

Final Project: Describing Communication Technologies
User Experience and Changing Literacies
Podcast Episode Script

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ETEC 540: Text Technologies: The Changing Spaces of Reading and Writing

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V: Hello everyone, and welcome to this episode brought to you by Tech Tea podcast, where we spill the tea on all things educational technology. In this episode, we are going to chat about User Experience and Changing Literacies in Education. My name is Victoria Cameron, coming to you from cold and frosty Edmonton, Alberta.

C: And my name is Connie Sim, and I live in Burnaby, British Columbia. Although we are both in different places, I'd like to acknowledge that I work, live, and play on lands of the Coast Salish Nations of Musqueam, Tsleil- Waututh and Squamish.

Victoria: Thanks, Connie. So let's get started. I wonder why you chose to talk about this topic?

C: Honestly, I was actually inspired by your interests (so shout out to you, Victoria for suggesting this topic!) And as I spent more time researching on this topic, it suddenly clicked that many things that happen in the classroom are in fact related to students' satisfaction levels on classroom experience. Honestly, working on this is absolutely overwhelming-completely something out of my comfort zone b..u..t I must say that I am REALLY glad that I am working on this topic rather than my initial thoughts on talking about textbook. I can't really imagine how I can put a spin on that topic to spice it up. So I'm happy to be overwhelmed.

V: I'm glad you thought so. You mentioned classroom experience- I'm curious, how do we connect conducive classroom learning to positive user experience? In what context?

C: Well, I realized that most of the issues I am facing in class are related to user experience. For instance I was working in a business school and there were many professors hired who are professionals who have decades of experience working in their respective industries. So when it comes to teaching content, they are absolutely knowledgeable. However the pedagogical skills that they utilize may not work as they would have wanted things to be. Well things got worse when Covid hit and everyone transitioned online. Add on technological skills to the list, things turned worse. And that's how the college witnessed a big decline in student enrolment. In the surveys, students cited reasons such as not feeling supported enough- emotionally and academically, and learning materials that were too challenging that they gave up before even trying. What about you, Victoria? Why did you choose to talk about this topic?

V: Okay, so when we completed the task on the [User Inyerface website](#), I was fascinated with this idea of a user experiencing various online media. (And if you are listening to this podcast and you have not heard about the user inyerface website I will link it in the description for you). I think that experience in combination with my current work as a Curriculum Software Implementation Specialist, I am very curious about the extent to which digital educational materials are being designed with the student as the primary user in mind.

C: I remember that task. It was annoying. I'm curious about your current work as a curriculum software specialist... what makes your job relevant to our topic of user experience?

V: Well, a very important part of my job is to think outside of the box, ask lots of questions, and look for anything that doesn't make sense. My team is building an education application

and I am responsible for offering a teacher perspective, and sometimes a student perspective in a room of designers, developers, project managers, and media technicians. We have weekly meetings on MWF about User Experience and User Interface, and these are my favourite because my job is to play and click around on the application and give feedback and suggestions... Then I wait for the changes to be applied, I get a demonstration about the changes from the developers, give more feedback and suggestions... Wait for the changes to be applied, and then I play and click around on the application and it starts all over again!

C: Wow! That sounds like fascinating stuff! I completely see why you are SO interested in exploring this topic! But you know, after doing some reading for this project, I came across an article by Kapros & Koutsombogera in 2018 about something called the Lean UX methodology, and it sounds really similar to what you're doing at your job. It's basically a process that allows for a team to provide something called the minimum viable product to their users as early as possible. This way, they can gather consistent and relevant feedback, experience, or impacts that users may be having, in order to create a better and more effective product (Kapros & Koutsombogera, 2018).

V: You got it bang on, Connie! That's *exactly* what we do. We talk about the process as iterative and focused on the end user experience.

C: That is so cool. And here we are, at the topic of user experience!

V: Yes! We've made it! Haha. So user experience, or UX, which it is commonly referred to, is actually a *relatively* new idea...

C: Yup! Based on the CareerFoundry website, the term UX was coined in 1993 by this guy who was working at Apple named Don Norman (Stevens, 2021).

V: Of coooooourse he was working at Apple! Hahah!

C: Anyways, the goal of UX is to design an application based around the relationship between the user and the application (McCarthy & Wright, 2004). So basically, it's the experience that a user has while interacting with something and performing various tasks.

V: It's also really similar to a process called human centred design, which involves designing for and alongside the user (Kapros & Koutsombogera, 2018). And this connection between user experience and human centred design is why I think UX can play a very important role in education, especially when it comes to designing digital learning environments and tools.

C: Yes!! I agree. The idea of iteration, of constantly reflecting and adapting is what teachers do on a daily basis, right? We are really in touch with what our students need at different times, and we can immediately tell whether or not a lesson went well, or if we need to reteach something. We are actually expert designers by evaluating our students' user experience every day, which is actually so neat!

V: TOTALLY! I love that. And that reminds me of the article on Learning Experience Design by Matthew Schmidt from UX of EdTech. Basically, Learning Experience Design, or LXD for short, borrows UX design principles and combines them with the pedagogical, technological, and socio-cultural needs of learners (Schmidt, 2021). And Connie, when you shared this article with me, I completely geeked out. This is so cool and exciting!

C: I'm so glad to hear that... I was also really excited!! The article mentions three important characteristics of "learning experience design- it is transdisciplinary, it is complex, and it requires multiple literacies" (Schmidt, 2021, para. 17). LXD needs to be transdisciplinary, which means that multiple perspectives are considered in the design process- they may include ed tech experts, educators, instructional designers, or even psychologists (Schmidt, 2021). It's also complex, in that it considers the pedagogical and socio-cultural contexts when designing a learning experience (Schmidt, 2021). And finally, LXD requires its designers to be comfortable with multiple literacies like "interface design, user experience design, interaction design, and graphic design" in order to effectively design online learning environments (Schmidt, 2021, para. 20).

V: And this reminds me of an article by the New London Group (1996), discussing the importance of students developing multiliteracies. We have classrooms full of so many learners, coming from various backgrounds with all these 21st century skills and literacies, and we as teachers need to help our students develop these literacies to become responsible, engaged, and well-rounded citizens. Educators need to be purposeful in the design of learning spaces that allow students to engage with and explore different multiliteracies.

C: Absolutely. I'm also reminded of Buckingham's book, *The Media Education Manifesto*.

V: Yes-I love that book- thanks ETEC 531!

C: Yes!! He makes a powerful argument on page 16 that media literacy education is quote, "a basic prerequisite for contemporary citizenship," unquote, and that the correct way to do this

is through the creation of media education that is meaningful, challenging, and empowering for students (Buckingham, 2018, p. 16). I really think that the best way to drive this forward is to look at it from a UX and Learning Experience Design perspective. It just makes sense.

V: Woah. All the feels- I feel like that was a mic drop moment!

V: Okay, so let's wrap a nice bow around all that we've talked about and let's share a couple of our favourite examples of how education has benefitted from the process of user experience.

C: Love it, let's do it.

V: Okay so for me, the first thing I researched was second language learning and I found a couple of recent studies that evaluated digital websites and resources for English language learners, Which i will link in the script and description. Researchers found that ease of navigation, hypertextuality, and interactivity were among the most important factors for effective user use (Alhabadan, 2017; Aguayo & Ramirex, 2020). In another study conducted by Alzahrani & Roberts in 2021, they discuss the benefits of using a visual-spatial-based zoomable-user-interface when designing english language learning applications.

C: Wait, what's a visuospatial-based zoomable user interface?... say that 10 times fast! Haha!

V: It's definitely a mouthful, haha! Okay, the visual-spatial-based Zoomable User Interface, called ZUI for short, is based on the spatial contiguity principle (Alzahrani & Roberts, 2021). This principle says that we learn new vocabulary better when texts and visuals are close

together in a context-based location (Moreno & Mayer, 1990, as cited in Alzahrani & Roberts, 2021). So I read this and I immediately went to my Duolingo app, because I want to know if this app is using this kind of interface! And guess- what do you think?

C: Uhhhhh, I guess it does. Well, it should, right?

V: Yeah, it should, because it's a pretty popular app, right? Right. Okay well I opened it up And it's asking me to translate a phrase from Spanish into English and it gives me the text, and it gives me the audio, but my visual is a bear wearing a scarf. So... there you go! Duolingo if you're listening to the podcast give me a call I'll help you redesign.

C: Okay so for me, I stepped into the world of mental health, because we know how important that is right now, and I know you, Victoria, are a huge advocate for mental health. I wonder if you have heard of Thoughtspot, a mental health app?

V: You know what, I haven't, but Let me do a quiiiiiiick google searrrrrrrch, okay here it is! According to Thoughtspot's website, mythoughtspot.ca (2021), this is an app that is "designed by students, for students". ThoughtSpot provides users with a live map that links to local health, mental health, and wellness services in Toronto. Users can also use the app as a wellness journal to keep track of any thoughts or feelings.

C: Yeah, it sounds pretty cool! Okay, so a study was recently conducted on user experience with the app, and the study described some pretty encouraging findings (Wang et al., 2021). They found that users were happy to use an application that was effective and efficient in delivering relevant mental health information, and they also used the app socially - they were

eager to look for information that would help struggling friends and family members (Wang et al., 2021).

V: Wow, that study was conducted very recently, in 2021, actually! I wonder what ThoughtSpot will do with the feedback they've gotten! I guess they're back to the drawing board for another iteration! That was a really cool case study, thanks for sharing!

C: My pleasure!

V: I also quickly want to mention that there has been plenty of user experience research related to video-based learning environments, so for example, a flipped classroom. Madariaga et al. (2021) mentions that UX is essential in designing effective video learning environments. Teachers basically just need to get involved, read the research, and apply it to their flipped classroom environment design! So maybe that's a whole other podcast that we will do together! Haha!

C: Totally, I would love that! Okay, so I think that we have argued that teachers are in the perfect position to design effective materials for learning. Teachers are the perfect link between user experience and educational resources and students. They are the mediators, designers, and learners in the process.

V: I totally agree. I thought it was really interesting when Kapros & Koutsombogera (2018) argued that educators lack deep pedagogical knowledge, which is one of the reasons why it is so hard to get all teachers on board with effectively implementing ed tech in their classrooms. I mean, imagine how cool it would be for teachers to be trained to use the UX process, work

in a community of practice in their schools, and meet weekly (and actually have the time) to create various iterations of classroom activities and resources.

C: Yes! That's so empowering- thinking even bigger, what if it became a Canada-wide UX movement for teachers- imagine what would be created, experienced, and learned!! Blows my mind!!

V: Right?! There's SO much to talk about! But, alas, the episode has to end.

C: Boo! Yes, I guess it does. Thank you for joining us, everyone. We can't wait to spill the tea on educational technology with you next time.

V&C: ByeEEEEEEEEEE.

References

- Alhabdan, A. (2021). Evaluating English learning websites and digital resources from the perspective of Saudi English Language Learners. *Technical Assessment Theory and Practice in Language Studies*, 11(5), 639-651.
<http://dx.doi.org/10.17507/tpls.1106.07>
- Aguayo, N. & Ramírez, C. M. (2020). Does technical assessment matter? Functionality and usability testing of websites for ESL/EFL autonomous learners. *Research in Learning Technology*, 28(0), 1–27. <https://doi.org/10.25304/rlt.v28.2353>
- Alzahrani, S. & Roberts, L. (2020). The effect of visuospatial designing elements of zoomable user interfaces on second language vocabulary acquisition. *System*, 96(6), 102936. <http://dx.doi.org/10.1016/j.system.2020.102396>
- Buckingham, D. (2018). *The media education manifesto*. Polity.
- Kapros, E. & Koutsombogera, M. (2018). Designing for the user experience in learning Systems. <http://dx.doi.org/10.1007/978-3-319-94794-5>
- Madariaga, L., Nussbaum, M., Guti´errez, I., Barahona, C. & Meneses, A. (2021). Assessment of user experience in video-based learning environments: From design guidelines to final product. *Computers & Education*, 167, 104176.
<https://doi.org/10.1016/j.compedu.2021.104176>
- McCarthy, J., & Wright, P. (2004). Technology as experience. *Interactions*, 11(5), 42–43.
- Schmidt, M. (2021, June 14). *Understanding the complexity of learning experience design*. UX of Edtech.

<https://medium.com/ux-of-edtech/understanding-the-complexity-of-learning-experience-design-a5010086c6ee>

Stevens, E. (2021, July 28). *The fascinating history of UX design: A definitive timeline.*

CareerFoundry.

<https://careerfoundry.com/en/blog/ux-design/the-fascinating-history-of-ux-design-a-definitive-timeline/>

The New London Group. (1996). A pedagogy of multiliteracies: Designing social futures. *Harvard Educational Review*, 66(1), 60-92.

Wong, H. W., Lo, B., Shi, J., Hollenberg, E., Abi-Jaoude, A., Johnson, A., Chaim, G., Cleverly, K., Henderson, J., Levinson, A., Robb, J., Voineskos, A. & Wiljer, D. (2021). Postsecondary student engagement with a mental health app and online platform (Thought Spot): Qualitative study of user experience. *JMIR Mental Health*, (8)4. <https://mental.jmir.org/2021/4/e23447>