



## **The Future of Education with Sultan Rana** **Nerdin' About Podcast Transcript, Season 1 Episode 14**

### **Michael**

Hey, everyone, welcome to Nerdin' About! I'm Space Michael, and with me as always, is someone who if we were at the Fox Cabaret doing Nerd Nite, she'd probably be drinking an old fashioned?

### **Kaylee**

That's correct! You know my drink, and I would not have eaten dinner. So, it would have been getting real messy, real fast.

### **Michael**

Don't we miss those nights when we'd get up there, we'd cruise in right after work, not eat dinner, drink like three cocktails, and then be like, what just happened? We just did a science night for 150 people.

### **Kaylee**

I mean that's one of the nice things about the podcast, we can still be drinking. So right now, are you drinking anything? I'm having wine.

### **Michael**

Oh, I've just got my soda water because I got to keep it together. I fall apart when I drink.

### **Kaylee**

Well, let me tell you, you're about to really fall apart, because I'm about to introduce our guest. So today we're joined by Sultan Rana who is a Toronto-based educator, and education technology specialist who teaches soon to be educators at York University's Faculty of Education. Hi Sultan, how are you doing?

### **Sultan**

I'm good. You know that line "I fall apart when I drink" that actually could be an R&B song. So, I appreciate that. There's so much inspiration coming from this already.

### **Kaylee**

I would love to see you specifically create that song Michael. So, to start off, Sultan, you've taught lots of kidlets, all the grades of the kidlets, and now you're teaching adults. So how does your approach to teaching change? I mean, as I got older, I generally just see adults as large children, but does your teaching approach change?

### **Sultan**

I think you hit it on the head there, with children, you sit in a space where you are a lot calmer, a lot more patient. You realize that there's a developmental piece there, there is an experience



piece there. There's a latent trauma piece that they don't even know that they're going through and enduring, that you have to be cognizant and aware of. So that when a kid acts up you don't look at them like "Oh, you're such a bad kid".

You actually have to sit there and think to yourself, "What are you going through? Like what are you deprived of right now that you're trying to get with this outburst?" I know that sounds, to some people like you're not looking through the traditional mindset of what a teacher should look through. It's different with kids, you are actually playing a role in their cognitive development. So, everything you do creates a memory, everything you put them through is an experience they may have never had before. So, you just have to be very delicate with that. With adults, what you are dealing with is a quarter of a lifetime of experiences, that have rooted that person in some of the things that make them rigid, entitled, difficult to work with, living in a space where they believe they're right, and because they paid for their education, because you're training them, and because you have the belief in your heart as an educator that everyone can learn, and everyone can be better than they are, and everyone can improve. If you wholly believe that, you have to hold that kind of truth to that adult as well. It's more difficult, because they are often a lot more secure in how they feel, or they believe themselves a little bit more than they believe you, they position their experiences over yours, or over your insight. You just have to navigate that sometimes, it's interesting for sure, but I'm happy to say like I am a cluster F of a human being, and I've been there and done that. I can often see myself and my arrogance of who I used to be and probably still am in them. So, I just live with a little bit more patience.

### **Michael**

So, Sultan you specialize in tech education. Now, when I say that word out loud. I mean, it's kind of weird. The first thing that comes in my brain is the original Nintendo game, Donkey Kong math. I don't know why that is. Could you tell us how you got interested in tech education specifically, and maybe even talk about, how you would define tech education?

### **Sultan**

I now think back to this game we had on Commodore 64 in our classrooms called Cross Country Canada, where it's just like a truck that would just travel across Canada, and pick up resources, and pick up products from different cities, and we had to guess what city it's coming from. It's like "you just picked up pigs and we're in Ontario, where could you get this?" I'm like "Stratford!" That's what think about when you said Donkey Kong Math. As a child I always was a little bit enamored by computers. I've never been enamored by the programming side of it, how you can create something out of nothing. I was more taken aback by the communicative, and the collaborative abilities of technology. So, before it became unfashionable, before 911, I used to be able to admit to everyone that I used to go to this really amazing Muslim camp every single year. At that camp, where we did campy things like canoeing, and arts and crafts, I had my boys were there, like my closest friends in my life were at that camp that I got to see once a year, from ages 7 to 12. These are still my boys, they were in my wedding party, that's how close I was with these guys. So, when I hit 12 years old, and everyone started getting email, it blew my mind that we no longer had to write each other these letters, where that one exciting day, once every two months, we'd get that letter from each other, then we'd write back and send



it, and back then mail Post took at least two weeks, right? Like things changed for me when email was invented, things went bananas for me when ICQ was invented, things went upside down topsy turvy when Skype was invented. My circle that I so desperately missed as a child was coming closer and closer to me, because technology was making it easier and easier for me. So, I've always just been really enamored by the communicative abilities of technology, and how it can get a message out, connect people, and do it for a low, limited, or no cost. Yeah, so that was where it all kind of started, and then as I became an educator, I realized that the utilization or integration of technology made my job easier. There were things that teachers were doing that in an analog fashion, or paper based fashion, that not only was it harder in the process, be it from something as limited as photocopying to something as more intensive as looking through various assessments and whatnot, not using programs to help you highlight certain information or anything like that. Seeing what technology could do to my practice, and make my practice actually easier, and not easier so that I just have a wicked easy job as a teacher, but creates and makes more time for me to do better, and more enriching and engaging things. That's what I think was like the aha, like atomic bomb that went off in my head when it came to the use of technology, because I just realized we are wasting copious amounts of time in classroom with these kids in one space, doing shit with them, that we could easily have them do somewhere else on their own in a faster, more expedited way if we utilize technology, and then when we actually are lucky enough to have the privilege to be together in a space - Now in COVID times when we talk about the privilege of being together, it means something totally different - But in the early 2000s, when I was like, look, I only get these kids for six hours a day in a room. Why am I keeping them for five and a half hours in that room not talking to each other? Why am I doing things with them that I think they could do at home, in a half hour's time, and I'm wasting that half hour here in person? Let me leverage this time, and do something else with it. So, technology always gave me this opportunity to utilize time differently, and that's kind of what the drive was.

**Michael**

So, Sultan, now that you caught us up from when you were a kid to now as an educator. Where do you think tech education is now heading? Will we all just be sitting around in virtual reality machines, where we're sitting in virtual classrooms, like in Bill and Ted University? Where do you think this is going here?

**Kaylee**

Oh my gosh, I would attend that. [laughs]

**Sultan**

I would not! Unless Keanu Reeves is doing a "how to be good with your money and give back to the world kind of class". You know what, that question is loaded, because if we're entering into the conversation thinking about your mid-range student that's probably, middle class, all needs met kind of people, that future looks different. For kids who are enduring poverty that future looks different, for kids who are very rich and have numerous resources to them that reality looks really different. So, another thing that pulled me into digital education, and education



technology really was just the agency I felt like it had or the opportunities I felt like it had to minimize the divide between people who are enduring poverty, and people who live the mainstream mediocre life that basically all governments plan for, all tax systems are made for, all programming is made for. So, I was really just enamored with what the possibilities are with technology, and for students who live in poverty, or live in transient or destitute situations. For kids who are refugees, for war-torn contexts, people who have precarious living situations. That's where I honed in on. I think this conversation would look different if we weren't in the middle of the Covid-19 pandemic, but we didn't go that way. Now we're realizing that we're relying fully on technology, and we're making assumptions as to what people have, we're realizing all those years, we could have been vamping up access and opportunities, and resources for people who endure poverty all across the world. We didn't, and now while we are finding ourselves in a position, where it seems like technology is going to be the answer for a while, it can't still be for a whole group of people, because their needs were – they were never brought to the table, and they weren't thought of when it came to enfranchising these resources to them. So where do I think it's going to go? I think, it's a reckoning unquestionably, now we have to deal with who has access to technology that allows them to do certain things like home learning, like satellite based schooling. We have to make sure we figure out who has it. How do you get it to them? How do you get them to use it, and have them have dependable and reliable resources that allow them to stay connected? I think once that gets figured out, everything else then can start going to the virtual reality experiences, the immersive education where you're not leaving your home or your room, but you could put on a full suit, and actually be immersed in a sort of virtual experience. I think it could go there, but I dare get excited about that, and I'd be remiss to not bring up that we're in the red for a whole swath of people who don't have access, who live in isolated areas, and we're forgetting about them, as we always have done, and I don't want this conversation to not have them be included. So, I think it can go far, but certain things need to be met first. So yeah, there is a good chance that we will reconsider what school buildings are utilized for, I'm not going to say they're useless, but perhaps we don't keep living in the 1 desk per kid, 30 in a class paradigm anymore.

### **Kaylee**

Maybe let's transition then back to equitable tech ed. Have you seen a movement toward that, in your own experience, especially now, as a teacher of teachers? Is there any platform that you're particularly excited about, or any opportunities there that you think are exciting?

### **Sultan**

I'm not going to pretend like I'm completely up on everything that's happening when it comes to equitable access to technology and infrastructure. I've seen some things that always sound like good patch up jobs, like I know in certain poverty-stricken districts in America, because they have the charter school system where they bus kids from sometimes close to two and a half hours from their home location to a totally different school, because you know, they won the lottery, and you know, it's all about school choice and other massive amounts of bullshit like that. Some things that they've done to fill up the gaps, or the painful journey between to and fro their house, is make sure that there's Wi-Fi on the school buses. So, what I've heard is once they drive the kids to their neighborhood, hoping that they're in a geographic vicinity, that's not



more than a block away from each other, they will actually park that Wi Fi bus in the neighborhood for the entire night. So, the kids in that neighborhood have Wi Fi access, because that is not something that many of them can guarantee in their homes. Little things like that I hear I'm like, "oh, that's nice", but that's not sustainable. That's not real infrastructural change. So, I'm physically close to the high needs areas around Toronto, and other than the pandemic encouraging lower or near-free access to internet, and schools who have closed down or who are giving students the option of staying at home, schools releasing, and finally letting go of their technology, and allowing it to go home with students. Other than that, I'm not hearing anything that I feel is totally like a paradigm shift from what we've had before. It's short term solutions that can be quickly implemented, and we'll plan the next time.

### **Kaylee**

Yeah, and I imagine that all teachers are using different amounts of technology, and so this is affecting them all differently, and navigating what that means for how they engage with their students is different.

### **Sultan**

It has a lot to do with your practice. What teachers fail to realize is that when you teach, you can't substitute, or just transfer what you do without technology onto technology. For example, I'll give you the biggest difficulty that a lot of teachers and students who are virtual learning are going through. These teachers in an in-person onsite context, would give students homework every single night, they would have them do silent reading in a classroom, and they would have 20 minutes of silent reading, then it's 30 minutes of journal writing, then it's going to be an exercise break, and then we're going to do think pair share games, all this stuff, you do that in an in-person context. You can do that, it's an okay program, but the thing is teachers are now transferring that into an online virtual learning experience. It doesn't work out the same, and teachers are teaching exactly the same, I'm not speaking all teachers, but there is a good copious number of teachers who once the cameras turn on, they speak to the camera for like 35-40 minutes teaching these students who are just sitting there, with their hands in their face, waiting for the teacher to just stop talking while they're sitting, listening to a talking head on a camera. You can't engage with people in an online form like that. So, your whole practice, the whole way in which you teach has to change in an online forum. If anyone's wondering what I mean is that if you need to talk to students for a sustained 15-20-minute period of time, then put your voice on a PowerPoint presentation, and email it to them, or make a video and send it to them. Be like, "hey, you don't need to look at me, but listen to me in the background while you wash dishes, or do some push-ups at your house. And then when you come to class on Monday, the moment you come into class, I'm not saying a word, I'm immediately putting you in breakout rooms, I'd like you to all discuss this topic, or I'd like you all to create a collective sketch note, or visual graphic that represents the video I sent you last week." If you have people in an online space, you force people to come into a collaborative environment online, you better make it that: collaborative. Don't be the talking head and talking to them. You should have utilized technology that records your voice, and you should deliver that all to them, so they could listen to when they wanted to listen to it. If you're going to ask them to seclude synchronously



an amount of time out of everyone's day at the exact same time, you better do something with that time and do something that's interactive.

**Kaylee**

Michael, are you reflecting on the Space Centre, and all the things that – is this what's happening for you?

**Michael**

Yeah. Oh, my God, this is really hitting me really hard right now, because what we do at the Space Centre is so interactive. Our events that we've built up over the years have been built on "let's get away from lecturing like they do at universities", people are going to come to the Space Centre, because they want to have a conversation, they have heard something, and they want to talk to a real person. We have translated that onto online, and it sort of works, but only for a very small amount of people. What we have been finding is this new realization that I need to get away from the mentality that we need to be engaging with so many people in real time. We need to realize that when you're engaging with people in this online format, you're now going into their home, and they have a whole other schedule, they have kids, they have spouses, they have things that they are dealing with when they're in that space, they're not in our space anymore. So, we have to be on their time. So, we create content now that needs to be digestible in smaller doses, and has rewatchability so that it's not happening at two o'clock. We're going to post it at two o'clock, but they may not watch it until a week later.

**Sultan**

Yeah, and so that term is considered asynchronous, being able to plug and play on your leisure. You hit it on the head where it's small digestible doses of this information as opposed to long lectures, timing is important. Again, it always goes back to the concept of time, that technology is best used when you're cognizant of time. It matters when and how often you deliver messages through technology. Like one thing I've definitely learned this past week is if you inundate your class with messages, keeping in mind they have five or six other courses they are attending, but you for whatever reason, your one measly course, you felt like it was necessary to message them four times in a week? That's annoying, just ridiculous, that's overdoing it, you have to give them one dose. Unless it's like a near massive meltdown of some kind, which I kind of did have last week, you have to be either consistent with timing in the sense of like, they always know on a Thursday you're going to message them or something like that, or you just realize that the frequency in how much you communicate with people has to be measured, or else it becomes overwhelming, and you become tedious and annoying, because people do go through tech overload, right? You have a very small window of time to work with people when they're fresh and ready to learn via screen. So, the concept of time has to be looked at, in like 20 different ways when it comes to teaching, and using technology in education.

**Kaylee**

So, we've been talking about your experience with tech education, but in addition to your tech ed work, you're also, to use your bio description that you sent to us, "enthralled with" education





that's rooted in anti-racism and anti-oppression. I've been thinking about that this week, because I think that teacher's colleges, actually would have an important role to play in that work, because they're training teachers who in turn teach children, and also work incredibly closely with their families. So, I know you've also been involved in some of that training. So, I was wondering if you might share what that looks like.

### **Sultan**

I'll reframe because I don't train anyone specifically on how to use digital technology in classrooms, I integrate it in everything I do. I was hired at York University, to be the instructor of how to teach physical education in the primary school to middle school divisions. I was hired also to teach how to teach social studies in the primary to middle school divisions. So, everything I do in the practice is leveraged by technology, if it's not the way I'm teaching it, it's integrated heavily into the lectures, or it's integrated heavily into the tools that I asked them to use when it comes to learning how to do assessment, and evaluation of students, or record student progress. It's nestled deeply into the assignments where I force them to use a tool that would allow them to take their instructional practice, or getting to know students to a different level. So, the technology integration is always in the design. So just like education, technology, and me embedding it in everything I do, I also embed anti-oppression, anti-racism, in everything I do. So, in gym, in how to teach social studies specifically, because the complete in your face racism that happens in social studies, has really gone unchecked for years. Because everyone's so deeply in love with the pioneer unit, and everyone's so deeply in love with making teepees out of popsicle sticks, that none of these things get interrupted, because they play such a pivotal role in people's good memories of their childhood. So, there's just so many things to interrupt in these subjects, but on top of that, I also had the luxury last year of teaching a course called 'Diverse and Equitable Classrooms in Ontario', where you literally, in a thematic way, have a full 12 course class. Where each class is "Okay everyone, today we're taking on homophobia/queer theory." "Today we're taking on anti-Black racism." "Today, we're taking on Islamophobia", like that's how the class worked. It is, it was, and always will be a contentious thing to take on because, you know, in the spirit of Ibram X. Kendi, everybody in this system in Canadian/American post-colonial system, everybody is one of two things, you are either a racist, or you're an anti-racist. There are certain actions that are bestowed onto those who can consider themselves anti-racist, and if you are absent of those actions, you are the former. And you are not a racist in the charged idea that a racist is a swastika wearing nazi who attends klan meetings every week, or someone that drops epithets at the drop of a dime, or who detests the presence of somebody who is not of their race, that is not racist. So, it's always so much work to get people to understand the real idea of what white supremacy means, what racism means, how are we all, including me, complicit in it, and complicit in in the oppression of various groups of people, and various aspects of ourselves, just to get by, just to get through the system, just to have access to resources just to aspire, and get to goals that we have. To take people through that, and have them navigate that, and to know you're complicit, it derives a lot of shame, it derives a great deal of fragility in a lot of people. And then there's only two things that come out of that, either emotional outbursts, or defiance, and rejection of the topic. So, this is where working with adults is very interesting, because you meet them at a time in their life where they thought they had it all figured out, they thought they had them figured out. To put that on its



head, in a course, where they're like, "I thought we were just going to, like, learn how to like run charities in our class and like, do fundraising." That's what I go through, and when you shatter their preconceived notions, you shatter their sense of who they think they are, and the good person that they think that they are, that's another thing. It's very hard to work with people, when you're standing on the ashes of who they once thought they were. Obviously, I say that with the intention, and the objective to build them back up. If you thought you were going to come here as an empty vessel, and be filled with knowledge, like you got another thing coming. Teachers College, and the Faculty of Education is a massive amount of unlearning, and then you learn, from the unlearning, you know better. Everyone's played the game of school, everyone thinks they got it figured out, and everyone has their preconceived notions of what it's supposed to look like. In most cases, when you don't know, the best form of faking-it-till-you-make-it is just replicate what you experience. The first thing I say to every damn class I teach is "If any of you, whether it be positive or negative, or just neutral, if any of you are here, to, in any way, replicate your experience in the K to 12 world, like when you were in school, please get out. Please don't be here, because whether or not you had a good time, you need to understand when you were in school, there were kids in the class that school did not speak to, there were kids in the class that that whole experience was pain, and sadness, and isolation. I'm happy you had a good experience, but you have to understand that the same exact opportunities and things that were taught to you, and presented to you that worked for you, catastrophically did not work for a lot of students, and you need to realize that. And now that you're here, use that privilege to rewrite this, abolish whatever ostracizes, or isolates certain students, and rewrite it so that there are entry points, and a welcoming, valuing system, or opportunity for everybody that you have in the classroom. That's what you're going to learn here and that the learning you'll do will be violent, it will hurt you, it will be very uncomfortable. And I make it very clear that I will make it very clear that I will make a distinction in this class, that I will guarantee all of you that you will be safe in this class, no matter what the conversations are, you will always be physically safe, and have no repercussions in your marks, or in your trajectory in your career. Unless you're terrible for kids unless you really hurt kids. Nothing will happen to you from conversations, but one thing I will not guarantee in this class is you will not be comfortable. Comfort is not guaranteed in this class, and discomfort is actually what I aspire for, because as adults, it is that unlearning, that discomfort, and that tension where real actual transformative learning happens for you, as opposed to as a child where you're like more in wonderment and experimentation. As an adult, it's when you endure tension, that that learning actually has far more transformative effects than if you were just open, perky, and receptive.

### **Kaylee**

So, do you think that training is ongoing at the university? Is it mandatory? Are they doing more of it? Are you seeing a movement towards more of it?

### **Sultan**

Totally. That course is mandatory, 'Diverse and Equitable Classrooms in Ontario', you have to take it to graduate. One thing I'll say about professional programs, love it or hate it in professional training programs, it's very hard to fail out, as long as you do anything. The reason





I'm saying this is because yes, it's mandatory, but by no means do I want anyone to think that anything that's mandatory in a training program means that we're actually reaching people. Do not think for a second that because there's mandatory equity training happening at corporations, just because Starbucks shut down their doors for a day that every barista is now woke, right? Training is the opportunity to bring it to light, and to show in a punch card fashion that this was done, but it doesn't mean you've incepted the idea in anyone's head, it doesn't mean you've changed behaviors, it doesn't mean you've changed people. Relationships do that, real conversations with people you trust do that. I say that people because it doesn't matter what I said in that class, I know that there were white instructors who literally took copies of my assignments, with my permission to teach in their class, and they were better received, about what they were teaching, and about what the assignment was asking then when I taught it, and I wrote it. Yeah, it's very interesting.

**Michael**

Yeah, that seems like really important work. Speaking of learning, and asking questions, should we let the Nerd Herd ask some questions?

**Kaylee**

I want to hear what they have to ask.

**Michael**

If you want to get in on the nerd herd questions, we post questions on our social media @NerdNiteYVR, you can also email us [vancouver@nerdnite.com](mailto:vancouver@nerdnite.com). Our first question comes from Pramodh who asks, "What will the university classroom be going to look like in a decade?"

**Sultan**

I think it is going to be very much like what we're experiencing now, which will be all online, but I think they will have to beef it up. Because, you know, at the end of the day, universities are a business. So, I think, while we are all kind of like in the Zoom world right now, I think there will be Ivy League schools that will actually deliver out University office chairs that when you sit in, you get sucked into a pod, it's an immersive experience. When you're in that pod, you will see classmates to your left, to your right, in front of you, you'll be in a digital lecture hall, but in the comfort of your own home. The commercial, and the merchandise aspect is going to skyrocket into a different way, they're going to figure out a way to make numerous more immersive ways to be a part of university. One thing that I think we can't deny is, if we go that way, we will deprive an entire generation of young people the opportunity to move out of their house for the first time. Don't get me wrong, like individuals who clearly have enough money to go to university. I mean, I'm just saying like that archetype that some middle-class people have that dream that "I leave high school, and then when I leave high school, I travel abroad to do something else" I don't think that will go away. So, I think, mixed with this satellite experience, where you could sit in a chair, and be immersed into a classroom, university campuses and spaces will be extremely different. I think lecture halls will not be lecture halls anymore, they will become multipurpose spaces. I think space will be reconceived, or reconceptualized to just kind



of create, almost like a real small, thriving city inside of universities. A good model actually be honest with you is Ryerson, Ryerson University, they have a program where your whole degree is you need to be an entrepreneur, you need to actually create a startup business. By the actual fourth year of your degree, you will have an actual sustaining, thriving business that you started up, that is what you leave the university with. So, when they come to classes, they don't come to classes, they come to small pods, where they have these collaborative meetings, and they got to check their books, and they need to talk about their investments, they need to talk about next steps, their investors and all this stuff. So, I think there'll be a small peppering of what it once used to be. This whole idea of us going to lectures, and sitting and listening, that will be done away with in my opinion.

### **Kaylee**

That's probably good, because when I sat in lectures anyway, mostly I just wrote notes to my friend. Mind you that was also when texting wasn't really a thing. So, we have another question talking about technology from Mev, who asks, "How can you ensure that diverse learners can achieve learning outcomes through a tech platform?"

### **Sultan**

You know, the responsiveness of that will always be left to these conglomerate companies. Like I'm not paid by anybody, and all my certifications or whatever don't really matter in the sense of like, they don't do anything to pay me on the side or anything. I would say a company that struggles in some way, but figured out one way to find the niche market around accessibility is Microsoft. God help us if I ever use Microsoft Word ever again, online or anything like that, in comparison to Google Docs, but when it comes to accessibility when it comes to captioning, to translation software, to creating spaces that are accessible to people with low vision, low vision capabilities, with dyslexia, Microsoft is incredible. So, I actually think we're not far from being completely inclusive of diverse learners in an online forum. What I will say is that these companies, and these education platforms need to bring programmers and practitioners to the table that have these disabilities to be there in the design process. To say, yeah, that actually works, that's responsive to the needs of someone with that disability, there needs to be a first-person experience in the design process to say you're meeting the needs of people. Going back to Michael's earlier question, is that where will we be in the future? I hope things change, but for things to be more inclusive, you actually have to be more inclusive in your business model, in your hiring practices, in who your design team is, and who informs how you make things for a particular group of people. If you're trying to make software for people who have dyslexia, and not even 50% of your team has dyslexia, then what are you doing? So yeah, is there diverse platforms? Yes, there is, but I would say that at the end of the day, what you cannot replace is the relationship piece that educators need to have with students.

### **Michael**

You want to nerd out?



**Kaylee**

Oh, I'd love to nerd out.

**Sultan**

I'm like sweating to nerd out!

**Michael**

All right, and you can get in on the nerd outs as well, send us your nerd out @NerdNiteYVR again on Twitter, Instagram, Facebook, email us [vancouver@nerdnite.com](mailto:vancouver@nerdnite.com) and we'll do rapid fire because we've got a bunch for this one. So, Cody is nerding out about trees.

**Kaylee**

Who isn't?

**Michael**

I know we just did a program actually about Equinox about trees, really amazing. Britleaf is nerding out about the evidence of aliens, we talked about in a previous episode with Rackeb. Lorenda is nerding out about the Great Lakes, and I'd love to go around to try to figure out exactly what we think Lorenda is actually nerding out about when it comes to the Great Lakes. Sultan, what do you think Lorenda is nerding out about?

**Sultan**

I think Lorenda is nerding out about how she can start at any Great Lake, and find her way out to the Atlantic Ocean.

**Kaylee**

What? I have zero Great Lakes knowledge!

**Sultan**

Because they're like, I'm going to use the wrong word, is it tributary, or they each flow into each other what is whatever that term is. I forget, once upon a time I was the geography teacher. If you start from Superior, that flows into Huron, that connects through the rivers it'll connect to Erie, then Ontario, and then St. Lawrence and then into the ocean.

**Michael**

Yeah, I think you're right. You know what else if you Google, the picture of Lake Superior, it looks like a weird goblin face. I love like looking at a picture of Lake Superior. Can you picture it in your mind?

**Sultan**

Yeah, I remember Owen Sound is connected to Lake Huron, and they said that Owen Sound is the elephant's asshole of the Great Lakes.



**Kaylee**

That's very specific.

**Sultan**

Because it looks like an elephant, but right where Owen Sound is. [makes boop sound]

**Michael**

Sultan what are you nerding out about?

**Sultan**

Oh man, I am nerding out on everything hip hop and R&B, from the 90s and the 80s, a little bit of the 2000s. It's a little hard for me to get into it now, I feel like the genre has changed, but that's what I'm nerding out about, everything Hip Hop and R&B in the 90s, I've nerded out about it even when I was in the 90s.

**Kaylee**

The 90s is a great decade.

**Sultan**

It is a very interesting decade. In the middle of COVID I purchased a little DJ mix set, I guess it was all the COVID DJ's, like you know D-Nice, and Quest Love going on Instagram every night, and doing a live set for everyone, calling it club COVID. I was just enamored by it. I was enamored by the true art form of mixing music, and beat matching and everything, and I always just felt like I would be good for that. So, I've been trying my best to teach myself, but my partner had a baby girl in May. So, it just seems really self-centered to engage in a hobby while my partner is up twice a night feeding, and taking care of a child. I just can't do it.

**Kaylee**

Not unless you can mix some sweet beats to put her to sleep.

**Sultan**

I will not lie to you, WAP is the song I rock my child to put her to sleep.

**Kaylee**

You know what, that's good. We all need sex positivity in the world empowered, strong women. I'm all about it, and I think that's great. Michael, have you been dancing to some WAP lately, like what's up with you? What are you nerding about?

**Michael**

I don't know what WAP is [laughs], but I have been nerding out about something that relates to the 90s, and its baseball cards, and how that relates to innovation. So, I just got a new job actually, a new project that I'm working on, I'm going to be working with the BC Science Fair Foundation, and they have a big science fair. We're going to be doing a bunch of monthly



events, engaging kids to come up with amazing innovations. I'm also going to be hosting a brand-new podcast, which may be out by the time we release this, called the BC Science Innovation Podcast I think we haven't figured out the name yet. I've been finding in conversation with 14-year-old kids, interested in their little bits of curiosity, where they come up with these ideas for these innovations. That inspired me in thinking about baseball cards, because when I was a kid, I loved baseball cards, and that was my pathway into thinking about new ideas, but baseball cards are like dinosaurs, nobody understands what they are anymore. Like a 10-year-old kid asked me why baseball cards? What's the big deal? And "why" is the best question in the world. Why anything? So, to boil down to why baseball cards, you have to think about the audience for baseball cards. So, I'm one audience member, because I like the nostalgia of them, I like the artiness of them, and then you also have the collectors that like the collectability of them. So, you have two main audiences. So, in the 90s baseball cards had this big rise, and then the internet came and baseball cards weren't relevant anymore, and now in 2020, believe it or not, baseball cards have made a resurgence. There's this project called Project 2020 that is tapping into people like me that like the nostalgia of the baseball cards, and maybe in the pandemic, we were sitting at home and looking through all the stuff that we have, taking old baseball cards, re-mixing them, cutting them up, and making a brand-new baseball card, that is a very unique collectible piece of art. So, it's taking these two audiences and they are now combining, and it's created this whole resurgence. There are certain cards in the project 2020 that are now worth thousands of dollars, and it's really amazing to sort of see that innovation. That's kind of like what I'm doing now with my new job is, talking with these kids finding those little weird bits of curiosity, innovation that may not relate to what they're doing, but it's where it all starts, and for me, that was baseball cards. So that's what I'm nerding out about.

### **Sultan**

That's awesome. There's also a very lottery or gambling aspect to card collecting as well. So, I was into basketball cards, when you get that pack of basketball cards, you get that pack, and you open it's like that excitement of getting a rookie, it's a surge of excitement that you can't really describe, and you can't stop buying them either. So, it was a problem. I remember it definitely was a problem in the Rana household.

### **Michael**

There's actually jargon for people like you in the industry, you would be called a Ripper, because you like to get the packs, you'd like to rip them open, and you like to search for those hidden gems.

### **Sultan**

Can I still keep the title if also sniff the cards after?

### **Kaylee**

Ripper N' Sniffer!



**Michael**

Oh, yes. I love the smell of them!

**Sultan**

I'm definitely like a Mary Katherine Gallagher level sniffer.

**Michael**

Kaylee, what do you like to sniff? What do you like to nerd out about?

**Kaylee**

I was sniffing a nice glass of wine earlier. So today, I'm actually nerding out about a couple podcasts. So, there's a podcast called How to Save a Planet, it's relatively new, it's all about climate change, and how we can work to solve the climate change crisis, and all the episodes are fantastic. But in the latest episode, I was introduced to another podcast that I'm also really enjoying. So, in that last episode, the hosts of How to Save a Planet, Dr. Ayana Johnson, and Alex Bloomberg talk about making republicans environmentalist again. So that part about being on the far right, and being a denier of climate change was not always a reality. They get into some of the history of that, and when folks on both the political right, and the left agreed that climate change was an issue, and that it should be solved even if maybe they disagreed on how to solve it. In that episode, they reference another podcast called Drilled that I am really enjoying, and that gets into how some of the big oil companies went from a model of actually leading the way in alternative energy, into actively creating communications campaigns to convince the public that climate change was a hoax. So, the story is, just freaking terrifying, generally, but it's also an example of a very successful communications campaign. As educators, science communicators we know it's all about who's your audience, what's your message, and how do you engage with them? How are you tracking your success? Holy smokes, did they ever have all of those things, and I think we can all agree that they've been incredibly successful. So, my nerd out this week is to suggest that you listen to both those podcasts, because they give a lot of history to how we got here, which is, again, a little depressing, but also have a lot to teach us about what we can do in the fight against climate change.

**Michael**

Which is a callback to one of our previous episodes that if anyone wants to learn more you can hear from Johanna Wagstaffe on her podcast about climate change. Sultan thank you so much this has been an amazing nerd out evening, hanging out with you. If more people want to learn more about what you're doing, where can people find you online?

**Sultan**

Well, I sometimes tweet. My handle is @MisterRana. I did start an Instagram account to put on my musings of what I was nerding out about, which is Hip Hop and R&B, but I put up two posts, and then felt really defeated after I only got like 10 followers after a week, and just said eff it burn the internet. I don't care anymore. My passion sucks and everyone else sucks. I think it's



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called the Musical Musings of Sultry D. You know what, this podcast has given me vigor to revisit that, so maybe I will rise out of the ashes like a phoenix, and come back to nerding out about what I intended to nerd out about.

### **Kaylee**

So, if you want to marvel at the splendor of that phoenix, and this Instagram account that may or may not once again be lit on fire, you can follow Sultry D, and thank you everybody for listening. If you want to hear more from us, you can follow us on our socials @NerdNiteYVR on Twitter, Instagram and Facebook. We'll be back in a couple weeks and until next time, don't forget it's all about making those meaningful relationships.

*Transcribed by <https://otter.ai>*