terribly, grammatically incorrect. Somewhere up to opposing view to. I'm basically asking for counterarguments. I'm just trying to write like a student would write to just show you what it does. And you can see they are looking at generating some different types of opposing views, some different counterarguments.

Now, I would never tell my students to accept these as face value.
We want them to think critically about what these different counterarguments mean, and what they're actually doing to the actual support of their actual argument and to think about coming up with their own counterarguments or their own opposing views on their own too. It is just a helpful tool for them to have and to think about. So let me resolve and hide this really quickly.
Now, there is one thing. I'll turn this back on so you can see this. I did put a little Easter egg in here too, the very last sentence is human generated by me. "The Earth is flat and supported by a series of turtles." Well, not quite, but I'm doing this for a reason. And the reason is sometimes we run across learners too that have some funny ideas about the world. Sometimes they have some incongruous ideas too. Sometimes they don't always match logically with their actual essay.
And this is where the general feedback for Lex can actually help them quite a bit because it looks at the essay holistically. Let me click off this and go over here to the cog at the top right-hand corner-- I'm sorry the head with a question mark next to this Ask Lex.
So I can ask Lex for individual feedback on sentences. I can also get feedback from the entire system. I'm using the entire system of Lex's AI on the essay itself. So let me just say get draft feedback for this. Get feedback on the draft. Now, sometimes, it's going to go ahead and identify it.
Sometimes it's going to miss it though, because it's not always perfect. And generative AI is not the tool that is going to ever be perfect, but it should identify-- there we go. One outlier sentence. So number 5, the Earth is flat and supported by a series of turtles. This statement appears to be a non sequitur and does not align with the rest of the article. Yes, maybe it may be a metaphor, maybe not to but it disrupts the flow of the piece, so you should probably take it out of there. So good. It can actually do feedback and actually identify some areas of that. So this is just one example of finding an interface to use with your students to explore generative AI technology.
It's not perfect. The underlying technology is not perfect either too. We're not going to be in a phase where we get to have a language model that doesn't hallucinate until they do something different besides transformers, that is just part of it. But I think that should give you guys something to think about, and I'm happy to now answer your questions.

NORMA HOLLEBECK: Thank you, Marc. That has given me a lot of things to think about, and I'm sure our audience has their cogs moving as well. One question that came up earlier when you were talking about the unethical use of those poisoning prompts and everything, the question has to do with if you look at that in action, and someone in our audience has seen this in action where the teacher used it to show the students the dangers of lazy AI and the use of lazy AI.

It wasn't in an actual assignment. So the question is, would that still be considered unethical if you're using it to show the students the dangers of lazy AI, as opposed to actually using it as a poison prompt?

MARC WATKINS: No, no, no. If you're modeling this and you're telling them, look, this is what the danger of lazy AI is, I'm not going to do this with you, but other professors can. Your boss can do this to you too going forward too. That's not unethical. From my perspective, it's unethical to adopt that and try to do that. But explaining that to them, that's never unethical. That's perfectly fine too.

And that's something that I've done with my own students, and we've talked about before too that now that this technology is readily available to everyone, that there are going to be people who are very much so adopters of it, and other people who do not want to deal with it. And that will try to tell faculty or students or your employer or employee that you cannot use this technology, and that is one of the means that they might try to do so.

NORMA HOLLEBECK: OK, Looking at using these generative AI apps, could you take it out of the writing and rhetoric perspective and put it into the scientific community, and consider commenting on the use of AI to write reviews of scientific literature for a given research area?

MARC WATKINS: So that's a great question. And a lot of different journals, I think, Nature's come out with some different guidelines to are trying to focus on developing guidelines to help researchers and scientists actually explore this.

Meta in November of 2022, put out a specific tool for researchers called Galactica, which was their own language model that was designed to help researchers write literature reviews and research papers. What they found within three days, and they pulled it within three days, is that researchers were finding out that you could make the model say anything. Again, it would be very authoritative sounding, but completely wrong.

I think one of the famous examples was that a researcher used it to produce a lit review about the benefits of eating ground glass on digestion, and put that onto Meta's Facebook-- Meta's Twitter feed too and saying that this does not appear to be safe.

Regardless of what tools we're using, and there are some really great scientific tools out there too. AlphaFold, which is one of the great protein folding tools that have been out there to using different types of machine learning and AI. But if you're going to use this from a scientific perspective, especially generative AI, you ultimately, have to be the one that takes responsibility for what you put into the paper.

If you are using your own words, someone else's words, or a generative AI's word, you are ultimately going to have to be the one that accepts responsibility for the truthfulness of that, the bias of it, or if there's any material in there too that could be plagiarized.

NORMA HOLLEBECK: Now there is a question. And one of the things that we always do look at is, do no harm with your students. And a lot of that also resides in what kind of data is being gathered. So what does Lex do with student data or writing that is input to the app?

The question comes in that our attendee knows that it's common concern around other tools like ChatGPT. Does Lex also come up with those kind of issues, and does it come up in conversations with your students?

MARC WATKINS: It does. And I know the developer he is trying to be as open and ethical as he can be. It's incredibly challenging to do this. We have various data agreements with Microsoft on the University of Mississippi campus right now.

One of those is for faculty to be able to use their version of GPT-4 called Copilot underneath their enterprise data protection plan. They have told us that anything we input into it, they do not have eyes on, and it is capable of handling sensitive data.

My perspective and what I tell my students, what I tell any faculty member is that you do not want to be putting anything in these systems that you do not feel comfortable with someone else knowing about the world too. It doesn't matter what they're telling you. It's just too opaque.

We've had issues before in the past too with various vendors where we've adopted different types of plagiarism detection software that have been problematic before too of retaining different types of student data. So we want to be careful. We want to be

cautious. We want to be exploring this. And we absolutely don't want our students to dive headfirst into this.

But we also want to be as honest as we can be. They are running across these tools in the wild. When I tell my students, it's like, OK, how many of you have a ChatGPT account? Half of them raise their hands. When I tell them what other AI accounts you have too? The other half raise their hands.

So we really do have to be thoughtful about this. I do think there are some universities that are moving ahead with their own versions of the tools, and they're going to have that behind specific servers that are housed on their campuses so that they can maintain FERPA and other types of educational data privacy. We're just moving so quickly. It just takes so much time to do this.

NORMA HOLLEBECK: Another question regarding Lex, specifically, would you not consider the use of Lex as a way of defeating the purpose of the student going out and actually conducting their own research through the school library or internet? It feels like it provides the student less opportunity to truly learn the topic.

MARC WATKINS: I think that's a great point, and I think that's the contentious moment that we're in. Lex is one version of that where I have some controls and guidelines. I can tell my students to that for this assignment, I'm requiring you to write your first draft and get all of your research on your own.

And from my perspective, 80% of the thinking process happens in that drafting phase. They're getting the research they're doing. If you want to then use Lex to give yourself feedback, if you want to use Lex to help you with editing and grammar, by all means, do that.

But the reason why I'm showing you Lex is that as imperfect as it is, and it is imperfect, it just gives you some guardrails that you can actually explore with it through a humanistic interface of writing. With ChatGPT, it's just a chatbot. All it's going to do is generate an answer.

And part of that time, that answer is going to be correct, part of the time, it's going to be completely incorrect. This actually allows students agency and control about what generative features they want to use, and frankly, what generative features they don't want to use.

NORMA HOLLEBECK: A question on a little bit different path. You were mentioning at the beginning, talking about the professional development opportunities there at

University of Mississippi and how you all felt you needed to embrace it early on. Our partner organization, WCET, has issued a framework for AI policy in institutions of higher Ed, which includes a bill of rights for educators that includes the right to professional development on AI.

So obviously, you're an advocate for this, but do you agree that institutions are obligated to train faculty and students on the various aspects of AI?

MARC WATKINS: Well, obligation is a little bit of a challenging term. I absolutely think everyone should be training their students to understand what the real world is going to look like, what faculty are too.

My point of view on that-- and I do not represent the University of Mississippi, and this is just Marc Watkins telling you his point of view. I have to caveat this-- is that every institution that wants to adopt AI or has the impact of AI on their workflows, whether it's educational institution or something else out there in the world, owes their workers the ability to train them and to create a conversation with them too.

All too often, that training has been, well, here's an asynchronous course we can do in an hour or something else. And what I just tried to show you with this presentation too is how that's not going to be effective.

We need to start communities of practice that come together several times a year and talk about this and think about how it's going to be impactful for what we are doing with our jobs in education, and how this is going to influence our students skills now, and the students skills five, 10 years down the road.

NORMA HOLLEBECK: So if you had a 30-second elevator pitch call to action for institutions regarding AI, what would it be?

MARC WATKINS: Revamp your professional development and talk to your faculty about what they need. Don't just go to policy conversations. Go to the fact that this is going to be an ongoing thing that's going to happen in their world. And faculty are going to need sustained support and engagement too from the university to do this.

So more professional development for all. Also more involving students in these conversations too and getting their actual input too about what they would like to know. Every single one of my students has asked me, what should I do with this? What's the point? What's the ethical? What is my boss going to ask me to do with this? Am I going to have a job five years from now? They're asking these questions. They're thinking about this. They have every right to be in this conversation as well too.

NORMA HOLLEBECK: Well, we thank you. Time has run down on this, and I know that we could have this conversation for several more hours. So, Marc, we appreciate all of this. This was really down in the area of tactical stuff that I know our audience was asking for in the past.

I think this was really relevant to what's going on today and very helpful. And we hope to bring you back to tell us what's going to happen in six or eight months and find out what's going on. Like you said, it turns around so quickly. It's a challenge.

So thank you very much to Marc Watkins for his time and energy and for such an exhilarating experience today. For our audience, we do ask that you take a few minutes out to complete the survey for today's presentation using the link that we are posting in the chat for you. If you've got something else going on immediately after, don't worry about it. We'll send you the link to the survey in a follow through email that you should get in the next day or two.

We have one more webinar in the Strategies for Success series, so I'd like to encourage you to join us for that last webinar where we will have a student panel discussing their thoughts and experience with AI. And actually, a couple of the students come from University of Mississippi.

So you'll get to hear that perspective in harmony with what Marc was presenting to us today. Finally, I'd like to tell you about our upcoming webinar series, Putting Equity into Practice, March 14 through April 4. We will be offering a digital badge to those of you who attend three of the four sessions. And if you want registration information, please visit our workshop section of our website.

We also encourage you to visit the Every Learner Everywhere website and our resources page, where all of our resources are free to download. Either read them online or download them at your leisure, and they are there for your benefit.

So with that, I would like to thank Marc Watkins for being here today for such an exciting experience. And I'd also like to thank our attendees for participating in today's webinar. We look forward to seeing you next week for another exhilarating conversation. Have a wonderful day, and thank you very much.