

## Transcript: How Assistive Technology (AT) Affects Self-Esteem

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Lawrence – You're listening to TalkLD, a podcast of LD@school. Our aim is to engage you, our audience, in a lively conversation aimed at educators as we talk about the issues facing students with learning disabilities in your classroom. I'm your host Lawrence Barns. Join me as we talk LD.

Welcome to TalkLD. My guest in studio is today is Chad Downes. Chad is the Assistive Technology Advisor at the Amethyst Provincial Demonstration school for students with severe learning disabilities. A graduate of the Media Information Techno-culture (MIT) from Western University, he's also earned a Masters in Teaching. Chad holds a strong commitment that all students and what they can achieve – particularly with his interest and use of technology. He is a member of the Accessible Formatting team for EQAO to help ensure all students have the opportunity to succeed. He has presented and developed capacity on 21st century learning skills, with a focus on students with learning disabilities, at conferences around the province including ASET, CEC and is actually also scheduled this summer to be part of LD@school's Educator's Institute. Chad, welcome to Talk LD and thanks for being with us today.

Chad – Thanks, Lawrence.

Lawrence – Okay, so let's fire off Chad and let's start. Obviously the title of this podcast is the link between assistive technology and a student's self-esteem. So let's start with the broad question Chad of what links do you see between assistive technology and growing a student's self-esteem?

Chad – The biggest link here is that students are able to be successful when they use their assistive technology. So that really – once you're able to be successful, it really highlights your abilities and takes away from the disability part. With students who have learning disabilities, a lot of times throughout their school careers they've had difficulty with their reading and mathematics. As they use the technology it helps enhance their self-esteem because they're able to be more successful.

Lawrence – Let's talk about your school environment, Chad. Is every student using assistive technology? Secondly, what devices are they generally using? And how often and in what ways are they being used within the classroom?

Chad – Yes, here at Amethyst we have forty students who are residential students. They all do use assistive technology and the typical devices that they're using are the Google Chrome Books, they are using iPads and iPods as well as any of their SEA equipment that is used from the school boards, but beyond that is a lot of the software. So when we look at assistive technology, there's a lot of



compensatory skills – we’re looking at voice-to-text, text-to-voice, word prediction, as well as organization such as mind mapping or planners.

Lawrence – Okay, so as you rightly say it’s not just about the hardware, it’s also about the right choice of software. So is there a process, Chad, in terms of identifying a student and their needs because I guess we’re looking at two-fold – a lot of the apps will run across multiple platforms, so sometimes I’m sure device is a case of what do they prefer or maybe what they don’t. But is there a process where you look at the profile of a student in what I’m assuming is a student who’s struggling to read is a different student than one that’s struggling to write. So maybe the dyslexia/dysgraphia kind of student – they’re going to have different profiles and presumably you build the technology support of that student in a different way. Chad, tell me what are the benefits of incorporating assistive technology within the classroom for students with LDs and what are the benefits for all of the students in the classroom – not just those that have LDs when we talk about a broad environment.

Chad – Alright, using the technology again for and with self-esteem is the fact that students are being more successful and independent. There is a big push for students to become self-advocates in their use of the technology, but some of the things that we see in our classrooms is rather than students who have difficulty with writing is that they can just take pictures of their homework board. And then they have all of the information written down in the right way. They have OCR the Optical Character Recognition. All of these devices in the classroom make them equal to their peers, and some of the hardships that we’re seeing with students is that they don’t like to stick out with the SEA equipment that they’re getting – having a big laptop, which is twenty year old technology, that they are not equal with their peers. So what we’re aiming to do is if we can provide technology for twenty-first century learning skills to all students with these affordable Chrome Books and other types of accessible technology, then students can use the tools that they need.

Lawrence – Yeah, I guess and I can relate to that, Chad because as a parent, I had a boy and when he was in that grade six/seven/eight when peer pressure is an issue, he had the dreaded laptop and a lot of the time he just wouldn’t use it because of that desire not to be labeled as different within the classroom.

Chad – That seems to be our number one challenge with the technology in these formative years.

Lawrence – So, Chad, let me ask you another question that I hear a lot about and it flows from this part of the discussion. What’s your view around this whole idea of – it’s kind of the *Bring Your Own Device* to school kind of approach because generally when you look at, I guess, board allocated technology there’s always likely to be the issue of supply and demand where often these kids have got some of the greatest – the greater and more modern technology sitting inside their smart phone in any kind of laptop they’re going to get through the system. So, what thoughts do you have around that?

Chad – Yeah. As part of the Institute, I really see a need for the boards to allow students to be able to use their own devices that way you’re freeing up funds for software and for training. One of the biggest



issues is that they purchase all of this technology, but the students don't have enough training in order to use it effectively. So I would like to see the model go away – and if there are students who still need it purchased for them, then the boards would have money to buy equipment that's not as out of date.

Lawrence – Okay, that makes sense as well. So, the other question I've got and I guess it comes from that point of how do you keep up with all of that stuff. One of the things, Chad, that you see a lot is obviously the technology is changing so quickly. How do educators stay at the cutting edge without jumping on every new bandwagon that comes along because of course as we all know with certain technologies there's that initial adapting group that take it in, but really it may not be useful in the classroom until its fifth, sixth, seventh iteration when a number of the initial bugs have been written out of it. So how do you stay on top of the technology sphere while trying to make sure you get good results?

Chad – Yeah, I think it's really important to have a top down approach, when you are looking at what the technology does for the student rather than what's the newest and latest and that cool factor. As I mentioned earlier with the compensatory skills, we're looking for OCR, the Optional Character Recognition, so that we can do text-to-voice. We want to be looking at what is the best option for voice-to-text. Traditionally, it has always been Dragon, but with these new technologies, we're seeing Siri come out, and other forms of AI – Artificial intelligence.

Lawrence – Right.

Chad – So we want to use the new technologies for – how are they going to help the student not just "oh, look at this cool new feature". There is always going to be other types of technology for mind mapping, there is always the latest and newest apps. But it doesn't really matter which versions what students use, it's more important that they know how to do the skills.

Lawrence – So let's talk about and obviously we can't talk about a specific students, but let's talk about some of the successes you see that raises students' self-esteem that are based in technology. Chad, can you talk about some of them without names, just some of the broad cases of students you have seen when they've come to you and you fitted out with new AT package, so to speak and you've looked in three months down the line and they're a completely different kid. What impact does that have on the student?

Chad – Yeah, it's really remarkable in the environment that I get to work in here. We see students come in to Amethyst with a really great sense of learned helplessness. They've never been able to be successful or do things on their own. And once they're using the technology, they use it in an innovative ways, they're able to be very independent and they're using it in appropriate ways that are outside of even the ways that myself and the teaching staff have shown them, because it works best for them. Another great success that we see here is a lot of our students when they go back to their school boards, they become the technology leads within the school. So they're helping out other students, which really gives them a great sense of, self-esteem and because they are now experts in something when they've never felt that way in a school environment before.



Lawrence – Ah, that’s interesting! The whole idea that they take it back and it flows through to other students. Let me ask another question, Chad, from an educator’s perspective. Maybe this is more in the fear of what technology does in the classroom. Obviously everything you say is very positive, the kids are, you know, their learning profile and their success rate changes. What about the fear that technology becomes a distraction that the kids are using it to play around, drift away onto Facebook or goes do whatever? How do you make sure that the technology is there as a guide and an enhancement to their education and not a distraction from?

Chad – Absolutely. And this is a very common question and concern that a lot of teachers have. It’s showing them how to use it usefully. They really need an understanding of what the technology is there for. Of course, there are always situations, but you even see in students’ notebooks if you’re using a pen and pencil, a lot of them are doodling in their books, they’re distracted as well. And you have to deal with the distraction as a distraction, not as a cause from the technology. We’re always trying new ways and we deal with those cases of technology on an individual basis. There is also ways to go about it from a hardware perspective that you can lockdown to specific Apps for students who are distracted.

Lawrence – Okay. So, let me just move on from that and talk about the technology environment. If you are talking to educators directly, which is what this podcast is about Chad. How would you help them to overcome, may be a fear of a broader use of technology in their classroom? What would you say that those teachers that are saying ‘I’m not sure if I’ve got the time, I’m concerned that all the students will be on their own devices, I’m concerned in an inclusive environment about trying to keep every student in the same place’, how do you respond to those concerns?

Chad – Absolutely. And those are common concerns and my biggest thing is yeah, don’t be afraid. Don’t be afraid to make mistakes. We hear a lot about the flipped classroom, and in another regard to the flipped classroom, let the students be your teacher, they know so much. These are –they’re digital natives, they know about this technology, they grasp it very quickly. You need to show them what is expected of them when they learn it, so have guidelines in place before they start using the technology, but you need to be able to try it out. Don’t be afraid. Things aren’t always going to go smoothly but it’s always a learning lesson; you need to show your students that you are learning as well, that learning is a lifelong commitment.

Lawrence – Right. Yeah, and I think that’s an interesting point, Chad, to talk about an being that role model to students when it comes to technology as well because you know, as we all joke about now days, if you want anything fixed in terms of technology, go speak to your son or daughter, right?

Chad – Absolutely, Yeah. And, I’m not afraid to admit it here that the students are constantly showing me new things as well and I love it and I actually highlight it to the whole school when they show me something new. I’m glad to have all their expertise as well.

Lawrence – Yeah, and again as a parent, having worked with my LD son through this process as well Chad, one of the biggest things I will say around their learning and what the assistive technology does is it takes away frustration, and if it’s anything that I think undermines these kids in the classroom, it can be the simple frustration of, you know, sitting there with pen and paper struggling to achieve anything



as oppose to suddenly with assistive technology, being able to produce, and feel that they get it and that they are the student they want to be.

Chad – Absolutely. And I think it’s important for teachers to remember what they are assessing. If you’re asking students to copy down from the homework board, for example, you are not assessing their writing. So, why are you sitting there making them sit there to copy things down in a writing format if they are able to take a picture? Podcasting is has been really big one for book reviews for us. We’re not looking for the skills in writing, that’s not what is being assessed, we want to know that they know the story line. LD students on a whole, if we are going to be stereotyping, are very good verbally. So play to their strengths, use the technology, allow them to tell you about the characters and about the setting. Don’t force them to be writing it down in a medium that is a difficulty for them.

Lawrence – Yeah, I think that’s a great tip because we talk so much about strength-based and I love, Chad, that as we’re ending this conversation you’ve come up with something just so practical to let them use verbal skills and test them on what is important in terms of the knowledge they’ve gained, not necessarily be hung up in the delivery mechanism. That is a fantastic way to end. Chad Downes, I want to thank you for your time today. You’ve been listening to Talk LD and until we meet next time. Goodbye.

