PODCAST Episode 371

Sun, Mar 10, 2024 9:21AM 1:00:39

SUMMARY KEYWORDS

adapted, assistive technology, people, device, squire, toys, lip sync, neil, switch, 3d printers, idea, community, volunteer, lis, talk, makers, disability, happy, ai, bottle opener

SPEAKERS

Steve Barclay, Rob Mineault, Ryan Fleury, Courtney Cameron, Lis Malone

---

R **Rob Mineault** 00:05
Hey and welcome to another episode of AT Banter.

S **Steve Barclay** 00:27
Banter, banter.

R **Rob Mineault** 00:30
This is podcast where we talk with advocates and members of the disability community to educate and inspire better conversation about disability. Hey, my name is Rob Mineault and joining me today, Mr. Ryan Fleury.

R **Ryan Fleury** 00:45
Hey.

R **Rob Mineault** 00:47
Miss Lis Malone.

L **Lis Malone** 00:49
Hey. I'm stealing Ryan's "Hey"

R Ryan Fleury 00:55

All right.

R Rob Mineault 00:56

And Mr. Steve Barclay is here too.

S Steve Barclay 00:59

Bazinga

R Rob Mineault 01:02

You threw me off, I was going to do like a rapid fire intro, but I was expecting more. I didn't realize that it was you're just doing the "hey". Otherwise that was that was a perfect intro. I'm just happy that I'm back in my my home studio and I've got my right microphone and I feel like all is right in the world. So that may be influenced my opinion of the intro ... other than Lis's thing, but otherwise ... Listen, this is why we do this on a weekly basis, because you never know, next week that might be the perfect intro.

L Lis Malone 01:42

I'm sorry, I fell on the mount at the beginning of the vault

S Steve Barclay 01:48

It leaves us something to aspire to.

R Rob Mineault 01:49

Exactly. It's fine. It gives us that thing that golden ring to aspire to.

L Lis Malone 02:01

Okay, maybe there will be gold rings next time if Lis doesn't screw up. Feeling really good. Thank you.

R Rob Mineault 02:11

How are you?

L Lis Malone 02:11
I'm so glad the band's all back together today.

R Rob Mineault 02:14
Well, I was gonna say that, I was gonna say everything is going well, I am in my home studio. Everybody's here, the guest showed up. Things things are going well.

L Lis Malone 02:23
And then Lis screwed it up. I'm just fell into the cellar. Okay, carry on.

R Rob Mineault 02:31
I'm having trouble recovering from that and I feel guilty.

R Ryan Fleury 02:34
Moving on then.

L Lis Malone 02:35
Mission accomplished.

S Steve Barclay 02:41
I think I think we ought to just start the intro over again here.

R Rob Mineault 02:45
Now it's fine.

R Ryan Fleury 02:50
You guys married yet?

L Lis Malone 02:53
Practicing. Exactly. We were perfecting our skill so we can ace the interview.

Practicing. Exactly. We were perfecting our skill so we can ace the interview.

R Ryan Fleury 03:00
Excellent.

R Rob Mineault 03:01
That's right. They're clearly together.

L Lis Malone 03:05
Like, they hate each other. That level, another loveless marriage.

R Rob Mineault 03:22
Anyways, hey so how is everybody? Real quickly?

R Ryan Fleury 03:27
Good.

L Lis Malone 03:30
Great

R Rob Mineault 03:31
Steve, how are you?

S Steve Barclay 03:32
Fantastic.

R Rob Mineault 03:33
Hey, are you ready for your big open house this week at Canadian Assistive Technology?

S Steve Barclay 03:37

I am still not ready. Although I did order sandwiches today, so that's one thing scratched off the list.

R Rob Mineault 03:44

Yeah. Okay, good. I'll take note of that. Sandwiches. From where, lked Subway?

S Steve Barclay 03:50

No, no, they're from the Safeway Deli section but they got they got some nice stuff. They got a little croissants and they've got wraps and sandwiches.

R Rob Mineault 03:57

Hey, now listen, the Safeway Deli section actually is better than Subway. Yeah, that's good. Yeah. Darn. Good. Excellent. Well, listen, next week we will all have a full report because we'll all be at the Open House of Canadian Assistive Technology. Well, with the exception of one person who we won't mentioned any names.

L Lis Malone 04:24

It'd be a very expensive Uber ride for me.

R Rob Mineault 04:30

That is true. Anyways, all right, to getting to the reason that we're all here, which is the show. Hey, Ryan.

R Ryan Fleury 04:38

Yeah, Rob?

R Rob Mineault 04:40

Tell the fine folks at home just what the heck we're doing today.

R Ryan Fleury 04:43

Today we are speaking with another one of those fabulous people working for our friends over at Neil Squire. She is Courtney Cameron. Courtney, welcome to the show.

C Courtney Cameron 04:53

Hi, thank you for having me.

R Rob Mineault 04:55

Glad you could be here. I'm sorry you had to witness all the Lis stuff there.

S Steve Barclay 05:02

The meltdown.

L Lis Malone 05:05

Lord, this is I am the product of abuse.

S Steve Barclay 05:10

I meant Rob's meltdown. It's interesting, though, that you would assume it was you.

R Rob Mineault 05:17

See, these podcast personalities you have to deal with. I'm sure it'd be the same if you're on Joe Rogan as well. I mean, I'm sure he's a giant pain in the butt as well. Anyways, welcome Courtney. We're so excited to be talking with you, and the work that you do at Neil Squire. But before we dive into that, maybe tell the folks at home a little bit about yourself and your background and what you do over there at Neil Squire.

C Courtney Cameron 05:50

Yeah, sure. So hi, I'm Courtney. I'm based out of Halifax, Nova Scotia here on the East Coast. And I'm the East Region Coordinator for Makers Making Change Program, which is program of Neil Squire. And so as Region Coordinator, I oversee our four Canadian Provinces and Quebec as well. And so my main job is really kind of promoting our Makers Making Change Program throughout my half of Canada. And really doing outreach, finding out what people need or kind of how we can help connect them with more affordable assistive technology. My background was not in tech, I did not start out in assistive tech at all. I started working in the disability field 10 years ago, I'm probably getting closer to 15. Actually, I should probably count. But I started working in the employment field. I was working for some different organizations, and just found out about Neil Squire, just kind of the the work that they do and I just found it really, really interesting. And assistive technology was a new field for me or kind of a new idea, even even though I'd been working in the field of disability already. So I just kind of got interested in it. And I slowly made my way over from our employment programs into working with Makers

Making Changes full time. And I just love the idea of more affordable assistive tech. So that's my main job -- just kind of coordinating, whether it's different workshops that we're running for individuals, figuring out what kind of the needs of the community are, and how we can get people the devices that they need, or the assistive tech that they need.

R Rob Mineault 07:27

So could you kind of break down Makers Making Change and what you're doing there?

C Courtney Cameron 07:33

Yeah, sure. Absolutely. So Makers Making Change as a program of Neil Squire has been around for probably five, maybe seven years. I always kind of ballpark that answer probably too often. But it all started with a device called the Lip Sync. So we received a grant from Google.org about seven years ago. And Neil Squire is an organization has always had a Research and Development department. We've started out, really with the whole origin story with Neil. People always ask Neil Squire like, what's that name mean? Neil was an actual individual. It was way back in 1980, he was a student athlete, and he was involved in a car accident that caused him to have a spinal cord injury and drastically changed his mobility. So because of his injury, he lost the ability to use its arms, legs, and the ability to speak well. He still could verbally communicate a bit, but it just became really labor intensive, or just more difficult for him. So he had a relative by the name of Bill. And Bill was visiting him in the Rehab Hospital that just thought, hey, there must be something we can do to help Neil. Bill had a background in engineering, and he's kind of an inventor type guy, and the type of guy who, you know, if something broke, he would pull it apart or fix it. Or he saw a problem he would try to, you know, whip up a new solution for things. So when he was visiting Neil, he thought, okay, let's come up with with a new way for Neil to communicate. So if you can imagine what technology was way back in the early 1980s, way different than what it did today. So what they did is they kind of developed the first of a few different puff devices. So Neil learned Morse code, so dot the dashes, those dots and dashes would equal sips and puffs of his air. So he would use those press blasts for those lips and puff of air, they would go down into what's called a teletype device, which would decipher the Morse code. And then his messages would be written on the screen of one of the very first version of a MAC computer because again, early 1980s. You know, most people had not seen a computer, let alone for it to being used for it to be used in this way was was pretty monumental. And people just got involved with this new way of using technology really. Seeing that technology allowed people to you know, communicate again or find their voice again in different ways. Unfortunately, Neil passed away in 1984. But because this community movement had started or this group of individuals in the community had started. They became, you know, a real charity and a real foundation in his honor. So we originally were called the Neil Squire Foundation. And so we're actually coming up to our 40th anniversary here, this upcoming June. 40 years of programming all across the country. So we run a like a wide variety of programming and all different sections. As I mentioned, I worked employment before. So we have all different things going on. But we've always done that research and development piece of Assistive Technology, which really pertains to that original Neil Squire's story. So to kind of tie it all back into Makers Making Change, we received a grant from Google.org to develop a new device. So we had spent time developing new devices, all along through our research and development team. But what we knew was that assistive technology is really, really expensive. And so we wanted to figure out a way to make it be more

affordable for people with disabilities. So at the same time, there was sort of this new idea of Open Source technology happening as well as the maker movement. So Makers Making Change really looks to utilize volunteer makers in the community, people who have skills and want to make stuff who are looking for projects to make. We're really looking to find those people and connect them with people with disabilities who need assistive devices made for them. We have a website called www.makersmakingchange.com. And on it, we have over 200, it's probably closer to I think it's about 220 devices on there. And so the whole idea is everything on there is Open Source. So if you yourself want to know how to make an assistive device, we give you all the information that you need to know how to make it. So if it's a 3D print file, you can just take it and connect to a 3D printer and have that happen for you. If it's something that maybe involves more electronics or more components, we can connect you with links on where to find some of the materials that you need as well instructions of how to put everything together. So it's just that idea of providing more resources for people, if they want to make more assistive technology. As well, if somebody with a disability is wanting to request a device, they can go ahead and just, you know, go on there and say, hey, I want a switch or bottle opener and request it and a volunteer in their community can can look at that and sign up and say, hey, happy to make this for you, with the understanding that it costs the cost of materials and shipping, if that's applicable, as well. So the whole idea behind it is just to make assistive technology more affordable.

R Rob Mineault 12:35

I love this idea of open source in this realm. I mean, we hear all the time about open source software. And we know just by experience, that software that tends to be open source, they tend to be very powerful programs, just based on the fact that you have so many people putting in the work.

C Courtney Cameron 12:53

Yeah, absolutely. And part of the reason we do that one is for that affordability piece, but then there's another piece of really been able to change or modify, to suit different people's different needs. So if somebody started to talk about, you know, a sip/puff device, if somebody wanted to change coding on our listening device, which is one of our our flagship devices, you could change the coding. So instead of maybe a three second puff of air maybe a one second puff of air is more applicable to your needs. You can go in and change and kind of make something suit your needs better. Same with some of our low tech devices, they might be like a certain hand size for some of our pen holders. But again, if you're, you know, a child's hand is a different size than adults, and so the ability to change a lot of the devices is really that customized piece, we really get a great response from people as well.

R Rob Mineault 13:45

With assistive technology in terms of manufactured devices, you run into that all the time, where it's like, oh, it's gonna work for this person, because they have this specific set of needs, but it's not gonna really work for this other person that is slightly different. Because as we know disability, there's a huge gradient. Any different condition, no two disabilities look exactly alike.

So the fact that you could take this, you could take this device and get somebody to modify it slightly, so that it would work for you. So you're not you're not looking at where you need 200 different types of switches in order to have have something for everybody in the community.

C Courtney Cameron 14:25

Yeah. And there is also the ability on our website as well to submit an idea. So if you have an idea for design, maybe it's, you know, something simple, or maybe it's something a little bit more complicated. There is the ability to submit an idea as well. And then volunteers can also sign up and say, hey, I'd love to work on this design for you and kind of, you know, figure out where together ask questions and kind of try to bring your idea to life. So even if it's a one off that is just going to benefit somebody somewhere. Sure, great, but likely there is also somebody somewhere that's going to need something similar as well. So we really love this idea that we're you know, Gaining ideas or gaining feedback from the community for a lot of our devices,

R Rob Mineault 15:04

The other side of that, too, is that for manufacturers of assistive technology. I'm sure that that they do consult the community, they do see where the need is, but sometimes it doesn't go that far. So for for you guys, I mean, you're, you're able to sort of see every sort of level of need, you know, based on the what the community's submitting.

C Courtney Cameron 15:29

Yeah, absolutely. And sometimes, you know, and this is not always the best way to this, but it could be something really simple, you know, like a bottle opener , which is the, you know, fairly simple 3D print. You know, maybe it takes an hour of print time, depending on how big or whatever you want for your device. So, you know, these kind or more simple or like low tech ideas, but can be super life changing for somebody to be able to gain that part of their independence back. So we really love that there's no, you know, idea too small or anything like that, right? We really just want to make sure, whatever somebody's issue is or problem that they're facing, we want to try to come up with solutions for that.

R Rob Mineault 16:06

Yeah. Because when we're talking about manufacturer of assistive technology mean, there's all kinds of things that they have to consider before they're going to make something. You know, send it into a factory because they have to make sure that there a market for this, or a big enough market for this, that we're gonna make some money off this or leave at the very least break even? So whereas, you know, with this with, with something that's open source, you don't have to worry about that. You can make, you know, something for one person, and that's okay.

C Courtney Cameron 16:35

Yeah, absolutely. And, and getting community involved, or having people kind of network with the community is always a good thing, I think. So there's also lots of those kinds of extra outcomes as well, that we really love about a project.

R Rob Mineault 16:47

Now, are you guys sort of region specific, or have you opened this up completely to everybody? Doesn't matter where they are?

C Courtney Cameron 16:56

We are a Canadian charity. So our programs - we work out of Canada - kind of have limitations on what my actual position can do in terms of staffing or things like that. But we have volunteer chapters all across North America as well. So we have at last count, I want to say like 23 chapters throughout the US. And these are just groups of people, or sometimes one person that are interested in that either as a volunteer maker, or they just are a hobby maker, and they just want to make stuff or sometimes people will have incorporated their work. So maybe they're an occupational therapist, or an AT specialist, whatever it might be. And so they just think this project is cool, and you know, want to utilize 3D printing. And so we have these volunteer chapters, that can kind of do a lot of that work and kind of help us be able to reach all kinds of places. So I mean, we sort of have to focus on Canada in some aspects just because of us being a Canadian charity, but we absolutely are happy to share resources or have conversations really with anybody anywhere. We get volunteer chapter applications in front of us all the time. Easily monthly I have a new one coming into my email, just people interested in it. So it's really cool that the project can, you know, do really well in the US, despite, you know, us not having any American staff down there or anything like that. But we have a really, really great network of volunteers all everywhere.

R Rob Mineault 18:28

Talk to me a little bit about 3D printing, because I'm curious as to has that been a game changer in terms of this?

C Courtney Cameron 18:34

It was definitely a game changer, I would say. So I really briefly mentioned it, but our kind of flagship device or the device that started this program, it's called the Lip Sync device. And that was really the grant that we got from Google.org. And when we were looking at how to distribute this and how to keep the cost down. And when this idea of involving the community members or volunteer makers in it, we really are thinking okay, this is a different manufacturing process, right? It's not a traditional manufacturing process and how do you do that? And a big piece of that is 3D printing. And so it just allowed us to be able to have the you know, different parts that we might need a much more affordable price and for you know me to print something here in Nova Scotia, and it'd be the same looking part that you can print in Vancouver, right? Because we both have our 3D printers, we're just using the same files. So

that idea of us being able to manufacture it wherever we're at with our with our 3D printers was definitely a game changer. It just allowed for us to look at that whole process more realistically. And especially when we looked at that it's possiblity within the community. People going to be able to do this when we could see the network of 3D printers out there, whether it's just people with personal 3D printers, universities and schools having 3D printers, people just having them in their own homes or libraries. We just knew okay, there's there's people that have these resources and are wanting to use this in a new way. So it definitely became a game changer for us. We have a really great, we have volunteer makers, you know, that might make devices one on one. But we also have like really great volunteer printers of people to just love 3D printing and just need something to print, right? We call that Printing With a Purpose. Sometimes, you know, people want to print or want to use a 3D printer, or they want to design things or come up with project ideas. But they don't want to, you know, just print off their names or, you know, little fidgets and things but also something a bit more purposeful, or something that could have an end use. And so this project is really great for that as well. So I have lots of teachers in schools that use their 3D printers, it's part of their teaching, and in their course, but also like, hey, we want to print stuff all the time, or, you know, the students always want to start the printers and say what can we print a lot of, and I say, hey, print up a bunch of bottle openers, and I'll get them out as needed. And they're happy to do that. So there's always that kind of nice piece of being able to connect with community that way as well.

R Rob Mineault 20:58

Yeah, for sure. I can hardly wait till we all have 3D printers, when it's just as common as a regular printer.

C Courtney Cameron 21:08

I like them more than a paper printer. I gotta say, I now hate paper printers.

R Ryan Fleury 21:13

Yeah, you can get it for like almost $200 or $300 now Rob.

C Courtney Cameron 21:19

You get different quality for different price points. But that's not to say that your $300 printer couldn't print really great things for you. Right? I mean, I always tell people, if I can figure out how to use my 3D printer with no tech background, you know, all learned kind of on the job. And then it's definitely feasible for a lot of people to get into if they want to, or find a friend, find a friend with a 3D printer because it's there too.

R Rob Mineault 21:44

Yeah, yeah, exactly.

S Steve Barclay 21:50

How does the Lip Sync compared to the Jouse, which was another product that Neil Squire invented years ago?

C Courtney Cameron 21:59

Thank you for asking because we actually just launched our brand new version of Lip Sync with some really nice updated features as part of it. So when we were developing the Lip Sync, and the Jouse was kind of the only comparable thing on the market at the time. But what was happening with that at the time, and there's been some developments or some changes with this now. But at the time, there was nothing compatible with touchscreen devices, right? Everybody was using touchscreen devices, and everybody was on their phones. And so there was no way great way to really connect with touchscreen devices, phones in particular. So we were really looking to kind of meet that market need. And at the time, that was a big thing for it. And in terms of how it works, it is similar ish, although it's not corded or plugged in at all. I think at one time the Jouse had to be plugged in at all times to a power source. Our Lip Sync device runs off of cell phone battery, or can have like an external like little power bank that you plug into. But in terms of how it works, it's similar as that it's a computer mouse that you're going to use with your mouth, it has a little opening on the end. So you can use your breath blasts. And you know, it can be used for laptops, iPads, cell phones, anything that you're going to use a computer mouse with, you could use the Lip Sync with and then through the years and through our development, you can also use it for gaming. So it also has a joystick compatibility, there's just different modes that you can put it in now. So if you want to use it as a joystick, and use it for gaming, you can absolutely do that, or you can use it as computer mouse. There's also a Bluetooth activation with it now as well. So there's lots of great improvements from the initial one. And we're really proud of our new device that just came out or sorry, re-launched version of our Lip Sync that we just released as well. We've made some really nice updates to how it works as well as the building process. Because that's kind of a fun thing that not a lot of people think about, but when you are getting the community to build stuff for you or with you, you have to have some some parts in there that are like user friendly too for people to understand right away or kind of be more easier for parts to be found. A lot of those things go into her design process as well. But in terms of use, the Lip Sync is similar to the Jouse, just made a bit updated and more affordable.

S Steve Barclay 24:28

Excellent. Well, Neil Squire has been the leader in that technology for years and years and years. So it's really nice to see it, you know, come come along the way that it has and to be so much more accessible to people than it ever was before.

C Courtney Cameron 24:43

Yeah.

R Rob Mineault 24:44

Talk to me a little bit about just launching this to begin with because this is a little bit unconventional - was it a bit nerve wracking?

C Courtney Cameron 25:00

Ah, absolutely. So I went lightly involved with the program at that time. But it was nerve racking in the beginning. So the original that was our kind of first with these idea of what we would call Build-a-thon. So we, we have the website that, you know, has everything to do it. But we also go out into the community and how had what we call Build Events, which is where we get a bunch of people to show up, we have a bunch of tools, we have a bunch of parts, and instructions, and we walk them through how to build it. So sometimes, you know, this will be an open community that where people can just sign up and come volunteer with us. Sometimes we'll be in schools during this with different classrooms. And so really, sometimes we do corporate events. So people want to do like team building events, or just something different to have their employees volunteer, they'll come in with us sit down and build some devices for us. So we had some really great community groups that are always interested in do this, thought when we first started doing that with the Lip Sync was fairly daunting, especially because the Lip Sync is a fairly technical device, there was a lot of soldering that went into it, some different tricky parts that went into it. So it was fun to do Lip Sync events. But now we kind of laugh when we think about those initial events, when we're building a fairly technical device with a bunch of novice makers. That's a pretty big undertaking, I think we probably just didn't know enough to maybe be wary of that and we just kind of jumped in. So it was a fairly big undertaking. But the response that we got from the community has been a similar response that we've always gotten just that people are really intrigued by this new and different way to get Assistive Tech or to give back to the community. It's just, you know, it might take people a little bit to kind of believe in it or to kind of buy in a little bit. But we really are proud of the outreach that we've been able to do or the response that we've gotten from the community over time. But it was daunting to say the least, especially at that time, with the kind of device building the Lip Sync. I think originally, we had to build 300 Lip Syncs in a year or something like that. And that's a lot, it's a lot to do that many, especially again how technical it is. So it was definitely daunting, but we probably just didn't know any better. And we just thought this project was cool. And we got some really great responses and people were into it. And so you know, that alone is a good motivation when people are interested in your work. So you just kind of keep going. And, you know, we're pretty happy that we've gotten this far, at least and we learned a lot along the way, but definitely all use the word daunting, I guess. That's the best way to kind of explain the undertaking, but we lived to tell about it.

R Rob Mineault 27:51

It's always daunting, you know, when you're putting sort of the control of how successful something's going to be in the hands of the community, how they're going to respond. And it's something that you as an organization, you can't control will either engage with it and accept it and be excited about it, or they won't, and having no control over that.

C Courtney Cameron 27:51

Yeah, it's daunting, for sure. I can tell you the first Lip Sync build I ever did, which I think was

Yeah, it's daunting, for sure. I can tell you the first Lip Sync build I ever did, which I think was back in 2016, maybe 2017. And I, you know, had just learned to solder for the first time and then was you know, helping people build this Lip Sync. And that alone is feels crazy to think about. But I remember, you know, we do a presentation, we're just talking about the need of assistive tech or, you know how it can be so cost prohibitive for so many people. Just that 'need' piece, you know, when you're really talking about how are our Neil Squire origin story kind of connects back to this Makers Making Change program. So all those pieces, and I can remember standing there thinking about and just thought, oh, this is a really cool program. And I want to keep doing this. And especially for me, having no technical background and was just kind of there. I asked a lot of questions, and they told me to go to the event. And so I just had no idea that I would have this kind of interest in this sort of work. But it's just really cool and interesting. And you really get to meet a lot of passionate people. And so I think that that's contagious. I think when people come to our events, they enjoy it, and they enjoy that they're maybe getting to build something that they know has need and will be used. And so it can be a little bit contagious. And we have a lot of people you know, coming back again and again, to our different events or getting involved in different ways because it's just, it's just cool because it's something a little bit different. And so that idea always kind of reels people in.

R Rob Mineault 29:48

To your knowledge, has anybody sort of taken this idea and ran with it or are you guys kind of out alone in front of the pack in trying something like this?

C Courtney Cameron 30:00

I think we're a little bit alone. Tetra Society is a little bit similar to the work that we do. They also look to utilize volunteer makers to do different assistive devices or whatever it might be. So they're similar to us, and we work really collaborative with them and find that we both kind of have our streams, and there is different groups, a few more in the US for sure. And 18 Acres is a bit similar. There's a few different ones, few more American ones, but there are some groups, but you know, we're as a whole, we're really collaborative organization. And in this space, I think you have to be, especially if you're gonna do a bunch of Open Source stuff, you know, you kind of have to be open and willing. And so we're really happy to work with people and kind of everybody can have their own lane kind of thing. Or we can collaborate with people on different things. AbleGamers is a really good example. Even though they do video game stuff, there's somebody that we you know, meet with every now and then quarterly, maybe just say, hey, what are you working on? Okay, this is what we're working on, just so we don't cross paths, because we don't want to both be developing the same device, that's a waste of everybody's time. It's a you know, you take this, we'll take that, and everybody can keep moving forward with the same ideas in mind. So we're really happy to be able to have that collaborative pace with a lot of the work that we do.

R Rob Mineault 31:26

Yeah, and honestly, like in a field like this, we want as many different organizations doing this, and like you said, having their own lane as we can, because the more ubiquitous we can make this and make assistive technology, the better. Especially the more options that that we can present to people, right. And I mean, not only that, like sort of going back to this idea of

homegrown assistive technology. You know, I think back personally, on the show, I remember, you know, us talking about somebody who had built in their garage, they built an adaptive Game Controller, for at the time, it would have been like, I don't know what an X-Box or something one of the one of the the older X Box models. And that was really cool. Fast forward a few years and Microsoft has taken notice of that and they actually develop their own actual official, adaptive controller. And you know, and now PlayStation, has come out with, with one as well. So you know, those types of things, those home brewed solutions can be really important. And when the when big manufacturers do take notice, or do realize that there is a need there, they can sometimes come in and fill those gaps.

C Courtney Cameron 32:45

Yeah, absolutely. And, you know, sometimes the things that we were focusing on, or maybe I'm concentrating some of our work on our response of what we see or hear from the community meeting and what's kind of not being met in other places. So if we can kind of magnify or highlight that needs somewhere, and if it makes somebody else do something to then that's a good thing in our mind, for sure.

R Rob Mineault 33:06

Yeah, absolutely. Now, in your experience, how does it kind of work in terms of people building devices, like say, somebody builds a bottle opener for somebody, but then somebody else comes and goes, oh, well, that bottle opener is really cool. But I also need like this. And then somebody builds that and kind of adds on to it. And slowly but surely, you know, you end up with a bottle opener that is a remote control for the TV as well. Do you find that that different devices sort of get built on and developed into different devices altogether?

C Courtney Cameron 33:41

I can't think of something that's kind of gone from like low tech to high tech, I can't think of any examples of that. I can think of devices that have started with one need, and then kind of grown to be like, Oh, hey, turns out there's multiple needs for this device, we've just changed it a little bit. That certainly has happened. You know, will people be using something for one thing, and then clue in that, oh, hey, we can do this for this if we change it a little bit. So that for sure has happened, I can't think of anything that's gone from a low tech to high tech. But that's not to say that it couldn't happen. And I should also mention that our R&D Department do oversee a lot of the devices, all of the devices on our website, so somebody isn't going to post, you know, a project up to our library and say, hey, here's this really cool device that is, you know, maybe something that is a little bit questionable in terms of, you know, what it does, that might be maybe something for safety issues or things. So we do kind of oversee a lot of that piece as well. We make sure that we kind of keep an eye on some of those things, too.

R Rob Mineault 34:52

Yeah, excellent. I'm thinking about it. Actually, I do want a bottle opener that is a remote control too.

C Courtney Cameron 34:58

Makes perfect sense. So now, put it on the site and somebody will figure that out.

R Rob Mineault 35:07

Or remote control that I can't lose. That would be another good one.

C Courtney Cameron 35:11

I think that's been invented. I think just Velcro on the side of the couch or whatever to your coffee table.

R Rob Mineault 35:27

Well, here's another question for you then. I know you kind of first came on my radar when I was reading up on the ATIA conference, and I saw that you had done a presentation about adapting toys. And I thought that that was really interesting. I won't ask you specifically about the presentation, but just in terms of like adapting toys or adapting different things that that people may not think about adapting. Are there things out there like that, that can be adapted fairly simple with a couple minor accommodations?

C Courtney Cameron 36:08

Yeah, for sure. And I could talk about that probably for another another three hours if you need me to. And that's because I just become super, super passionate about it. So the quick answer is, yes, there are lots of things out there that could be you know, kind of quick adaptions. The reason that I think toys resonate, or that people are interested in switch adapting toys, is because it's a really great way to talk about accessibility, or about the need for adaptions when people are kind of outside of our world, right? If we are all working in assistive tech, we kind of know about those needs, or know how to talk about it. But anytime you have a conversation with somebody, and they're not familiar with, you know that that assistive technology piece, or the idea of adaptations, or accessibility, as soon as I kind of start explaining about a toy that maybe has a button that's really small, a certain kid doesn't have that fine motor skills with their fingers and they can't grasp it, then people can kind of start thinking about it. So there's something about that, that is really relatable, or that people can kind of picture really easily for whatever reason. So when I talk about this idea of plugging in this bigger button or just a button that you can move to meet them, wherever the needs are at whether it's their head or elbows, or you know, just you know, an easier button for them to hit on their table. People kind of really think, oh, wow, that adaptation really could be done pretty easy and think about how the world of difference that could make. So I find anytime that I am talking to people that are kind of new in this space, for whatever reason, it really gets them kind of thinking about, oh, how would I play with toys? Or what would I have done and just thinking about that need. They'll always say back to me, everybody deserves to play with toys. So it's that really simple

kind of a baseline idea, right? It's that everybody should be able to do something. So it's kind of one of the reasons that I love talking about switch adapting toys, because it's a really great way to bring people into our world. And then just that idea of that, it's pretty easy. I mean, I don't want to over sell it and say that you can add a switch every toy. It's not that simple, because there's some complicated ones out there. But you know, some toys with like one or two buttons, most battery operated toys can be switched and adapted. Again, I don't want to generalize this too much, but toys are, you know, not made with the most expensive parts and not the most complex or most complicated to put together. So often when you open it up, you can see the wires and kind of trace circuits easily. And so once you kind of do one, you can kind of take those skills and do another one, once you know what you're looking for. And you know what kind of parts to use are kind of the whole overall concept. It certainly is something that people can take on and run with. So there's definitely other things out there. Battery operated fans are a big one that people will switch adapt as well. So really battery operated, it's a big piece to kind of go along with that and just that complication of how many buttons something has. Generally however, how many buttons something has, the more complicated it's going to be to switch adapt. That doesn't mean that it's impossible, it just means you're going to have a bit more work ahead of you. But certainly, you know something with one button and the battery operated and you can actually access the wires, there's probably a way to do it. So this past September to December, 2023, we did our second Hacking For The Holidays campaign. So switch adapting toys is wonderful for a bunch of reasons. You know, kids should all have access to toys and when you're around the holiday season talking about that really hits home for people. So we started this campaign to make sure that there was switch adapted toys for the holiday season. So this was our second year running it, we were able to adapt over 1000 toys all across Canada. We built over 1300 switches and around 40 joysticks. And we did this in all 10 provinces. So we're happy to say these switch adapted toys went all throughout Canada. We had about 100 events and over 3400 volunteers participating in it. This campaign is really important to us, for so many reasons. There's that basic idea of making sure there are switch adapted toys for Christmas. But it's also a really great time to kind of spread awareness or talk about assistive tech and about accessibility and a lot of those needs. And it's become a really importantpassionate project for us. Because everything we do is built on feedback from the community. So the reason we knew that there was a need for switch adapted toys was because we heard families or clinicians telling us, you know, there's not enough available or there isn't a variety, or there isn't any choices for my 10 year old to play with. They're all toddler toys, so, you know, we want some variety so my 10 year old can have a toy, a switch adapted toy for Christmas. So we just really started to build our campaigns to make sure that we're meeting those needs. So we put together a really nice toy list, so you know, why I spend my summers walking around toy stores and kind of looking and seeing what's going to fit the needs we think we can switch adapt, and then having this really nice list that clinicians or families can choose from, and look at and say, hey, we'd love to have this lava lamp or this Pikachu or Peppa Pig or, or whatever it might be. So we try to have a really nice variety for families to choose from, which is not something that typically happens for them to be able to have a choice of what switch adapter toys they can have. So we think that's really important. And through that, you know, that's kind of why you know, when I did the presentation at ATIA on how to switch adapt toys. It's because I kept having people say to me, is this something I can learn to do? Is this something I can do? And so we were like, yeah, totally. So you know, I kind of developed this presentation and built it into like a full workshop for families, families or clinicians to partake in, where we can show them or teach them the skills to switch adapt toys, so that you know, they can work with us and kind of do one together, take some of the information that we gave them, and then they can take that back with them. And if it's something that they want to keep doing, to switch adapt toys for their own family members, they certainly can. So we've had parents take part in a lot of our workshops, to switch adapt toys for the kids, we've had siblings or

friends and relatives, switch adapt toys, we've had lots of clinicians, occupational therapists, and speech language, therapists partake in a lot of our workshops just because they want to have better access to switch adapted toys and really be able to access that variety. So it's very empowering for people to be able to, you know, kind of take that choice back and get involved. So we've had great feedback from the community. And we're going to do it again next year. So if anybody's interested in you know, even getting a switch adapted toy, or even, you know, just getting involved in Hacking For The Holidays, we are happy to have that conversation year round. We will provide these workshops year round as well. So if anybody's interested, please reach out, we're happy to help people have that access.

R Rob Mineault 43:24

That's awesome. Now, actually, there is something else that actually I wanted to ask you about, that I noticed. Could you talk a little bit about the STEM With Purpose program and how that works? Because I really feel like this is more really really important work.

C Courtney Cameron 43:44

Yeah, absolutely. It's one of my favorite parts of the work that we do for sure. So when we started Makers Making Change, you know, in that kind of community aspect or having these group of volunteers building stuff, we didn't necessarily see students as you know, the end result. But through time and you know, finding people to to build with us, we started to realize, oh wait, there is a ton of students - whether university students or pretty often the students I work there in grades five or grade six - who are wanting to learn hands on tech education skills. So STEM - so science, technology, engineering and math skills, - a ton of really great teachers wanting to provide these opportunities. I mentioned, you know, 3D printing with teachers and so we have a lot of really great people wanting to get involved. And so we just realized that realize that working with students could really fulfill so many outcomes for everybody. So the students love it because they get to solder and you know, assemble something with their hands. They love you know, getting involved in assembling things and really, really love soldering. So that's great. They get to give back to the community. We get to go in there and talk about assistive tech and accessibility. So there's all these really great outcomes that we think is just a wonderful match, that we're all very happy at the end of the day. And then again, not only do the kids get to build a bunch of stuff that typically works at the end of the session, but then we also have 20 switches that can go to a local rehab hospital or a group that needs them. We're really happy to be able to partner in that way and are always looking for more schools get involved.

R Rob Mineault 45:22

Yeah, yeah, that's awesome. We've talked on the podcast ad nauseam about, you know, the fact that the accessibility works the best when it's baked in at the development process. And so if this next generation of kids, that, you know, might end up going into engineering, if they're, they're coming into that, with this understanding of what accessibility is, and needs might be out there, we might start to see some of this stuff baked in from the beginning way more often than it is now. So that's why this is such important work.

C Courtney Cameron 45:54

Yeah, absolutely. I couldn't agree more. And you know, even if, you know, it's just kids being more understanding of their classmates that maybe use assistive tech in their school, you know, there's there's tons of outcomes. We just think it's super important and love that idea that we can no get in there early, as you say, and really kind of change your perceptions of the thinking on a lot of stuff.

R Ryan Fleury 46:15

So is there a resource on Neil Squire's website where people can find adapted bottle openers or adapted products so that they can purchase them like you connect people with suppliers?

C Courtney Cameron 46:30

Absolutely. So we connect people and volunteers, so if somebody wants something made, they can just go ahead and request it, and a volunteer will sign up to make it for them. And we do have volunteers all across the country. So yeah, so there's a tab called assistive devices, and people go in and look through, and there's some different ways to select categories for maybe what you're looking for. But you can have a look at some of those devices, and then just request it and somebody can sign up and make it for you. And then that process starts okay, I live here, you know, what's the cost of materials, that sort of thing. And we do oversee all of that as well. But typically, it is cost of materials and shipping if applicable. And yeah, so people can go on and check out or, or at device library and see what's on there. And if they're not seeing something that meets their needs, they can always submit a new idea as well.

R Rob Mineault 47:17

Where can people go to find out more about Neil Squire and Makers Making Change?

C Courtney Cameron 47:22

Yeah, so both are our websites, so www.makersmakingchange.com and www.neilsquire.ca, and there's, you know, Contact Us forms. And there's lots of resources on both of those websites as well. So anything I mentioned, in terms of people want to know more about switch adapting toys, or 3D printing, we also have lots of resources for people to get involved or if they want to start getting involved and are a little nervous. We have lots of resources for people there. And then we encourage people to reach out anytime with any questions. We're always happy to connect with them, and help figure out what they need.

R Rob Mineault 47:55

Well, Courtney, we want to thank you so much for coming on and chatting with us. It's been an absolute delight. And yeah we'll have you guys on closer to the holidays again, and we can talk a little bit about switch adapted toys and Hacking For the Holidays.

C Courtney Cameron 48:13
Yeah, that'd be great.

R Ryan Fleury 48:13
Thanks so much.

C Courtney Cameron 48:14
Thanks so much, everyone.

R Rob Mineault 48:17
Thank you. That's cool. I love this idea of open source, you know, going open source with all of this. I think that's such an amazing idea.

R Ryan Fleury 48:26
Well, I think the opportunities are almost limitless, you know. Like she was talking about toys with a single button or a couple of buttons. You have somebody you know, take a look at the board and the wiring schematic and adapt a toy, you know? How many people go to a toy store and actually wonder, you know, I wish I could get that for my child. And don't even think about, you know, adapting a toy.

S Steve Barclay 48:48
Yeah, in a lot of cases, if it's, you know, if it's just an on/off type toy, it's actually pretty straightforward because there's just a switch. Switch adaptations, they're actually available through our website, I believe, that for whatever size battery you want, it just puts a switch in line with the battery pack. But more and more there's there's toys that have in addition to the battery pack, they have some sort of physical on/off switch, and when it's a push button, that becomes a problem. If it's a if it's a physical push over switch, super easy to adapt that toy with a battery adaptation.

R Rob Mineault 49:33
I guess it's the home brew part of it that is so powerful because if you think about it, you know, for a company to decide that they're going to manufacture a piece of assistive technology or something that's adapted, they really do they have to be pretty much guaranteed that okay, there's a need, there's enough of a need for this that we're going to make a profit. It's going to

be worth it to manufacturing this thing. So for a lot of needs that are very niche, you're just never going to see an adapted like, whatever. Maybe a bottle opener, maybe that's a perfect example. You know that that's just something that doesn't exist in terms of a big manufacturer manufacturing them. So, but this way you can because you can literally have somebody who's just like has a 3D printer and it's no problem, I'll print this off for you. I can make one or two or three. It's not it's not an issue. That's where I see the real benefit in something like this. But also, I mean, how do you know if you're in the community and an adapted bottle opener is something that you need, how do you even communicate that need so that an assistive technology company, for example, that they will think that you would even need that?

S Steve Barclay 50:46

You'd have to start asking around, I guess.

R Rob Mineault 50:48

Yeah, exactly. And, you know, companies don't do that. Generally, they stick to what they know is profitable.

R Ryan Fleury 51:03

So open source and AI will take over the world.

R Rob Mineault 51:06

Oh, God, if we put them together...

S Steve Barclay 51:14

Their own 3d printers for testing?

R Rob Mineault 51:17

Oh, god. Yeah. Can you imagine that? You have AI have access to the 3D printers? And yeah, pretty much society's toast within six months. Scary thoughts. Before the mics came on. We were talking about Ryan and I were talking about this new AI engine that's basically text to video. I don't know if you guys have heard the heard of this?

S Steve Barclay 51:45

That's interesting.

R Rob Mineault 51:47

So it's called Sora. So it's, yeah, basically, you can take a text prompt, and it will produce video. I have no idea how it works. I'm assuming that it's like everything else it just takes video from a bunch of different sources. But so some of the examples that they were showing is like, you know, Oh, give me a close up of a woman's eye, where the pupil is the Earth and it produces that video. Which is frightening, from from the point of view of, you know, soon we're not going to know what video has actually been shot and what's AI video. But what interests me though, there is that you can do some really cool accessible things. Like you can literally have people who are blind, making videos by text prompt, which is interesting. I mean, the sky is kind of the limit when you can do something like that. And you can do it now, right now, quite easily with, you know, in terms of text to pictures.

R Ryan Fleury 52:53

But you don't know as a blind person, what images are actually being generated, so there will be a risk there.

R Rob Mineault 53:02

But I'm talking about in the sense of creativity wise, you have some cool things you could have, like, you know, this is you have a film festival of films that were were made by blind people. Because, you know, it's really It's just your imagination is the is the only thing you really need. So, I mean, in that sense, AI, I see great creative potential there and some really neat things that could happen. But of course, like I mentioned the Ryan, the scary thing is we soon we're not going to know if anything's been was written, or shot, or drawn by a human being. Everything's going to be AI and then AI is going to be pulling from AI. So then it's just going to be a loop. It's gonna be like snake eating its tail. So anyways, big tangent. That's a whole other episode. It is another episode of AT Banter Yelling At Clouds.

R Ryan Fleury 54:14

Guess what, guys and gals? We had a bump in our numbers last month. Did you notice that?

S Steve Barclay 54:21

Yeah, you mentioned that.

R Ryan Fleury 54:22

Yeah, I sent you the emails and there was only one possible reason that that could have happened. It's the new segment, Steve's Dad Joke of the Week. Oh, there we go. So I think it's time for Steve's Dad Joke of the Week.

S Steve Barclay 54:42
Oh, geez on the spot here.

R Rob Mineault 54:45
Well, you didn't prepare, you didn't think we were serious.

S Steve Barclay 54:49
I don't know if you guys know this, but I wrote a book.

R Rob Mineault 54:52
Oh, yeah?

S Steve Barclay 54:53
Yeah, I wrote a book on how not to fall down stairs. It's a step by step guide.

R Rob Mineault 54:59
Oh, okay nice.

S Steve Barclay 55:15
Oh yeah. So science puns make me numb. But math puns make me numb-er.

R Rob Mineault 55:32
Okay, so here you go here I got one for you. Why did the Scarecrow win an award?

S Steve Barclay 55:39
Because he was outstanding in his field.

R Rob Mineault 55:42
Damn

S Steve Barclay 55:46

You want to play Dad joke with me? You better come prepared, boy.

R Rob Mineault 55:49

No, no, I asked Chat-GPT to write me a bad joke and that's the one it gave. See, we're not gonna be able to tell what what what's an authentic bad joke and what one is from Chat-GPT.

S Steve Barclay 56:05

You know, Jeff Bezos does before bed? He puts his pajamas on.

R Rob Mineault 56:13

Okay, we are bleeding listeners now. So much for bumping numbers. 4 dad jokes in a row.

L Lis Malone 56:41

I'm not contributing to this bloodbath. My dad didn't tell jokes. So I got no dad jokes.

S Steve Barclay 56:54

Just awful.

R Ryan Fleury 56:55

I didn't have a dad.

R Rob Mineault 57:03

Yeah, well, who knows? Maybe maybe four dad jokes, maybe our numbers will quadruple. We can only hope that that's how the way it works. Right. Hey, Lis.

L Lis Malone 57:17

Hey, Rob. Where can people find this? I believe we can still be found www.atbanter.com with more numbers than ever.

R Rob Mineault 57:29

R Rob Mineault 57:29

They can also drop us an email if they so desire at cowbell@atbanter.com.

L Lis Malone 57:43

That was in stereo Ryan. I felt it, I sensed a sense disturbance in the Force

R Rob Mineault 57:50

We need to switch adapt that buttton and remove functionaity.

L Lis Malone 58:15

Oh, man. Where else? Where else can they find us, somebody.

R Ryan Fleury 58:20

Facebook, Mastodon. Instagram.

R Rob Mineault 58:24

Instagram.

R Ryan Fleury 58:25

Instagram.

R Rob Mineault 58:25

All right. Well, I think that is going to do it for us this week. Big thanks, of course to Courtney for joining us and we will see everybody next week.

S Steve Barclay 59:52

This podcast has been brought to you by Canadian Assistive Technology, providing Low Vision and Blindness solutions as well as Physical Access solutions and Augmentative Communication Aids across Canada. Find us online at www.canasstech.com or if you're in the Vancouver Lower Mainland visit our storefront at number 106-828 West Eighth Avenue in Vancouver. That's one block off Broadway at Willow. You can reach us by phone toll free at 1-844-795-8324 or by email at sales@canasstech.com.