

**Transcript for FLO EdTech Sandbox Series—Mattermost (Sept 13, 2023)**  
**BCcampus event hosted September 13, 2023**  
**Presenter: Ian Linkletter**  
**Host: Gwen Nguyen**

GWEN NGUYEN:

Good morning everyone. Welcome to our very first FLO Edtech Sandbox sessions. Thank you very much for joining us today. My name is Gwen and I'm a learning and teaching advisor with BCcampus. I'd like to go over some details. The first one is the session will be recorded, the very first part of the presentation. so you're welcome to keep your camera off and feel free to rename yourself to "Participant." We also have enabled the live captioning for your convenience. At the end of this session, we invite you to participate in a short anonymous survey. And we will provide the survey link in the chat. Your feedback will help us with planning more fruitful professional events in the future. We hope that you will stay with us till the very end so that we can share some exciting upcoming learning opportunities as well. I would like to extend my special thank you to my project partner, Britt Dzioba. She's in a learning event at BCcampus at the moment, but her bold and invaluable contribution was instrumental in the planning and coordinating this program with me. I also would like to acknowledge the special presence of my co-worker, Kelsey Kilbey, who has provided wonderful support behind the scenes for this learning event. Before we dive into the session, I'd like to start with the territorial acknowledgment. I was born and raised in Saigon, Vietnam. It's a big city where it's very hard to see the beauty of nature. I don't see the blue sky and the ocean trees very often, because those are all overshadowed by many high rise buildings, as well as the air pollution. Since I came here to Victoria in 2015, I fell in love with this beautiful and peaceful place. I'm very grateful that my family and I have an opportunity to live in this place that is so close to nature. This slide shows the highlights of our summer, every day in the sun and by the ocean. I chose those images to say my last goodbye to the summer. Today, I'm connecting with you from my home office in the traditional territories of Lekwungen speaking people, including the Songhees Nations, Esquimalt people, and W̱SÁNEĆ people whose historical relations with the land continue to this day. Let's go back to our main event, the FLO or we say facilitating learning online at Tech Sandbox Series as outlined in the B.C. Post-Secondary Digital Literacy Framework, launched back in the spring 2023. A digitally literate educator is someone who approaches new technologies with curiosity, confidence, and with the ability to troubleshoot those technologies that don't work. We are very excited about this launch. We believe that with the sandbox approach in the context of teaching and learning, we can offer a safe online learning space for all educators to explore, experiment, and to collaborate with each other to review the tool, as well as to visit some teaching ideas with those innovative technology tools.

Today, it is my delight, and actually our whole team's delight, to introduce our first Sandbox session featuring Mattermost led by the exceptional Ian Linkletter. Ian is the emerging technology and open education librarian at the British Columbia Institute of Technology. Ian has rich experience in evaluating learning technologies through critical lens. And what impressed us the most and inspires the most is that he's a strong advocate for open education as a social

good. I know that Ian has a very informative and engaging session for all of us. Here you go, Ian, take it away. Thank you.

IAN LINKLETTER:

Thank you, Gwen, for the introduction. And I have my slides up on the screen now. As Gwen said, welcome to the FLO Ed TechEd Sandbox Series. I'll be presenting about Mattermost today. I'm Ian Linkletter. I'd also like to acknowledge that I live and work on the traditional ancestral and unceded territory of the Coast Salish Nations of Squamish, Tsleil Waututh and Musqueam. I'm joining you here today from Burnaby at the BCIT Burnaby campus. I live in Vancouver B.C. on these coastal nations. I'm very grateful to be here.

An overview of what we'll be doing today. I'll have a short presentation about Mattermost and some of the considerations that go into building a learning community. We will sign up for Mattermost on an open server that doesn't do anything fishy with your data. We'll have a Mattermost scavenger hunt where we all shift over to Mattermost and go through a number of activities. You'll learn the ins and outs of how it works, making your own channels and all of the different options. We'll have four different conversations inside Mattermost. These will be fully within the platform. I have some provocations, some resources to check out together and then we'll take it from there. I notice in the chat that we have a wide range of people. We have educational technologists, we have faculty, a lot of people that I recognize and some that I don't. So I just ask that when we shift over to the scavenger hunt and the conversations in Mattermost, that we really try to shift our focus over to Mattermost itself. I'll still be here in the Zoom with my camera off to answer any questions and share my screen to help guide people. But the session is all about immersing ourselves in the tool. The tool supports community. We're a community today, so let's immerse ourselves for about half an hour when we get to that part. We'll continue our conversation back in Zoom and I'll have a slide letting us know when it's time to come back in Zoom. To keep us on track and Mattermost, I will be sending messages. You'll be getting a little alerts, letting us know when it's time to go back to Zoom. Then we'll spend some time evaluating Mattermost using a rubric that BCcampus has adapted from the University of Western Ontario.

Let's go ahead and get into this. Starting with the big question of what is Mattermost? Mattermost is a Team Chat tool. Team chat is something that really emerged about 10 years ago with the advent of a tool called Slack, which popularized the medium. Since Slack came out, it grew very virally in especially the tech sector, other companies have rushed to catch up. Microsoft Teams came out. Zoom has pivoted to Zoom Chat. There's a new button when you log into Zoom. There's Discord, which is more gaming oriented. Rocket.Chat, which is an open source competitor, Workplace by Meta and Workplace by Google.

Mattermost is an open source communication tool that facilitates collaboration in a chat environment. I want to point out that it's some fly by night operation; it's a very legitimate tool. It's officially supported at the University of Western, sorry, the University of British Columbia and Thompson Rivers University as an officially supported learning technology. And it's

available to other B.C. post-secondary institutions through what's called the OpenETC, which I'll talk about next. Some personal background. I led the Mattermost pilot at UBC when I was there. I was at UBC for 10 years in the Faculty of Education as a learning technology specialist, and I was involved with the selection and evaluation of Mattermost. And so, I wanted to go back to this idea of Team Chat as opposed to the older chat systems from over 10 years ago now like an Instant Messenger, ICQ, MSN Messenger. What's specific about Team Chat that's a little bit unique? The first one is that it has channels, public and private channels. It supports direct messages one on one or with a group. Mattermost supports up to seven people in a group direct message. File sharing. The ability to upload files or images and sometimes preview them in the chat. Notifications. The ability to have push to your mobile device, web notifications, email notifications, or no notifications. Search options. We have keywords, hash tags, which we'll use during our scavenger hunt or date filters. Threaded conversations. Threaded conversations are going to be really important today because we'll be potentially having numerous conversations at the same time. And that's okay, because we have threads. I'll show you how to click the reply button and talk in a thread. Then, rich text formatting. If you're familiar with the formatting language called Markdown, you can just type in Markdown things like asterisk asterisk, bold. Asterisk asterisk will be bold. I don't quite have the hang of Markdown, but luckily Mattermost has a rich text editor that you can use to format plain text and make links. The features continue. I'm not numbering them anymore. We also have reactions and emoji. Customizable appearance, Mattermost supports theming. Let's see, my sides are lacking a little bit behind, but my next item...I'm just going to go back and forward. There we go. We have user profiles, so the ability to set your picture, display name, and status, whether you're available or not. There's apps and mobile compatibility, whether you're in the browser or want to download something, and I'll show you how to do that. Pinning and bookmarking. You can pin something to the top of a channel or you can bookmark it privately for later. Then the last feature, this is something that we should come to expect, is accessibility. If there's a Team Chat tool out there that isn't accessible, that's not appropriate. But luckily Mattermost does comply with WCAG 2.0. It has an A rating and they're working on a double A rating. There's a few things that bother me like the fact that images that you upload can't have alt text attached to them. You have to type it out. But other than that Mattermost is pretty solid, especially with the custom theming if you need more contrast. That was a lot of words. How about I just quickly show you what the Mattermost interface looks like, and switch to my other computer and share, Just one moment. Just another moment while I open the app.

Okay, so what we're going to look at here is a real community that exists. We're going to be talking about the OpenETC in a moment, but the OpenETC has its own Mattermost community on the same server that we'll be using today. What we're looking at here is the Town Square channel. So on the right hand side this is, you can see my pointer on the right hand side here. This is where the messages go. At the bottom right, where you write your messages. Underneath here are those formatting options that I mentioned. At the bottom right, there's the ability to attach a file using the paper clip, browse for an emoji using the little smiley face, and then send your message using the arrow that looks like a paper airplane. You can see as I look at other messages, including my own, that as I hover over, this little bar appears with quick

reactions, that emoji, for an emoji reaction, the ability to save, which you can then access again using the bookmarks button up here at the top right. Or the ability to reply in a thread. So when you hover over a post and click this little reply arrow, you'll see the entire conversation within its own context. A window opens up on the right hand side, or a panel opens up on the right hand side. This allows you to respond just to these posts, even if there were later posts. You can then X out of this sidebar when you're done with it. There are some things at the top right I wanted to show you. You can look up your recent messages or your recent mentions under this @ sign. You can look at saved posts using this bookmark sign. You can configure your Mattermost settings, including notifications, which we'll do during the scavenger hunt though this gear symbol up at the very top right where it has a photo of me. Or it'll just be a round icon with your first initial. You can click into here and your status, type in a custom status if edit you want to, let people know that you're on vacation, for example. And edit your profile, which are all things that we'll do during the scavenger hunt. I'll have some screenshots for you to remind you. On the left hand side, this is where our channels and private messages go. You can see that I'm in a channel called Town Square. It's public because it has this globe. I'm in a couple of channels called Institutional Leads and Team Admins with lock symbols to indicate that they're not public. Then down on the left, there's direct messages where you can see all the people that I've talked to recently. But I'm going to close that up so that we don't give away anybody's secret messages. Just kidding. On the very far left, if you do already happen to be in a Mattermost team, it's really important that today you switch over to the BCcampus EdTech sandbox team. The way that you do that, you may not need to if you're not in a different team like ETUG or H5P ,or OpenETC. But if you do see all these squares on your left hand side when you log in, click on the little BCcampus logo, and we'll go to the session for today. Once we get to the sign-up portion after my presentation, we'll switch over to this. Any questions about the Mattermost interface? We'll have a scavenger hunt and some screenshots. But at this point, is there anything that you wanted to check out while we're looking at it together? All right. I think that some of the tools that we listed earlier are probably quite familiar to people. And we have an activity coming up where we'll talk about the tools that we've used. I see in the chat that Jennifer needs to leave. So, Jennifer, thank you. And Julian, the BCcampus channel will appear after we go through the sign-up process together.

Okay. So I'll go back to my slides presentation on my other computer here. I'm going to stop sharing and bring it back. It seems to have gotten stuck for me, but I do have a backup computer if we need it. Okay, so what makes Mattermost different from all these other tools that we looked at? The majority of those tools are not open source. The only one that was Rocket Chat. Let's talk a little bit about what that means. Mattermost is an open source tool, which like a lot of open source tools like Canvas means that in this case, it does have a for profit company monitoring the project, putting resources into keeping it going. It's really difficult to have an open source project with just one or two developers. Mattermost is open source, anybody can download it, post it themselves for free. If something happens to the platform, like a new feature is added or they change the interface, you don't actually need to upgrade. You can stay on the server that you're on. It's really important, I think, to highlight the difference between open source versus a vendor controlled tool like Slack or Microsoft Teams, or

Facebook's thing or Google's thing. Because essentially you have the ability, you have the control to manage your own installation. With these other tools, especially in the educational context, we often run into them making changes in the middle of a term, changing all of our documentation without any warning. And that's just not the case. It's also self-hosted, as I mentioned, which means in the case of the OpenETC's installation that we'll be using today, it's actually hosted in British Columbia versus disparate corporate cloud that might be in the states, might be in Ireland, might be all over the place. In British Columbia, we do have a unique legislative context where until recently things needed to be hosted in B.C. The privacy law here, FIPPA, has recently changed so that things don't necessarily have to be hosted in B.C. But you know what, it's still a good thing. I wish they hadn't changed that law because it does add a level of protection to students' data. The Mattermost interface is relatively simple compared to its competitors. When we evaluated it for UBC, when we selected it, that really stood out. The simplicity of the interface. As I mentioned, no surprise upgrades. When you want to upgrade, you do it yourself. In this case, the server administrators at Thompson Rivers University give notice and the OpenETC team lead, like me at BCIT, will give warning to people that they know are using Mattermost. It's all done in a controlled way instead of an ad hoc random way. Whenever some billionaire wants to make a change. As an open source tool, privacy risk is diminished. The advantage of hosting your own tools is that you get to write your own privacy policy. I know for a fact that the OpenETC has no plans to mine your data for AI or training models with it, or selling it, or calibrating marketing. None of that will ever happen. And I can't say the same for some of those other tools, especially Facebook. Come on, that's what they do. Google too. It's hosted on the OpenETC. Let's talk about that.

The OpenETC, if you haven't heard of it, is B.C.'s Open Tech Collaborative. You can go ahead and check out the website at [Opened.ca](https://opened.ca). Let's open it up real quick and have a look here. You can see some awesome art that I'll reference in a minute. There's an artist whose name, I'm still trying to remember, who made this awesome chicken art. This art here. I'll use it in my presentation and show you who it is. Essentially, the OpenETC is a community of educators, technologists, and designers, sharing their expertise to foster and support open infrastructure for the B.C. post-secondary sector. The OpenETC was ahead of the times. We talked when mentioned earlier... Yes, this is Brian Mathers. Thank you, Erwin. That's correct. Brian Mathers actually made all this art for the OpenETC. He was commissioned and paid, and it's, I believe, openly licensed. The OpenETC was ahead of the curve. We now have this digital infrastructure plan for post-secondary and having cooperative structures like this that can be cross institution, I noticed was part of the recommendations.

What is the OpenETC? We've mentioned it. Yeah, we already went through this. It's a community of educators, technologists and designers, sharing their expertise to foster and support open infrastructure for the B.C. post-secondary sector.

How is it relevant to today and our open education climate? Remember, I am an open education librarian, so I live and breathe and believe this stuff. This is from the Cape Town Open Declaration of 2007, and it reads, "Open education is not limited to just open educational



resources. It also draws upon open technologies that facilitate collaborative, flexible learning and the open sharing of teaching practices that empower educators to benefit from the best ideas of their colleagues." I believe in open education as a social good. My background, I have 15 years of experience as an educational technologist, and open educational technology was really where my heart lied. I'm so happy that I get to return to my time as an educational technologist today and share this tool with you.

The OpenETC has three platforms to offer. The one that we'll look at today obviously is Mattermost, But it also supports WordPress and H5P. Something that's really important to point out here, especially if you come out of the session excited and mention it maybe to your IT department or your Edtech department, there's no need for them to feel any pressure or competition from the OpenETC because it complements existing infrastructure, It doesn't replace anything that we already have. You probably already have a Team Chat tool like Zoom or Microsoft Teams, or you're in the process of rolling one out. That's okay. Mattermost is its own separate thing hosted by the OpenETC. The reason that I feel comfortable recommending it as an alternative to other tools is because we're already using alternatives to other tools. When I was at UBC, it was an uphill battle convincing people why they shouldn't be using Slack, why they shouldn't be using other corporate tools that they found off the shelf or heard about at a conference. Mattermost is open source. It's hosted in an ethical manner, It's controlled. Privacy is protected. It's a much safer thing to recommend to people than just whatever corporate tool they find for free. The key differentiators versus the tools that we often have supported at our institutions are, first of all, that it's self-serve on opened.ca there's the option to request a Mattermost team, or you can send me a message personally in the Mattermost team that will be joining together today. And one can be made for you if you're at a B.C. post-secondary institution. Unlike other tools, students can make teams if they want to for educational purposes. It's available to students and it's cross institutional. If you have a community of practice or another type of learning community that you want to share with people that aren't at your institution, that's something that's easy to do. You just generate an invitation link, you have them join, and you're in the same team. That's something that I spent a lot of time trying to figure out how to do at UBC, and the tools just generally don't support it when they're institutionally supported. Most importantly, being part of a co-op model we're learning together as a broader community. That's what we're doing today.

Members of the OpenETC, include 14 out of the 25 post-secondary institutions in B.C. All of these institutions have some presence on the Mattermost or works installations that the OpenETC supports. Clearly, you're in good company, and if you don't see yourself on this list and you do end up using Mattermost, please let me know, and I'll make sure to update it for my next presentation. I see Julian in the chat says that the cross-institutional collaboration feature alone makes Mattermost worth using. I agree.

In my own context at the British Columbia Institute of Technology, I'm happy to report that about a year and a few months ago, we officially endorsed through the Educational Technology

and Learning Design Committee that I'm a part of, the OpenETC for open education purposes. Again, it complements infrastructure; it doesn't replace it.

Some other differentiators that are really important, especially as we compare to corporate tools, are the following. Mattermost is hosted in British Columbia by BCNet. BCNet is a consortium that almost every post-secondary institution, I believe all of them, belong to. They host a big conference every year. And it's a legitimate organization that has its own cloud hosted in Canada. That's where Mattermost, on the OpenETC, is hosted. The hosting is paid for by BCcampus, so financial support is coming from them. We really appreciate, I say we in a co-op way; "we" includes you. But I really appreciate the support from BCcampus. The server isn't administrated by some person doing it off the side of their desk. It's supported by real server administrators at Thompson Rivers University. If you know Brian Lamb's Open Learning team, that's the team that supports OpenETC's Mattermost installation. I know they have a great reputation. The installation has just been rock solid for the few years that I've been using it. What this means is that it's not a hobby, it's not on the side of someone's desk. Thompson Rivers University has their own installation of Mattermost that they use for courses. I talked to Brian recently. It's not a whole lot of extra work to just keep the OpenETC's installation upgraded too. So official hosting by BCNet Official financial support from BCcampus. Server administration by TRU. The other thing that I'll point out is that, like I said, BCIT officially endorsed it. UBC has its own Mattermost server, which they support as an official learning technology for the last five years.

I'm going to be repeating myself a little bit because for accessibility reasons, I want to make sure that I say everything that's on my slide. My apologies for the repetition here. But the slide says Why a shared approach? Complements existing infrastructure, doesn't replace. It promotes digital literacy and connected learning experiences. Cross-institutional collaboration and knowledge sharing. A counter-balance to processes, which favour commercial solutions. Platform co-operativism helps us identify common needs in B.C.. Participation in a growing cooperative of B.C. higher education institutions.

That's the OpenETC. And yes, Art by Brian Mahers for the OpenETC. So opened.ca is where to get started with learning about the OpenETC.

Together, we'll be joining the Mattermost team in a moment. I just wanted to open this up for a few minutes here, we can edit this part out. I think that we actually will open it up just for a quick conversation about what are some benefits of open source technology? Feel free to contribute in the chat if you don't want to be on camera or microphone, then I'll read it out loud. But at this point, let's just take a few minutes, 3 minutes, 5 minutes, and talk about any open source technologies that you've used in your life, especially in an educational context, and what benefits you perceived from them. I've definitely gone into my reasons. What are some open source tools that you all have used? Or what are some benefits from open source technology? Okay. All right.

IRWIN:

I could speak to, let's say, using WordPress. Okay. Perfect. In one of my... two of my courses at Royal Roads University. And it allows for students more openly sharing and connecting their work to the community that they're involved in. And they also are able to maintain that work over a longer period of time. They can come back to it; they refer to it sometimes in my course. They look back at what they've done in earlier courses because their blogs, for instance, are still there. It creates a longer record of their learning, like a diary or portfolio of what they do. doesn't cost them anything. They can choose the level of privacy as well. Because there are disadvantages to being out in the open in some cases where they might want to be able to say things, let's say, about a place that they work as a critique that they don't want to get out there. That's important too. But it's creating the idea that their work goes beyond just doing it one time in the course and forgetting about it. The only person who sees it is the instructor who grades it. It puts out there for the wider world to look at and to comment on. It encourages collaboration within the class. It's all kinds of really cool things that can happen with a tool like that. Being open source, we know that it's not being plundered for data or that some other company is going to buy it and twist it into something else, stuff like that. It's community controlled.

IAN:

That's great. Thank you so much for sharing. Irwin, is it okay if we have your wisdom in the recording?

IRWIN:

Oh yeah, that's perfectly fine.

IAN:

Great, Thank you. I see some comments came in Zoom while we were talking. Comments from a lot of folks. Does anybody want to turn on the mic and talk about these? I'll read them out loud in a moment, but if anybody wants to elaborate on what they wrote, please feel free. Okay, we have some comments in the chat that it equalizes access. "Open tools are building on our more localized knowledge." "More control." "H5P and WordPress are great open source tools." "Bspace, Mastodon, WordPress, Evergreen ILS. Examples of open source tools that are in use." "We are not at the whim of corporate decisions to access." There's already a thumbs up, but I'm going to give one too. "It's a fantastic community of support." Thinking of Moodle and Sahera, which are LMS and portfolio tools or sorry, Mahara not Sahara. Someone else? "Moodle. I also use WordPress and HP5 when teaching at UVic." "PKP suite equals open journal software." "H5P, Canvas, Moodle, etc." "WordPress. Jabber." "Cost-effectiveness and institutional decision making has benefits" and "Lower costs to institutions as compared to subscriptions." Thank you so much, everybody. I really appreciate the insights.

I mentioned previously that in my previous job I worked at UBC's Faculty of Education, we had a Mattermost evaluation where we actually sent surveys out to a couple hundred students. We interviewed eight instructors, or TAs, came out with this open resource. This was the first tool



evaluation that was licensed openly after the Centre for Teaching and Learning Technology at UBC decided to make all of their products, all of the work product that their employees make, open source, open license.

I just really want to highlight this amazing report, which was written by Laticia England from CTLT at UBC with assistance from myself and Joe Zerdun, another educational technologist with the centre. This is a really thorough document. I know that it's been shared and is just so beneficial. It talks directly to students and faculty about their use of this specific tool, what they found useful, what they didn't, and some recommendations for how to maximize the pedagogical effectiveness of Mattermost.

Going back to my slides, I just want to point out that in addition to this link, you can just google UBC Mattermost report and it's the top result. Really recommend opening this up, saving this PDF, and referring to it. We have one more comment about the benefits of open source. "It's critical to bring students' awareness towards the difference between distributed learning platforms and open platforms." That's really wise. This UBC Mattermost Evaluation Report we will return to because there's some recommendations that we'll talk about after we do our scavenger hunt and conversations. But let's proceed.

How did UBC choose Mattermost? Like I said, it's been an officially supported learning technology for the past five years. I was in the faculty of education and we had a need for this program. We previously used an older school tool called Blackboard Instant Messenger. It was discontinued by Blackboard. We went on a project to find an alternative. The Faculty of Education collaborated with instructors on use case studies. We worked with the UBC Learning Technology Hub, which is CTLT, and IT services together to generate primary and secondary requirements for the tool. We adapted Tony Bates and Pools' SECTIONS framework into an evaluation rubric. We conducted an environmental scan, tested a couple of finalist candidates, and worked with instructors to look at it too. We launched the pilot in 2016. We evaluated the pilot in real courses in 2017, and it became an officially supported tool in 2018.

The SECTIONS model that I mentioned comes from Tony Bates's *Teaching in a Digital Age* open textbook, which you can find on the BCcampus website. And it has these eight considerations to keep in mind. And they stand for SECTIONS. Students, ease of use, cost/time, teaching (media characteristics and learning and instructional strategy specifically under teaching). Interaction, organizational issues, networking, and security and privacy. All of these are interconnected and they connect with a middle tool called media select... or a middle process about media selection. I noticed that Gwen has just posted the link in the chat to this open textbook. Thank you very much for that. It's legendary. You've got to check this out. It's so great every educational technologist, every instructional designer, every faculty member should be familiar with SECTIONS. I have this more in detail diagram about SECTIONS, which was created by Sheila Jagannathan from the World Bank. It was also included in *Teaching in a Digital Age*. Again, for students. S, Students. What do you know about the kind of students you're trying to reach, such as demographics, access to technology, and learning styles? E, Ease of use. How easy and

reliable is the medium or technology for the instructor and learner to use? C, costs. How much does this technology cost to design, deliver, and maintain the course? T, teaching functions. What are the educational affordances of the medium, that is, how is it good and not so good for teaching? Interaction. For I, what extent does the medium provide interactivity between the learner and learning materials, between learner and expert, and between learners? O for organizational issues. Does the institution support this technology? Networking for N. Does the medium provide opportunities to network outside the course with subject experts and others in the community? And S, security and privacy. Is this a safe technology for the instructor and students to use? I feel like I've covered all these, talking about the advantages of open and the affordances of Team Chat. You can see how Mattermost rose to the top when we went through our rubric.

Some observations from a technologist. Just some things that I observed, and research backs these up. But I'm sorry, I did not cite specific research, but these are things that I learned along the way in my 10 years as a technologist at UBC, five years as a technologist at Fanshawe College and BCIT. So community is essential in supporting collaborative learning and discourse. At UBC Faculty of Education, I supported all the online courses and building a learning community was an essential part of making a great course or an okay course. If you want a great course, students need to feel a sense of community and that has its own benefits, especially to perceived learning. It's a really difficult thing to design a study and prove that a sense of community causes learning to happen. But it sure makes students feel like they're learning. In many cases that's almost the same thing. Perceived benefits to learning are the most measurable thing that we can look at when we conduct a pilot evaluation. Because you can just ask students; they don't have to submit these surveys, but we can ask and learn from them.

The UBC pilot, like I said, looked at 11 courses, interviewed eight instructors and TAs, and surveyed 202 students. Most students rated their overall experience as neutral or positive. You can see here that neutral is the majority. Somewhat positive, and very positive are another third. And with the pedagogical recommendations that we'll return to at the end of my session today, there's ways to maximize the advantages of this tool. You can access this one pager with the pilot evaluation outcomes at [bit.ly/mattermostrecs](https://bit.ly/mattermostrecs), like Mattermost recommendations. [bit.ly/mattermostrecs](https://bit.ly/mattermostrecs)

The last thing that I want to touch upon before we go into Mattermost itself, which seems long overdue at this point, I'll be quiet shortly, is the Community of Inquiry approach to teaching. The Community of Inquiry approach was something that came out over 20 years ago by Garrison, Anderson, and Archer. What we're looking at here is a Venn diagram with three circles. Circle number one is called Social Presence. Circle number two is called Cognitive Presence. Circle number three is called Teaching Presence. Where all three of these overlap is educational experience. In the middle, where Social Presence and Teaching Presence overlap, is Setting Climate. Where Social Presence and Cognitive Presence overlap is Supporting Discourse. Where Cognitive Presence and Teaching Presence overlap is Selecting Content. This came out of

an article called "Critical Inquiry in a Text-Based Environment: Computer Conferencing and Higher Education Model," from the *Journal of Internet and Higher Education* in 2000.

To dive into these three areas, social, cognitive, and teaching presence, I have more quotes from Garrison and his work. And there's more information on Athabasca University's COI website at: [coi.athabascau.ca](http://coi.athabascau.ca) So Social Presence is defined as "the ability of participants to identify with the community. (i.e., course of study), communicate purposefully in a trusting environment and develop interpersonal relationships by way of projecting their individual personalities." Teaching Presence is "the design, facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes." And Cognitive Presence is "the extent to which learners are able to construct and confirm meaning through sustained reflection and discourse." All of these definitions came from Garrison's work and specifically were summarized on Athabasca University's website at [coi.athabascau.ca](http://coi.athabascau.ca).

I hope that this is as significant to you as it was to me the first time that I learned about the Community of Inquiry model by Dr. Brenna Clark Gray from TRU was the one that opened my eyes to it during the pandemic and it really shaped my thinking. But we'll be talking about the Community of Inquiry model soon in Mattermost as one of our conversation topics. Remember what you've just thought about and hold that thought.

Last thing that we're going to talk about, we have this Bandwidth Immediacy Matrix and a quick Jamboard activity regarding it. The Bandwidth Immediacy Matrix is something that came out in 2020. It was created by Daniel Stanford and is licensed Creative Commons, Noncommercial Share Alike. What it looks like, just visually, is it's a matrix with four compartments. It's basically a continuum between low bandwidth and high bandwidth tools. How much bandwidth do they take? And low immediacy and high immediacy tools. How quickly can you expect somebody to interact with you? In the yellow zone, which is low immediacy and high bandwidth at the top left. We have tools including pre-recorded video, asynchronous discussions with video, pre-recorded audio, asynchronous discussions with audio. Going down to low immediacy, low bandwidth tools, we have readings with text or images, email, and discussion boards with texture images. Moving over to the high immediacy side of things, which when we start to think more real time, high immediacy. High bandwidth tools include video conferencing like Zoom or Microsoft Teams, or audio conferencing. Again, Zoom, just turn off your webcam. The high immediacy, low bandwidth tools which is where Mattermost belongs, include collaborative documents like Ether Pad or group chat and messaging like Mattermost, Slack, or Microsoft Teams or so on.

I want to dive into this bridge between high immediacy, low bandwidth tools and high immediacy high bandwidth tools. I call it the purple zipper. It's the combination between red and blue. I think that Mattermost is really powerful because it can support web conferencing. It can be a persistent place for the chats. Whereas Zoom Chat is ephemeral, and you can't see what came before it. Mattermost is an ongoing, persistent chat tool that can support what we

do. We're now going to hop over to a tool called Google Jamboard. You do not need to be logged into Google, but it will use your Google login if you are logged in. We're going to drop this link into the Zoom chat. I think that Kelsey is going to do that and open it in an incognito window. If you don't want your Google account associated. Let's check out this Jamboard. What we're going to be doing is we're going to be using this menu. On the left hand side, there's a sticky note icon. Just click on that and start adding some stickies for the group chat and messaging tools that you've used in education. It's okay if you repeat yourself, because Kelsey and I will be rearranging these stickies and overlapping them. But I'm just curious what tools people have used before in an educational context. I'll be reading these out loud because things like Mattermost can get quite small and small sticky. But the two stickies that I've added already are Mattermost and Slack. I will hop over to the Jamboard. We're going to be using this Add Stickies button. I'll be helping rearrange these. We have "Desire to learn Team Chat." Oh, that's great. I didn't know it had Team Chat. "Microsoft Teams," here's another Teams. Here's another Teams, that's three. Here's another Teams, that's four. Here's another Teams, that's five. Wow, Microsoft Teams really taking over. We have Slack. That's the second instance of Slack. Miro. Oh great. Someone's already using Mattermost. That's two. Here's another Miro. That's two for Miro, Here's another Mattermost. That's three for Mattermost. WhatsApp? Definitely a Team Chat tool. Here's a third Slack. Here's another Google Hangouts. WhatsApp is being used for a COIL project at Langara. Whoa. What if I gotten myself into, there's so many stickies. I'm going to give up on sorting all of these and just read them out loud. Facebook Messenger. We've got WhatsApp? Oh, I think Kelsey is helping me. Thank you very much. Another Slack, another WhatsApp. Yeah. You can see here that there's a lot of tools. Discord, especially as a student-led tool. Yep. Can't discount Discord, but their privacy policy is a little bit worrisome for a faculty member to ask students to use. But yeah, we have a good spread of group chat tools. I'm confident that as we move forward into signing up for a Mattermost and doing the scavenger hunt activity, that a lot of this will feel easy and familiar to you. Let's go ahead and continue with the presentation. We're almost done here.

Now we're ready to sign up for Mattermost. Just for convenience's sake, I've made a URL using my domain and it's just [signup.linkletter.org](https://signup.linkletter.org) That's all you need. This is going to forward to a really long link that we don't want people to be able to guess. But for today, we're just in the sandbox space. If somebody shows up that we don't want there, I'll kick them out, but I really doubt that's going to happen. We'll just go to [signup.linkletter.org](https://signup.linkletter.org). It will ask you to enter your email address. Please use your work email address. That way, no personal information is being added to the system. Work email is not considered personal information. You can use just your first name. Use a username that doesn't mean anything to anybody else, or add your first and last name. I'm going to go ahead and take a 5-minute break. We're going to come back at 11:00 having signed up for Mattermost. [signup.linkletter.org](https://signup.linkletter.org) is in the chat. Now I'm also going to proceed to show you how you would get an app. Thank you, Dana, for being here. Enjoy your next meeting. So [signup.linkletter.org](https://signup.linkletter.org) is everything that you need to get started. If you want to download an app, you can go to [Mattermost.com/download](https://mattermost.com/download). There's an app for Windows, Mac, Linux, and mobile apps for IOS and android that you can find in the stores. Hey, we're here together. If you don't mind double fisting your phone and your computer. There's no reason

that we can't check out both the app and the website or the desktop application at the same time, okay. If you are installing the app, this is the server URL that it's going to ask you to input. chat.open.ca. We're going to hang out here until 11:00. It's 4 minutes from now. Remember, signup.linkletter.org to create your account Mattermost.com/downloads to get an app. Everything's better with an app. chat.opened.ca for the server URL that app will ask you for. Okay, Just wrapping up the sign-up process.

I'm going to move on to some very important instructions. Now that you're in the BCcampus EdTech Sandbox Mattermost team. And remember, if you have multiple Mattermost teams, look for the square that says BCcampus on the very far left of Mattermost to switch to that team. Once you're in it, we're looking for this little plus button right underneath BCcampus EdTech Sandbox. This plus button is very important because it will help you browse channels, create a new channel, and invite people. Click the plus button at the top left, go to Browse Channels. There are six channels that we want to join today. Introductions, Scavenger Hunt, and Conversations one through four. I'm going to switch over. On my other computer, I'm going to take a look at these channels and just make sure that we're all on track to join these. Okay, I see people joining Introductions. I want to also join Scavenger Hunt and the four conversation channels. So click the plus, go to Browse Channels and join these six channels. All right. It's filling up, awesome. Okay, this is great. Okay, just going to hold off another minute so that people can get into the conversation channels too. We'll be going to these conversation channels shortly, but first we'll start with the scavenger hunt. No need to start with those. We're just getting started. Change your notification settings. Mattermost does something that's a little bit, I wish they didn't do this. They make it so that by default you get emails when there's a notification for you. We don't want those emails, or maybe you do, but I want you to have the choice. I'm here in Mattermost. I'm in the Introductions channel, which we'll check out shortly. But the first thing that we're going to do is check out our Notification settings. Just a second, right? Okay. Notification settings, as I mentioned earlier, at the top right underneath this gear icon. If you hover over any of these icons, it'll tell you what they do. But hover over this gear icon. You should see it. Let me make sure that it's showing up on the Zoom. Yep, so gear icon. This will pop up and we want to go into these notification settings and make some changes. Email notifications you might set up for never or just for threads. You follow mobile push notifications. You can set up, as you choose, Desktop notifications, if you're using the desktop application, you can set up how that works, and if it makes noise and all of that. You can also set up some custom words. Obviously, I'm very interested in Mattermost. And when someone says Mattermost, I want to know about it. I want to be able to help. That's my contribution. I have a word that triggers mentions. And for today I also made Ian a trigger word. If you use Ian, I'll be there. Okay. I hope that everybody has set up your notifications. I have a couple of other things with the interface to show you really quick, and then we'll get started in the introductions.

Okay, Mentions, Saved, Settings, Status, that's at the top right. At the, at the bottom right of the textbox tool, we have the paper clip to attach. The emoji icon to emote, and the paper airplane arrow to send your message.

This is going to be really important. I'm going to hang out here for a second. Go ahead and open the Introductions channel, which is on the left hand side under channels. I have some instructions here. It says, "Welcome everyone. Please create a new post about yourself. Who are you? Please share your pronouns. Where are you from? What are you working on?" My name is Ian. I'm an emerging technology and open education librarian at BCIT. My pronouns are he/him. Originally I'm from Washington, but moved to Canada to pursue love, education, and career. Right now, I'm focused on ordering textbooks for our collection, preparing library orientations, and leading this workshop. Please remember that when you hover over a message, there's this little arrow icon. As we move into our conversations number one through four, this will be really key. Okay, here we go. I'm going to stop sharing. Make sure that you're in the Scavenger Hunt thread, and we'll get some instructions coming your way momentarily.