Transcript for FLO Friday: Teaching and Learning with ChatGPT: Navigating the Landscape (May 26, 2023)
BCcampus session hosted on May 26, 2023
Host: Gwen Nguyen
Facilitator: Lucas Wright

GWEN NGUYEN:
Again, good morning everyone and welcome to our FLO Friday on ChatGPT in Teaching and Learning. It's a very beautiful Friday in Vancouver Island. And I hope that the sun shines wherever you are too. It's the Friday that I really wish to be somewhere else rather than in front of my screen in a Zoom session, so I'm very thankful that you choose to be with us today. My name is Gwen. I'm a learning and teaching advisor, with BCcampus. I would like to start the session with territorial acknowledgment. So if I could have the next slide, that could be great.

And as many educators and scholars around the province are engaged in the practice of territorial acknowledgment, and I'm aware of the recent criticism regarding the land acknowledgement that I have also been making several mistakes in this process myself. I find that land acknowledgments are a very important and powerful start in any learning event. So especially when we gather here in digital space with all the AI tools, like related it to higher education. I think that it's very important to think about our relationship with everyone and everything surrounding us. I came to Vancouver Island in late 2015 to pursue my study at the University of Victoria. And I fell in love with this beautiful and peaceful place right at first sight. So I'm a haiku practitioner besides my work, so I usually write short poems in my free time. I would like to share a short one. "When I came, the land is part of the Earth's surface. When I left, the land suddenly transformed into a spirit flying with me wherever I went."

We normally talk about the land and the people as two separate entities. But in some Asian cultures, there's no dualism between humans and environment. The land is actually the people, and the people or the land. So I respect it. I really respect and admire that Indigenous people love the land as who they are. And the relationship with the land and everything surrounding, surrounding us is very important in shaping and growing who we become. So I'm joining you today from my home office located in their traditional territories of the lək̓ʷəŋən (Lekwungen) speaking people, including the Songhees Nation, the Esquimalt People. And W̱SÁNEĆ People, whose historical relations with the land continue to this day. You're invited to share your introductions as well as the territorial acknowledgment in the chat if you wish.

So I would like to go through a few housekeeping items before the introduction of our facilitator and the topic today. This session will be recorded and you're welcome to keep your camera off and feel free to rename yourself to Participant. Live captioning has also been enabled. At the end of the session, we would like to invite you to participate in a short anonymous survey, and we will pop the link in the chat. Your feedback is highly appreciated because it's going to help us a lot in planning more events to support professional development in teaching and learning in post-secondaries in B.C. So I would also like to acknowledge the

special presence and support from my co-worker, Kelsey, from BCcampus IT Support in the backend. Okay. Back to our topic today about ChatGPT. So back in 2012, in one of my class assignments, when I asked my students to visualize the language class in the next 10 years. And in most of the infographics, I saw the emergence of the system of the bot teacher, either a hologram or drama. I was shocked and very sad at that time. And as many other instructors, I started to worry about my career. Then last year in November 2022, ChatGPT was released. Even though it's not the first one available in higher education as AI technologies, but it became so popular among all the scholars and students. And within just a couple of months, I saw my YouTube friends reviewing it. We discussed it at the team meetings. Even at the informal catch-up coffee with my friends, we talk and joke about it. So I was like, my students and many other wishes have come to life and here for the reasons and is actually evolving and becoming with all of us. So I started to learn and write about this topic myself. I follow all the posts and the journals related to generative AI and ChatGPT in education, and with our Lucas. So I attended one of his sessions offered on LinkedIn and I was very impressed by his talk initiative around this topic. I just love his vibe and courage that he takes as a scholar and the learning designer around this topic. So my co-worker, Helena and I are very happy to invite him to facilitate this session on Navigating the Landscape: Teaching and Learning with ChatGPT. So I know that he has the full session planned for all of us. And here you go, Lucas.

LUCAS WRIGHT:
Thanks, Gwen. Thanks so much, everyone. Welcome. I'll introduce myself in a second, but I noticed there's 116 people in the session, which is wonderful and we have lots of activities today. So I'm really excited for what folks can share. I think that's one of the most interesting parts of this space right now, is how we can share and think together on this. So here's a picture of a maze. And I think I asked DALL-E2 to put a bunch of AIs in the maze and we can think about navigating that landscape.

So a couple of outcomes today. We'll take a look at investigating the capabilities of ChatGPT for enhancing student engagement and educational outcomes. We're going to participate in a couple of discussions. One on ethical challenges, one on implementing it at our own practice, as well as one activity around futures with ChatGPT. And hopefully as we go through this session, we'll start coming up with some questions that we can start asking about generative AI and ChatGPT in this space.

So an agenda, I'll give you a second to read it. I think the main point with the agenda is I'll do a little bit of talking between each of the activities, but my main goal is these four activities. So activity 2, about how we use it, we're going to do an intro activity. We'll do an activity around best and worst case using ChatGPT. So I'm Lucas Wright. I'm a senior educational consultant at the Centre for Teaching, Learning, and Technology at UBC. And previously I worked at BCcampus for a year as well. And I think my interest in the work I do is helping faculty, students, and staff think about technology and giving them some space to think about it. I'm not an expert with ChatGPT or generative AI, but I have been using it very, so much on my own, and I've also researched it quite a bit now. Again, just as self-research. And I will say that outside of

some folks who specialize in NLP or large language models, most people right now are not experts, and I think it's a great space for conversation. I got to use a Lensa app for this picture, which is one of the rare cases I get to share my Lensa photos outside of Instagram. Lensa generates AI portraits.

So in order for you to participate and to make your participation easier so you're not just looking up at a screen, I created a collaborative Google Doc. And you're welcome to comment on this doc. We're just going to share it in the chat now. But I've also linked to examples and resources and everything I've talked about. I really wanted to use this picture. I don't know if you've had a chance to search stock images on DALL-E right now, but they're all deeply in the uncanny valley and quite disturbing, so this is what they came up with for collaboration.

So let's start with a quick overview around ChatGPT. And I'll acknowledge that I'm sure many of you have a lot of expertise in this area. You've done a lot of reading, you've worked with it. So I'll try to keep this fairly brief.

But before we jump in and introduce that, again, we have 118 people in the room. What I would like to do right off the bat is kind of get an idea of who's in the room. And get a quick idea of what you're thinking around generative AI for this activity in a moment, I'm going to share a Padlet. And if you haven't used Padlet, It's a collaborative, a collaboration tool. But they've added the ability in Padlet now to automatically generate images from DALL-E. So what I'd like us to do, and I'm going to demo this a second, is I want us to go into the Padlet. Kelsey is going to share that in the chat now. And when you're in the Padlet, I'd like you to introduce yourself. Please feel free to use your name if you want, your affiliation if you want. And then I'd like you to generate an image, and I'll show you how to do that in a second, that's a metaphor. Your metaphor for how ChatGPT or generative AI is impacting higher education. So I'm going to share the Padlet now. And I'll kinda walk you through how this process works. So if you go to the Padlet, you'll see here is my metaphor here. A giant question mark, kind of destroying a skyscraper like King Kong. Just click on the plus here. And when you get to the plus, you can add your subjects. So I can add my name Lucas Wright. I can add my affiliation, et cetera. And then click on these three dots here and go to "I can draw." Once you go to "I can draw." you can prompt chat DALL-E for an image. And what I do recommend with DALL-E, if you haven't tried this, is append whatever you put in with digital art. It seems to pull better images that way. So I'm just going to do it. Sorry, not very creative. I'll just do an image of a computer eating a hot dog. I don't know why. And just put "digital art." So think of what your metaphor is. Once you've done that, click on this arrow sign here. And it takes a little bit of time. And then your image should show up. Once you've done that, you're going to be able to publish the image. This is a little bit of an experiment. I'm not totally sure how it's going to work with all of us doing this. But let's give it a shot. And again, once you've done your image, just publish it. Wonderful, and it's great seeing these popping up here now. So I'll give you a couple of minutes to do this. Great. Alright, I like the otters in space here. And we'll see how many images it takes to break Padlet. A computer brain pencil. I like the tidal wave one. I love that idea, that rabbit hole. Wonderful. I think this is what I'm most excited about in this session is that we're going to

just have a chance to collaborate together. So many opportunities. I like that one. Learning support. How we can partner with AI. And it's great to see such a diverse group of folks. So I'm gonna give us another minute or so on this. If you haven't had a chance, you may want to take a look and see who else is attending this session. Who else is in the room? And you know, I encourage us as we're doing this, to use the chat to communicate with one another as well. Share your ideas, et cetera. I'll acknowledge I'm not going to have much time to see the chat until after. But this is a great space to share. Let's go 30 seconds more on this. And when we're done, you're welcome to continue thinking about using Padlet and using AI in your classes. I think this is an interesting type of activity just to get into sharing and creativity. Wonderful. Thank you. So I'm going to jump back now into our slides. And again, please feel free to keep sharing on to that Padlet and scanning.

So a quick definition of generative AI in this session is about ChatGPT. But I think it's worth thinking about the overall class of generative AI. George Veletsianos has a good post about the importance of not focusing only on a single tool. Generative AI is a type of system capable of generating text, images, or other media. Generative AI systems use generative models, large language models to significant or statistically sample new data based on the training set, and for ChatGPT, the training set is a combination of Wikipedia, books, and I'm not sure the extent that the books are open or closed. It's a little bit questionable right now and you can find Harry Potter information on ChatGPT, as well as web scraping.

This is ChatGPT. And ChatGPT, as you know, came out last year. There's previous GPT models. Right now, we're at GPT-3.5 If you haven't had a chance and you're willing to spend a bit of money. Chat GPT-4 is also available. You have to pay for it and it's much more powerful. And I think this brings up some interesting questions around equity in our teaching when some students may be paying for a much more powerful model of GPT than other students are with the free version.

So GPT-4 these are a couple of its capabilities compared to GPT-3.5, it has really improved accuracy and I'll show an example of that. It can also ingest up to 50 pages. And we will talk about privacy in a little bit. But one of the powers of GPT-4 is you can ask it to ingest things and to do this you just need to prompt it and keep mentioning, "Do not write anything. Ingest this, do not write anything," and then use this in later questions. So this is often called single-shot or multiple shot rather than open shot. It can also do image to text. However, this hasn't been released within GPT Plus yet. It will be in the future. And from what I've seen, it's gonna be able to analyze images and create textual information. Citations aren't perfect, but they're better. And the plug-ins are just starting to come out with this. A couple of plug-ins that I think are really significant. One is Wolfram Alpha, which is a computational engine that is going to be plugged into GPT and allow it to do more complex computations. And one that I played with and I realized I forgot to link to is. It is Perfect Prompt that allows you to put, it's not available in Canada yet, but put a question into it and write a really high quality prompt to prompt ChatGPT with. These plugins are growing. And finally mentioning a lot of folks are using GPT with the API, including many of your students, I would expect. So rather than generating answers, they're

generating spreadsheets. They are creating applications with it. This is an example of the accuracy of GPT-4 compared to GPT-3.5. And what they did is take a number of different exams with it. So an example of this is on the standard bar exam, GPT-3.5 got was in the 20th percentile. GPT-4 was in the 90th percentile. So it's a real game changer in terms of the quality of responses created.

And I wanted to share this quote around capabilities. I found this paper. It's really mind-blowing. It's called "Can large language models write reflectively?" from *Science Direct*, and I've linked to it in the tab. And what this group did is they trained GPT-4 to create reflections for a pharmacy course. And when they created multiple reflections, and they had graders grading these. And what the graders found is that they consistently mark the GPT reflections higher than the student- written reflections, and they couldn't differentiate between the two. So when we're thinking of things like reflective writing, I think with good prompting it can make a really quality reflections. And these were critical reflections.

So when we're thinking about capabilities, I wanted to mention, you'll see it. Or I've seen in the media, lots of different articles that talk about the minimal capabilities of GPT, saying while I tried to do this, it doesn't generate an essay. I think a lot of this is in the prompting. And with really good prompting, we can generate very different responses. So these are the, this is the prompting approach query example context that Li talked about in the previous article, and they used to generate these reflections. You create a query with a set of clear instructions. Provide an example, so train it a little bit. Some people call this single shot or multi shot, and then describe the context. In addition, what they did in this activity, and you may want to try if you haven't yet, is ask it to evaluate its own responses. So once you print out the response or once it creates the response, say please evaluate this response. Let me know the criteria you used. It will tell you the criteria and then ask it to make further responses. That's what they did in this case. And I think they made it make 100 responses based on that criteria of the quality response. Another approach you can take to prompting it is to get it to show its own work. And this is really interesting for accuracy. And it's really interesting when we're thinking about trying to get beyond how opaque this system is, is just asking it, where did you draw those ideas from? Share the sources. Share how you worked out that problem. Share why you rewrote this paper in this way. So I think why a lot of this is important to me, and I wanted to share my own example before we share some of your examples. My whole life I've had some written output challenges which is very interesting being in academia and I'm really privileged and happy I landed here. But having to express myself in writing, including every email that I do now is really stressful for me because I still make really silly grammatical errors. I still have a real challenge in the way I express myself, and I've been finding that as long as I'm very attentive to privacy, it's really changed the way I think about knowledge and think about my own work. It feels for the first time in my life that I can create things without feeling embarrassed by it. And I wonder how many students, how many people are dealing with written output? How many people are dealing with other challenges who are interested in these tools?

So for the first activity, what I would like to do is, we're not going to use a Padlet for this activity. But what I'd like you to do is share the way that you're using ChatGPT or generative AI in your own work or life. We're gonna be able to look more at academic examples in a later activity. But for now I just, I'd love to hear from you in the chat. What, how are you using these tools? And what strategies are you using these tools? After we do that for about five minutes, what we're gonna do after that is I'm going to do stop sharing. And we can hear from a couple of you on the mic. So let's kinda light up that chat to share some of the ways that we're using it. And I'm just going to open up the chat. So asking it to find the error in an SQL query or explain the error and try to fix it. I don't other than in educational settings. Thanks, Barbara. Creating a tagline for a current project. Lesson ideas, applied questions, Write up a trip my husband and I took to Hawaii. Grammarly AI to improve my written communication in teaching. Thank Sheldon. That's interesting as these AI tools aren't new. We've had some of these AI tools with us, such as Grammarly for a long time. Helps me get unstuck when I'm doing creative writing. I'm volunteering for a reporter's YouTube channel to do a translation from Chinese to English. And ChatGPT does a fantastic job helping us get the first draft ready. Writing code. Wonderful. Someone's mentioning they appreciate knowing these capabilities more. Frank is using it to write quick blog posts, reference letters, song lyrics. To get over the fear of a blank page, I love that one. Art directing. So to generate images instead of using stock image libraries, marketing material, learning outcomes, party ideas. A supercharged Google. Leon, That's really interesting. I know that Google has just released in the states an AI search engine. I know that they've been a little slow to release in Canada, partly because we're drafting AI legislation, which makes me quite happy. QuillBot for grammar and spelling checks, contract writing, marketing. Wonderful. I'm just going to give you another minute of sharing in the chat and then I'm going to stop sharing this screen. And maybe a couple of you can share with your mics. Book synopsis. It could make book clubs a little bit easier. Background for DMD role-play characters, love it. Alright, I'm gonna stop sharing. Please feel free to keep adding to the chat if you'd like. And I'm wondering if a couple of you, I think we have time for maybe two folks. Do a couple of folks want to jump on the mic and explain how they're using it in their own lives? Please feel free to raise your virtual hand if you want to. I know it's a little daunting with 124 people in the room, but it'd be great to hear from you. Wonderful. Xinli, and I'm sorry, please correct my pronunciation. XINLI You got it. Thanks. So I volunteer with a YouTube channel in fact. So it's a standby Chinese reporter who does reporting for news in China. And we translate it from Chinese to English. So there's a transcript file. What I do with it is I feed ChatGPT this file then as I translate from Chinese to English, it does a very good job, especially when there's a particular reference for historical figures, historical events. It finds exactly the right person's name, whether they're Chinese or American or Canadian. And then you can find the correct event. I'm quite surprised by that.

LUCAS:
Wonderful. Thanks for sharing. Wonderful and Olivia, I think you'll be the last for this activity. Please go ahead. Oh, you're muted.

OLIVA:

I think what I found really great about it is finding applied questions for disciplines like when you can't really think what kind of questions would we ask for assessments. So we don't have students copying or any academic integrity issues. And you can actually ask ChatGTP, like, what kind of questions would you have less cheating in them and are applied questions. And it actually helps you come up with those kinds of questions when you feed it.

LUCAS:
Wonderful. Thank you. Thanks for sharing. Let's keep going now and I'm on a, we're on a fairly tight time schedule. Thanks for sharing that, and we'll save the chat afterwards as well and see if we can share that. And I will mention just before I jump in, I know there's a lot of folks in the room that have a lot of critique and a lot of cautions around this tool. And there is a section on this in this presentation. And I just kinda wanna reassure you that, you know, a lot of my views are really critical to this tool as well. And it's really challenging to balance the criticality around these tools with the excitement around these tools.

So in the next section, I want to talk a little bit about enhancing student engagement and educational outcomes. At the end of this activity, we're going to do an activity where you can share how you're using it in the area of education. So first of all, this is a paper—I've linked to it in the chat—by Terry Owen Kichizo, an undergraduate student who says "I'm a Student, You Have No Idea How Much We're Using ChatGPT." Again, I think in the media, there's still tends to be this idea that students are just saying generate essays. But they're not, they're using it often in a much more strategic way. So in this case, Owen talks about how he uses it to generate multiple thesis statements. And then create an outline and then create stem paragraphs for each part of an essay, rather than just this idea of simple plagiarism. And I link to, I tried to use his generation approach with my own kind of Google document and you can find that in the chat. But I think as we're thinking about how students are using it, there's a lot of complexity there that we may not be realizing, or we may not all be realizing.

How can it be used in teaching and learning? One example is Vered Schwartz, a computer science professor who uses it for learner support among other ways. And Vered also presents about this tool. So during a lecture, if a student doesn't understand the concept, the app could generate a quick explanation to a question, which then allows the students to understand the rest of the lesson. If we wanna get really futuristic about this, a woman that I follow, Rachel Woods, who talks about AI and runs an AI start-up, talks about perhaps in the future captioning being more than about a visual representation of what's talked about. But when someone's talking about something, maybe it's breaking it down in multiple languages and in multiple complexity levels with different captions. So what does it mean for learner support?

Next is accessibility. This is a tool. Could I get a thumbs up if you've heard of Goblin Tools? Using the virtual thumbs up. This is a tool my colleague Will Angles shared with me and it was a tool developed particularly for neurodivergent people and what it does, or people with neurodivergence. What it has, it's built with ChatGPT on the backend. It has a couple of things they can do. So for example, if they put a brain dump in there, we'll make a list of tasks. So

7

helping folks with ADHD. For the judge tool, they can put an email in there, and it will tell, will try to judge the tone for them. I've linked to this in the chat, but I think this is an interesting idea around some of the ways that it can transform, tech transform writing to help neurodiverse people. So there's lots of accessibility uses there as well.

Next, this is an example of using it as an in-classroom assignment. Dr. Pretap-Singh has modified food nutrition and health at UBC product selection. For part of the assignment, he allows students and encourages them to use ChatGPT to identify recipes, ingredients, and compositions for new food product development. So for some faculty, for some instructors, they're really embracing it and thinking of ways to use this in their teaching.

This is an example from SFU. This was an article from February. Again, I've linked to all of this in the document. In this course, Leanne Ramer asked students to synthesize the results of several studies around experimental treatment for neurological disease. And she used tools like ChatGPT and also Perplexity AI. And this session is only around ChatGPT, but there's lots of different AI tools that faculty may be using.

And I wanted to share this and again, I'll get a thumbs up if you've heard of Khanmingo. Khanmingo is a tool in development by the Khan Academy. And it's the idea of an intelligent tutor or a chat bot-based tutor. These have been around for awhile, but I think with GPT and some of this power, this idea of tutoring and having intelligent tutors will be very significant. What I think about when I think of these sometimes is, you know those courses you've taken at university, they're kind of they're typically, I won't mention any names, but they're often compliance-based courses. So you have to go through the course, do these compliance courses, and they're just kind of check- off-the-box type courses. I'm wondering what it would be like to have an intelligent tutor rather than doing these check-box type courses in our teaching and learning.

And this table of examples, I think, is really creative. This is from Sabozalieva and Valentini from a UNESCO "Chat GPT and Artificial Intelligence in Higher Ed." But they think a little bit more about what this could be in teaching and learning. So a study buddy touches a little bit on the intelligent tutor, a co-designer, a dynamic assessor. So again, back and forth around assessment, a possibility engine, and I saw that a little bit in how some of you are using it. This idea that it can generate multiple possibilities. A Socratic opponent, someone to debate with. A guide on the side so act as a guide to navigate physical and conceptual spaces. So again, I've linked to this document, but lots of creative ideas for its use.

So now it's over to you. What I'm going to do now is using Padlet, and I'll demo this again. I'd like you to share ways you are incorporating GPT-3.5 or GPT-4 in your teaching, learning, or practice. So in the last activity, we looked more at the self. Now I want to think more about how you're doing this in your workplace, how you're doing this in higher education. But I'd like you to use two colours for this. So I'll show you how to do colours in a second on the Padlet. But for things that you're currently doing, I want you to use green Post-it notes, and for things that you

can do in the future, so kinda future cases, I'd like you to use blue Post-it notes. I'm going to take this down right now and let me just share the Padlet with you. Great. So I have the blue and the green, and I'll just show you how to change the colours of your Padlet. If you click on here, I can say I'm using it as a dynamic tutor and you can describe that below if you would like, right here, and then change the colour right here. So again, green for right now, and blue for future uses that you can think of. So I'll give you 5 minutes on this. And again, I think the real strength of these workshops is the opportunity to come together and to share what we're doing with these tools and we will share these out with you after. Wonderful, Thank you. So these, so a dynamic tutorial, a writing tool. And I'll just move these around a little bit as you're, as you're writing. Learn how to evaluate and write mathematical proofs. Titles and summaries for workshops. To understand the complexities of AI-developed information. A content creator. As I contemplate her, I love that. Incorporate into assessments in the future, and I'd love to hear from someone when we stop about what that looks like. More streamline code. Brainstorm discussion prompts. BIPOC and Indigenous case studies to give novel case studies. And if you haven't tried this already, ChatGPT is quite good at writing case studies of different types, including based on literature that you feed it or literature that you mention. Wonderful. Lesson planning. To draft an assay and then critique it. I've found that in my subject area, ChatGPT gives very specific, non-generic response. What's neat about that is critiquing it from a certain perspective, like act as an associate dean and critique this plan that I'm sharing. Or act as a disgruntled student and critique this lesson plan. Let's just give another two minutes on this part. Wonderful. Supporting student engagement across languages. Reduce time spent on creating assessments. So many ideas here. Support critical thinking. Philosophical questions about writing. Alright, I'm going to stop us now again. I'll encourage you to keep adding there if you want, and we'll be sharing this later for ideas.

But I want to stop sharing. And again, I think we have time to hear from two people now before we move on, and we talk about some of the ethical challenges around AI. So please feel free to put up your virtual hand. Again, I know it's a daunting group with so many folks in the room. But it would be great to hear from a couple of folks. Wonderful, Sheldon, please go ahead.

SHELDON: I'm not sure if my camera is going to work here. Of course not.

 LUCAS: I can see a bit of a sideways angle.

SHELDON:
Yeah, that's okay. I just find… When I speak, my way of explaining things doesn't make sense to 99% of the world. And so sometimes in my head, everything I put down for teaching materials makes so much sense, and then my students are confused by it. And so by using ChatGPT, I will use it to give me different ways of saying things and I will pick out from that what is the most common and best way to say it. Does that make sense? Yeah. So my language is weird and I think that's probably my verbal output sometimes.

LUCAS:

Thanks for sharing. I mean, that resonates so much with what I was saying about writing. Is writing actually for someone else finally. Thanks, Sheldon. Now just see if we have one more person. Alright, if not, I'm going to continue on now.

Let's shift gears a little bit, and talk about some of the ethical challenges around ChatGPT. And I've done this different presentation a couple of times. And each time I have to remove a couple of the ethical challenges because there's so many, they won't all fit within the time. So this is a quote from Sam Altman and this is a blog post that he released two days ago. And it's kind of a call for governance around AI. I think it should make us all quite uncomfortable when the creators of AI are calling for governance and calling for regulation on it. So he says, "Given the picture as we see it now, it's conceivable within the next 10 years, AI systems will exceed expert level in most domains and carry out as much productive activity as one of today's largest corporations." I'm not sure if this is true. I tend to lean towards it. I think this may happen. What does this mean? What's the significance of this? And why are these groups calling for governance right now? And what does governance look like?

Next is privacy. I really like this quote here. There's a lot of university data going somewhere, and we don't know where. So ChatGPT has already leaked a couple of times. It's a little bit unclear whether they're using the data that we put in as training data and lots of private information is going into this. Lots of reports are going into this. It's really hard to know. I think at the very least, it's worth thinking about. When we use ChatGPT, are we putting names into it or are we just putting name fields? I know whenever I'm using it, I take out the name of the university. I take out the name of any person that I mention, and I just put square brackets and say "name 1, name 2." So what are we doing to deal with this privacy challenge?

Next is misinformation. I worked with a project called the Digital Tattoo at UBC. And we help students think about their digital identity. And recently, we had a spam come in. And we often get spam, and sometimes new students will actually reply to it. This spam was totally different and it took so much time for us to figure out if it was spam or if it was a legitimate email. So what's coming out now? How are we going to deal with the misinformation? The internet became quite a dystopia around misinformation in the past few years and it's something we really haven't been able to contain. So what does this mean when, you know, someone can write 1,000 letters to the government using a spreadsheet? Someone can flood the internet with misinformation. How are we going to deal with this? What is it going to look like?

Intellectual property. This also gave me a lot of pause. I linked to this article by Naomi Klein. And to be honest, I'm just not sure how to grapple with this stuff now, one of the ways is to bring people together, to think about it together. "Because we train the machines. All of us. But we never gave our consent. They fed on humanity's collective ingenuity, inspiration and revelations, (along with our more venal traits). These models are enclosure and appropriation machines, devouring and privatizing our individual lives as well as our collective intellectual and artistic inheritance." So what is this web scraping that it did mean for us? How are we going

to... How do we reconcile this? The amount of books, the amount of web scraping, the amount of things that were taken from the web, and now it's becoming private. What does this mean?

The environmental impact. So there's limited data on the carbon footprint of a single generative AI query. But some industry figures estimate it to be four or five times higher than that of a search engine query. Again, we've seen how the world deals with environmental issues from technology. Bitcoin, bitcoin mining. What does this mean? What does it mean when we put in a search query, and it takes far more data, far more carbon for each of the search queries that we do.

And accuracy and hallucinations. So GPT-4 is better at this. I love this chart from that UNESCO document. Does it matter if the output is true? There's a quote around ChatGPT that it's 100% confident, but 70% accurate. And I think this is a real challenge when working with it. You may have had that experience when you're using it. And it tells you something that's completely incorrect. You question it, and it says, sorry about that. What does this mean if you're a novice student using the tool?

And one thing I didn't focus on much during this session. Intentionally because I think we're probably hearing a lot of focus on this right now is learning and academic integrity. And I put learning here as well. I think everyone's trying to deal, to grapple with what it means for academic integrity. One place to look for how we're dealing with this, as Clint Lalonde talked about in a recent post, the math departments who have been dealing with Wolfram Alpha for a number of years now and have come up with some different approaches with this. But what is our approach to academic integrity? And how do we not go down the rabbit hole of using the escalating integrity checkers versus AI. These integrity checkers, as Ian Linkletter talks about in his recent tweet, have lots of false positives. Recently at a Texas university, the instructor accused his entire class of plagiarism because he fed their essays into ChatGPT and it told him it was plagiarized. But how do we change what we're teaching? How do we change the way we approach assessment to deal with academic integrity? And I've added to that learning. What does learning mean? How can we help to make sure that our students are learning if there's short cutting in the learning process? How did they make sure they're learning if they have ways of short cutting the learning process?

And again, part of the reason for these sessions from my perspective is I think we need to create opportunities for faculty, staff, students, and other stakeholders to discuss the impact on higher education and co-construct strategies to adapt and adopt to AI.

So I had another activity, which I was really aching to do, where we think about the worst then the best case for AI. But what I would like you to do instead is if you want to do that on your own, I'll just quickly go over it. And then I just wanted to stop sharing and have a little bit of a discussion, just an open discussion about what your thoughts are around ChatGPT. What are your thoughts around the ethics? What are your thoughts around the positive? So for the activity, and again, I encourage you to do this on your own, is to imagine that universities have

not been able to respond to generative AI in an ethical learner-centred and equitable way. What are the consequences going to be? What is university going to look like? What will be changed? And the best case? What could generative AI mean for education? What would it look like if it were used in an ethical way? How could assessments change for the better? I'll encourage you just to think about that after this session. But right now I just wanted to stop sharing. We have a few minutes left. And I'd love just to hear from a few people about either the ethics that we've talked about, the use in higher education, or just something else that you've been thinking about around ChatGPT. Again, I'll get you to raise your virtual hands if you want to say something. Yeah, Bonita. Nice to see you. Please go ahead.

BONITA:
Yeah, I'm teaching a course right now. It's entirely online and this is the sixth time I'm teaching it. It is a course on learning to interact and communicate better with learners who are deaf or hard of hearing. So it just requires a lot of self-reflection and examining their own biases and thinking. So we've already had students in previous sections clearly using ChatGPT to write things like reflections and etc. on the activities that we're asking them to do. So I approached it this term. I'm trying to come at it with a very open and compassionate kind of approach. Right away I was saying in my intro video, generative AI can do a lot for you. It can think for you. It can help you write things. It can revise for you, it can edit. So I'm okay with you using it to edit, revise, translate, but I'm not okay with you using it to think. The whole point of this course is to think. And I just had, I was just marking an assignment last night and the student clearly used ChatGPT to write it for them because it was super general and didn't actually address the way they should. So I didn't, I feel like we can't actually accuse them of anything, as there's no way to prove anything. So instead, I just made it super inconvenient. I'd like them to resubmit. Wrote this long thing like I need more individualization, speak about your personal goals, etc, etc. It's trying to individualize more. And I'm curious to see how that goes. I also know that there's probably a lot of students using it to think for them that I wouldn't know and wouldn't catch it. So it's definitely a difficult time.

LUCAS:
I loved that distinction around thinking for them rather than helping them. Great, thanks for sharing. Other folks want to jump in? I'm seeing lots of stuff in the chat as well here. Yeah. Jessica, please go ahead. Nice to see you again.

JESSICA:
Hi Lucas and everyone. Just thinking to the day when we're over that, oh my god, how can we slow this down? How can we restrict it? And we actually invite ChatGPT and generative AI to the table. As contributors to our intellectual process. I'm wishing that there was a way that we could share the prompts we use like in the reference section. Part of the job of our reference section is to give credit where credit is due. The other part of a reference section is so we can follow up and see if we have the same interpretation or if we can, so that we can deepen the research, widen the research and interweave our body of knowledge. So in the reference, first of all, not did you use ChatGPT, but how did you use ChatGPT? Write your prompts. Where did

it... We actually get an opportunity because I feel a little guilty that I'm not giving credit where credit is due, but there's no protocol for giving that credit. But also, I was thinking, looking at your images, I'm just going to put it in the chat, please give me your prompts. How did you give it? How did you get it to give consistent style? Because in DALL-E I get images, but they're not related in style at all. So even learning, even learning the human part, the part where we prompted it is giving credit because we hopefully will all have access to this tool in an equitable world. Then prompting and how we integrate that knowledge and how we change our thinking matters. So that's my thoughts are there like, let's just get over this stage and get to credentialing it or technology. Thank you.

LUCAS:
And I just noticed in the chat, Darren Wilson mentioned that "I ask my students to show their work, share their prompts, how ChatGPT responded and how they edited what came out of the chat bot. So that kind of speaks. Thinking about something like InVivo. We do have, this isn't the first time we will have had somebody or we've asked students to share how they've used a different tool. Leanne, Please go ahead.

LEANNE:
Hi. I've got a bit of construction going on, so hopefully you don't mind the banging. I found it so helpful to hear how everybody's sort of wrestling and contending with this in the examples are really helpful for me. So I just thought I would share how I've been changing things. So I'm teaching a 400-person, fully online course right now. And I just give students the option. I'm like if option A or B. A, don't use ChatGPT and this is how it comes out or option B, I actually lay out, sort of give them the prompt, get them to reflect on how they could improve the prompt. Doing the same type of thing that, sorry, I forgot the name of the previous speaker. I'm doing that same type of thing, like sort of showing their work, showing the process. Linking it back to readings, like okay, so how can you use a concept in this way? And I just kinda see my job shifting now from instead of finding and squashing it out, like how can I actually train students to use this tool in a way that still gets them to be thoughtful. But because my main concern is equity and especially students with different language barriers, I just find that I've just had to shift my thinking of how I'm approaching it and how I can help students use this in a way that they can just be open about. And also just the fact that like we're all learning this together at the same time. So I never want them to feel like they need to hide it, but just kind of like embracing it. As many ethical concerns come along with that. I've just, instead of the first few times, the first few months, I just had a head buried in the sand approach. And now this term I'm finally welcoming it, and it's been really, honestly, wonderful so far to see students just being open about how helpful it's been for them and how it's helping them have a better learning experience.

LUCAS:
Wonderful. Thank you and I loved that. I mean, again, reflecting on the chat, there's lots of great ideas coming in the chat, but I'm just at the end today and I want to, I love what you're saying. We're all learning this together, and I think that's not just with you and your students,

but all of us. And I think that's one of the reasons this is such an exciting space. So thanks so much for sharing. Gwen, I'm going to turn it over to you now for the last slide here.

GWEN:
Thanks, Lucas. The chat is really vibrant, and I think there's a couple of questions there from Annie as well, but we are at the end of the session, so we hope to save the questions and maybe, you know, like we were saying over to Lucas. So maybe you can address it or if anyone responds related to that question. But thank you very much, everyone for staying with us until now. And today is the very last day to register for this in-person event next week. Future-proof Learning Design. So it's also about the integration of AI and other inclusive tech in teaching and learning. So we hope to see some of you there as well. And this morning when I actually, I was driving my kids to school, and I was thinking that navigating education landscape with the AI tool was like driving and navigating the road in some way. It's really hard to just ignore those tools there. But we'd rather find ways to drive teaching and learning ethically, safely, and effectively in a way that is not hurting each other and help the students do that as well. So this is my very last part. And again, thank you very much for staying with us. And we also pop a few links in the chat. One is the survey and a couple of links to register our upcoming micro-course on Creating Course Community, and as well as the ETUG event next week. So yeah, thank you very much, everybody. And have a great day.