**Vision Support**

**Delphine:** Welcome back to the access to education podcast, where we talk about everything having to do with learning disabilities and learning differences.

Over the past while this podcast has allowed me to bring you stories of overcoming challenge or growth. And of course, experts on various topics. On the podcast I strive to bring you both families on their journey, something to see yourself in, but also for those of you who are educators, those who are looking to learn, and just the average person to have something to think about today on the show is no exception.

There are so many different types of exceptionalities, whether they are neurological, physical vision or something that's invisible. With me today on the show is Jason. He runs a tech company that helps support accessible technology called AT Guys a podcast and is an author.

He is a believer. The products and services should be accessible. No matter the person's ability. Jason has worked with companies and agencies all over the world, promoting accessibility with a focus on technology. Jason, welcome to the show.

[00:01:02] **Jason:** Thanks so much for having me. I really appreciate it.

[00:01:05] **Delphine:** So, let's dive right in. I think I'd really love it. If you could give the listeners a bit of an introduction to who you are, and kind of how you came to doing what you do.

[00:01:16] **Jason:** Sure. Not a problem. I guess I've been in technology pretty much my entire life. I am blind myself. So, growing up in school technology was exposed to me at an early age. Pretty much out of necessity. Starting with a display that allowed me to read braille, an early computer. This was back in the late eighties.

So, it was kind of heavy and very bulky, but essentially, I could read the braille as it would pop up on the screen, and then kind of go through and do my homework and other things like that. So that was starting at about age eight. And when other kids were. Finishing their homework after they were done; I would be sitting in the back sometimes reading the manuals to the tech products like a true geek would do.

And I guess that kind of just, throughout my entire life, my interest in technology has remained, [00:02:00] through college, graduated from Western Michigan University, with the telecommunications degree. And then as you mentioned, I opened a technology products and consulting business called AT Guys.

So, I've pretty much been a tech guy, my entire life.

[00:02:12] **Delphine:** So with AT Guys, what's the function? Like what's the purpose? Do you go in and support, say companies, for example, in providing accessible tech or do you support people who need accessible technology?

[00:02:26] **Jason:** Yeah, so pretty much all the above. So, we have a couple of different focuses. One is working directly with customers. So, people who are blind or low vision to help them find technology products that are suitable. And we really try to focus. On solutions that are affordable and practical, there are a lot of solutions that are really, expensive, and don't really do what they are advertised to do.

So, we try to focus on the products that are more affordable and are going to provide the most value. We have very high expectations for blind people and people who are low vision. And we want to help people [00:03:00] succeed in any way they can. So, we work directly with consumers, but we also work with educational institutions, and rehab agencies and others as well to try to help find the best tech solutions that are available.

[00:03:12] **Delphine:** So that's a nice broad overview. It must give you an interesting perspective because you would see different things, right? From education to business. There'd be a bit of a difference in what they're looking for, the tactic and the technology that they can implement depending on the cost.

[00:03:27] **Jason:** Yeah, absolutely.

[00:03:29] **Delphine:** So let's, you alluded to it a little bit when you were kind of giving your introduction of yourself, but. I know that. When I started out with technology in my spec, ed class, as a kid, it was a Commodore 64. It was like this big bulky thing. We played math blaster on it. I remember having to train my dragon to do voice to text, which was like weeks of training to do.

So I'm curious, let's talk a little bit about the evolution of technology. I mean, we've seen it, you know, even in our day-to-day products and lives. I mean, we've gone [00:04:00] from flip giant cell phones to, a computer in your hand, but. I'm just wondering if you can talk a little bit about the evolution of the support that technology now is able to bring to those who struggled to access basic things like web pages and digital text.

How has that evolved and, and what are the, the awesome things that are happening in our, out there?

[00:04:22] **Jason:** Sure. I guess the biggest change looking back from when I was a kid to now, is that a lot of technologies now have accessibility support yeah. Built in. So if you were to take it an iPhone or an Android phone, that's out there, every single one of those has software built in to either magnify the screen or speak.

The tech set is on the screen. So on iPhone is called voiceover for speech and an Android it's called talkback. So you don't have to go out and buy specialized hardware or software. Everything when I was a kid was a special program or special software, and usually it was. Couple thousand dollars or more, or you just wouldn't get it because you [00:05:00] wouldn't be able to afford it.

so that's a really big advance that, you know, as far as looking at webpages, obviously there are sometimes limitations, especially if they are not well-designed for, uh, accessibility support, but having access to the internet certainly has been a game changer as far as having access to technology services.

It's good and bad though. Right? Because as there's so much more technology out there. There are a lot of people that will say things like, oh, well now we have this technology. So we don't need to learn braille, which I think is still vitally important. These days. There is no substitute for actually putting your hands on a page and reading.

[00:05:35] **Delphine:** I'm thinking, are there tools that you could take to the grocery store, for example, that might, but then I guess you'd have to, I guess, because I don't, I'm not blind and I don't have low vision.

So in my head, I'm trying to think like if I'm grocery shopping and I can't see, how would, I know what was on the shelf if I can't see it, like, is there a tool that, that blind, low vision people could use to kind of scan the shelf to see what it is, but then I'm thinking you'd have to be able to see where the label is to scan it right.[00:06:00]

[00:06:00] **Jason:** You know, you're absolutely right. You've kind of exposed some of the. Challenges and things that go into making a decision of when is it best to use technology or when is it best to ask for assistance? It's okay to ask for help. If you truly, you know, really need visual access to something, you know, for me, I try to find an alternative way of accessing that information.

So for groceries specifically, I have migrated to using shipped and Instacart the delivery services because I have entire access. To reading through everything that's available at the grocery store. Yeah. I might pay a few bucks extra for the groceries, but to me that's much better than going to the store.

Having them send someone out, uh, as a shopper's assistant to help me through the store. Yes. I could take a piece of technology, wave it around the shelves, but like, as you said, say you have 50 different cans of Campbell soup. You're going to be standing in that aisle for 15 minutes just to find one product.

So while technology has gotten so much better these days, it isn't the solution for every single problem and challenge that we have.

[00:06:58] **Delphine:** I'm stuck on the, change of [00:07:00] things. I feel like I remember a time where we had to download apps to do all the things we wanted to do. And to your point, like we had to pay to get the things we needed that made it accessible. So how have you seen pricing change?

It's like, have things gotten more expensive? Have they gotten more affordable? Because sometimes as things roll out. I find that things are less expensive or that at least the, the price point feels less painful for what you want, but when it's new, it tends to be really expensive. So in terms of price, for technologies that might support, you know, I mean really on any level support people with, need that technology can help with have things, are they leveling out?

Are they still getting really expensive, or does it depend on how new the technology is?

[00:07:42] **Jason:** So it's not necessarily newness of technology, but it has a lot to do with the features that are available or the. Type of technology you're dealing with. So let's take an example, um, OCR, which is Optical Character Recognition. That's what we would use to look at a piece of printed [00:08:00] text and turn that into text to speech or braille.

So going back to the seventies, when this technology was invented many, many thousands of dollars a machine that would take up an entire room and as time went on, the machines went smaller. They went to semi portable, then portable, then an app built into your phone. And the one that I now recommend called Voice Stream is about eight bucks.

So it is actually faster than anything else that is out there for scanning. Now, for some people, the iPhone, isn't a suitable solution, you know, especially if they have trouble learning, uh, smartphones or maybe have a dexterity issues, other things like that. We still need to recognize that sometimes the modern technologies like smartphones, aren't going to be suitable for every single person, but for lots of people's smartphones.

And like you said, getting those apps for a few bucks, they are as good. Or if not better than the thousands of dollars of pieces of technology that we would have to buy and lug around or get someone to help, uh, Pay for. So yes, that definitely the app marketplace really has [00:09:00] changed the dynamic, but you know, there is a challenge there too, right.

Because if you're selling an app for $5, If you're a company that's making one of these programs, where's the money or where's the, the development time or research and development costs to produce an app like that. So there's mostly good because the prices are way lower, but I do want to also hopefully ensure that technology continues to March forward and we still get new innovations in tech.

[00:09:26] **Delphine:** And I'm just thinking too, like I know I've downloaded apps, you know, to help me with various things, for spelling and reading things. Cause it just sometimes for the comprehension of it, for me, if I hear it read out loud, it's easier. Some of them work really well and some of them don't, some of them you have to pay for it.

You can't really test them out first. So it's kind of, sometimes it's a trial and error and you don't want to end up going down the rabbit hole of spending, you know, Five bucks doesn't seem like a lot, but if you do it 10 times, right? So it's, it's really a case. I think, I mean, there must be communities where people can kind of go to compare or talk about, hey, I've tried this or I've tried that, like, are [00:10:00] there those, those sorts of, you know, whether they're Facebook groups or I don't know, just agencies that can help you kind of navigate that.

[00:10:07] **Jason:** Sure. So there's a couple that I'll mention. One is my own blindbargains.com. So we, as you mentioned, we do podcasts. So we do kind of do a lot of interviews and demos with the latest and excess technology products and services. So that's one, uh, we try to put up a new episode every week or so. So that's at blind bargains.com or on your favorite podcast app.

Another really popular website for iPhone users is Apple vis. And that is the largest, , listing, forum for app reviews at marketplace, everything related to the iPhone, iPad and Mac, as far as accessibility, anything that you would want to know around, , Apple and accessibility is covered there.

And so there is a thriving community.

[00:10:46] **Delphine:** that's good to know that there's those communities out there. So if there are families who might be listening at home and they've got a young child, who's. Blind or has low vision, or they're just starting to understand their child's needs. What are some of the things that they can do around [00:11:00] the house to support their child with vision?

So I really liked your point about the independence of being able to, you know, buy your groceries yourself. Because I can imagine that having that independence, feels good. It feels like, okay, I'm doing this for myself. I don't need someone. So how do families create that balance with encouraging their children to ask for help when required, but also doing things into independently.

If they're not themselves blind or low vision, it might be quite difficult to navigate.

[00:11:28] **Jason:** Absolutely. So I worked at a summer camp for blind kids for several years. And you see a lot of parents that like to coddle their kids. And what that ends up doing is being really counterintuitive. If you have a parent or even worse yet, a sibling who is in charge of helping the blind kid in the family, the blind kid has learned to do anything.

You know, you have them there. Someone's always bringing them their food or pouring their milk or doing everything for them. You know, even as a teenager. So I guess the number [00:12:00] one thing I would say is treat your kid who is blind. Like every other kid in your family expect them to do things. They can do chores, they can wash the dishes, they can take the trash out, everything that you would expect your other kids to do.

You know, treat them exactly the same. Um, you know, and that even comes with, you know, doing sports and recreation activities. I did a lot of sports when I was a kid and you know what? I got hurt because I'm a kid, you know, it's okay. Kids are going to run into walls, they're going to do things. And if you try to overprotect your.

Child who is blind, it's really going to be counterintuitive. And they're going to grow up with the mindset, oh, I can't do this because I'm blind. And I really think instilling that mindset in them. And then, you know, just helping where it's appropriate. Obviously, you want to support them, but at the same time, let them live their life and be independent.

[00:12:46] **Delphine:** What are the, are there, is there a point at which, or an age at which starting to use some of the technologies is. Good. So I'm thinking like I have a five-year-old [00:13:00] who I don't particularly want, you know, using her phone all the time, because as a parent, I'm trying to limit tech time. However, if there was a need for right.

If she had a visual impairment and those apps created a more successful learning environment and home life for her but are some of these apps really more geared towards or better for older sort of teens or are they really accessible to kids even, you know, as young as five.

[00:13:26] **Jason:** So there actually are quite a few and a growing number of educational apps, uh, especially on the iPhone and iPad that are helping kids learn. So that's one thing to think about. If you don't want to give your five-year-old a phone, I can support that you can get an iPod. Or you can get a phone without service or an iPad.

And that way they're able to use some of the apps. And of course, you can have parental controls to, you know, not let them sign up for things or do things that you wouldn't want them to do, you know, and start out with a pretty limited sandbox of apps. Find a few educational. Tools, um, as far as letting them explore and learn how to use the [00:14:00] technology.

Now, every kid is different, but I do think learning technology at an early age, just like I said before, you know, whenever you would think of having any other kid in your family, get to technology, do the same thing. And yet maybe even at a slightly earlier age, because of the importance of using technology, uh, you know, if you're.

A sighted kid. You can easily go into a dictionary and look up a word. Now I had a braille dictionary, they do exist. They take up an entire bookcase and, you know, they're, they're a good thing to get, but you know, for sometimes, you know, reference materials, things like that, there was no. Easy substitute other posts too, just, you know, looking it up on your phone, obviously you still want to teach the importance of a library and things like that, but having the phone being used for those types of situations, or even just interacting with a smart assistant, uh, like, uh, I won't even say their names, but those things can, we will set them off, but you know, just having some basic grounding and technology, but also let's look at the original technology for the blind, the Perkins Braille [00:15:00] Writer.

So. If they are blind or low vision and anyone that includes anyone who's low vision that is losing their sight. So even if they're a five-year-old and they can read print pretty well, they're starting to learn for it and it can read the letters. If you're not able to read print as fast as anyone else can reprint, that's not efficient.

Then you really should be thinking about learning braille, especially if they're losing their vision.

[00:15:23] **Delphine:** That's an interesting idea. Um, I have yet to have had the pleasure of experiencing teaching a blind, low vision student, and I would think it would be quite an interesting endeavor. Um, and I'm just thinking about, you know, kids in technology, they pick it up so quickly and I can only imagine that starting a child.

Early who is blind or low vision or is beginning to lose their sight. That's starting them early on. These pieces of technology can only help to bolster their self-confidence in the ability to use it. Well.

[00:15:53] **Jason:** Yeah, absolutely. It really, I mean, it was one of the things that helped me along in life, for sure. Just having the confidence to use [00:16:00] technology and make it a part of my life and the kids that grasp on to technology early. I think also grasp on to other concepts as well. No,

[00:16:07] **Delphine:** Yeah. Agreed. So while we're on the topic of education, cause we were just talking about that a minute ago. I'm an educator I'm always looking to learn and understand how I can support students with varying abilities. Are there any tips you might have for educators who might be listening today in terms of how to support blind or low vision students in the classroom so that you know, their sight impairment, maybe isn't the focus or it isn't such a thing.

What can educators do to support kids?

[00:16:36] **Jason:** Sure, absolutely. Again, I do think it kind of comes back to first of all, treating them like every other kid and, you know, letting them do the things that they want to do, whether it's, you know, getting into a sport or during gym time, you know, making sure that they are involved with the regular class activities, whatever they are.

And finding ways to adapt them. So if you're working with a kid who is blind and you're dealing with an art class, there are tactile art [00:17:00] board where you can draw on a board that's attached to a screen, and then you can feel raised lines of where you're drawing. So quite a few activities. In fact, most activities can be adapted.

In a way, uh, to sort of blind people can participate as well. There's lots of card games and board games and other games that can be adapted. You can get a bell or a ball that has basketball that has a bell in it or other balls that have bells in it. , so you can play sports and you can hear the bell as it moves around.

So there's lots of this kind of small adaptations that was also say connect with other teachers who are blind. There are groups on Facebook, designed for families. That are out there. One is the parents of blind children group that I would recommend. And there's this lots of resources that are out there where you can kind of go on Facebook and say, hey, this subject is coming up in my class and we've never dealt with this before.

Has someone else gone through this? The chances are you're either going to hear from a parent or another blind person who has gone through it and can give some tips. So definitely that networking, connecting with other parents and [00:18:00] other teachers is really vitally important as well.

[00:18:02] **Delphine:** I think that networking both for parents in terms of what can they do at home to continue to support their kids, but educators as well. Right? Remembering that none of this needs to be done in a silo that, you know, reaching out for help and asking other people, what are you doing for this? Or what are you doing for that?

It only grows the community. It grows accessibility. So, this is an unfair question for you, and you've talked about a couple of them, but I'm curious to hear what, your thoughts might be on this in terms of, are there some really good, critical either apps for phones or, or web applications or particular programs that blind, low vision people?

What are the specific or go to apps or, um, pieces of software that really should be included in say either their phone or their computer to make things accessible for them.

[00:18:50] **Jason:** sure. So I guess starting with the basics, like I mentioned, your phone and your computer has what's called a screen reader or magnification, whichever is needed, or you can use both even [00:19:00] combined. So that will pretty much read the basics that are on the screen. So if you're in windows, There is a free one called N V D a Non Visual Desktop Access.

Um, you can also use Jaws, which is a paid option as well, but honestly, the free one seems to work just fine. For most situations, sometimes schools will prefer to do the paid option, which is fine, and it will still work just fine. Same thing. If you had a Mac, uh, there is built-in screen reader again called Voiceover on the Mac that you can use as well.

So. As far as apps and services, I guess a couple, especially related to education. There is a really good website called Bookshare, which has hundreds of thousands of books, everything from the actual essential educational materials that are needed for growing up in school to all sorts of leisure materials as well.

Now these are books that are in a text format, so you can get a book reader, , for instance, on your phone, you can get voice stream, , to read the books on your phone. Or you can read [00:20:00] them in braille as well. So that's a completely free service for anyone that is in K-12 at least here in the United States and there's certainly access in other company or other countries as well.

So there's lots of reading related, apps that are useful as well. The American printing house has a typing tutor app. Available for the iPhone that is free as well. So I mean another one to look at, and I'll definitely, I'll send that link over to you as well. So there's lots of, kind of educational tools along those line.

And also, games are important. I don't think it's, you know, don't forget the important. So just having fun and being a kid, there are a lot of games that are out there. There's a company called Blindfold Games that does a lot. Of games for both kids and adults that are really fun to play, so you can have a little bit of fun as well, and those are their games, but they're also really great ways to learn how to use a smartphone or a smart device because you learn the commands, for opening apps and moving around the screen and doing everything else [00:21:00] with your phone by playing a game.

Yeah.

[00:21:01] **Delphine:** You're right. I often forget the play piece. I get stuck on the academic part. So thank you for reminding me that play is as important as the academics.

[00:21:10] **Jason:** Absolutely.

[00:21:12] **Delphine:** Jason, if people want to learn more about you, what you do, your podcast, your AT Guys, uh, where can they find out more?

[00:21:19] **Jason:** so that's The AT Guys website is where we do sell technology products. We ship anywhere in the world. So that's www.atguys.com. If anyone has any questions, I'm always happy to talk to parents or educators or other people that have questions. You can email me directly at JJ@ATguys.com.

I'm also @ATGuys on Twitter. Um, I'm on clubhouse. That's where we met at J G nine. And pretty much also, like I mentioned, the Blind Bargains cast as well. So that's blindbargains.com or to search for blind bargains on your podcast app of choice.

[00:21:57] **Delphine:** that's awesome. Jason, thank you so much for being willing [00:22:00] to, come on with me, and you know, help eliminate a little bit, some of the blind, low vision, you know, issues and ways in which parents and teachers and just the general public can help people feel independent and navigate the world. So thank you so much.

[00:22:13] **Jason:** Thank you so much. My pleasure.