

TEACH.LEARN.SHARE

Teaching in the era of gen AI

Episode 4: AI literacy starts with a conversation: Transparency, metacognition, and starting small

Episode description

Can open conversations about AI help students reflect on their learning? In this episode, Prof. Nikki Lobczowski shares how she models transparent use of generative AI, while encouraging her students to think critically about how their own use of AI tools might support their learning (or not). The conversation addresses common concerns—including AI literacy, assessment, and time constraints—and emphasizes the value of gradual changes over sweeping course redesigns.

Transcript

Jasmine Parent: Welcome to Teach.Learn.Share, a podcast that thoughtfully explores teaching and learning practices in higher ed. I'm Jasmine Parent, an Educational Development and Digital Learning Designer.

Adam Finkelstein: And I'm Adam Finkelstein, Associate Director of Learning Environments. I'm happy to be here for yet another episode, Jasmine.

Jasmine Parent: This podcast is brought to you by Teaching and Academic Programs at McGill University, also known as TAP. We're recording today from Montreal, Quebec, on unceded land which has long served as a site of meeting and exchange among Indigenous peoples, including the Haudenosaunee and the Anishinaabeg nations. We honor their stewardship as we live and work on these lands.

So, welcome back to another episode of our [fifth podcast series, *Teaching in the era of gen AI*](#), where we talk about all things teaching, learning, and the impact AI is having across our classrooms. Throughout the series, we've been exploring both possibilities and complexities that faculty and students are encountering in this new landscape. Our hope is that by hearing how others are navigating these changes, we can build a sense of community, create a space for reflection, and spark new ideas—and maybe a bit of confidence—for our listeners.

In this episode, we're not focusing on one particular teaching strategy. Instead, we're talking with an expert in learning sciences who has been actively exploring generative AI in her courses and using it to support her ... her teaching in a variety of ways.

Today, we're welcoming McGill instructor Dr. Nikki Lobczowski to the show. Nikki is a part of the Faculty of Education. Her work bridges psychology, education, and human-computer interaction,

making her the perfect person to help us think about AI not just as a tool, but as a part of the social and emotional fabric of learning.

Before we dive into your experiences and strategies for approaching AI and teaching, Nikki, perhaps you could introduce yourself, tell us a little bit about your teaching at McGill.

Nikki Lobczowski: Yeah, hi. I'm Nikki. Thank you again so much for having me. I'm really excited to talk about this topic. I think a lot of people are, kind of, talking about it ... or not talking about it at all ... and so, I really like the opportunity to kind of explore this and see how we can apply it to teaching.

I've been in McGill now for ... coming up on three years. And I actually started in January of 2023, which is right around the time that ChatGPT provided an open source option. And so, from the beginning, it was just this, like, panic. So, I almost ... even though I have some teaching experience in university and tons of experience in K through 12, my first real experience was, like ... came along with the ChatGPT.

So, I didn't have to like necessarily unlearn anything or adapt too much, which I think is important to think about when you're working with people who have been teaching ... who have a variety of different teaching experiences.

While at McGill, I either teach research methods or educational theory type courses. But this past semester, I had the opportunity to teach EDPE 555, the Introduction to the Learning Sciences. And so, the learning sciences is this really interdisciplinary field where we look at learning in ... in various contexts and different types of learning. And so, one of the things that I did with this being my first semester teaching it is ... I ... it's a 500-level course, so undergrads and master students can take it.

So, I actually recruited across every department, every school across campus. And the students that ... I ended up with about 40 students, where we had students from the learning sciences, but psychology, cognitive science. We have an education and global context minor. We have health professions. So, we have actually like practicing physicians, sociology, economics, linguistics, gender, sexuality, and social justice, and even anatomy, and some had, like, computer science experience.

So, it was super fun, very challenging, but a really, kind of, interdisciplinary class where we're talking about something that every student is kind of familiar with—learning, but taking a more theoretical approach to it.

Adam Finkelstein: Great. How did, sort of, gen AI come to be within this class, *per se*? And ... and you know, you sort of, said you started teaching that term. What ... what sparked your, sort of, interest in pulling gen AI into it, into the conversation?

Nikki Lobczowski: You know, my main goal for all of my teaching is for students to be able to apply what they're learning in their own context, interests, etc. And so, one of the main ways that I used generative AI in my class was to help create activities of some of the learning science topics in different settings. So, when we talk about, for example, scaffolding or problem-based learning, these kind of general education terms, and again, I can give examples till I'm blue in the face and I do of math, but

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when it comes to, like, the linguistics pieces or what does this look like in cognitive science or what does this look like in sociology or the sociological components to it, you know, that's my limitations. So, I'll use gen AI to, kind of, create some examples or to create maybe some questions to have the students, bring their expertise in it.

I think one of the ... the big keys is the transparency that I'll use with them when I'm using it. I think that's important to know, like, what I do and what it does and how, if it's wrong, because it will be wrong and I will be wrong. It ... it happens. It's part of this kind of new information age that we're in where we have to kind of figure out what's accurate.

And one of the main topics in our class ... one of the first things we study is [metacognition](#) . You know, having that very early on makes that conversation about using generative AI a lot easier, where we talk about, you know, metacognition, thinking about thinking, the reflective piece, you know, evaluating sources of, you know, for help and, you know, strategies to, kind of, help improve.

But I ... I know it's ... it's helped ... I ... I ... the feedback ... I think I really had just a really great class this year, but the feedback I've gotten from my students about ... it specifically ... about being able to connect what they're learning with their own experiences. And I'd like to take all the credit for that, but I can't.

Jasmine Parent: So, for ... for your strategies, you're more using it in helping support your actual teaching. And then, you're open with the students how ... how you have used it to create examples, data sets, whatever.

When you're transparent with the students, kind of, telling them how you're using it, what's generally their reaction to that? How have they responded? Like, you must then have open conversations about how they might be using it, as well.

Nikki Lobczowski: Yeah, and again, it's ... it's kind of ... I'm ... I'm in a unique space because we're talking about learning and one of our sections is even on technology. So, like, stopping to have this conversation about, like, AI literacy and metacognition, and how to do this ... it's not ... it's not extra for me.

And I think, you know, when I talk to some colleagues in different fields, I think that's where it gets a little bit difficult ... is squeezing it into a ... a space where there's a whole bunch of other things that ... that ... it doesn't necessarily align well with the curricula. So, I'm ... I'm fortunate in that and ... and can build activities around that and even kind of help them think.

But yeah, I ... I think just again, the open, honest transparency. I also make them on their assignments, like, include a statement of how they used it, what ... what they used it for, you know, what did they get away from it, you know, those kind of things. Because there's not really, to my knowledge ... I know they're continuing to develop, like, use policies. So, I think it's really important that we have these ... these conversations with the students.

I ... I kind of feel like we're in that space of we just don't talk about it. People are going to do it, but we just don't talk about it. And I was, like, but they're not doing it responsibly because they don't know how, because they're afraid to engage in conversations about it. And so, when I remember the first time I bring it up in my class, my students look at me, like, I say the dirtiest curse words, like, you can't ... you can't talk about that.

In my previous class, we even, which is on technology, we even, like, had them design a lesson using AI ... generative AI. And I wanted to share it as an example, and, you know, I wanted to give them credit. And they were, like, "Well, you can share my example, but don't say my name."

And so ... but it's always fun just watching them, like, freak out, like, you can't talk about that. But, you know, I like to say up front and like, give them suggestions of, like "This is how you can use it," rather than just saying, "No, you can't use it" or ... or ... or just being really vague about it. I don't think that's very helpful.

Jasmine Parent: And it's not only they're surprised that you're just talking about it, you're showing them like, "This is how I'm using it and how it can be useful in my own professional position."

Nikki Lobczowski: And ... and it's interesting because there's just such a variety, like, again, I teach a very diverse group. I have undergrads, like, in their second year all the way up to master students who have been teaching in K through 12 for a while. And you know, I've got students who, you know, use it regularly. And then I had ...had a student the other day e-mail me of, like, how to use it because I gave them as an example, a suggestion of how to use it and ... and this student had never used it before.

Anytime you bring in technology, there's just this opportunity for bridging gaps, but then there's also, if ... if you don't think about it responsibly, it ... it will widen those gaps or it'll just, kind of, blow them open.

Adam Finkelstein: And it seems like, also, like, especially, like, at this ... this kind of juncture, there's a ... sort of a widening chasm between the students that, kind of, have at least some experience. Some have a lot of experience. Some are very good at using things like generative AI to support their learning and others that are just completely unaware or don't use it at all. And you, sort of, have this huge, sort of, widening groups of students on campus.

Nikki Lobczowski: Yeah, and the other thing too is they, again, just understanding the output and I tell them, you know, there's like, there's no detector, right? There's no reliable detector that you can actually use. And I ... I've put in my own stuff before and sometimes it thinks I am a robot, and then other times, it thinks what I put is human and it's not. So, it's completely invalid.

That does open the door for a lot of students to just, you know, use it however they want. But my assessments are also ... they need human intelligence. And so, the ... the things that I ask you to do to reflect critically, to apply it to real situations, you know, when I ... when I get papers that use generative AI, it's very obvious because it just doesn't have insight. It's just like regurgitating crap.

I do think it helps a lot of my students, kind of, brainstorm and reflect, and things like that. But the actual writing ... it's very shallow and doesn't have the things that I'm looking for. And ... and they're going to get points taken off, not because I know they use generative AI, because it didn't help them meet the standards that I put forward. So, you know, having those conversations up front of, like, "This will not help you."

But I do notice a trend in how students, like, as we use it more over time, and me as well, for little things, I find myself struggling to get started on other things, right? It's like, "Oh God, I'm so tempted. I know I shouldn't use it here, but it would save me so much time." And so, again, I think, you know, starting this early, again, going into this AI literacy, I think that's why the longer we put off these conversations, the harder it's going to be to break those habits.

Adam Finkelstein: So, you sort of were alluding to something interesting there, the issue around, you know, the not wanting to use it there or wanting to use it for an efficient use of time is a good example where we as, sort of, people in professional scenarios tend to look for opportunities for efficiency because we can bootstrap and do other things. Whereas in terms of our students, we want some cognitive struggle. There are things they ... they need to work their way through.

So, one of the questions is, you know, how to help identify those scenarios and also help point out to them that "Hey, this is something you want to do on your own first before you, kind of, use AI" or "This is something you want to use AI first." And it seems like that's one of the big issues of trying to target, you know, what do we get students to jump past and what do we get them to struggle through?

Nikki Lobczowski: Well, I'll ... I'll take it even further than that because I think there's a bigger issue in that transparency of what are the ... what are we actually wanting them to learn? And so, it's going to be hard to connect, like, when we want them to think critically, if they don't realize that that's what we're asking them to do.

So, again, I'm going to tie it back to math because that's what I know. But I think there's a ... there's an easy ... the easy out is, like, just to get the right answer. And that's not the goal in a lot of this, right? It's ... it's about the underlying processes, the figuring out, the setting things up. And if we're not explicit about what they're trying to learn, they might not realize that it's not an appropriate use, right?

I'm going to continue to circle back to metacognition that, you know, this is, you know, there's tons of research that shows that it should be modeled, it should be explicit. But it's not. And so, having students think about, like, what are my goals here? And ... and just kind of slowing down and thinking about that. And that's the other part ... is slowing down ... is kind of the antithesis, right, of ... of AI. But why could I slow down? I could get so much more done.

There's ... there's a big gap of ... or ... or a big misunderstanding of what it should be used for and what it shouldn't. But that's, again, going back to the problem of, like, because people aren't engaging in

these conversations. And ... and again, having students and teachers be very explicit about these underlying skills and connecting them to effective strategies.

Jasmine Parent: Yeah, that really resonates ... especially the idea that slowing down is part of the learning, and that AI doesn't always help us do that. And if students aren't clear on what the learning goal is, it makes sense that they'll be even more likely to skip ahead and use a tool to do so. So, bridging those two pieces ... you know, being very explicit about what ... what we want them to learn, and then helping them recognize how and when AI is appropriate is ... or feels ... essential. And I think that's maybe where AI literacy comes in.

Nikki Lobczowski: There's a huge, a huge need for AI literacy. Really, it's ... it's popping up everywhere. I mean, it's not too much of a stretch from digital literacy and media literacy and all these kind of things.

But where it gets tricky is ... you know, and I went to a panel last week, I was, like, you know, "Whose job is it to do this? Are the parents supposed to be doing it? Are the teachers? And whose job is it to train them?" And ... and within literacy, AI literacy, it's like, "Do I need to know how to pre-train a model in order to use it?" So ... so it's ... it's that degree of what do ... you know, who ... who needs to know what information and for what purposes?

And again, I ... I struggle with this and ... and it makes me think of, like a ... we were in my class, we were watching a video on how they're banning phones in, like, a local school ward. And there was, like, a parent being interviewed and was, like, "They don't need to take them away. They just need to train them how to do it." I was like, "Who is they? Why are you putting ... oh, the teachers need to do more?" Right?

And so, you know, and obviously, you know, that's ... that was for K through 12, but it's true in higher ed of, like, "Oh, one more thing for us to do. Oh, great, great, great, great, great." On top of everything else. And so, what do we do? How do we have these conversations with students? How do we train faculty and in an equitable way, in a way that makes sense?

Adam Finkelstein: You know, it's really interesting that you ... you touch on a real big issue ... that, you know, faculty are really put in a very difficult position because it's ... you know, here there are augmentations and additions into curriculum that they've never had training for. No ... no courses we ever took had gen AI. And it's totally new. And it's, like, you're applying things into scenarios where nobody's ever gone before. And so, it really is, like, a lot of breaking new ground.

And it's ... and it's one of the things in terms of transparency ... is a lot of things that students don't necessarily understand either. Like, no one is there, you know, doing all of the AI stuff for faculty. You know, it's like ... it's like no one is there helping you with myCourses. You know, it's like you're doing it yourself. Like, it's all part of the ... the ... and I guess maybe it's one of those ... the role of the faculty member has greatly expanded in the teaching realm. More so, I think even than the research or any

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other area. It's the amount of things you have to do and know are a lot more and ... and probably for the good because they are going to enhance and make things better. But it's definitely what ... you know, not necessarily what a lot of faculty originally signed up for when they decided to become a professor of X or Y.

Jasmine Parent: Yeah, and I think that really captures the tension that faculty are feeling right now. A lot of people are doing what's manageable just to get through the term, rather than working from this sort of shared or well-supported approach. Even when trainings and resources exist, the time and the capacity that faculty have to engage with them might be limited.

So, I think that's something that we're very mindful of in our work, as well, you know, how do we support faculty through this shift without adding more work to their already full plates? And when these conversations don't happen, it can feel easier for faculty to just avoid the topic altogether or rely on really restrictive measures of, you know, totally banning AI in the classroom, even though that doesn't really reflect how students are actually using and engaging with the tools.

Adam Finkelstein: How do you see your course, sort of, evolving over time? So, now ... now that you've done this, sort of, this fall with your course, what do you, sort of, see that you're going to do in, kind of, next iterations as these things continue to ... at breakneck pace, you know, new AI, kind of, enhancements come out to each one of these tools?

Nikki Lobczowski: I think that's the other really frustrating part is ... I'm going to plan for something and then it's going to completely change. And then ... then what? Like, so, it's not just like I'm asking ... you know, we're asking teachers to change. We're asking them to continually change as long as this change, which could be forever. And ... and that's just, you know, that's a lot to ... to put on.

This is why I engage in conversations with my students. I beg and plead for them to give me feedback throughout the class on the teacher evaluations of, like, how to improve this. I try to have conversations with them, give them ideas, have them give me feedback of that.

So, recently, our final project is for them to write a paper. And I ... I had a [Mitacs](#) project a couple years ago where they used AI as this, kind of, like, grader for the lack of a better word. But what you could do is ... you could put in the rubric. And then I ... and then they can put in a draft of their paper and ask the generative AI to evaluate it.

So, I ... I was in office hours with a student. We sat down and did it together. And it gave her a couple of pointers of, like, areas where she could improve. And she's like, "Oh, I know" or "I don't" ... just watching her engage in this metacognitive processes.

So, I sent out a message to, you know, the whole class of like, "Hey, you can do this. Here's some things to remember. Just because it says you get an A does not mean I will give you an A or that you earn an A rather. You know, that you can't do this with it. You can't just copy and paste." Some stuff to remember. You know, like, those kind of things. And this is what happens ... every time, I feel like I

have a conversation with somebody about ... "Here's an idea. You can use it." They're like, "Huh, I never thought of that."

I think some people, and I think this is where I see a difference in my students, is that some ... it's, like, much higher on their list of, like, it's a go-to strategies. And for others, it's like a last resort or something they don't even think about. So, you know, one of the big differences I've seen in students since I've been here, especially my international students where English is not their first language ... reading complex theory papers ... they'll use it either before or after to summarize the paper so that when they read it, they can assess, like, "Do I have the same interpretation of this?"

Now, fully aware, some people are just using it to summarize and not actually reading the paper. So again, when I give them this strategy, I tell them, you know, "Well, what happens if you don't read the paper? You can't connect the examples to your actual lived experiences because, you know, ChatGPT or whatever is telling you what's important in this chapter. You don't get to make that decision for yourself."

Jasmine Parent: But I think there's, like, there's a lot of ... there's vulnerability tied to transparency, especially with this topic. So, I do appreciate your transparency with the things that you know and the things that you're still learning. We're really grateful for your time today and I want to reiterate this importance, as you pointed out too, of having these conversations. You know, we're all sort of navigating this together. So, thank you for ... for coming on today. Do you have any final message you'd like to share?

Nikki Lobczowski: I'll say this along with any other thing that you're trying to integrate in your teaching: it ... it doesn't need to be a large scale change. It can be incremental. There are days where you're going to fall back on older practices and there are days that are going to be more successful than others. I ... I think the key here ... the way to make that, like, lasting change is just to, kind, of chip away at it, realize that you're a human first. You're, you know, you're doing your best.

And again, having those conversations and being transparent and ... and being reflective I think is the most important part, not just completely changing everything at once, which I think sometimes we feel like we're pushed to do.

Jasmine Parent: Excellent. Well, thank you so much, Nikki. This was great. Thank you to our listeners who are ... who have tuned in. Please subscribe to Teach.Learn.Share and let others know about it. Until next time.