

## **Transcript for 2023 Pan-Canadian Report on Digital Learning Trends in Canadian Post-Secondary Education**

**BCcampus event hosted February 13, 2024**

**Host: Amanda Coolidge**

**Presenter: Dr. Nicole Johnson**

AMANDA COOLIDGE:

Hi everyone. My name is Amanda Coolidge. I am the executive director at BCcampus. Today we are going to be speaking with Dr. Nicole Johnson on the 2023 Pan-Canadian Report on Digital Learning Trends in Canadian Post-Secondary Education. Next slide, please.

I would like to start us off in a good way. As mentioned, my name is Amanda Coolidge. My ancestors come from England and Ireland and we're uninvited settlers on the Mi'kmaq, Nipmuck, and Wabanaki Nations, also known today as Prince Edward Island and Massachusetts. I have lived on the Esquimalt, Songhees Nations of the Lekwungen peoples for the past 14 years. In particular, I've lived on the Esquimalt and Songhees Nations, also the Tsawout Nations and the Scia'new Nations. BCcampus offices are located on the unceded territories of the Tsleil-Waututh, Squamish, and the Musqueam, Saanich, and the Esquimalt and Songhees Nations of the Lekwungen peoples. And we're very grateful to be hosted there and to join you today. If you'd like to, please put in a welcome, and if you would like to, an acknowledgment in the chat and Next slide. Sorry, before we go. Yes, that's great. Thank you.

One thing I do want to say is, first I'd like to introduce Dr. Nicole Johnson. Nicole Johnson has been involved in the field of educational technology for over a decade. Her primary research interests include tracking macro-level trends in digital learning in the post-secondary level. Defining and operationalizing key terms associated with digital learning and better understanding how adults informally learn in digital context. She's the executive director of the Canadian Digital Learning Research Association (CDLRA), and she's also involved in a number of collaborative projects with Bay View Analytics and Royal Roads University that investigate faculty experiences with digital technologies in the future of higher education in both Canada and the US. It's really, we have a great partnership with Dr. Nicole Johnson and doing this work.

In particular, we do this work because of our mandate. I want to share our mandate with everyone so that you understand how the survey itself is directly aligned with the work we do at BCcampus. For those that may not know, we drive innovation and teaching and learning and open education in alignment with B.C. post-secondary system priorities. In particular, we lead and facilitate collaboration in teaching, learning, and open education that really support post-secondary educators. We develop and deliver professional development for educators. And curate, manage and distribute collections of open educational resources. And lastly, we collaborate with and we are responsible to the Ministry of Post-Secondary Education and Future Skills and to all of the post-secondary institutions and other system partners. We are incredibly grateful to co-sponsor the CDLRA research that comes out of this, what we're going

to be talking about today. In particular, we find that the findings from this work not only help inform our own strategic plan as an organization but also help you, as educators and as folks in the post-secondary system, better understand what is happening across the systems. With that, I am going to bring it forward to Dr. Nicole Johnson. And one thing is a little bit different about the way we're going to approach this webinar is rather than having Nicole present to us, it's going to be a question-and-answer period. I will be posting some questions that we have curated. Then we will end at about 10:50 and open the floor for folks to ask questions that may not have been answered through this. Next slide, please.

And I'll introduce Nicole Johnson. So if you want to say anything as an introduction before I ask you the first question, go for it.

DR. NICOLE JOHNSON:

Thank you so much for inviting me here, and I'm excited about the format today. If you're wanting to see all the slides, the charts, and things like that, I invite you to read the 2023 report. I will say to you that B.C. is very well aligned with what we saw in the Canadian findings overall. We're just very grateful to BCcampus for sponsoring our work for many years now. We are a non-profit organization, so we're not able to do this work without the support of our sponsors, and we're very grateful for that. We're also not able to do this work without our many participants. The many people who respond to our surveys when they come out in spring and fall. So if you're someone who's answered our surveys over the years, we really express our gratitude and thank you very much for that. It really makes a difference in helping us to give organizations and institutions and governments data on which they can make really important decisions about digital learning strategy. Again, glad to be here and I'm glad to be answering these questions today.

AMANDA:

Great. Just for folks in the audience. If you would like to, you can follow along with some of you might want to check out the report itself. Paula has put in the PDF of the report as well as a link to a blog post that I published recently.

- Report by Dr. Nicole Johnson: [An Increasing Demand for Technology Use in Teaching and Learning: 2023 Pan-Canadian Report on Digital Learning Trends in Canadian Post-Secondary Education](#)
- Blog post by Amanda Coolidge: [Looking to the Horizon: Emerging Trends in Post-Secondary Education](#)

Just talking a little bit more about some emerging trends that we're seeing in post-secondary. But first, I'd like to ask you, Nicole, what surprised you most about the findings?

NICOLE:

Yeah, that's a really good question. I've been asked this a couple of times now. Every time I get asked, I think can reflect on it a little bit more. I think there's a couple of things that I found surprising. I think the first one is, despite all the change that we've seen in the past five years. So if we're thinking back to 2019, pre-pandemic, we've been through, I still think we're in the pandemic to some extent, but we're at a different stage of it for sure, where there's certainly a return to in-person learning as it existed in 2019 is possible.

We also within the past year or so had the disruption that's come from a widespread use of generative AI, particularly ChatGPT. And with all these things that have come up, people are still expecting more change. So when we're asking our respondents, we ask it in a couple of different ways. We ask, are you expecting to see more growth in technology use and online hybrid offerings and so forth? And we're seeing a trend towards that. But we also asked in projecting the future, like how different do you expect post-secondary education to be in... I think it was five years if I'm remembering correctly, we're still expecting a big difference. Despite all the change that has happened, people are still expecting more change. But I think what's the surprising piece in that is... We saw this, we actually asked the same questions both in Canada and Bay View Analytics, who is a partner of ours, asked it in the U.S. too. And really comparable findings in the sense that expecting change, being somewhat prepared for change. But in the Canadian context, for sure, we also see a lot of optimism around the change. People are expecting change, they're feeling somewhat ready. And in Canada, they're feeling okay about it, actually. Their attitude towards it is mostly positive. I think for me, that was a really surprising result.

And I think the other thing that came up in there too, and this is sort of a mix from both the open-ended questions and the quantitative questions that we asked, was there's a preparedness gap. And I don't know if this may be a surprise as it is like a light bulb moment. Where we're realizing we're hearing from faculty, we're hearing from administrators, that students aren't necessarily coming into post-secondary with the skills that they need in terms of resiliency, in terms of, in some cases, digital literacy, and in some cases it's the academic rigor. There's concerns being expressed there. At the same point, we see a real professional development gap for faculty in terms of required professional development and understanding that in many cases that's because of collective agreements and various things. Adjunctification, it's complex issues. It's not a matter of faculty not wanting to. And we know faculty burnout is one of the key things. But we also see, especially among our administrators a big concern, the more technology heavy a modality of a course is, the less our administrators are seeing that faculty have the skills and know-how to teach in that modality. We've got this perception that students maybe aren't quite coming in ready. Faculty might not be as equipped to teach online as they need to be. This explains why sometimes there's that butting of heads, this frustration, this tension about this isn't working for me. Well, it's not working for me. I think it was that surprise and there was like, it seems to come down to support, whether that be professional development training and student readiness and all these supports that I think are really needed in the system.

AMANDA:

Yeah, that's interesting, That whole message that change is constant, right? And it's sort of this acceptance from everybody that yes, we know change is constant, but then how do we best prepare ourselves for that change? Next slide, please.

You answered this a little bit, but maybe you spoke a little bit to the findings that you were optimistic about. I'm also wondering what were some of the findings that concerned you?

NICOLE:

Yeah, that's a really good point. I think concern certainly would be the professional development findings because we're seeing that need, that perception amongst administrators and teaching and learning leaders. These might be directors of teaching and learning centres that don't necessarily have the skills and know-how to teach in different modalities. We see that the competence for faculty to teach in an in-person modality, for the most part, is pretty high. It goes down when we're talking about a hybrid. It goes down even more fully online if we're talking about like a HyFlex or multi-access modality, then there's a real sense of hesitation as to whether there's that preparedness there. Again, the professional development. It's a tough system and I don't have the answers on how to make this happen, but I think there's a need, especially as we saw that professional development requirements did not change by modality of teaching. Same requirements for a faculty, a new faculty coming into a position or ongoing faculty. It wasn't like there were different requirements for someone who was teaching online to necessarily gain those skills to teach in that environment. I think that that is a concern as well. I think my optimism, it makes me optimistic to know that people feel positive about change that's coming up. I think another reason for my optimism would be in terms of, I feel like there is now a sense of understanding that online is really important for some students and it's important for having an accessible system. It's this sense that there seems to be a system-wide understanding now that to have equitable learning experiences, we need to have it delivered in different ways. For some students, it's really critically important that they have that flexibility to be able to learn in an online modality or in a hybrid modality. And for some students in an in-person modality, I think having done this, as long as I've done that, there was far more resistance, 5, 10 years ago, towards putting in online offerings, towards putting in hybrid offerings. Whereas, now, that's becoming much more commonplace, and I think the value of having those offerings is really being understood and seen. That makes me very optimistic.

AMANDA:

That's great. And one thing, I was just actually yesterday we had an email, random connection here. But we had an email from my son's school. He's in elementary or in middle school. And they've just recently started offering the kids if you're grade 4 to 9, you can all have a hybrid option. I think it's almost like we're seeing that trickle-down effect as well. Right? Seeing how folks are across different systems and even in secondary schools are addressing that as well. Next question. Next slide.

Can you please talk about some of the key digital learning trends and what the implications are for the delivery models in post-secondary education? Kind of alluded to this one in your previous comment. But if there's anything else you'd like to add with that.

AMANDA:

Yeah, for sure. I think the key trend that we're seeing is the hybrid modality. More so than just in person. I think that narrative that everyone wants to return to in person, I have not seen that in the data since the pandemic. I have not seen that in any of the studies that I've been involved with. Not to say that there aren't some people who want a return to fully in person, but when we're looking at the prevalence of that attitude, that might be a loud voice in the room, but it's not the prevailing attitude. But hybrid models and that notion of flexibility, that comes up more and more and not just students are wanting that, but faculty too. When we asked, students and faculty alike indicated that they want the option of either learning or teaching online some of the time. Now that isn't to say that there aren't some faculty who want to teach fully in person. Some faculty who want to teach fully online. Some students who want to learn fully in person. Some students want to learn fully online. But the majority we're seeing is in that middle ground where they actually want that option some of the time. When I'm thinking about what the implications are for delivery models in post-secondary education, I think institutions, and I see this more and more especially in the B.C. context, offering different sections in different modalities is important. I was involved in a study run through BCCAT a while ago where we were talking about different modalities being offered and things like that. And when I was doing some of the interviews there, some of the respondents had said sometimes all the online for a certain section was filling up before the in person. So there's this real demand. Many times it is coming from students who are technically registered as in-person students. Some of the reasons why is when we look at housing costs and transportation costs, those are our big issues. For some students, they might be commuting to campus, but affordability wise with gas prices and everything like that, they can commute maybe one day and then learn from home the other days, that really helps them with affordability. When we're thinking about some campuses, especially in B.C., Lower Mainland, I know that there's a number of institutions that have satellite campuses. Or they've got courses where you can take on one campus, but you might have another course that's housed on a different campus. And we've got students who rather than physically driving from one place to another. It might take one course at campus while they're there, and then they might go into a quiet spot, attend their course virtually if it's a synchronous session from a quiet place on that one campus, rather than driving to the other campus. That structure of post-secondary, I think this demand for one of the key things, I think HyFlex or multi-access learning experiences. They are different in the sense that students can choose on any given day where they're going to attend. I think this offers wonderful flexibility for students. It's also very challenging for those who are in a registrar position who are booking rooms and trying to figure out what size room we need, which rooms do we outfit with technologies? I think there's also a lot of logistical and operational challenges. We know the theoretical benefits. There's the ideal. Sometimes, depending on how an institution is resourced, that balance between what's ideal and what's feasible. Sometimes there's tension

there too. It's a balancing act for institutions. But by and large, I think the key thing is as many different ways that you can offer a section allows a more diverse student population. Because each student is different and they have their needs. Some online is ideal, and for some in person is ideal.

AMANDA:

Interesting. One thing, I'm putting the pieces together here, is that something that might be really important for teaching and learning centres, as well as for us at BCcampus when we're looking at professional development opportunities, is potentially to really focus in on how do we help faculty create effective hybrid learning experiences. If that's the delivery model. Thank you for that. Next question.

We're going to get into a little AI question here which everyone knows is a hot topic these days. We noticed that survey respondents overwhelmingly agreed that AI use will become a normal part of education. About three-quarters thought that AI will make teaching more challenging. But 59% agreed that AI will make teaching more efficient. How do you see people's perceptions of AI changing over time?

NICOLE:

That's a great question. Yeah, AI brings out a whole bunch of tension. Yeah, the past year, at least a little bit, 12, 15 months has been just... AI has been one of the things that I've been digging into and in front of mind and looking at trends, looking at what's happening. Even over this time. I've seen people's perceptions changing. That's what I expect to see more. And I think it ties into this tension here that it's going to make it more challenging and more efficient. And I think both of those things can be true together. Because I think AI offers ways that we can streamline some of the more administrative tasks of teaching. AI is a great tool for generating a syllabus or generating materials for the courses. Obviously needing to be checked, But AI should always be double-checked and verified by someone, a human. AI can have where it comes up with false information and that always has to be double-checked. But when you're, if you're sitting there trying to plan a course and you're hitting a brain block, or you're just exhausted, to be able to run it through ChatGPT and have something generated that you can then work on as a starting point is excellent. I think some of the ways that it can support various parts of teaching, whether that be assessment, whether that be assignment generation or study tools. I know Contact North has a great AI Tutor Pro app, which really. To be able to have that there to assist students in answering some basic questions and things like that that can ease faculty workload. And then they can be there as a backstop too. For what if a student can't figure it out, then they're coming there. The challenge, of course, particularly surrounding academic integrity. How I see people's perceptions changing over time, I think that the concerns about academic integrity will ease over time as people become more used to AI being part a of it. I think we saw this same level of concern about academic integrity come up near the start of the pandemic. When people, it's like we have to assess people online. Oh, no. Oh, no. Everyone's going to cheat. People are going to cheat. Some people will always try to cheat. I think that's just the reality of it. When we take it from this approach, like assuming that people

are going to be dishonest. I don't think we're doing students favours. But it comes down to changing assessment practices. I think the perceptions will be tied to changing assessment practices. I think the shift to having moral online offerings and the shift to having AI there is forcing different types of assessments that are maybe more authentic in different ways. Requiring a student to maybe videotape themselves explaining an idea ways that, that things that an AI couldn't do. Moving away from more traditional assessment methods to methods of assessment that actually might create a richer learning experience for students and create better feedback for them in helping them master subject areas and really meet educational standards in a strong way. Now, do I think that that's going to come easily without growing things? No, but I think that's how I see it changing over time.

AMANDA:

Yeah, I mean, you're so right. Even before we really got into the scariness of AI, we have been talking about the need to change assessment practices. And as you said, there's definite linkage right there at the start of the pandemic. And it makes me just want to put a plug out there for more professional development opportunities regarding how to create authentic assessments. And my heart is always with open education. Any kind of open pedagogy that can be utilized within that is something I think that's great to see and also helps with authentic assessment creation.

Next question. Oh, look at that. We went from my love of my heart and open education to an open education question. This is great. The survey indicated that awareness of open educational resources, or OER, is high, but institutions often don't have policies to put it into practice. I'm curious, what role do organizations like BCcampus play in supporting the use and adoption of OER on campuses?

NICOLE:

Yeah, that's a really good question there too. Yeah, that's the thing, I think it was wonderful. Actually, I was really delighted to see the relatively high awareness of OER and particularly in B.C. And I think that that speaks to the wonderful work that BCcampus is doing. I think in terms of policies, we saw this as well with AI policy and various different things too. It's so different by institution in terms of sometimes a policy. There won't be an institution-wide policy, but one or two departments might have policy around it. It's tricky. A key role that maybe BCcampus could play in that is finding out each the institutions, especially in the B.C. province if there's OER policy, where is it being set? Is it at the institutional level? Is it at the department level? Is it at a faculty level? Where is it? And then perhaps advocating for or encouraging consistency across the board. If there's several departments in an institution that have OER policies, how do they compare? Like are there policies consistent? If a student is perhaps majoring in one subject, but they're doing a concentration or a minor in a different subject, and that second subject has a very different OER policy that can create confusion. I think there's a place there to be doing some deep dives and then encouraging consistency with policy. Where can it be consistent? And then encouraging too, at that top level for institutions to have OER policies. We see that awareness. But I think there's still room for even more awareness because I think if there's

policies that also increase faculty awareness. I think there's a difference between awareness and use. That's something we'll continue digging into on our end top is to see, but is that awareness leading to OER adoption in the classroom? And if not, what are the barriers? We did ask about this in our survey and one of the key barriers for faculty adopting OER was just time to figure it out and to put something together. I think even that and having resources that would help ease either the perception or the workload itself for faculty in preparing. Even knowing where to go, subject matter as well too. Like I don't know if there's good OER that I can even work from in my subject area, so being able to point faculty in the right direction so they're not starting. Sometimes I think they feel like they need to start from scratch in terms of well, where do I even go? How do I even start? I have to learn this whole new thing and I don't necessarily have time to do it.

AMANDA:

I think that's a great plug that I would like to put out there as much as possible: utilize your institutional librarians. They're sometimes the hidden superheroes for open education resources that they can often find the resources and do vetting in advance. Definitely a plug for librarians. Next question, please.

We know that faculty burnout emerged as definitely one of the most pressing teaching and learning challenges at post-secondary institutions. Not only in B.C., but definitely across Canada. Where and what are the main causes of faculty burnout and what can be done to further support faculty to mitigate these challenges?

NICOLE:

Yeah, those are great questions. I don't know that we have any specific data to say the why. When I think about other work that I've done and conversations that I've been part of, I think the learning curve required of faculty in the past five years has been a main cause. It's been a lot, there was a lot of pressure that happened for faculty during the pandemic. That is a lot. I think this is tied into what we saw as our reasons for optimism and pessimism. Particularly some of those reasons associated with pessimism about the future faculty seeing like I'm exhausted. And Students aren't ready. I'm having to remediate students who aren't coming in with the standards. I've got to learn these new technologies, I've got to keep track of AI now, there's so many things to do and I'm tired. Adjunctification is certainly an issue. I think we're going to find very different answers from someone who's got an adjunct position versus someone who has a permanent position at an institution. However, with that said, someone with a permanent position at an institution may also be dealing with the service demands that are on them meeting research expectations. I think the position of a faculty member has expanded and exploded. And it doesn't feel like there are enough hours in the day to do all the things that are meant to do. There's certainly different scales that faculty are being paid at. I think that's something to be aware of in our economy too. If we've got faculty members who, particularly if they're adjunct faculty, who are struggling to meet their needs, their basic needs on the income that they're making in the post-secondary institution, that's really challenging too. What can be done to further support faculty to mitigate these challenges? I don't know if

I've got the answer to that. I think a lot of it is systemic issues. I think as much as possible, creating things and creating resources and tools. I think like I had said with the OER where it's there for them. They don't, they don't have to search for something or re-invent something. But they can take it. They can find it and they can work with it. That's a huge thing. I think learning efficiency, being trained on the ways that they can use AI to make their work load more efficient, their time more efficient. I just would say that with caution, as we want to be careful that if we're making things more efficient for faculty to save their time to burn them out, that we're not then saying, oh, well they've got more time because they're doing this this way, so let's give them more tasks. I think that mental health, wellness, that's really critical there too.

AMANDA:

Yeah, I find this topic something I personally am very interested in in terms of faculty burnout. Where is it? How do you mitigate it? What are those challenges? And one thing you know that comes to mind is we often talk about pedagogy of care. What does that mean? Right? That's faculty caring for their students in a way that's creating assignments that implement universal design for learning principles, that provide alternative ways of assessment. But then part of me just wants to ask, what about the institutional care, right? Where can institutions provide care for their faculty so that we are trying to combat that systemic problem. That seems to happen all the time, where we're asking faculty, adjunct or otherwise, to do everything off the side of their desk. I don't have an answer either, but I do think it's something we need to continue to investigate a bit more and see what we can do towards that. Next question.

Given your findings that professional development and different teaching modalities is largely voluntary, what do you see as the biggest gaps? And where are the opportunities to support teaching competencies?

NICOLE:

Yeah, I think that this is great. I think it's really important to remember too, in both the Canadian and U.S. systems, that many times faculty are content experts coming in as subject matter experts. Unless they're in the field of education themselves, they may not have had any training on how to teach. And really they're modelling the teaching strategies that they've seen throughout their career and going by what worked for them. But maybe without the training to know that just because something worked for them doesn't mean that it is, a strategy that's going to work for everyone in the room. And how do you meet the needs of different learners in your room? And I think this ties into what you were saying too, is we've got faculty who are expected to meet the diverse needs of students. To be managing accommodations and creating accessible experiences, which is really critically important. But we're asking this of people who haven't had educational training, much less how to teach students with diverse learning needs. I think there's the gap in terms of modality. I think learning how to teach in an engaging way in different modalities I think is important. We also don't want to assume that, I know that there's a sense among administrators that faculty have the skills and know-how to teach in an in-person setting. I would be curious to see if there was research that supported that from a pedagogical perspective. Like to see the teaching methods. I think sometimes it's just because

they can read faces there in the room, but it may not actually be. There still could be plenty of room for improvement, I think in terms of pedagogical practices in an in-person setting. But I think teaching faculty what are appropriate and engaging teaching techniques in different modalities. We know that most faculty want to have that flexibility where they have a mix of in person sometimes, online sometimes. So knowing how those modalities are different. And what's a good practice for one, what's a good practice for the other? What's a good universal practice in any modality? I think opportunities that exist are creating those teaching things, but also the teaching how to teach to the needs of different learners and how to adapt and modify assignments. And I think that also ties into the need for different assessment practices. When you're learning how to modify and adapt for different students, that also impacts how you're assessing. And it may cause reflection on assessment practices and saying, oh, actually it makes sense to actually assess everybody like this. Why am I giving a long multiple choice test when actually what I would be modifying for this student might be better. Now with that said, there might be limitations as well in terms of how a course is designed and how much wiggle room a faculty member has to change how they teach, especially whether that course is their course that they taught for years and years versus an adjunct faculty member coming in and really teaching it in a more prescriptive way. And that changes from institution to institution. But I would say that certainly, yeah, that knowing what are best practices in general, what are best practices by modality, and then what are best practices for teaching different types of learners? And I think that having that available to faculty widely would be very beneficial.

AMANDA:

That's interesting. That's very in alignment with... We recently put out a... We're working on a three-year strategic plan for BCcampus. And we recently put out a survey, an external survey to ask folks in the sector and anywhere else, some questions that would help us form that strategic plan. We had 125 respondents, 80% were actually faculty teaching in an institution, either tenure track or adjunct. Interesting enough, when we asked the question, what is the most critical challenge facing your teaching right now? There were a couple of key things. One was assessment. So definitely in alignment with what you're speaking about. The second was AI, which to me interprets not specifically AI but this change, change in technology, and therefore what do I do about it? Then the third, very much in alignment with what you're talking about in terms of modality but also serving students, was a combination of teaching, teaching related to anti-racism practices, universal design for learning, and accessibility. It was combined all together. Again, it's that care for the student, right? Like how do I create a course that is addressing all of these? So really interesting.

Okay, next question, Just so you all know, I do see a lot of comments in the chat and I love it. I'm going to bring these comments forward after we answer a couple of more of these questions. How has technology affected student learning experiences? What improvements or changes would you recommend to enhance the overall experience for students? And then combined with this, how is the technology being used to promote equity for learners? I managed to combine three questions in one slide. Take them as you will.

NICOLE:

Perfect. Yeah. Again, just the questions today have been fantastic. I think this is... I'll give the caveat. So, the CDLRA are pan-Canadian surveys, we don't survey students, so we are surveying faculty, administrators, teaching and learning leaders, people in a variety of roles. But we don't survey students. However, when people are answering about student needs, drivers of student preferences, those sorts of things, they're typically going on student surveys, it's not just they're off the cuff answers, so we're very confident in what they're getting. And then in other work that I've done too, I'm always looking to see how the CDLRA answers are aligned with what I'm hearing and other projects I'm doing? And they certainly are. When it comes to students, how is technology affecting student learning experiences? I think anecdotally what I've heard and what I've seen in open-ended responses is that it's creating an environment where students are better able to meet their needs. I think it's opening doors that wouldn't have been open before for students. I think there's work that needs to be done on student outcomes. I think that, while it's improved, I still think that there may be a prevailing perception out there that in person leads to better outcomes. I do not see evidence of that in the work that I've done. But with that said, I think there needs to be some more robust studies with large sample sizes that really are looking at student outcomes over time. That also looks at the ways that they've learned in their experience. That will also help us, again, like we talked about before with professional development, improve the ways that we are delivering a learning experience to students in different modalities. But I think what it has done is it has opened more doors for students. And I think when students can learn in a way that feels more comfortable to them, it reduces anxiety, it improves their overall experience. And I think that that's very important when someone doesn't have to choose between being able to pay for their day-to-day expenses versus driving into campus because of transportation costs, I think that lowers the pressure on them. I think when a student can stay in community, especially if this from many Indigenous people in the system who I've talked to who said for Indigenous students in particular to be able to stay in their home community connected with their community and not have to move to campus is really important, and especially if they can have, they're not limited in the offerings that are available to them. I think there's a lot of reasons for technology really improving student experiences. Improvements or changes to recommend or enhance the overall experience for students in higher education? Again, I think that, that comes to that student outcome piece. I think we need to know success is a hard thing to measure because obviously the natural inclination to go to, okay, well, are they being hired for jobs out of post-secondary? Which is one of the key reasons students are going to post-secondary, and it's an incredibly important thing, but also there's mastery of subject. And post-secondary has had a long history of being a place where people go to learn to think on their own and become productive citizens, that citizenship piece of it too. I think when we're looking at outcomes, we need to take a holistic look at it. And I think that outcome work will help us to improve. Certainly I think what has shown this year in the survey is that need for professional development. How is technology being used to promote equity for learners? The key way, I think, is terms of accessibility for some students, especially when we're looking at students with disabilities. For some students, it is much better and much more equitable for them to be able to learn in an online setting. For others, it's being able to learn on campus. We can't take a one size fits all, or this should be the

right situation for you. And I think technology creates more options and the more options that are there, that creates more equity across the board.

AMANDA:

Yeah, it's interesting too. One thing, and also one of the, when I think also about technology and digital equity, I often think about the technology infrastructure. So how would a student actually have access to some of the tools that are required in order to utilize these modalities? And one thing I will just put a plug out there is that through the Digital Learning Strategy that the Ministry of Post-Secondary Education and Future Skills has been working on, there is some work happening on looking at technology-renting programs, technology-loaner programs across different post-secondaries. I do hope that that will help mitigate and promote some of the equity that we're talking about, but this is great. I really appreciate your response to these questions.

Next question. Okay. I think this is our final question. We're going to ask this question. And then one thing I will say to the audience is if you do have questions that you would like to ask, please put them in the chat. Otherwise, once Nicole has done this question, I'm going to open it up and if you would like to grab the mic to ask Nicole a question, you're welcome to. So final question. Looking ahead, what do you see as the biggest future trends? Any hints as to what we should... Oh, sorry this is not worded correctly but, any hints as to what is new on the horizon?

NICOLE:

Yeah. Biggest future trends. Again, I've said it a number of times before, but that hybrid learning, having that mix of online and in person and hybrid learning can look many different ways. There isn't just one way to do it. It might be that it's mostly online with an in-person practical practicum experience. It might be a couple of days synchronous online, and then one day in the classroom for a lab setting. It's dependent on the subject area. But there's so many things that can be done. I do agree with the respondents who have said that AI is going to play a bigger role, and I fully agree with that. And I think we're going to see, just in terms of what I've seen over the past year in terms of how people are using ChatGPT and creating their own GPT that they can do different tasks and different things for them. I think we're going to see a lot more integration again. I think we're going to see students being taught and encouraged to use AI as a tool to help them study. I think we're going to see a lot more conversations on academic integrity and what does this mean and what should be used. From what I've seen in terms of AI policies from across the country. They're all over different. I've seen the chat, someone said, "Are you distinguishing between blended and hybrid?" I've done a lot of work on definitions in the past. I usually would share a bit on a slide. I use blended and hybrid the same. We use them synonymously here at CDLRA. That is a good question. Some institutions do use them differently. Just to clarify, I'm using blended hybrid. The same. Yeah. Then anything new on the horizon? You know, I think we're going to continue to see more options come up in the micro-credential space. I see that there being a gap there. I think this is what we have talked about too, a bit with the workplace. What are students getting in terms of outcome? Students wanting to be hired as soon as they get out. Also, there's a need for micro-credentials in there

to help students become more specialized as they're going through their program. But I think we see that also in mature learners or reskilling or people, especially in the economy. If there's layoffs happening in certain sectors and people are going, they don't necessarily need an entirely new degree or diploma, but a micro-credential could help them. Certainly, I do see a trend towards that. I think in terms of accessibility trends, I am seeing this increase towards OER awareness is very promising. I expect that that will become more of a conversation in terms of, because it's very tied to the accessibility piece, which is a big trend, and how do we make resources not just for students accessible but to faculty accessible too? It's not just about lowering cost, but it's also about being able to create really specifically designed tailored materials for our course that they can remix from something else. I think as people learn more about that, I think that that's something that we're going to see increasing on the horizon. Those are my predictions. We'll see how they pan out.

AMANDA:

Well, maybe next year if we do this again, we'll have to come back to this and say, "You said." Next slide, please, which I think is our contact.

We do have a question in the chat. If you want to ask Nicole a question on screen, please raise your hand and we'll get to you. But this question is from Julian Pryor. He asks, "What are your thoughts on extended reality VR, AR as a trend? Still a cost barrier?"

NICOLE:

Yeah, I would say cost is the big thing. I've heard, and I've seen examples of where it's being integrated into programs and programs very well, particularly in some of the hard sciences we're seeing that. And I think there's a ton of potential for that. Especially what we've just seen recently with the Apple VR headset coming out. With that said, I think it's got a price point of \$3,500 and that's. Your average student is not necessarily going to be able to afford that. I think that unless there's a lower cost, options come in that can do what we see these higher models doing, it's going to be a while or it's going to be very situated. It's going to be situated at institutions who can afford to buy a class set of these things to be used in a specific lab environment or it's being sent out. I think there's a ton of potential with VR AR. I've got my Oculus headset here that sometimes get used by my kids, sometimes I'm using for different things. I think there's a ton of potential there. But because it's not a daily-use technology like a smartphone or a laptop, it's a hard thing to justify in asking students to buy for themselves. If an institution is on a budget, it will be a hard thing to justify as to this is a way to teach that is so much better than any other way to teach this thing, that it is a necessity. Because I think that that's the argument you'd have to make to get over the cost barrier. Yeah. Yeah, for sure. Other questions? Anybody want to ask a question? Add a comment? I think there was another comment which I thought was interesting is Brian Lorraine said, "Research on assessment design would be revealing if most in-person classes still have heavily weighted exam papers, yet we see 92% of respondents of this current survey indicate faculty within their institutions have the skills and know-how to effectively teach in person. There seems to be a disconnect there."

NICOLE:

Yeah, I think I'd mentioned that too. This is their perception. I would argue, do they, have we done some research to see how their in-person courses are being taught? I don't see evidence out there that in person is being done better. I think that that's a perception and it's based on familiarity with in person. Everybody's had some experience at some point in their educational career, typically with an in-person setting. I've said this in other contexts too that when things go wrong in an online setting, if a student really has a poor experience in an online learning environment, they tend to blame the modality. Online isn't working, online is terrible. If they have a really poor learning experience in an in-person environment, they just tend to blame the professor. That professor was terrible. So I think that there's actually work that needs to be done. There's a research task for someone who wants to start a study, is really looking at exploring whether the teaching strategies and in-person settings across the board, what's being used and how effective is that. Because, yeah, I would agree with you. I think that perception is it's done effectively. I would argue that maybe it's not as effective as people think.

AMANDA:

Thank you. Jenni H. has a question. Would you like to unmute and ask your question?

JENNI:

Sure. Thanks, Amanda. Thank you so much, Nicole, for this great presentation. It's really nice to hear your voice in addition to reading the PDF. One of the things that I noticed in this conversation and in so many other reports is there's a real, we often say that there are systemic problems, there are policy problems, or all these things. But what I don't see is sufficient research in how administrators are being trained about the use of technology and decisions about technology. I know Tony Bates, he's been doing this for 100 years and would like to, prefer to play golf probably than address it again because he has addressed it very well in his books, but they're not widely read by administrators. I wonder if there is an opportunity to survey faculty about their needs and to make that information available to administrators to talk with students. Because as you say, there's a chain of action here. Students will say it's the modality. Faculty will say, I don't have enough time, I don't have enough training. But the decision is being made up here by folks who have not been offered the opportunity to get some really good objective training in what it means to make technology decisions about modality and about how students are working. Like every decision I make as an administrator at the dean level, president, VP president level is going to have an impact on 15 different systems at my institution. I need to know what that impact is, but I don't always fully understand it. I wonder if there's room for creating some training, or at least getting some data to make an informed training decision.

NICOLE:

I think that's a really good question, and I think that's something that we hope to get over time is differentiating between the different perspectives of roles. Yeah, I would agree with you in the sense that admin, they come and they have different sets of priorities. I think there's also that sense, there's pressures in terms of keeping enrollments up. I think that's been a topic

we've all heard a lot about in the past couple of weeks. And being able to provide this. I think one of the things that I've seen in talking to admin over the past couple of years too, is there is a sense of burnout among administrators too. We talk a lot about faculty burnout, but I think we don't think we talk enough about administrator burnout right now. Administrators through the pandemic and with AI, these changes are being put on them too, and really having to make fast policy decisions, for example, on AI. There isn't a lot of data to go on, because in staying within the pandemic context, this was the first that many of us had experienced in our lifetime. A situation where everything was moved online and what do we do? What does this mean? Having to make fast decisions that someone is bound to hate. Same with AI policies, someone is bound to hate. And we don't have enough information on that, but you make a very good point on having that administrative training. And where does that come into? One organization that does a great job of this thing is CICan, especially at the college level, with their leadership retreats that they offer. Their presidents, their VP retreats that they do, they talk about a lot of these issues. I think it's woven into bigger issues, budgets and all these things come in. And that's where there's that decision between what's ideal and what's feasible sometimes comes in too. It's challenging. I think there's a lot of complexity. I always love the role that I get to take in looking in at the system because I'm not a faculty nor am I an admin. I'm an independent researcher. We're independent and I have this bird's eye view where I hear everybody's stories and what they're doing and hear these different perspectives and challenges. For the most part, I think everyone's really trying to do their best. But there are certainly big gaps in the system. And there's funding issues as well too. More funding allows for more training and various things, and when there's limited resources and fast decisions to be made, where do these go and what are going to be the decisions that are better in the long term even though they're not the newest technologies and yeah, there's so many complexities that come into that. But that's a really, really good question. Thank you very much, Jenni.

AMANDA:

Yes, thank you. And good to see your face, Jenni. I want to say thank you so much, Nicole, for the presentation, for talking to us through all of the questions that we posed to you. To everybody who attended, thank you for attending. There will be an email coming to you with a recording. Please do fill out the survey. If you do want to be in touch with Nicole, her email was posted above. And of course, if you want to check in with me, I'm happy to also talk to anybody. But thank you again, Nicole, and have a great rest of the day. Thank you.