Ben Kahn: Welcome to the UP Tech Talk podcast. This is Ben Kahn at the University of Portland. Today I'm joined by my co-host, Maria Erb.

Maria Erb: Hi Ben.

Ben Kahn: How is it going today, Maria?

Maria Erb: Great.

Ben Kahn: Cool. And we have with us in the studio today two gentlemen from the UP School of Education. We have Dr. Eric Anctil and Dr. Randy Hetherington. Welcome.

Eric Anctil: Thank you Ben.

Randy: Nice to be here.

Ben Kahn: So this episode came about so one night a couple months ago. I was probably in bed doing my nightly Twitter routine and my night mode turned on on Twitter so I didn't get kicked out of bed, and I saw Randy tweeting something about incorporating the ESTI Standards into his curriculum here at UP. So I tweeted Adam, "Hey you want to come on the podcast and talk about it?" And he said, "Yeah, but only if I can bring Eric on as well." So here we are. And we wanted to find out a little bit, for those that don't know, because this might be a little bit more specific to school of education, but very applicable to anyone that's interested in the kind of intersection of technology and curriculum.

 So what are the ESTI Standards and how did they come about, at least in terms of how did they come about being brought into the University of Portland?

Randy: The ESTI Standards themselves, they're not just national, they're actually international. And they're a way that we could acknowledge the role of technology and what it can do, both in the classroom, outside the classroom, in learning environments wherever those learning environments, frankly, are taking place. And that's why I wanted to have Eric join us today because part of it is knowing why we want this to take place in the first place.

 And I think it's probably the most important question and Simon Sinek does a great TED talk on that, if we only knew our why, maybe the hows and the whats would fit in a lot better. I know Eric is right on top of kind of where we need to be and why technology needs to be something that we look at as not just a tool in the classroom, but as something that these generations of students, the generations we teach, they are a part of it already. And so we as their teachers also need to be a part of it.

Eric Anctil: I think one of the things that makes the ESTI Standards important is that, especially for technology, is technology has oftentimes historically been thought of as an add on tool to education. And so, you have a technology class that's a standalone where you learn how to use a projector, if you're going to be training to be a teacher, let's say, and you learn how to use tape recorders or you learn how to use the recorders and headphone sets that your students might be listening to a phonics lesson on back in the 70s.

 But it's always or at least traditionally been kind of an add on to the things that are happening in schools. And we need more intentionality about how we infuse technology into the curriculum, because as is reflected in the larger society, it's becoming the thing. I feel like in many ways it's always been the add on thing and now it's becoming that thing. And so what does that mean, and what does it mean for our students, who if, let's say in the mid 80s you didn't have much of an interest in the Apple IIe computer that was in the corner of the one classroom that had the one computer, you could ignore it.

 No one made you carry around a Sony Walkman. And some people couldn't afford them and technology was always at an arm's length away. But today, it's so much easier for so many students to be involved in these digital spaces that we have to with more intentionality, think about the why questions like, why do we need these things? And I really believe that we have an ethical obligation to meet our students where they are and to give them an incredibly powerful tool like a cell phone that has worldwide distribution capabilities, that can record 4K video, that will archive anything they do and can be a very powerful tool for good but also a very destructive tool if used improperly.

 And then just to tell these kids, "Here you go. Good luck, by the way." It's like giving them a car that can drive a thousand miles an hour and handing them the key and not really explaining to them all the things that it does. And so I think that as we educate teachers and future teachers and think about their role, we have to meet our students where they are and when they need our guiding hand. And the ESTI Standards speak to some of those things. It's imperfect but all things are. But I think that that's the larger why thing, is definitely where I'm thinking on why we need these things.

Randy: And to extend Eric's metaphor one step further, if that were like the driver's education course for this new tool, for this new sports car and the ESTI Standards are an important part of manual. And so we need to ... Some of the things for students include things like digital citizenship. This is important. They need to know how not just to use the tool but to use it in a way that maximizes what it can do for them, but doesn't offend others, does not cause more issues than the things that it's helping.

 I had asked them to become a creative communicator. There's so much talent and power in that new tool, in that sports car. And so if we can help them as teachers to know what it's about and how they'll discover the power they'll create.

Maria Erb: How are the ESTI Standards being incorporated into the curriculum here at UP?

Randy: With the school of education, and I think, I'm not sure if this is campus wide per se, but it certainly is throughout the school of education, we're required, because we're an education program provider and we have to teach the teachers and prepare them for our school system, we have to pay attention to the leadership Standards, to the dyslexia Standards, to the end TPA Standards for the state of Oregon.

 ISTE is the latest in the Standards that have now been mandated for us to make sure that we're including, in all of our syllabi because as Eric said, it's our ethical charge to help our students understand this tool and be able to use this tool to their best advantage and if we don't do our part, then it won't happen.

Eric Anctil: And I think the Standards become an expression of intentionality about commitment. We are committed to teachers who are going to be working with future classrooms of students, who are cognizant of and thinking about what those student needs are. And it becomes a language by which we can communicate our values, really. I worry sometimes that the Standards movement has become so bloated that they become watered out, watered down rather.

 And it does worry me. But at the same time, when I look at the ESTI Standards and when I look at any of them really on point, I think, yeah, there's goodness in here. It is an expression of our values, how best can we use them to put into our classes the things that we think future educators are going to need. And so to me there and it's really an expression of value there.

Ben Kahn: I don't want to put you on the spot, but I how closely do you feel that you have to align every single thing you do to each one of these Standards, which are all good things, as you said, being a good digital citizen, learning how to collaborate more effectively, designing your own multimedia and things like that that are all really valuable, but how much of it is more just like a series of guiding principles versus something that you're really like teaching directly to each standard?

Eric Anctil: I'd say it's both in that the program, our unit, does a review, kind of an audit really, of all the classes that we offer and we ask ourselves, "Where are these Standards appropriate, for which classes?" So that that way, we can narrow down and focus on the things that are there. And then we have key assessments or some kind of an assessment that looks to measure the things that students are doing to address whatever standard might be there. So in that way, I think that there's a targeted approach to making sure that the curriculum is adhering to what the standard is trying to introduce.

 And then on the other hand, it has a broader sense that we should be thinking about these things in totality so there's not an exclusivity to it. Digital citizenship is something that that everyone can be striving for. Even the educator or even the professor, it's like we all need to be thinking about how to send an email that could be very uncivil and not expressive of a digital citizen ...

Ben Kahn: And it's something that can be conceptualized in so many ways from very simple and narrow to really broad like, is it not using all caps in here when you're typing or is there something more to it than that.

Randy: Well, for example, the ISTE Standards for teachers, there's five of them and we don't attempt to have all five represented in every single course that we teach in school. However, we've taken those five and kind of cross-walked them or mapped them across our courses to make sure that if a student goes through a program to become a teacher, they will at some point have encountered all of the ISTE Standards and addressed them in some meaningful way through assessment, through something that has been recorded and something that I'll give credit to a good colleague of mine Da Maria.

 You may have heard about her in this podcast from time to time, and she always emphasized that it's, "Okay, what are you going to do with it." Having it on paper in a syllabus is one thing but what we've found in educational research that it's not embedded in the planning process and that's what we're teaching our teachers to do, is build this in when you're planning your unit, build this and when you're planning your lesson, don't assume you'll be able to seize the moment or slide it in.

 That's when it becomes as Erica I think said in the introduction, a one off or a something that we just kind of cover off. If you're if we understand this, we want to be intentional about building it into the planning because as I told my students over and over, great planning and great teaching builds a great community in the classroom, one that's globally aware of it's creative it can do the things we want them to do. And so you have to embed it. You have to make sure that it's built into the plan so it's there make sure it gets done.

Maria Erb: Are you running into any resistance or opposition to incorporating these Standards?

Eric Anctil: I'm not. No. I think that if there's any resistance that I sometimes perceive, it's that people aren't naturally inclined to embrace technology and so they want to keep it at a distance in some way. And I just think that ... It's kind of like saying, "Well I'm only a math teacher and so, the reading, literacy stuff, it doesn't really apply." But it does. Your students need to know how to read and they need to know how to read in a language and they need to know how to be literate and math.

 But you have an obligation to meet them at least minimally in the places that they need you. And I'd say the same thing for technology, but in terms of resistance, I think that sometimes people ... And then the other thing is that people feel like they're not techie people in general. "Oh I don't have that knew of a cell phone or I don't use my computer that often." which is fine. Those are personal choices that you can make. But I think that ... I believe that as an educator you have an obligation to meet your students in those spaces, even if they don't appeal to you.

 In the same way that I think if you're teaching high school, occasionally go to a soccer game that your students are playing and occasionally attend the social events of your school. You don't have to go to all of them. But the students see you there and they realize, "Oh, you value what I do outside the classroom," or "You value my life in its totality, not just in history class." So that's kind of my subtle way of pushing back against that. So I just challenge people, pick up a tool that's new to you and just give it a shot and you don't have to master all of these things. None of us do.

 But the ability to have an open mind to try and take the risk is not on like being a student, and I think that that is .. So, Yes. That's how I approach that resistance.

Randy: I like the word you used there because that's the word that I wrote down in gathering my thoughts for the podcast was the word challenge. And where do people see the challenge? I guess that's the pushback, Maria, that I see is it's fear. And I think of colleagues ... I know my hair's a little grayer than the other folks who are on the table and thank goodness this is radio and they can't see that.

 But whether it is fear of technology, is one thing. Eric kind of addressed some of that. But it's also fear of confrontation, because it's entirely possible. You could be in a classroom and have a student who knows more than you do about the app you're using, about the device you're using etc.. And as a teacher, if you haven't reconciled the fact that your students are going to know more about technology than you, that confrontation could be something you avoid so therefore you don't embed and then put yourself in that scenario.

 Or it could simply be just fear of change itself. We all know that change is not comfortable. But as Eric said earlier, as teachers, it's our obligation to meet the students when they're at, and if that makes us a little uncomfortable, so be it. We've got some learning to do.

Eric Anctil: And there is a learning curve if you're going to innovate your classroom, some things aren't going to go well, you're going to be standing at the front of the room and things won't work the way you expected them to or it won't have the intended consequence that you were looking for, that outcome maybe. But that's just part of being innovative as an educator is, you have to be willing to have things go off course and then the next time you correct them, and that's how you refine it.

 The challenge of just having being the kind of educator who can say, "You know what? I'm just going to give it my best effort on this and I'll learn from the experience and I will move on." That's a lifelong learning, that's innovation, that's innovative teaching. Those are the things that we we say that we do believe in.

Ben Kahn: I think it's authentic teaching too, just because when you are in a situation where there's technology being employed in the classroom, either just to enhance it or just to be more efficient or because it's state mandated or whatever. You are going to run into the situation where there's some whiz kid that been like, "Oh, I've been doing this stuff since I was five and whatever and I'm super advanced."

 Just to give like a shout out to one of my teachers down at Western Oregon, I took a Photoshop class from her and she started off the class by saying like, "Oh, I've been working in Photoshop for 20 years, so I'm going to teach some of you some stuff and some of you are going to teach me some stuff." And that was very true.

Eric Anctil: That's a pretty humble position. That I'm going to learn from you, even though I'm an expert in this and I've been doing it for many, many, many years. And I think that one of the things that, at least for us, as we think about future educators, is how do we teach to someone's humility so that they can come into a situation and recognize that they will learn from the process. And I think that technology is one of those ones that brings out the fears that, "This is going to be too sharp of a learning curve for me, I don't feel comfortable with it."

 I have a colleague in the in the School of Education and she has a computer on her desk. It's got to be 15 years old and I tell her, "You know they refresh these every few years, you should get a new computer." "No, I just really like the computer I have." And it looks like it came out of a time machine. But what's interesting is, last year when Pokemon Go, the augmented reality app was a big hit in the summer, her summer class, she incorporated in an exercise having the students doing something with Polemon Go.

 And I was like, "That's pretty awesome." Like that's a risk that it would make me nervous to take. She's not a tech savvy person, but she knew that there was something that was really relevant in the moment and she harnessed that and used it with her students and she had students walking all over campus doing Pokemon Go augmented reality things related to her class. And I thought that, "That to me is a jewel in the crown of how you do it. That's it." Because she doesn't have to be tech savvy. But she has to be willing to use technology appropriately or innovatively, really.

Maria Erb: I think you touched on a really good point there, it's that spirit behind the motivation to do a lot of these things. I know Ben and I have talked recently with some of our tech ambassadors that have done really innovative things in the classroom, but not because they wanted to use the latest tech thing, but because they wanted to connect with their students in a really relevant way. And I feel like that's what you're speaking about here. It's that desire that teachers have to connect with their students, and a lot of times it's going to involve these new tools and new technologies and new ways of doing it.

 But because you're got that heart behind it, that leads them.

Ben Kahn: What I think it's just a recognition too of education having to change because the world has changed to be so much more full of possibilities, both really exciting and really scary that the students in pre-service teachers are going to be going out into. If you're teaching cursive, that doesn't really change, right? I know that you're doing this wrong, you slap a ruler on the hands. But if you're like, "All right, today we're going to do a project to explore different forms of language throughout the world." And you just set them loose on an Internet browser to do research. Almost anything could come out of that kind of project, so I just think it's a different world and it's a lot less known and locked down.

Randy: Don't worry, Ben. We no longer slap the ruler, we just restrict their Facebook time or [crosstalk 00:16:23] That's the new rule.

Ben Kahn: That's a fate worse than death.

Randy: And it's interesting because Maria, I think, kind of switched the focus there a little bit I think to a very important point for our future teachers and one that I had with my students just in class the other day. They saw the benefits of using technology as a way to help students communicate and we're talking about classroom blogs and Facebook pages and all of the ways that they felt they could engage and build a relationship with their students. And then unfortunately, I had to play that other card and let others say, "Well, what about?" And bring in the legal aspects of it that we too often see advertised about schools and about technology where people have taken a video with their phone of something that's going on, posted it on YouTube, caused problems. The bullying issues.

 All of those things are all part of it. And that's why I think, again returning to one of Eric's comments earlier on, the digital citizenship piece needs to be all teachers, all disciplines, all the time, because it's become a new responsibility, it's become a new way of being that some of us aren't really comfortable with; the openness, the freeness and the immediacy of it. Sometimes you find out things by seeing it posted on YouTube before your child's even gotten home from school. And for a lot of parents, that's scary.

Eric Anctil: A few years ago, I remember being in a classroom, a second grade classroom and the teacher was using Twitter in a second grade classroom. And if I just say that straight away, I have ... and this was at the time more than it is today. But I remember people would say, "Really? That seems really reckless." And I would say, "Why?" And there was a lot of reasons why using Twitter in a second grade classroom was somehow inappropriate.

 And I said, "Well, let me just explain what she did. She had an invited group only. And so, it was a locked down group and she invited family of the class, so you had to be a parent or a grandparent and maybe a sibling. But I think there was some criteria upon which you could be involved in this Twitter feed, and it was about 40 or so names for a class that was about 25 students. And they would tweet out every morning a question. And the questions would be like, Does anyone out there ... "Is anyone out there from Germany? And could you share a little bit with our class about the German experience?" Or something like that.

 And I'm making that up but it gives you an idea of it. And then at lunch, they would check, and by and large ...

Ben Kahn: Since then they had found one German word that was 140 characters.

Eric Anctil: People would send back these responses. And then they would talk about it. And the one I'm remembering was someone from ... a grandparent in Germany who had sent a message from Germany. And so it gave the teacher an opportunity to talk about Germany. And maybe the original question with something about an international something or European country or something like that. But it gave the teacher now all these ways of helping the students visit, at least in their minds and their imagination, Germany with that person in communicating with them.

 So Twitter became a tool for engagement. It wasn't the thing itself. And so, so often, Twitter is maligned for being full of hate speech and it's weaponized against people, and all those things are true, it can be that way, but it can also be a very productive tool. Helping people see the difference in that tool use is a part of digital citizenship and I think that to Randy's point, the ability to see it across the curriculum, the ability for everyone to have an appreciation for why we need to do have good digital citizenship.

 Because it it is part of the fabric that makes the tool useful. So it's not really about the tool. I worry though in the resistance that you brought up a little bit ago Maria, I worry that the resistance sometimes it's to the tool itself. Like, "Oh, the tool is disruptive." A cell phone can be, you and staring at all day and get nothing done in your life or it can be something that's really constructive; it helps you find where you're going, it helps you communicate with people, it helps you research.

 But it's not about the tool, it's about our behavior with the tool. And that's really why I think ESTI standard are about.

Randy: Ideas, and that's the conclusion, actually, that the students came to yesterday is not the tool that's bad, it's how it's used by the people who utilize the tool. And they understood it and they understand that you can change settings and do things. And sometimes those of us who are a generation and a half, perhaps a little bit older, I don't know but all those settings even in my own classroom and I have had the students say, "Oh, why don't you just do this and afterwards you can change this?" "Oh cool. Show me how." And they're happy to show. And then you can res ...

 And then you can do the things like Eric's talked about. And then again it becomes a tool for good and not how it's used to, 140 characters at a time to do bad things.

Ben Kahn: That's a great point. I think it's so important to recognize that all these different tools have sets of what you might call like an avoidance of something that it's going to allow you to do. And I would disagree that technology is totally neutral because I do think they're designed with certain principles and they sort of are funneled along certain paths and have certain biases, and usually it's like, "How do we keep people on here longer? How do we get them clicking more? How do we make this company more money by getting ads?"

 But usually, I think a useful part of digital literacy or becoming a good digital citizen as far as employing technology in education, is not just a learning one tool but learning like, "How do I interrogate this tool and find out what it's good at and what it maybe wants me to do that I don't really want to be doing. And where are the settings that I can change or how I.. "

Eric Anctil: Adjust my behavior.

Ben Kahn: How do I adjust my behavior or how do I compare and contrast it to what else is out there and pick the one that's the best for this classroom or for this purpose or pick a different one.

Eric Anctil: Yeah. The Twitter example's an interesting one because the teacher had to push back against the negative reaction she got from some parents in that class. Because I asked her, "How did the how did this role work out?" She goes, "Oh no. Well, it all ..." And she said, "But I really want the students to see that Twitter is not just something that gets talked about. I want them to be able to see what it looks like. And she had a projection or a projector going with Twitter, her Twitter feed going on and things and it allowed them to see a safe area of what Twitter is.

 And I think that to your point, I think she was trying to help those students see how you vet the tool. And you can start as early as second grade, because as early as the second grade, you can get onto a search engine and look up anything you want. And most parents don't have settings on their computer set to censor the Wild West that's out there.

Maria Erb: Or on their kids' cell phones.

Eric Anctil: Or on their kids' cell phones. So many places where kids just have just unfettered access to anything. So why not, at an early age, help them to see just do exactly what you're talking about, Ben, which is to vet the tool.

Randy: That will be critical thinkers and Ben, you just gave the main justification for ESTI Standards in the first place. We want people to be critical thinkers and if we embed that instruction in it have them look at the technology when they're learning to be teachers, then they can help their students look at the technology, look at it critically, what is this meant to do? What can it do? What could be some misuses?

 And you raise that critical application, and the hows and the whys that this thing is about. That is the justification. That's what ESTI wants to do. They want to raise that global awareness so that this is a common understanding no who you're communicating with.

Ben Kahn: One last point in regard to ESTI Standards that I wanted to ask about is where you see it going or where it might need to add on. A different viewpoint or to morph a little bit, just to my thinking, so much of technology is about communication and social media and interaction. And it's so powerful but really, what it takes to capitalize on it is attention. And so with technology kind of be a distraction and having so much possibility, maybe you're going off and just looking up your hobby or shopping or maybe you are looking at really cool stuff relating to your field of study or whatever.

 I'm just curious if you think like some sort of like focused training or some kind of like attention training or something like that could or should be incorporated into something like the ESTI Standards in the future.

Randy: That's a really good question.

Maria Erb: That's a really good question, Ben.

Eric Anctil: What I think the future ... I don't know, I don't have an answer to your question. I don't know what necessarily that should look like. I think as I look out, I think that if as we think of digital literacy, I think we are nearing the end of Act One of digital literacy, as in it was a play. And that is that you can use a computer and a tablet and a cell phone and you know how to find information, you know how to use that information and that you're digitally literate, and maybe you're fairly sophisticated with it. You're able to to use a lot of the formatting features like an a word document or PowerPoint. Not PowerPoint but Photoshop, you're pretty sophisticated user.

 But as we move away from devices and we have more wearables and we have augmented reality, artificial intelligence, really strong predictive analytics coming, to me I feel like that's the starting point of act two of the new kind of digital literacy. Moving past these foundational things to some other new area where we have to do things like differentiate between reality and virtual and digital, in and in different ways and our identity construction is part of that.

 It's not really about being able to master the tool as it's better understanding who we are. And so looking to the future, I wonder how are our Standards and how we teach and what we think about will change on that trajectory. But to answer your question directly, I didn't have any answer.

Randy: It's not so much about paying attention as being able to like discern reality. It's unbelievable.

Ben Kahn: Because the blended reality stuff that I've been seeing coming out on the commercial side where you're walking down a street and advertisers can just blanket you with information through your phone and make and then we'll be able to, in real space, be able to make things appear that aren't really there is really going to ... There's a picture that went out on Twitter a couple of months ago of this little girl hugging a water heater that looked like a robot. And she really anthropomorphized it to the point where she was hugging it and said I love you. And she was about four years old.

 What's that little girl going to do when that robot isn't a water heater. But when that robot is something that interacts with her in a virtual space and seems very real. And those are the kinds of literacy issues that I worry about for the future. How will we help people be those discriminating consumers and users that we need them to be?

Randy: And not by any way in answering or an answer to your question, but I think ... And I'll compare it to STEM. I'll compare it to the science technology and ... What sparked that? What got that going? Well, something got going and it and it was certain people who got into space before other people got into space. So all of us so we need to focus on X, Y and ... I think, well, Eric doesn't feel he hasn't answered your question, I think in part he did, because there's going to be something that's going to dictate whether we need. Whether it be a focus or an attention, something's going to dictate that.

 And that something is going to be something bigger, something newer. For example, when the web first came into being, that was a pretty big deal and it kind of snuck in a little bit on some folks but on others it was right there. I think there's going to be one of those things that's going to, not only move us into action, but mandate us into action just in order to keep our kids not only safe, but also to give them maximum opportunity, maximum access, maximum ability to do some of the things that frankly we can't even imagine they're going to be able to do now.

 That's why Eric needed to come because he's got a much better imagination than I do. And I just think there's going to be one of those events, one of those things is going to occur and that's going to guide act two.

Eric Anctil: I think act two is going to be a lot of operating systems that are guided by artificial intelligence in our personal lives, our outside of education lives, and those things will seep in more and more. Not being distrustful of the teacher, but just realizing that I have an operating system that I talk to, kind of like a teacher and like a friend and like a companion, alot of other relationships, and I really look forward to that. In the same way that a student today is going to go do research in a web browser on their phone before they're going to grab an encyclopedia.

 And so we have to figure out how we aren't a bound encyclopedia on a shelf as educators. I think we need to figure out how we can meet them so that the world competes a little strong but kind of competing against an artificial intelligence and operating system that Microsoft or Apple are putting out into the universe. And maybe it'll be Facebook and maybe it'll be Amazon.

Randy: Or just a random Youtuber.

Eric Anctil: Yeah. Exactly. You think of how much power that the YouTuber has today that they didn't have with the number of followers and it's the things that they say or do are taken as gospel.

Randy: But if we want the answer you're saying we could just ask Alexa?

Eric Anctil: Yeah. Alexa is the thing. Yes, exactly. I think that's going to be the big thing in terms of what's going to force us, as Randy is saying, what's going to be that touchdown. That Sputnik moment will be when we start realizing that kids are hearing artificial intelligence and hearing it as a human, not hearing it as a machine. And that's going to really threaten, I think, us on a philosophical level.

Randy: I think it's here.

Eric Anctil: And it's here. Yeah. Exactly. If you hear little ... If you hear younger kids interacting with things.

Maria Erb: And are looking to it as an authority figure, more than a teacher in front of them.

Eric Anctil: And when you have parents who are going to be using it as a third parent in a home, a kid comes home from school and they check in with the operating system of the house, and then that kid ...

Maria Erb: How was your day.

Eric Anctil: How was your day. Make sure have a snack. Your dad and I [crosstalk 00:30:13]

Ben Kahn: I only have the version of the Echo that you can just call and it will answer without being picked up too. You heard of that?

Eric Anctil: Oh, yeah. The broadcast's open?

Ben Kahn: Yeah. It's like a video camera that you can put in your house. And one of your kids are supposed to be home from school or you can put it in like an elderly parents room or whatever and you can just turn it on and it's looking, showing you a video of them without them answering.

Eric Anctil: And you can just shout to them and say, "Come to the camera."

Maria Erb: Turn around.

Eric Anctil: Exactly.

Ben Kahn: Show me your hands.

Maria Erb: That's right. Show me ...

Maria Erb: Then it's that idea of that surveillance versus ... I don't know, accountability I guess, but those are really very much surveilling behaviors to me. Oh yeah. And so, what's that going to be in the future. I don't know, I look to it with optimism but also with a lot of trepidation.

Ben Kahn: Well, wide ranging conversation. I think we can wrap it here. Just over a half an hour. We can go ahead and skip the ... All right. So, Eric and Randy, thanks so much for joining us. Thanks Maria. We'll see you next time.

Eric Anctil: You're welcome. Thanks for having us.

Randy: Thank you for having us.

Maria Erb: Thank you Both.

Randy: Bye.

Maria Erb: UP Tech Talk is a bimonthly podcast with co-host Ben Kahn and Maria Erb of Academic Technology Services and Innovation that explores the use of technology in the classroom.

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