

Ep. 085: A.I. and You 2

<https://prodev.illinoisstate.edu/podcast/2023/ep085.shtml>

The pace of AI development and innovation shows no signs of slowing, and the only thing for sure is that the academy will never be the same. We follow up on our conversation from earlier this year with Dr. Jennifer Friberg and David Giovagnoli on the current state of generative AI in higher education. Joining them is Dr. Roy Magnuson, professor of music and a current Provost Fellow tackling this important issue. The three of them join Jim Gee for a roundtable discussion about how these types of artificial intelligences have transformed in just a few months, how it all works on the most basic of levels, and how AI is impacting the way we teach and the way our students learn. They also explore opportunities for rethinking how we design and deliver our courses, and they end with some advice for instructors as they prepare their next semester's worth of courses.

Transcript

JIM: Hi there, I'm Jim, Let's Talk Teaching.

(Music)

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. It's been about 10 months since, perhaps a little bit longer since conversations about generative AI blew up all across the academy. Shortly after that, when we came back from winter break in the beginning of 2023, a couple of my colleagues and I sat down and we talked about it, you can find that episode linked to today's show page for our podcast. We called it AI and you. So, I guess this is to start with AI and you two, perhaps. Anyway, we'll insert the laugh track in later. So, joining me returning, two folks who were part of that conversation, Dr. Jennifer Friberg is our Director of Scholarly Teaching. Hi, Jen.

JEN: Hey, how are you, Jim?

JIM: I'm good. Jen is also the Cross Endowed Chair in the Scholarship of Teaching and Learning. David Giovagnoli is our coordinator for scholarly teaching. Hi, David.

DAVID: Howdy.

JIM: Howdy right back at you. And joining us for the first time is Dr. Roy Magnuson, who's an associate professor in the Wonsook Kim College of Fine Arts and holds a fellowship this year in the provost office, which happens to deal with...

ROY: AI.

JIM: AI. So, see, we're bringing the conversation to a new level today. And I truly mean that because this is great that our provost office is tackling this issue or this concept, I don't want to always define it as a problem, but on that level, so. So, Roy, we definitely want

to hear about what your plans are, what you're working on through the provost's office. But first Jen going back to our original conversation, we made a prediction. And that was, this AI thing ain't going anywhere. So, mission accomplished, right?

JEN: Turns out, we're right. We can buy a lotto ticket. You know? Here we go.

JIM: Yeah. So, I'll just throw this out for the three of you. Since we started talking about this on our campus, what has changed in the conversation over the last 10 months?

ROY: Well, I think the biggest thing is that it's the increased access, and the user experience is getting much easier. So, even in 2022, in November, when GPT-3.5 came out, and was sort of the atomic bomb that was dropped. That was pretty easy to use, but it's still a website you have to go to, and you have to make an account. And there's barriers to it. And now Metas rolling out their llama GPT rival in Messenger. And it's just baked into Facebook, it's baked into WhatsApp. Copilot is just literally replacing assistants in Windows. It's everywhere. Similar technology, but it's getting easier and easier. And it's getting harder and harder to avoid using it or avoid interacting with it.

JEN: Well and there's so many I mean, we were just - Roy and David and I have been putting our heads together over this for a little bit now. And we've had these conversations with lots of people. And one of the things that we know is that up to 1000 new generative AI apps are hitting the market every week. So, we use words like ChatGPT, and Bard. But really those have become colloquial names for all of generative AI, and they're showing up in spaces where you can create video and image and text and all kinds of things that 10 months ago, they couldn't do.

JIM: Right.

JEN: And it's seamless video.

DAVID: Yeah, and thinking about how in the end of 2022, beginning of 2023, you had to go to the AI thing and put in a prompt and have the AI make a thing for you. And now it is not just seamless, but almost hidden. It's tacit, in some ways that things that we were using before like Outlook predictive text, was always powered on something related to GPT. But now it's fully going to be built in. And so even when folks don't think they're going to be going and using AI, they might be like, I don't consider Grammarly to be at the same level as Chat GPT in terms of originality and authenticity. But it is also powered by a version of GPT and has its own generative AI also built into it. It's also connected to our systems.

JIM: Right. So, if I were a faculty member, and I've been hearing about this AI thing, but I haven't really dived very deeply in it. Can someone give me the basic definition of what is the generative AI that we're talking about? And also, kind of the elevator speech - What is the implication for teaching? Why are we worried about this?

JEN: Want to split that one Roy?

ROY: Yeah, sure. So, generative AI, I mean, it's, it's the idea that - I mean, the best way to think of is, you know, since 2017, or so, there's been a shift in this sort of algorithm

research. There's a major paper in 2017 that had to do with the T of GPT, this transformer technology and architecture for artificial intelligence. It's a different way of engaging with training of an AI. So, the best way to think of it is like we're giving AI access to a library. It's running around and reading a bunch of stuff. And then we're kind of shaping what its knowledge is. It's almost like a student, right? It's learning about stuff and then humans will go, for the versions of ChatGPT or whatever parallel to that, go and supervise it and tell it like no, don't do that. Yes, this is okay. And that that is just profoundly different than any other version. It's more of like a reasoning engine, because it's learned all the stuff. And its sort of feeling its way through a sentence or through a concept. Sometimes not knowing what the end of the sentence is. And this is where you can get hallucinations and things like that too. But feeling its way through it in a way that is not like searching the internet, or a sort of like predictive A or B model of AI in the past. So, it's fundamentally different. And that is, can influence anything in our lives. It's hard to overstate, like just any industry, any facet of your life from cooking to, I was reading, or I was listening to a podcast this morning about therapy, and, you know, they were going through things that like, oh, yeah, I guess that would work. And then they just started reading through the free therapy, things that we're generating, like that's staggeringly helpful, because it's patient, it's available anytime, it's free. It's, you know, just so many like tremendous opportunities.

JEN: Well the thing that makes it different than a search on the internet, or something like we're all used to now at this point in our careers in our lives, is that every time you feed something into one of these platforms, it gets smarter, because it trains itself obviously, on what we're entering. And it takes our searches and the content we upload and all those different things in it. It evolves and trains itself so that it can better answer questions and address prompts. And that was really brought home to David and I because we looked at some of the guidance we put on our website earlier in January in response to instructor concerns about what can they do and what they can't do. They being students using AI to help them complete assignments or activities in the class and the things that ChatGPT and other AI, generative AIs, couldn't do in January, they're doing easily now.

JIM: And David, I know that you you're reworking that guide, which we'll link to you can go to our website prodev.illinoisstate.edu and see that, but in the conversation we had, we're taking stuff out - some of the examples out because it's just impossible to keep up, right?

DAVID: Right. So, our example pages, if you haven't seen this before it's updated, right now they show places where AI fails. And so, the example - one of the examples is a simple order of operations type problem in an algebra problem which as my home discipline being English, I had to do this all by pencil and paper to make sure I was right, that the AI was wrong. But understood the underlying concept but couldn't apply it correctly. And I actually had a chat with ChatGPT and asked it: are you connected to Wolfram? Like, do you have a math reasoning engine? And it doesn't. And so, at least how it was solving problems lately is it will look for places like Quora and forums where people have asked for help with problems. And so if nobody's ever asked for a particular problem, it'll struggle to find an answer to it. Until enough people ask it until it's right

or wrong. But GPT-4, I believe is going to be connected to things like Wolfram, and there are LTIs, integrations across different services. And so that's one of the scary things in terms of seamlessness. If we want to think about it, that you can ask it anything, and it will connect to various things to find the answer to it. And so as a teaching implication, that means that our knowledge level questions were already difficult sometimes to assess authentically with the age of Google. But now our application level questions also become, we need to increase their complexity.

ROY: Yeah, you're right. It's one of the things that's so crazy about especially GPT-4's a good example, that they have this huge training model that they've created, and then they're starting to add to it. And they're like plugging things into it like Wolfram, or there's an option to go into that it can just kill the math, like it just it fills that gap. And it's knowledge. And people are creating their own bespoke plugins to do all kinds of things where you can, you know, order your groceries and then have them delivered just through a conversation you're having with this. And it'll just do it right. So, it's that flexible, because of its base level of understanding. And then people are filling holes and just like stretching it to do certain things, or in a lot of ways limiting it. So, it only does certain things so that you don't get, you know, problems or going off and some sort of tangent.

DAVID: And I just want to clarify I mentioned Wolfram and that is a software developed that can solve math problems if you plug them in and sort of human readable notation.

JEN: So Jim, you asked about challenges for teaching and I think that is, you know, a huge issue that we're facing and you know, we in the Center have started to offer programming around this. Roy is developing some programs that he can take on the road too for different units and departments here on our campus. But you know, the fact of the matter is that everything has changed and it will never go back. And that's kind of a line in the sand that is difficult to say so plainly, but it is factual and it is true and we're in a position right now. know that most of us as course instructors really need to examine everything we do in our courses to say: do I want students to use AI in this situation to complete this assignment to do this thing? Or do I not want them to do it and through making decisions about to use AI or to mitigate AI, there are different strategies and ways about achieving learning outcomes that might need to be different than we've done in the past. And that's really difficult to wrap our heads around, I think this wholesale idea that we have to look at every single thing we've done through a very different lens.

JIM: Yeah, there's an intellectual level to this, that we have to understand as instructors, there's a strategy level that we have to develop, our center is here to do this, to help you to do that. There's also an emotional component to this as an instructor as well. The ground has shifted so much.

JEN: I think what we're talking about is cognitive load. I was actually writing a blog about this yesterday. Thinking about the number of pressures that are on instructors right now. Because not only do you need to keep up with content and your own discipline, and think about how to best present that and engage your students with that content. You're also having to think about how might my students use AI? Do I know how to use

AI? What's out there? What's happening? And really having to have a lot of reflective moments of saying what's important to me? What do I really need my students to do? And how can I find the resources to help me make that happen? And I think everyone feels like they're in the wild west a little bit right now, and probably rightfully so. But there are lots of resources and lots of things that we can offer as things that work right now. But I think the other challenge that we haven't really spoken to explicitly, goes back to something Roy and David were talking about. We may be suggesting things that work now, but they might not work in a year again,

JIM: Right.

JEN: Because of the evolution. You know, Roy has said, and he can certainly speak more about this. But ChatGPT-5 is already training itself and who knows what that's going to be able to do. And, and, and...

DAVID: I just wanted to echo that. But also I we've mentioned the word training a few times with regard to AI. And so wanted to just clarify really simply for folks that when we train an AI, we don't want to anthropomorphize too much. It's not sentient, but training is the data set it has available. So, we can think about it as the vocabulary it has, the encyclopedias it's able to read, and all of the data it draws from and so a concern for instructors is also - so yes, the emotional component, the intellectual component, but also an ethical component, because all of these draw from different sources, and they have biases built into them. So, Microsoft, I believe, pretty famously created a chat bot and they trained it on Twitter. And the results were well, yeah, they were a little xenophobic.

JIM: Yeah. Yeah. Roy, expand on that, could you? Because you were not able, as David was talking.

ROY: I mean, it's, it's trained on the internet. So, it represents the best and the worst of us, right? It's reading publicly available, scholarly, vetted journals. And it's also reading Reddit. I mean, so that's the whole supervised training part of it, you have to go through and try to limit it and cut out these things that are not appropriate, not okay, we shouldn't have these things. We shouldn't be representing that. But also know that it's being trained by people from a very specific background. I mean, it's very much so, you know, white, cis, male researchers. So, it's like a very specific group of people that are making the software. So, that that in itself is like a very - it's an issue, right? And that we need to be aware of it as we're engaging with it, because it's very easy to not see it, and just, you know, you're reading it, it seems, oh, yeah, this is totally fine until you start to shift the lens.

JIM: So it sounds like that that is an important next step to make this more usable and more accurate. And yet, the solution has inherent flaws. And earlier on, you had used a word that I just kind of lit up I had not heard yet, in terms of AI and I'm not very deep into it. Hallucinations. I prefer to hallucinate on my own. But if my AI were to hallucinate, what does that mean exactly?

ROY: It's making stuff up. So, it's the way the model works. And again, saying ChatGPT, large language models, it's just predictive, it's writing the next character. And it doesn't

know what the end of that sentence is. It's just going through and like reasoning its way through sentence, and it wants to make you happy, like, think of it like it's somebody who just wants to please you. And often if it thinks it basically has the right answer, it's just going to boldly and confidently go in that direction. And it's often just very wrong. A great example for my discipline is if you try to ask it to analyze visually or just cognitively talk through music theory, it will just confidently tell you the wrong answer. And I will correct it and I'm like "nope, that bottom line on the bass clef is a G" and it'll say, "Yep, I see that now. Thank you." and then it'll confidently say the wrong answer again. Something totally different. It's like, okay. You don't get it.

DAVID: And speaking of confidently, one of the flaws or downfalls or pitfalls everyone thinks about with ChatGPT is it doesn't give confidence values of "I'm, I'm sort of sure this is the right answer." or "I'm absolutely sure the right answer" because it's weighing JSTOR against Reddit and finding them equal, like it doesn't have source fluency. And so that's one of the things we add as value in the academy is information literacy.

JEN: And that's so important, I think. You know, we were just at a conference recently teaching and learning with AI that was hosted by University of Central Florida. And the three of us went and had lots of nonverbals back and forth when we were awed and inspired in different ways by the people who are there with us. But one of the things that I think is really so important was something that was touched on in one of the sessions there. That when we, as course instructors, think about AI, we're thinking about it with a solid knowledge base in our discipline. So, to your example, just a minute ago, Roy, you knew that there were errors in what ChatGPT talked to you about about music theory, and you were able to say, haha, you're wrong. Our students don't have that knowledge base. So, we have the knowledge base, and then we think about the tools, they think about the tools to learn the knowledge base, and we have to, right that wrong, right? We have to figure out how do we get our students to the point where they understand the content of the class, and then can think about how to use AI appropriately. And vet through notions of information literacy, digital literacy, is this right? Is this wrong? So, that they can be consumers of the outputs of these generative AIs. Because really, truly, that's where we're headed, you know, how are our students going to be using AI in the future in their disciplines? Well, they're going to have to be consumers of this and understand what makes sense what doesn't to be solid professionals in whatever realm they're working within.

JIM: And in case anyone ever doubted that, I mean, in one way we talk about media literacy, it is an extension of what we've been experiencing for years, right? We've been talking about: don't take things at face value in Twitter, or you know, even if you're going out and researching, Wikipedia has its uses to get started. But you know, that's not necessarily going to be the foundation you want to base an argument or a claim or anything else on or a decision on, right?

JEN: If I could change the conversation for just a minute, I have something that I'd like to hear David and Roy weigh in on. I attended a conference just before that AI conference I mentioned a minute ago, the SOTL Summit hosted by Kennesaw State University and one of the keynoters Melanie Hamilton, who is my SOTL colleague from the University of Saskatchewan was a keynoter. And she was talking about the Scholarship of

Teaching and Learning and AI, and what are the opportunities to study student learning around these generative AIs and that sort of thing. And somebody in the audience asked a question about how do we handle students who act in X way? And she said, well, how would your students handle you when you acted in Y way, and her point was, we need to treat each other as we hope others will treat us in this space. There's lots of questions about integrity around the use of AI, and how can I catch students who are engaged in certain behaviors? And what about my intellectual property? And I think that's one of those huge issues facing instructors and concerning instructors right now. And some of that is just due to the newness of these conversations.

DAVID: Yeah, absolutely. I was grading last semester. And I thought, this doesn't seem exactly right. And I wondered, could it be ChatGPT, and then it turned out to be SparkNotes. And so in English for a long time, ever since Google, I would think we've had concerns about plagiarism and things like that. But at a certain level, if you can Google the answer, maybe it's not a good prompt for a long form writing assignment. And I think our recommendation is that we shouldn't try to detect or police, we should try to create robust assignments, and also think about: how is this going to help us in our own working lives? For instance, I never write my own citations, I use Zotero. I know enough about APA and MLA to check my citations, but I'm not going to cite by hand, I'm also not going to typeset by hand, I'm gonna let Word do that for me. And so automation, with a critical lens is going to be good for us as professionals. And so when we think about our students, and their cognitive load and workload, not embed AI in every single learning experience we do, but not also position AI as only a cheating tool, because we can use a lot, like, even Word already has its own built in citation manager, we can do a lot.

ROY: Yeah, I agree. I think it's never going to be worse. And it's never going to be more difficult to use these tools. And I do believe we have a responsibility as instructors to prepare our students for a world where they're going to have the expectation of a base level of fluency with the tools of the world. Right? And this is just the way we're going. There's, as much as we may not like it, a lot of these tech companies dictate how we interact with our lives. And Apple has just been really quiet about this. And they're - all the companies we've mentioned they could purchase. I mean, it's like there's lots still that's going to develop and it's an arms race we don't want to have, I think, against students where we're thinking, obviously, you don't want to think like the student is always cheating, or that - that's a bad relationship with kids, it's gonna be difficult to overcome that as a pedagogue and having a good relationship with the student, but like, we don't want to always try to stay in front of them. And it's going to be very difficult, if not impossible to detect any kind of AI usage.

DAVID: And students are very adept at picking up our feelings towards them. There have been recent studies on growth mindset. So, Carol Dweck, a psychologist, her theory on mindset is that if we have a growth mindset, that means we believe we can learn and change and learn a new skill. It doesn't mean we're going to succeed necessarily just by believing in ourselves, you know, but not having a growth mindset, like deciding as an English major, I can't learn math, that's going to be a self fulfilling prophecy, it works the same way pedagogically, so if we don't think our students are going to succeed, or

we think they're going to cheat, that's going to happen. And students are going to pick up on that. So, if we can really believe in our students, and, you know, not position it as an adversarial relationship, I know it's gonna position both of us students and teachers for success.

JEN: And I add to that, that we need to mediate our processes, right. And so we can be very transparent in how we design our course projects, assignments, assessments to say, here's what I want you to get out of this. If you use AI, you will be cheating your own learning. Please try and do it without AI. Or, I expect that you might use AI to do this, this or this. And also say, in my life, in my professional life, I use AI to do these things we need to model responsible use and behavior and really the thought process of will it harm or will it hurt if I use these things in this situation? And so you know, I'm a huge fan of that. And if that's kind of a new concept to people, the TILT framework. Teaching with transparency, teaching... what does TILT stand for, David? Do you remember?

DAVID: No.

JIM: We'll link to it on our show page later!

JEN: I've got it! Transparency In Learning and Teaching. And it is a great framework that lays out what an assignment does, how people will be assessed what the expectations are. And, you know, it's been shown by itself, aside from AI, to increase equity in the classroom, and access to learning and really, I think could be a nice way to sort of process for our students our expectations around this AI infused era.

JIM: And I think what you're talking about there, and we mentioned this in a previous episode, as well, the most AI positive work that I think we can have our students do are maybe iterative. So, for example, I'm teaching Comm 110, the basic speech course this semester, we're doing outlines for the first big speech, they're doing three drafts of outlines before they actually get up and give the speech now. I didn't used to do that. I would just look it over the day before and give them some pointers. No, no, no, we're doing much more. And that first outline that I got from about, I would say a quarter of the students was just a big chunk of text. Now, I don't know if that was generated by AI in part of it or whatnot. But what I told them was I said, Okay, well, if you're using AI, that's a great tool. And maybe that's appropriate for this first step. But now let's take that step and riff on it. And let's talk about why we outline things and how we put it in this particular format and stuff like that. I'm not saying I'm an AI teaching genius yet, I'm just trying to - because also, they may just not have had outlining skills, they may not be bringing that to the table, either. So, it's the way I would teach it anyway, if AI wasn't out there. It's something I identified that needed to be done. But I have no doubt that in some cases, some of that stuff was probably generated that way.

DAVID: Yeah, I was preparing for a learning community next week with the future faculty learning community. And we're reading Teaching Gradually, and one of the chapters describes that as a creative assessment. So, you're gradually building up as the points over time or whatever, by small pieces add up...

JIM: As in an accretion.

DAVID: Yes, like an accretion disk.

JIM: We're gonna go all cosmos.

DAVID: Yeah. And I think one point I'd want to address is on the detection side. I want to phrase this very carefully. There are no AI detection services that we are aware of that have been vetted to have any type of accuracy that would be necessary for conversations about academic integrity. Open AI itself pulled their own AI detection service recently for both false positives and false negatives. And one of the other services we've looked at, they post a study on their website, which hasn't been peer reviewed yet, but it's it's a scholarly work that's in process. It's been published on one of those open access databases, and in that it was only able to detect at a 50% rate once students had run out their content through a second AI service to paraphrase it, and so anyone at this point who's trying to sell you an AI detection service also has bridges available. And so I think we should just, as pedagogues, be really cautious with that, because it does run into intellectual property concerns as well, and also extremely easy to circumvent.

ROY: And there's significant problems with intellectual property, with FERPA violations. If you read the Terms of Service, you're probably violating the terms of service of an AI, for putting in things like that anyways, another one's work that you don't own - if you don't own the thing that you're pasting into it.

JEN: And certainly the three of us don't speak for the university. However, these are the things that, you know, we've read about, we've heard about, we've talked about, and especially coming out of this AI conference, listening to some of the things that colleagues and other universities were doing, we had some significant concerns about the ethics and legality of putting student intellectual property into AI generating devices. And it just really - to what end? You know? So, I think we really have to, again, go back to my colleague, Melanie's quote about treat others as you want to be treated in this space, because, you know, I don't think I'd want my students uploading all my course information into an AI generative platform, but then I can't do it to my students, right? It's a balance. And I think we just have to really protect each other's thinking and processes until we consent to saying, Yeah, let's let's add this to what's out there and see what we can do.

JIM: When this episode comes out, faculty members will be looking - just planting the seeds for spring. The course shells will be in Canvas and all of that other stuff, and maybe planning on what they're going to be doing over the holidays. So, I want to, I want to kind of end today with some advice you would give people now at this point in time. But before we do that, Roy, I do want to go back to the fellowship that you have in the provost office. Can you tell us a little bit more about that? And kind of give us what's the goal of that? What are you aspiring to do?

ROY: Yeah, I mean, I, I saw the call over the summer and -or I guess, late spring and submitted to the provost, a fairly frank application where I said, I don't know if this is what you want, I don't know if this is what I want. But this is a thing that we probably

need to be talking about. And I'm happy to learn about these things and talk to people about these things. From the position of someone who is not a machine learning scholar, like I'm not an AI person. I've done a lot of tech stuff and VR things. But I'm a composer, as that is a representation of sort of where we're at, as a culture, right? That someone, like, go to this and just learn about it, because the tools are there. And you can absorb so much information and have it try to make it make sense to you and then go out and explain it. So, a lot of my work with the provost in the fellowship has been that sort of drinking from the firehose and then talking to her and the staff, and then going out working with these fine folks at CIPD. And going out and doing talks to my colleagues who are faculty, right, coming from a faculty member. Another half of that was to deal with I mean, generally just disruptive technology and the other half is, you know, XR sort of VR, AR mixed reality, spatial computing, that has been my background with art. And these technologies are tightly linked. We're going to see this sort of point in the not too distant future where truly insane things are possible with spatial computing and shared 3d experiences. And we want to be ready for it. Right? When it's not just like, Okay, well is my student using ad to generate a five paragraph essay or something. But what do we do? And the expectation is, we need to have, you know, 3d, editable, interactive experiences for students, because that's what they expect when they come to college, right? And that's going to take time to think about what are the facilities look like? What infrastructure do we need? What is the - legally what do we need to do? What's the software look like? And to get on those trends, because it's coming. It seems pretty fun and Meta's doing stuff and Apple's gonna make a headset, but there's gonna be a tipping point where it's like, oh my gosh, this is the holodeck.

JEN: It's necessary. That's the other thing. And so, you know, it's not about dorm rooms and fitness centers anymore, recruiting students, it's what are your technological capabilities? And how will I be able to explore those things?

JIM: And the onus is not just to build the infrastructure and know how to turn it on, it's how do we help students learn from that experience. There's always that added level of difficulty that the judges scores on at the end of the day, right? In terms of how are we modifying our own pedagogy to do that.

JEN: One last point I do think what that's going to lead us to, though, is more engagement with our communities and our community partners, you know, the people who our students will eventually work with after they graduate because if we don't understand their needs, we won't be preparing our students well, and so I really think we're going to see an increased partnership between higher ed and industry going forward to realize what you were talking about, you know, Roy and to really best prepare our students.

JIM: You know, I would love to have a conversation, maybe this is another episode, of where we're talking about what does the future of teaching look like in terms of all of these intersecting technologies, and also with a healthy dose of human nature always put into it. But right now let's talk about those instructors who are getting ready to teach their next courses in spring. What's your one best piece of advice about AI,

generative AI, if they're worried about it? Or do they need to worry about it? What would you suggest in terms of course design or, what they're planning to do?

ROY: I think take it very seriously. It's more powerful probably than you imagined. And I imagine. The more time you spend with it, the more you're gonna see what it can do. So, to that end, take it seriously and be curious about it mean go, if you haven't used an LLM, like Google Bard, or ChatGPT, or there's tons of them. Try it. Just go and start talking to it and know that it's iterative. The way I like to explain it is talk to these entities like you would talk to your friend who knows the most about whatever thing you're trying to ask it. Friend who knows about cars, talk to about your car, what type of car do you have, I have this problem, you can go take a picture of your engine and ask it to explain where you would change the serpentine belt. I mean, it's really nuts. As you're absorbing all that stuff, think about your class, like, okay, where, if I don't want them to use this, where can I reinforce? If I do like, oh my gosh, this would be such a different class, let's like start shaping things like that. Understanding also, we don't have a legal agreement with any of these entities. So, it's using it like requiring it in a class is something you're gonna want to talk to your whole like academic stack about. And figure out what the process is. But it's definitely there. It's coming. So, you know, take it seriously, be curious.

DAVID: I think I would also say, if our pedagogical goal is to have students avoid using AI, this coming spring, that would make a lot of sense to me in a lot of contexts, especially if we're not fully fluent yet in what it can do in our discipline. Like that makes sense to me. But I think we want to avoid decisions that are going to make our classes less accessible. So, for instance, I wouldn't recommend switching to Blue Book assessments. A timed handwritten writing assignment, A) it's going to be difficult to read, I'm sure. But also, who is that othering in the classroom of someone who might really need a laptop, for instance, but also getting back to what Jen had said about what is the core learning goal of this course? And how can we accomplish that? And so, thinking about if I'm teaching English 101, for instance, which I've done many times, and I'm doing a long form writing assignment, I'm thinking about how to really ground the process with my students as being important. And I think that comes back to transparency and in our design, which can be uncomfortable. So, we never liked the question from a student: why are we doing this? That's often not a comfortable question, because it's implying that we're doing something wrong, or we're boring them or something. But having an answer to that question, why are we doing this, is very important.

JIM: I'll tell you what, I have a slightly different take on this. And you're right, it used to be uncomfortable for me. But now when they ask that, I'm thrilled, because A) I've thought about it, and I have an answer now, especially in these courses I've taught over and over and over again. You know, I had students ask, why are we putting our notes on note cards and not just reading off the outline for our speeches? And I had an answer for that. I won't go into what it is. But it has - it's as much performative as it is anything else. So, yes, I think I can speak to all of you out there. In the teaching world, you can get comfortable with that idea. And I agree with you, I think that's an important one to look into. Jen, final thoughts?

JEN: Okay. You took mine, David, so I have to dig deep on this. So, I will say-

JIM: There are no points being awarded for this. I'm just throwing it out there.

JEN: All right, so I'm gonna get in the weeds just a smidge. So, I'm gonna go back to Randy Bass. And a long time ago, he talked about the fact that a bunch of intellectual folks like us, course instructors in higher ed could get around each other, and have really intellectual high-level conversations about our scholarship, our creative research, around our lunches and other places we get together. And that for some reason, there isn't as much value placed on high level scholarly conversations around teaching that it seems shameful. If you have teaching issues, it's perceived that quote, unquote, everyone can teach, right? And the truth of it is, is that most of us weren't taught how to teach as part of our terminal degree programs. And it is really rigorous intellectual conversation right now to be talking about this with our peers. To open up conversations about what are you doing? How can we do this better? If I do this in my class, how can it build on what you do in your class? And thinking about this from what I'd call sort of the mezzo level, how does AI fit into not just your class but your department or your unit? And what are your goals across your program, not just your course or your assignment? Like how does this fit because again, your whole degree program is all the classes, right? So, there should be cohesion of thought and process and prioritization around how technology is used or not used. So, I guess that would be my next level slightly outside of the classroom recommendation. But we need to be talking to each other about this.

JIM: Well, I would love for us to get together again at some point, and we can talk, maybe look, again into our crystal ball a little bit further out into the future. But until then, anyone have any final thoughts that they want to add?

ROY: The thing that occurred to me, one of my my teachers, David Maslanka who is a composer, this memory of watching him copy out his music by hand, and he would read everything by hand. And I said, why didn't you - why don't you use a computer? Like that takes forever. And he looked at me, he said, Roy, nothing about what we do is convenient. And as a composer, that hit me really hard. But thinking about these challenges, it's like, it shouldn't be easy, like, this is hard to rethink how - what we are, right? And that's okay, it's gonna make us better. There's no fantasy world where this isn't part of our lives, it's out, we're doing it. And that's fine, right? There's gonna be a lot of really heavy, hard choices. But I do think the path to a better way of teaching and just generally better, more interesting life is there. You just have to go and work. It's gonna be a challenge.

DAVID: And I would just make a plug then for our summer course design programs through the Center for Integrated Professional Development, because maybe at this moment, you know, we can open up the hood and bolt in the AI stuff into an existing course. But this is a real opportunity to redesign a whole course from the ground up. And so, for every challenge, there's going to be an opportunity here. It won't be convenient, but it'll be good.

JEN: And before summer, we're here.

JIM: Yeah, absolutely.

JEN: We have consultations, we're happy to meet with you. We have reinvent, well not reinvent, but redesign an assignment for AI that the three of us are all involved with some of our colleagues here in the center. And, you know, we are infinitely happy to have those hard conversations about, oh my gosh, what do I do here? So, reach out!

ROY: Yeah, for part of my fellowship, I have a talk that can go out, and happy to go talk to anyone. You know, I've got some community things lined up, but also just any groups on campus, just sort of explaining where we are, where we've been, where we may be going and then have a discussion.

JIM: Jen, David, Roy, thank you so much. And that's all the time we have for this episode of Let's Talk Teaching. Find out more about teaching with generative AI and other teaching topics as well. Go to our website, it's ProDev, that's prodev.illinoisstate.edu. Our show this week is edited by Colin Winkelmann with production support by Kim Brucker. For Roy, Jen, for David and for all my colleagues here at the Center until we talk again. Happy teaching!