

Streamline Your Teaching and Workload with Artificial Intelligence

SPEAKERS Michael Strawser, Jean Mandernach, Jeremy Caplan, Tierney King

Tierney King 00:01

This is the Faculty Focus Live podcast sponsored by the Teaching Professor Conference. This year, join us in New Orleans from June 7th through the 9th, where you'll collaborate with other educators, gain innovative teaching solutions, and hear bold ideas from some of higher ed's most respected voices. I'm your host, Tierney King, and I'm here to bring you inspiration, energy and creative strategies that you can utilize in your everyday teaching. We are back on the conversation of artificial intelligence since we're seeing AI being used more and more in our everyday lives. In this episode, we dive into how AI can offer assistance to faculty overwhelmed by escalating workloads. We'll explore the practical applications of AI in higher education, from enhancing teaching practices, drafting course materials, and helping assess student learning. Additionally, don't forget to check out the recommended resources where you'll find AI programs, articles, and more to kickstart your AI journey. To start, Michael Strawser talks about how you can use AI to maximize time management and streamline your workload.

Michael Strawser 01:05

The reality, though, is that we've all probably been using artificial intelligence, whether we realize it or not for at least a decade, if not longer, in some capacity. So when Magna approached me about doing a potential AI session, I said, "Yeah, absolutely, I've got a couple different ideas." I'm not by any means an artificial intelligence expert. I'm not even a software expert related to kind of the practicalities of how all of these different kind of platforms speak to themselves, speak to each other, and then also generate content. But I'm going to share just some baseline information with you just about AI and kind of what it looks like. And then some bigger picture things that I do to kind of help save myself a little bit of time as a faculty member in terms of how I use the platform. But my heartbeat, what I what I think about, what I write about, what I talk about a lot is communication. And so I honestly see all of these different artificial intelligence tools as just very specifically just tools that we can use to more effectively communicate with our students, and hopefully to more effectively become better teachers. But also, as I'm going to talk to you about a little bit today, just kind of expanding that idea of the role of the faculty member, and kind of how we can use AI in that capacity. I think it's important that we each kind of identify a what is our why as we're participating in this particular session. And I think that everybody's y is going to be a little bit different. So I already share with you Hey, I started using these tools not because I thought that they were earth shattering or groundbreaking or volcanic but because I'm

looking at it going, oh, you know what, I think these can help me with some menial tasks, or some tasks that maybe require some more creative thinking, where I need to brainstorm and do some different things. And so it's worth it for me to learn how to do these things on the forefront so that it will save me time, kind of big picture, right? And then the long run. There are three generative AI tools though that I don't foresee going away, right so the first is chat GPT. The second is Bings version, which is called copilot. I'm actually going to show you some examples of prompts today that come from copilot and then Google Gemini, which used to be kind of underneath this auspice of Google Bard. So these are these are tools. These are systems platforms that are not necessarily going away. Al can help us clarify learning objectives, course descriptions, assessment game plan. So big picture, it can really help us think about our courses as a whole. And really help us think about kind of very practically, what does it look like for me to use this as almost like a virtual teaching assistant, right? So for me, I've used it in the past legitimately for lesson planning, where I'm looking at, you know, an hour and 15, two and a half hour, even a three hour course and saying, "Alright, here's my course, here's what I'm trying to accomplish. I need to brainstorm some different activities, so that we're actually doing things as opposed to just me lecturing, right?" But I've used it for rubrics, which I'm going to show you here in just a minute, and then even synthesizing content at times. So if there's even a textbook chapter, where I'm going, "Man, I would really love to be able to get this to my students in a paragraph or two." That doesn't negate the fact that they need to read but at least synthesizes and provides them kind of with a good overview or summary. I'll use it for that, right? Again, I'm editing, I'm trying to figure out very practically, what does it look like for me to kind of use these things effectively, but I've used it for that. Now, from a teaching perspective, I also like to incorporate low stakes testing using AI. So and this I think, kind of dovetails also into assessment, bigger picture. So it can really help you at least provide a starting point for writing. And I'm gonna hesitate even to use the word good right now. But for writing better questions, maybe then we currently write on our exams or quizzes. And one thing that's interesting with this is that a lot of us probably have not been trained how to write multiple choice questions in a way that is some kind of research-driven in terms of how they are supposed to be written. So a lot of us are kind of grasping at straws here. And what I've used it for is to help me generate different types of questions. So I'll, you know, feed it some content and say, "Look, I need three multiple choice questions, I need two short answer questions, and I need for multiple answer questions where we can have more than one correct answer. And then three true or false for this particular content. It's a great starting point to think about questions that are related to the content. Now, you always have to be aware of this because generative AI feeds on itself. So what I mean by that is the moment that you enter content into generative AI platforms, it it consumes it, right, it becomes it becomes that particular platforms. So I would encourage you, like I'm saying this in part as a disclaimer, but also in part as just kind of a encouraging you to think practically about kind of how you handle AI in general, beware of copyright elements. I'm not just going to very literally copy and paste a textbook chapter and feed it into open AI. And say, I want you to, you know, take all of this and summarize it, like I'm gonna paraphrase it into my own words first and allow it to then kind of think about some different things. I would say the same thing with testing. I'm not encouraging you to just take content that is it, you know, behind a paywall, and inserting in there and having it pop out these low stakes items, I think you just need to be careful of that and be aware. I've also had it helped me with recommendation letters a lot, a lot, a lot. And then also just either job search or kind of even helping my students, which I consider to be like a service helping my students kind of look through a lot of different job search documents and finding commonalities and then tailoring their materials to these

different jobs that they're trying to apply for. "I'm writing a recommendation letter for a student who's applying for a position in public relations, I need a framework for a letter letter that focuses on PR and communication skills." Now, when a student asks me to write a recommendation letter, and I'm at USC, right, some of my classes are 300 to 400. I have colleagues with 1200 students in their classes who are getting asked to do a recommendation letter. We don't know all of our students in depth. So I usually say "Hey, send me a copy of the job description and your resume." Usually what I do, I take out their names from the resume. But will insert different, like job duties that they've had insert the job description, and then I'll ask Copilot to craft a recommendation letter for me. And then I go in and try to personalize it a little bit. Now, here's what's interesting. Let me go back here for just a second. So this is the first thing that it spit out, right? And it's very like you can tell it's just very robotic. So I asked, "Hey, make it more of a narrative. No bullet points." Certainly, let's see we can do. And usually what I like, I don't insert the student's name. I usually wait to put that like on my actual Word doc. But here, I asked it to be more narrative. And it didn't do exactly what I wanted it to do. I wanted to show you that because again, prompt matters. So I gave it two different prompts and even told it, hey, I want it to be a little bit more of a narrative. And it still gave me this bullet point list, which when our students kind of submit something, and they're cheating, this tends to be kind of what it looks like a little bit. And this is part of what helps us know that it came directly from chat GBT. So again, just be careful of how you're asking it to do what you want. And you know, fair warning, be careful of copyright. But also be careful to not insert personal data, right. I've also used different tools for scheduling Calendly as one but you know, Doodle poll, all these different things, minute taking in meetings, Otter AI is a great one for that. And then action item tracking and committee meetings to so that we don't just feel like we're constantly spinning our wheels in terms of having the same conversation over and over again. So collectively, it can help your committees hopefully be a little bit more efficient.

Tierney King 08:58

So we've covered some of the ways AI can be used as a time saver, but it can also kickstart the creative process when you draft your course materials. Here Jeremy Caplan discusses how AI can be used to help in lesson planning, question generation and syllabus creation.

Jeremy Caplan 09:15

A second thing you can use the AI for, in addition to a lesson plan, let's say is to generate questions, discussion questions. These could also be assessment questions or check for understanding kinds of questions or discussions about comparing things. These can be a list of a long list of questions that have been generated for you. And then you pick the ones that are most relevant for you or that feel right and you adapt them, you edit them, you customize them, you make them your own, you can use the AI to generate a rubric for you. So if you are going to be evaluating something or if you want students to know the key criteria you're using when evaluating assessment, you can tell the the AI and your prompt, what characteristics of this assignment are most important to you, and what aspects you're going to be evaluating the spelling and grammar, whether you're going to be evaluating the originality of the ideas, the creativity of the ideas, the thoroughness of the thinking, whatever it is that you're evaluating, you can essentially say that in words in a sentence or two, and ask the AI to provide you this rubric in a table format of or whatever other format you want. And then you can adapt that, edit that - the advantage of using the AI for that is it's saving you that initial drafting time. So it's taking your

raw ideas and thoughts and turning them into an initial rough draft that you then as the educator can customize and refine, you can also use the AI to generate a draft of your syllabus. When I'm thinking about a new course, or teaching a different version of a course, I might give the AI a little bit of some of the material that I have, as examples and say generate an updated syllabus based on this subject matter but can make it designed for just a three week class or a five week class. And give me the week by week breakdown of what we're covering that week. And the summary information of the topics or whatever detailed prompting, I want to give it and I can get a starter syllabus that I then iterate on, edit myself improve, add to and build upon. As I'm developing a new course or a new format, I can use this also to help me specify or strengthen learning outcomes within the syllabus. So I can say here's the learning outcomes as I've currently written them, please give me a stronger version of these using more active verbs sharpening the language of these verbs using Bloom's taxonomy or whatever kind of instruction, then it understands those terms that understands that idea, and will give you alternatives, you can even say give me three different ways of writing these three learning outcomes. And then you can pick the one that's most relevant for you refine that, adjust it, and humanize it for your students. And to match your own objectives. You can use the AI to give you all kinds of ideas for creative assessments, whether you want to create an assessment that has students critiquing an AI generated set of materials, so you can create assessments that the AI will suggest that proposes different debates where students will take different sides, you can have the AI generate an assessment, where the students are asked to teach one another something, or to annotate something or to document some kind of work. You can really use the AI to come up with lots of possible assessment ideas, and lots of possible guiz guestions, lots of possible assignments, and you can then choose among those one that makes sense to you and refine it, adapt it improve upon it.

Tierney King 12:37

Lastly, we'll talk about how you can use AI to assess student learning and understanding. Jean Mandernach talks about how students can have a dialogue with AI, and how AI can be used for concept mapping.

Jean Mandernach 12:49

How can you take these ideas and adapt them and tweak them to really start to embrace AI to assess students thinking? So the first idea, is just a problem solving dialogue. And this really does rest on conversational analysis. In an ideal world, imagine if you could just sit down with your student and say, I'm going to give you this problem. Let's talk about it. I want you to share your ideas, I wouldn't reflect on those ideas. I'm going to ask questions, I'm going to follow up with other ideas. And I just want to go back and forth. And I want to see if you understand the material. Now if we don't have very many students, we could actually just do that. And oral assessments are not new. In a small enough class and in the right environment, we can do an oral assessment. AI lets us do this with larger classes. So now you can actually tell your students I want you to go to whichever generative AI program it is that you prefer. Bard, Bing chatGPT, it doesn't really matter the AI program. And you could start students with the prompt and say students, I want you to interact and you're going to start with this prompt. And it could be a problem. It could be a hypothetical situation, it could be a challenge that they're facing right now. And your discipline will tell students, here's the question you're going to start with. And I just want you to interact and go back and forth. Now to set up that AI interaction. You're going to want to tell the generative AI what you're doing. So you would say I want you to simulate a simulate a dialogue with

this student that allows them to show their understanding, to pivot to interact to answer questions, and to adjust in a conversational manner. How AI that and then posed the problem. Now, when you're assigning this to students, you're simply going to give students that big prompt, and you're gonna say, here's the prompt that's going to set the stage for that generative AI program. And then here's the question that you're going to kick off the dialogue with. And then rather than having students write about their experience, you can simply have them copy and paste the dialogue. Or if you're in ChatGPT, there's a little button that you can say share this chat, and they can submit the chat. And now you can look through and see where their questions how did they respond? Were they accurate in their understanding, you can assess the ongoing dialogue. Another idea is just using AI for concept mapping. Oftentimes in psychology, that's my discipline, I want to see if students understand how the different ideas and theories connect together. Historically, we've had them do a literature review, I asked them go out and get the literature, bring it together, organize it by themes and write it up. Well, as we've already discussed, those that are good writers are probably going to do this task much more effectively than those that aren't. Concept mapping focuses on the same cognitive task. And you bring all these different pieces of information together and organize them by themes so that you can see where are the gaps? Where are the trends, what is happening? So again, you can set up an AI prompt that says. Ask me the questions to help assemble how we can see the trends and themes that are emerging. For the output you could possibly have students submit the final concept map, or you could even have them submit the dialogue the prompts that they use the themes that they enter, or even both goal is can you see how students are connecting information and how they're bringing that together?

Tierney King 16:20

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