

Episode 082: A.I. and You

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New teaching tool or machine menace? ChatGPT and other A.I.-generated content services have been in the hot topic of discussion in academia in the start of 2023. Our director of scholarly teaching, Dr. Jennifer Friberg, and our coordinator for scholarly teaching, David Giovagnoli, weigh in. We explore strategies for instructors looking to spot A.I.-generated materials in students' work. We also unpack how it works, its strengths and (at least for now) weaknesses, and how teachers can get ahead of the game by making use of these services in their teaching, now.

Transcript

JIM: Hi there. I'm Jim.

JEN: I'm Jen.

DAVID: And I'm David.

JIM: Let's Talk Teaching

JIM: Welcome to Let's Talk Teaching, a podcast from the Center for Integrated Professional Development here at Illinois State University. I'm Jim Gee. Today we are going to talk about something that has been the talk of academia on Twitter and a lot of channels of communication over the last few weeks. We're recording this at the beginning of 2023. So over the winter holidays, there was a lot of talk about a service called Chat GPT and in general, AI, or artificial intelligence, generated content that students are using, perhaps, to complete their work. So joining me to talk about this today, because it's been something that's been very top of mind here at our center the last couple of days as we prepare to help faculty teach in the spring of 2023, David Giovagnoli is our Program Coordinator for Scholarly Teaching and Learning. Also joining me Dr. Jennifer Friberg, who is our Director of Scholarly Teaching and also holds the Cross-Endowed Chair in the Scholarship of Teaching and Learning. So I want to get in and define terms a little bit more. But Jen, I wanted to start with you. What we're talking about is an online service that students can go through, or they can use an app to go through to it and they can ask a question, and it generates not just a list of search results, but it actually generates knowledge.

JEN: Content.

JIM: Content. We're probably going to be talking for the most part in terms of like text that it would generate or mathematical equations or something like that. But it also, you know, it can generate images and other media and stuff to. What is the impact that this could have? Why are people worried about this in terms of teaching and student learning?

JEN: Well, I think that ultimately, course instructors are concerned about students learning through doing and if students are able to go to a site and enter a search query such as, could you give me an outline for a paper about the Gettysburg Address, and then 30 seconds later, that outline is present, it takes away the ability of students to go and find the information that or takes away the opportunity for students to go find that

information and create the outline on their own. And so I think what it does is it forces instructors to have to really think about what they want their students to do and what the best ways to accomplish those ends might be. And I think that's sort of where the tension is right now. The technology is here, it's not going away. So what do we do with it now that this capability exists for students to ask questions about coding or math or, you know, content that's, you know, more text based, as you said.

JIM: David, we were talking before we started recording that it's a new technology in this particular case, but it's not a new phenomenon that teachers have run into.

DAVID: No, exactly. I think about lots of other things that have, you know, come into existence that we've had to sort of cope with as teachers. There's a project at the University of Calgary by Dr. Sarah Eaton. And in an interview with CBC, Calgary, she said, "We need to teach students to engage in AI, and teach them how to learn ethically." And I think that's a similar thing with Wikipedia, like, do you consult Wikipedia to find references? Yes. Do you grab its text and put it into your paper and say, I'm quoting Wikipedia? No, or plagiarized? You don't do that either.

JIM: Yeah.

DAVID: And so this is just another one of those tools. I think another issue with AI so far is that it doesn't give you a confidence factor when it gives you an answer. And so it will be fully wrong and give you an answer and give you no clues that it might be wrong.

JIM: Right. And part of the danger there is that someone who isn't versed in critical thinking, because it will give you an answer that factually may be wrong, but it actually sounds fairly credible on the surface. It has a sort of narrative fidelity to it, even though the facts are completely wrong.

DAVID: Right. We were testing it with math problems with our colleague, Vicki Bush, a few days ago. And on the one hand, some of the services would give different answers to the same question on repeated attempts, which is problematic with math. But a few times it would give the correct answer and then even explain the order of operations rule correctly. But then when it showed its work, it didn't follow the steps correctly. And so if you're trying to learn use it to learn how to do a kind of problem. It might lead you down the wrong path. And I actually asked it, "Can you do your homework? Can you do my homework for me?" And it said, "No, but I can help you find resources" and then I put them on well, that problems solve

JIM: Them. So yeah, that's interesting. Well, I'm glad you both have had a chance to kind of explore this thing a little bit. I'm reminded of because we had also talked before we were recording today about well, calculators what happened when calculators were available? And I remember being a high school student at that time when the digital watch was kind of the new thing and making sure that you know my math teachers in high school looking at my wrist to make sure that wasn't a calculator watch I had like I was gonna surreptitiously type in. With my with my old man eyesight nowadays, I can't even imagine seeing those numbers.

DAVID: Wolfram Alpha is a tool that I knew about. But I wasn't super familiar with until I was talking with Vicki about it. And it can solve equations too. It doesn't show its work. And yeah, and that's cool. It's been around for a while. And math has figured out how to handle it. But there are affordances and limitations with every new technology.

JIM: Right. And I certainly want to touch a little bit more on what you can do with AI with your students or AI generated content or content generators, I should say, with your students a little bit. And that may be something we explore more I've seen more articles just today come out about teaching with AI. But let's kind of go back because I think Jen, a lot of people's first instinct is that this is something that is going to require a little bit more on the policing side of teaching. And that's my phrase, that's no one else's phrase. But a little bit more of the how do we lock this down? How do we prevent them from act from engaging in this behavior? So could you talk a little bit about that, and then maybe also, the three of us, we can talk a little bit about a little bit more about how do you detect this kind of work?

JEN: Sure. I think that is the temptation, right, is to think about it as how can I lock this down. And going back to a point that I made earlier, and David just alluded to, you know, the technology now exists, and it's going to be very hard to walk that back. And so I would argue moreso how could we use the technology to enhance what we're doing and work with the AI rather than against the AI, I suppose. Certainly, we have some suggestions. And you know, we can go through those on ways you can mitigate the use or, you know, lessen the likelihood of use of AI type platforms. But I think there are ways that you could use AI with your students in low stakes ways that end up building on their learning over time.

JIM: And no, I think that's- I think that's a really good point. And as you're talking about AI, and you keep using the phrase AI, I think we also run into a little bit of a cultural thing, in that we probably are giving a little too much credit to these. Maybe our students certainly are because they see that as kind of a maybe a way to- they're very busy people in a way to kind of manage time and especially students who are just concerned about getting the points for the assignment, getting it done, as opposed to maybe truly engaged in the learning process for such thing. But when we talk about AI we're talking about it's not true intelligence, it is constructed, it's artificial intelligence. It is not "I'm sorry, Dave, I'm afraid I can't do that" we're not this is not on the level of a thinking machine.

JEN: No, and yet, it gets smarter all the time, right? It does take us to adapt based on the exchanges it has with its users and is able to grow its ability to engage in what I know ChatGPT would say is a more conversational kind of exchange with its users in order to have dialogues about topics of interest, right. And in our case, our students have topics that are very interesting to them for different motivations, I suppose.

DAVID: And one explanation I saw on Twitter, I think it was yesterday, I was watching this video. And the presenter made the point that really what the AI is, is it's a series of heuristics and algorithms. And so it's a series of different algorithms for specific problems. And so it has a lot of different algorithms to handle a lot of different problems. But the thing it

lacks is some sort of hypothetical creativity algorithm, like it can't make new algorithms for situations it hasn't encountered before. And so that's both, you know, good for maybe the survival of our species, but it's also a limitation in the things we see. And I think that's a way you can see content generated by this thing as being pretty evident.

JEN: Absolutely. David and I were sitting in his office sort of toying around with these different platforms earlier this week, and found that Bloom's Taxonomy is really helpful in how we think about how we might use AI, or how we might create situations where it would be difficult to use AI. We found that if, and Bloom's Taxonomy, of course, is a hierarchy of cognitive processing, right at lower levels of Bloom's Taxonomy ostensibly students or learners would have lower levels of cognitive stress, right to learn something and as you move up that taxonomy towards things like evaluation, and synthesis and analysis, which are harder tasks that are based on lower levels of learning that, you know, there's higher levels of cognitive processing, more work goes into that kind of thinking. And so if we were entering queries into our AI platforms, along the lines of, you know, can you tell me about this event in history? We got a nice paragraph or two that made a lot of sense, was grammatically correct. It was low level Bloom's Taxonomy. It was, you know, just sort of explaining something in a definitive defining kind of way. But when we asked the AI to juxtapose the outcomes of two battles in the Civil War? They couldn't do that because it, what the AI needed to be able to do is say, well, here's all these facts about this battle, here's the facts about this battle. And they weren't able to knit them together in a way that showed any level of-

JEN: Evaluation and analysis and then synthesis for a final answer. Yeah,

JEN: Right. So we found that really interesting and very telling about how we might be able to design assignments and projects and assessments for students that would really render AI as it currently exists less useful.

JIM: Right. Well, and I was looking around my office here where we're recording this today, while you were talking, because we have these handy little flip books that we give out that are based on Bloom's Taxonomy, and they help you to phrase questions based on which portion of the taxonomy you're trying to achieve in the assessments you're making. So when you're talking about synthesis or analysis, you're often you know, imagine a situation where, or you're giving instructions like that.

DAVID: Or to apply two different concepts simultaneously, or to pull something apart is what analysis means. Because that's when we put in the equation, it was $X^2 - 49 = 0$. And so the solution to that you would factor it and it would be seven and negative seven, because a negative number times a negative number is a positive number. It just gave seven, which is a wrong answer, but also a common answer an undergraduate might give to that problem. And so it might not think to go check its work.

JIM: So let's talk a little bit more about what we as instructors, if we're concerned, or we're suspicious, perhaps let's start with an example of we've talked a little bit about mathematics already. So let's talk about an essay. And I had an instructor over the

weekend, ask about this, in an- I had an email conversation, and they said, I'm teaching over the winter intersession, I actually suspect that I've been getting a lot of stuff written by machines. And I personally went back to some of the final papers from one of the classes I taught this semester, that I thought were just incredibly poorly thought out and poorly written. And now I'm kind of thinking that maybe they too, had been helped out by something like this.

DAVID: Yeah, I think that's tough in a lot of different ways. Especially if something is partially written by an AI, you can notice shifts in the language, or the patterns that come into like it the same way you might see plagiarism in other instances, right, have a dramatic shift, for no reason when it's the whole thing, it can be difficult. But one of the sort of detection services, that's being developed, our office manager, Beth Welch, forwarded yesterday. And in the methodology they're using in that one is basically looking at the consistency in sentence structure. It's suggesting that humans tend to vary a lot more than the machine, but also things like word choice and so those would take a lot of close reading and a real familiarity with students work. And so if you're only having a few writing assignments each semester, like digging in yourself to every single one of them would be difficult. But what seems to be the Achilles heel so far in our observations is their citation practices. For instance, they will either in a bibliography fail to cite correctly, which if you've taught, writing, you know that that's not just a feature of AI that students will sometimes not sure if they're bibliographies, correct. But sort of in a more obvious and more alarming trend, they will invent citations. And so we asked it to give us citations on a SoTL project that we knew there were books about, and it gave the correct authors, but it invented a new title and summary for a book, which is confusing, but that's relatively easy to detect if you feed the student bibliographies into a service called CrossRef, which is described in the guide we have. And-

JIM: And let me interrupt you right there, just because I do want to mention if anyone is actually furiously writing down notes right now, we have and we will link to the show page for today's episode. You two, have authored a multi-page guide, which is on our website, it has some pictures with it. And in fact, and some examples of the output from one of these services, and a lot of the suggestions that you're talking about. So you can go to [pro dev dot Illinois state.edu](http://prodevdotillinoisstate.edu). You'll see it linked on the homepage, you can also go to Teaching Resources, it's under that but you can also click on the podcast link and look at today's show page. So anyway, you were saying a little bit about how references into there are some services that you can use to check references and links and stuff like that. But also what as far as the actual content, the actual, the actual assignment, the actual assessment itself, is there something that we can do, phrase them a certain way to actually kind of AI-proof or AI-mitigates take away the ability for people to use this stuff?

DAVID: I think that's such a difficult proposition. And when we think about all the different stages of creating a writing project, assuming that it's a, it's a large project, you might have different drafts. And you might say, so you could use it create, like one or two paragraphs, then cite that somewhere. But basically, in our experimentations, higher order thinking is difficult for it to accomplish. But so, would multistage projects. So you

have a draft and a revision, or an annotated bibliography and a revision, okay. And things like problem based learning or design thinking or-

JIM: Personal reflection? I mean, is that something that could, you know,

DAVID: Yeah, I, you can ask the AI what it did to like how it came up with this answer, that doesn't always give great answers, but evidence-based reflections, like pointing to specific passages in the text and explaining like, this is how this method assignment or even with CrossRef, you can use reflection that way, because you can have students generate their own reports from CrossRef. And what it checks for is whether there's a DOI associated with a particular reference, and it can flag things like I don't think the source exists, and the student can write, well, it's an older book, and it doesn't have a DOI, or I found that this source, or I got the citation wrong, and now I fixed it. And so that can be a checking tool that students do themselves, that then serves to help their learning as well, because everyone should know how to use that. It's what journals use to check our references

JIM: Right, right.

JEN: One of the things too, that we've seen in our research and talked about together is that if you focus your writing prompts on things that happen in your learning context, whatever that is, discussions you've had, readings very specific to your course, and customize your writing prompt so that it directly references something that happened in your class, AI doesn't have that information.

JIM: Right. Okay.

JEN: Right, that if you say in this discussion on this date, we talked about these things. Well, what did you learn from that? And what do you want to know more about? AI can't help with that because they weren't in class. They don't you can't google that information. Right?

JIM: Right.

JEN: So there are ways to do that. I also think, you know, David referenced multistage projects. And I think, you know, we have an opportunity to show students the limitations of AI content generation services by using them in class. Why couldn't we suggest that a student bring in a first draft that's generated by AI and have them revise it over time to fact-check it, improve it, expand on it, take it to the next level, whatever that is? Or could we bring a prompt to class and have the students critique it? What's right, what's wrong? What- Where did where did things go awry? What, well, how could this be improved? If we show students the limitations of the AI, they're going to recognize that it might be a step towards completing something, but it's not the step towards completing something.

JIM: Right. And just to clarify on the technology, one other point, because we've had we get inquiries once in a while. And I know there are discussions going on on campus about writing, essay checking software, like Turnitin, and other companies have other

companies are available. But that really wouldn't help you here, because the output is not if I asked a given AI service the same question all the time, it may not generate it with the exact same words in the exact same order. Is that correct?

DAVID: Right. That's something we observed in just, as you said, asking the same question multiple times. But also, one of the things the system is trying to do is to not phrase saying things the same way as it finds on the internet. And so the way that plagiarism detectors work is they are just they're basically search engines.

JIM: Yeah.

DAVID: And with Turnitin, specifically, depending on the license at the institution, student papers are also archived into the system and it checks other student work. And so because AI generated content is generated on the spot, these systems wouldn't work

JEN: But there are things you know, our campus has for faculty licenses for Grammarly,

JIM: Right

JEN: And because you're an English, you know, instructor I would ask you to speak to that a little bit more. But I know if we can use some of those, quote unquote, detection services to actually help students improve their writing and find areas where there might be concern that they would need to address

DAVID: Right. So Grammarly does have a built in plagiarism detector, which again, it works in a similar way to the other ones. And so it would search content online, but it has, if you haven't used its features, it goes beyond just spelling and commas and things like that. And it looks at style, right and flow and all of this sort of abstract things that we kind of struggle to put a finger on. But it will identify large swaths of I'm not sure if this was enough variation here or I'm not sure if in I mean, the irony there being that Grammerly is somewhat powered by AI itself. And so it's an arms race against each other.

JIM: And that's where we're ultimately going with this because we've also seen in recent days in media that there are people who are innovating and coming up with ways of detecting AI generated content using artificial intelligence generators themselves or AI systems themselves, that can learn what to look for and stuff like that. So it sounds like it would be possible to use something like Grammarly, which, again, we have a license for faculty on our campus to help identify some of those less polished areas that may be a little bit more ineffable in some of this writing. Jen, I wanted to, as we wrap up here, I wanted to talk really quickly, ask you to put on your administrator hat, which is lovely by the way. Where does this fit in with the academic honesty on our campus and the academic honesty policies that we have and stuff like that? Because I know you and David have had some conversations with folks in the Provost's Office.

JEN: Yeah, and you know, it's ever evolving, because things change every day. But at the core of this, we have a student code of conduct, like most people on most campuses do, and our student code of conduct expects that and, you know, outlines that our students are to behave with integrity and honesty, and that they're not to engage in certain

dishonest behaviors like plagiarism, or, you know, anything that could be tied to some behavior like that. And, you know, right now, the challenge is to write policies and procedures and practices that encompass our student expectations. But also, what outcomes could be if students make bad choices, right to think about what do we have teeth? What are those teeth look like? What should they look like? And so, David, and I have actually put some draft language out to the Provost's Office and the General Counsel to look at. And as you can imagine, it changes, you know, as time goes by, and new technologies come into place, but we really purposefully took apart the last suggested syllabus statement about academic honesty or-

JIM: Integrity

JEN: Integrity, thank you. I'm talking in circles, academic integrity to say, if you have a question about whether what you're thinking about doing is plagiarism. Come talk to us. That's why we're here. That's part of the learning process. But you know, we expect that you're going to submit your own work, you're going to do your own work, you're going to be honest and have integrity. And I don't know if that exactly answers your question, Jim.

JIM: Well, no, I think that's kind of where we're at. And so for faculty members who are starting out this semester, we have for, as you've alluded to, for many, many years, now, we have kind of hosted a creating your syllabus section of our website, which includes a lot of suggested, both required language, but language is required by the university, but also suggested language. And so that's been updated for this semester to include a reference to artificially intelligent generated content, so at least it's in there. And maybe an avenue for having another conversation, as well. So

JEN: One last thing- I think it is- If we tell our students not to do something, the first thing they're going to want to do is go see what it's about, what it is right. I think that's just human curiosity. And I think what I would hope that course instructors will do is have honest conversations with their students about why are we doing the things that we're doing? Why is it that if you go through these processes, you'll learn better and be more prepared to function as a, you know, journalist or a scientist or a humanist, be very transparent about what you're doing, why you're doing it, what you think those outcomes could be, and how by using content generating services, that they may miss out on really important parts of suiting that really could, you know, help them translate content into something that would be really meaningful for them down the road. And I think if we continue to have those conversations, they'll at least understand our perspectives and know that we're open to talking about it. And it paves the way for future conversations about the topic.

DAVID: Yeah, I think sort of a good example of a practice that I've done before. Maybe I shouldn't say it that way, that my practice is good practice. But I-

JIM: Or best practice

DAVID: Best practice. Yeah,

JEN: No no, don't say best practice.

JIM: That's the next episode,

DAVID: Right? I use citation managers in all of my own work, like I have hundreds of citations in them that I can then put into whatever papers I need to and it does the APA for me because my background is MLA, but now here at the Center, we use APA most of the time and I do that all the time. So why would I stop my students from doing it? In English 101 I do have them do something citations by hand to understand the style guide and be able to understand what the system gives them and say, okay, that I know that's wrong or this is right And so it's all about the learning with the AI content generation. If you don't understand the underlying concept behind the question you're asking, you have no way of backtracking, like those math questions. It gave a nice round number to some of them, like is a non math person like that seems right. But what Jim was saying about being honest with students, about why we don't want them to use this being transparent is like, you need to understand how to do it yourself, to ask the right questions to the AI and understand what it gives you.

JIM: Right? Right. No, I like that. And it seems to be kind of the conclusion we've come to as far as what's that one piece of advice that we would give instructors first and foremost, is to engage your students on this topic. And in going back to what we were talking about that academic integrity statement, it actually says if I recall correctly, the revision says something to the extent of the uncited use of AI generated content. So at the very least, we're encouraging them to identify when they're doing it. Now, that doesn't mean that you may go ahead and say, and by the way, Thou shalt not do that for this assignment. But I think that's good. And then as you said it, what we're really talking about a word we have not used on this podcast in a while. We're in some ways talking about metacognition, right, we're talking about thinking about thinking or how we're thinking about how we learn. And it's going back to students and explaining to them why that's a good thing. Are you excited about AI generated content in any way, and you don't have to be so you don't have to make up something. I'm not trying to end on a false positive note.

DAVID: I think there are several proposed uses of it that are sort of co-piloting technologies the way I've been describing. And so a thread I sent Jen yesterday was it's it'll look at your notes that you take in your notes app, and then tag them and then arrange them by content and subject and so not, so you're creating content, and then it's helping you decide how to organize it. Or even like, when we think of predictive text, and emails and things like that, like there, I think there are some exciting uses. But it's all about that literacy of right when the trust, right system, right?

JEN: I have a college age son, and I was talking to him about this. And I was trying to explain to him, what I think it would be like as a student to have auto generated content given to me and the closest I could come to because I have no frame of reference for it as a student is you know, there have been times in my career where I've been asked to teach a course that a colleague has taught before me, and they say, I'll give you all my PowerPoints and all my notes. And I think, well, that's great. But when I start looking at

other people's material, I feel like I haven't learned that content, I haven't dug into it, I don't understand. And I don't know, and I'm not saying any of my colleagues are anything other than accurate and wonderful. But I can't speak to the accuracy of what they put on their PowerPoints, I have to do that myself. And I tried to explain to my son, you know, that's the thing, if you as a student are turning in somebody else's work, you're standing behind that with your name on it, and it may or may not be accurate. This is new technology, and there are some issues with it. Can we use the notes that we get from AI? Or our colleagues who teach a class? Absolutely, it's a great starting place to get some information. I'm excited about it for that reason, okay. What I am afraid will happen is that we will just react in a way that says it's bad, we shouldn't use it, don't let the students use it. And I just think that's going to shut the door in a way that closes down conversations that we could have around where does this belong in our profession, in our discipline, in this class, at this university, in our society, because it's just going to keep growing. We can't shut that door. I've used that analogy now three times. So I think I'm done.

DAVID: As a historical note, I'd say that there was similar conversations in composition studies when spellcheck first came out.

JIM: Sure.

DAVID: And so it'll be interesting to see others

JIM: Well, and I'm thinking, you know, when I started here, 10 years ago, it was on the tail end of the conversation about smartphones, but banning smartphones in class, and I'm sure there are people who still do that, and maybe for good reason and there. And the other thing is to remember that there are contexts to use tools like these. And then there are contexts, when we don't we can't do that. I know that we deal with a lot of licensure stuff in certain departments on this campus Nursing and Health Sciences and stuff like that Environmental Safety. Yeah, we don't want to rely on that AI program to keep people from being blown up or getting getting an air bubble in their syringe or whatever. Having said that, there are other times when it's appropriate, might be appropriate to use it. So having anything so final thoughts.

JEN: Yeah, I just want to toss out there that you know, if you go and you were to Google AI or some of the services that we've referred to, like ChatGPT there are people who have some fairly radical suggestions about maybe how to mitigate the use of AI and I'm just going to pull one out to use as a talking point, having students handwrite everything. Pencil and pen.

JIM: Yeah, I've heard that from a couple folks.

JEN: And if you think about that, on the surface, it could make some sense, right? Students generate their thoughts. So they put them on paper. They document what they're thinking. But there are a lot of of secondary considerations for those kinds of processes. You know, do all my students have equal access? And are they able to do this? What does this do to students who aren't native English speakers who might need the process

of writing and having spellcheck or some kind of grammar check to really fully express themselves in the way that they want to? I think that we need to think carefully about the choices we make around this, but also recognize that there's help. There's a broad network of people having conversations about this right now that it has wonderful suggestions, whether that's on Twitter, whether that's in our teaching and learning centers, and certainly here at Illinois State, we have people who are ready to consult with our course instructors to answer questions to help work around the roadblocks that they envision in their classroom in ways that can be supportive of them as instructors, but also of their students to help support their success.

DAVID: Yeah, and I guess one note, I'd add to that is our one of our keynote speakers in 2022. We're recording this the day before the 2023 Symposium.

JIM: Yeah.

DAVID: David Rettinger has this great line. A lot of academic integrity, like prevention methods are lockdown browsers, Proctortrack, Turnitin they're a two foot high fence, they only stop the people least able to step over them, right. And so we need to think about how to use these technologies. And also think about what barriers are we putting in to try to stop their use? And how is that going to impact equity, diversity, inclusion, access. And I think that we'll see that in the long run, this will hopefully have positive impacts on learning and teaching. But like with all new technologies, it'll be a learning curve for all of us to figure out what to do with them.

JIM: Right. So a lot of broader conversations, I think to come in, and the data are still coming in as well. So Jen, David, thank you so much.

JEN: Thank you.

DAVID: Thank you.

JIM: And that's all the time we have for this episode of Let's Talk Teaching. Find out more about what we've been talking about today. You can go to our website pro Dev, that's P R O D, E V, dot, Illinois state.edu. Look for the links on the homepage that talks about teaching resources. And you'll find David and Jen's guide to working with AI generated content in your courses. And of course, you can also find on the main page, more about our pokey little podcast. For Dr. Jennifer Friberg, for David Giovagnoli, and for all my colleagues here at the Center, until we talk again. Happy teaching!