

Webinar Transcript: Integrating Assistive Technology into the Classroom: Lead with Pedagogy, follow with Technology

Presented by: DJ Cunningham

[SLIDE – Integrating Assistive Technology into the Classroom: Lead with Pedagogy, follow with Technology]

[Text on slide:

Presented by: DJ Cunningham

CEO LEARNstyle Ltd.

For technical assistance, please call at 416-929-4311 ext. 27

Image: LD@school logo

www.LDatSchool.ca

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[Cindy Perras]: Good afternoon everyone, and welcome to LD@school's third of four webinars for the 2015-2016 school year. My name is Cindy Perras and I will be your moderator this afternoon. If anyone is experiencing any difficulties at this time, please call the number on the displayed slide. Also, if you have a Twitter account and would like to tweet us live throughout the webinar, our Twitter handle (@LDatSchool) is displayed at the bottom of this slide.

[SLIDE – Image of LD@school logo]

[Text on slide:

Funding for the production of this publication was provided by the Ministry of Education. Please note that the views expressed in this webinar are the views of the Recipient and do not necessarily reflect those of the Ministry of Education.]

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[SLIDE – What We Will Be Sending You]

[Text on slide:

1. Power Point Slides;
2. Webinar Evaluation Survey;
3. Link to Access the Webinar Recording.]

[Cindy Perras]: After the webinar, we will be sending out the presentation slides as well as a link to a survey to provide us with feedback on the webinar. In approximately three weeks, the webinar recording will be available and we will send out a link to all participants.



**[SLIDE – Integrating Assistive Technology into the Classroom:
Lead with Pedagogy, follow with Technology]**

[Text on slide:

Presented by: DJ Cunningham

CEO LEARNstyle Ltd.

Image of LD@school logo

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Tweet us LIVE @LDatSchool]

[Cindy Perras]: The LD@school team is very pleased to welcome our guest speaker, DJ Cunningham, who will be presenting this afternoon on Lead with Pedagogy, Follow with Technology. For your information, all webinar participants, with the exception of the presenter, have now been muted for the remainder of the presentation. Once DJ has finished his presentation, we will be opening up the floor for questions. Over the course of the presentation, if you would like to ask any of the LD@school team a question, you may enter your text in the box at the bottom of the control panel and choose to send it to the staff from the drop-down menu underneath. We will also be tweeting throughout the webinar, so if you would like to participate, you can send us a tweet. Our Twitter handle is @LDatSchool, which is displayed at the bottom of this screen.

[SLIDE – Welcome]

[Text on slide:

DJ Cunningham, CEO LEARNstyle Ltd.

Photo of DJ Cunningham.]

[Cindy Perras]: That takes care of housekeeping for this afternoon, so let's get started. It is now my pleasure to introduce our speaker, DJ Cunningham, who is the CEO of LEARNstyle, an assistive technology training company that focuses on revitalizing education by providing interactive, multimedia learning opportunities. DJ has a personal connection to learning disabilities. In Grade 4 he was diagnosed with dyslexia and ADHD. In school he faced all the issues related to hidden disabilities: feelings of inadequacy and stupidity, concealment, embarrassment, ridicule, teasing, being viewed as lazy or defiant. He used common coping mechanisms such as becoming invisible, acting out, and at times and with growing sophistication, playing the LD card. While attending Trent University he discovered assistive technologies and a door to independence and academic success opened. DJ has been a user of assistive technologies for the past 10 years. He has trained hundreds of students and he has led numerous training workshops. Welcome, DJ. The cyber floor is now yours.

Hello, everyone. Please bear with us for a couple of minutes as we work through a technical difficulty.

[SLIDE – Overview of all presentation slides]

[SLIDE – LEARNstyle]



[Text on slide:

LEARNstyle logo

Website: www.Learnstyle.com

Twitter: @learn_style, @djcunningham

Email: dj@learnstyle.com

Telephone: 1.866.324.9155]

[DJ Cunningham]: Thank you so much for allowing me the opportunity to be here this evening. I'm so excited that it is springtime. It's my favorite time of year. And I feel that the warmth that is out there and the energy that is out there is a perfect time to talk about technology in education. Right? So as mentioned, I'm definitely a person that has some personal experience with understanding the upside of using technology. That being said, it's something that I have not only had the advantage of learning about, but it's truly become a complete passion of mine. And what I really hope to do today is to talk about a couple of key places that we've really learned how we can start integrating AT into the 21st century classroom. And one of the greatest ways in which we can do that is by looking at really good practice that we already are doing and that we know how to do, and simply plug technology into that. Let me set the stage for us a little bit.

[SLIDE –AT and the 21st Century Classroom, Lead with Pedagogy, follow with Technology]

[Image: Globe labeled U.D.L. (Universal Design for Learning)

Image: Graph labeled D.I. (differentiated instruction)

Image: Gear labeled Functional usage of tech

Image: Stick figure labeled reframing A.T. (assistive technology).]

[DJ Cunningham]: I really kind of want to look at these four large pillars. I want to take a look at, where does UDL come to play in terms of AT and the 21st century. Really talk about some of the key components of DI and how DI is a key ingredient to effectively integrating that AT into the classroom. Talk about a switch from kind of a technology-focused understanding of AT tech to more of a functional focus of that AT tech. And then finally, reframing AT all together. And again, the underlining theme with these four pillars is truly that concept of let's lead with pedagogy. Let's lead with what we already know, and simply follow with the technology.

[SLIDE – Digital Boom]

[Image: Globe with bomb attached]

[DJ Cunningham]: I kind of consider the world in a digital boom right now. Right? There's technology everywhere. And, you know, let me make this a little more -- there we go.

[SLIDE – Digital Bloom]

[Image: Green USB cable grows out of the ground like a plant.]



[DJ Cunningham]: That's a little bit nicer, right? It is our digital bloom. And I honestly feel that at some point in the time, there's going to be, like, little sprouts of USB cords coming at us out of park benches and garden beds and so on and so forth. But, I mean, the truth is the world is completely, completely immersed in technology. And it's something that our students absolutely love and adore. Technology is something that they have on them at all times.

[SLIDE – Students Love Technology]

[Image: Doodle of heart in notebook, inside the heart is written “students love technology”

[Image: Four children, first struggling under weight of backpack full of schoolwork, the backpack gets progressively lighter until the backpack is replaced by a digital tablet and the child is able to walk upright.

Text on slide:

Top internet sites: Yahoo, Google, Microsoft, Wikipedia, Amazon, Twitter, Facebook (all accompanied by logos)

Text on slide:

81% Traffic from outside North America]

[DJ Cunningham]: In fact, I've got a couple of poll questions and I want to pull one of them out right now. And one of these questions is really around, how much technology do we in fact see in the classroom? So what we're going to do is we're going to quickly poll the audience. And I'm just kind of curious to see how often you see your students using technology. So having said that, we'll see if we're able to get this poll question up, and understand just how much technology -- what percentage, specifically, of your students bring a computer to school. So take a second and I want you to click on what best describes your reality.

[SLIDE- Poll Question- What percentage of your students bring a computer to school?]

[Text on slide:

What percentage of your students bring a computer to school?

25% or fewer

Between 25% and 50%

Between 50% and 75%

Between 75% and 100%]

[SLIDE- Poll results- What percentage of your students bring a computer to school?]

[Text on slide:

What percentage of your students bring a computer to school?

25% or fewer: 56%

Between 25% and 50%: 18%

Between 50% and 75%: 20%

Between 75% and 100%: 7%]



[DJ Cunningham]: And as you start seeing your students and we start recognizing technology, we can start understanding that there are a lot of students that have computers. But what's kind of interesting is, how many computers do we actually see come to school? And as I'm taking a look at the results right now, we're seeing that there is quite a few students that don't actually bring computers to class, yet we know -- I mean, it's saying 56% of 25% or fewer students bring their computer to computers to class. That's the majority of students. Which fascinates me because that's such a disconnect with how much technology we actually know these students have.

And when we continue thinking about technology, we not only know that our students have a lot of it, we know that they depend on it.

[SLIDE – Graph]

[Image: Apple laptop charger partially filled in with colour blue to serve as a pie chart

Text on slide:

38% (of students) say they can't go more than 10 minutes without using a digital device.]

[DJ Cunningham]: This is a hilarious stat that I found. It says that 30% of people can't go more than 10 minutes without using a digital device. So we know that it is being used all the time in the classroom, right? The question is, and I think we just kind of saw that in the poll before, are they actually using it for any sort of productive use within the classroom? Kids are great at social media and texting and connecting, but how can we start applying that technology to more of a learning environment?

[SLIDE – Line Graph]

[Image: iPod with line graph on screen

Text on slide:

98% of college students own a digital device

Photo of the guest speaker: DJ Cunningham, CEO LEARNstyle Ltd.]

[DJ Cunningham]: I want to guide us to our first major pillar. We've established that technology is completely immersing our students, but yet we just don't see that translating into it being used in the classroom. So where does UDL come into play when we start looking at AT and the 21st century classroom?

[SLIDE – Post It note]

[Image: Yellow post-it note

Text on slide:

81% use them for research.]

[SLIDE – Students Love Technology]

[Zoom back out to image from slide 6



Image: Doodle of heart in notebook, inside the heart is written students love technology

Image: Four children, first struggling under weight of backpack full of schoolwork, the backpack gets progressively lighter until the backpack is replaced by a digital tablet and the child is able to walk upright.

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81% Traffic from outside North America]

[SLIDE –AT and the 21st Century Classroom, Lead with Pedagogy, follow with Technology]

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Image: Gear labeled Functional usage of tech

Image: Stick figure labeled reframing A.T. (assistive technology).]

[SLIDE – PPM8]

Image: Laptop with text on screen

Text on slide:

Universal Design for Learning. The principles of Universal Design for Learning (UDL) should be applied to assist educators in designing products and environments (e.g., teaching strategies; pedagogical materials and tools, including technologies) to support students with learning disabilities in accessing the Ontario curriculum.]

[DJ Cunningham]: PPM8, I think, says it really, really good. It says that universal design for learning, the principles of it, it's something that should be applied to assist educators in designing everything in their teaching, in their classroom environments, in their strategies, and so on and so forth. So we know that it's a critical component, but how does that, kind of, tangibly look? How can we take a more pragmatic look at, what will a UDL classroom look like when we start thinking about assistive technology supporting the most vulnerable of students?

[SLIDE – Zoom out to Overview of all presentation slides]

[DJ Cunningham]: Well, I want to kind of take you back in time a little bit to when I was a little bit younger. And I want to share with you some challenges that I worked through. And some of the strategies that teachers used with me, and how we can now take a look at those strategies and start transforming them into a UDL approach to support, again, kids like me.

[SLIDE – Image of a school]

[DJ Cunningham]: I'm going to take you all the way back to school. When I was really little I was diagnosed with a learning disability.



[SLIDE – Graph of student grades]

[Image: Graph with grades along the y-axis ranging from F at the bottom to A+ at the top. Graph shows normal distribution curve. One point, corresponding with D grades, is labeled “ME”, to represent DJ’s grades in school]

[DJ Cunningham]: And I definitely wasn't a straight-A student. I was a student that barely scraped through.

[SLIDE – LD + ADHD = OMG]

[DJ Cunningham]: And it's funny because when I got diagnosed, it wasn't just my LD, I also had ADHD. My mother always referred to it as the OMG because I was just, like, spinning out of control and all she could say was, like, "OMG!" Like, "What do I do with him?!" Right? I was that person that consumed 70% of your resources as teachers. And for that I do apologize. But nevertheless, it's something that was really challenging for me to come to terms with. And one of the biggest challenges that I had was the fact that I didn't have independence in my learning.

[SLIDE – Growing up]

[Images: childhood photographs of DJ at various ages arranged in a circle around the words “no independence.”]

[DJ Cunningham]: And even though growing up I think I looked pretty normal for the most part, right? Except until you asked me to read out loud or except until you asked me to write on a chalkboard or a whiteboard. Then there was a big difference. And the reason there was a big difference is these are the areas of challenge that I absolutely have with my learning disability. And the challenge is it is completely invisible. Right? So what I mean by that is when teachers look at me, they don't see the disability. And this is where the myth of laziness comes from, which so many of us know about.

When a teacher would ask me to read a page and I'm using my own mechanisms, I'm only comprehending maybe 15% of that page, which is why I need to go back and reread it two, three, four times. Every time I go over it I understand just a little bit more. And so when we start looking at why this myth of laziness emerges, teacher would say to me, "DJ, read this page." I would go over it and only maybe comprehend 15% of it. And teacher then would say, "DJ, what did you learn?" And I haven't learned anything. I've gone through the mechanisms of looking at all the words, but I haven't comprehended very much. So I'd sit there, like, you know, a deer in headlights. And teacher would say, "Why didn't you read it? Why aren't you trying harder? Why are you being lazy?" And this is really where that myth of laziness immersed from. And it wasn't the fact that I had the inability to comprehend all of this, it's the fact that I needed the tools and strategies to help me with it.

And going back to the independence piece, the reason why I started really drawing on the resources of the classroom teacher was the fact I didn't have that learning independence. So whenever it came time for me to write something, of which is a massive area of weakness, my go-to strategy was learned



helplessness. I would just sit there and wait until my teacher or a peer or a parent came and did the work for me. It's -- I refer to this as "Academic Chicken." This is how the game basically went. Everybody probably knows the game "Chicken" where you look at somebody and you start running as fast as you possibly can at them. And whoever wins the game is the person that chooses not to flinch. It's a crazy game. I do not recommend playing it. But I played my version, known as Academic Chicken. So, I mean, scenario would be teacher would give me a writing assignment saying, "All right, class. You have 15 minutes to do some journaling." I would sit there, and the game would begin. Right? I would sit there. And I would just sit there. And I would be staring at my teacher as they walked around. No writing would be happening. And maybe five minutes would go by and my teacher would look back at me and say, "DJ? Have you started writing?" You know? At which point I'm sitting there saying, "Oh!" you know? "Not yet. I'm still getting all the good ideas that I have." And five minutes -- another five minutes would go by, teacher would look back at me and say, "DJ, have you started writing?" To which point I'm like, flipping through my journal saying, "Not yet!" You know? "I'm looking for my blank page." And finally 15 minutes would go by and my teacher would look at me and say, "DJ! Have you written anything?" And, you know, there I am, like, sharpening my pencil, "Almost ready!" At which point I would win the game. Because my teacher in, you know, pure frustration would look at me and say, "Give me your pencil and start telling me your ideas. I'll write them down for you." Boom! I won the game of Chicken. I did not flinch. And that was my MO. But the challenge with this is I had no independence. And it was never a good feeling.

[SLIDE – Romeo and Juliet]

[Image: Book cover of William Shakespeare's Romeo and Juliet]

[DJ Cunningham]: So as mentioned, I want to share with you a couple of stories of, kind of, epic train wrecks that I went through in classes. That teachers kind of looked at that, kind of, train wreck and saw the potential for a universal approach to be implemented as to not put me in that situation again and not put more students into that situation. The first of which was in Grade 9. I'll never forget my first day of Grade 9. I went to school and I was feeling pretty good about myself because my mom had bought me, like, a brand new leather jacket. Right? And I had a flat-rim Jay's hat. And I had L.A. Pumps, because it was all the rage in, like, 1996. And this was a good thing for me, that I was feeling good about myself. Because my father has always told me that making a good first impression is important. So on the first day of Grade 9, all I was thinking about was, "I need to make a good first impression." So I'm walking into the school -- and let me set this up for you just a little bit more. In Grade 6 I was probably reading as though I'm in, say, Grade 4. Okay? So I had a lot of challenges, obviously, with reading. But then my greatest fear was reading out loud. Because you have to understand there's reading, but then reading out loud causes a whole bunch more anxiety. My reading level probably goes to, like, I don't know, preschool one, if that exists.

So walking into school, I walk through the front foyer of my school and I'm handed my schedule. And it is like a freight train hits me. Because guess what my very first class of Grade 9 so happens to be? English.



Okay? So there I am freaking out and, you know, deciding, "Okay, I'm going to go to English and give this a shot." Because I don't want to be the kid that, on the first day of school, doesn't go to, you know, Grade 9 English. And like a good LD student, I kind of take a deep breath, beeline it to class, sit at the back of the class away from everybody and, like, melt into my chair.

And then my English teacher walks in. I'll never forget my Grade 9 English teacher. Because she is that person that is so very happy all of the time. I want you to picture this person. I'm sure you know somebody like this. I swear to you that they eat rainbows and happiness for breakfast every single morning. They're just so excited that they kind of float instead of walk. So you have to imagine her not really walking into my class, but she, like, floats on in. And this is what she says on the first day of Grade 9. She goes, "Class! Welcome to Grade 9 English!!" And she starts cheering. And then she starts giving people high-fives. And I'm so scared because I'm like, "Oh, my goodness. Who is this English-loving person?" Right?

And then I got even more nervous because my teacher starts talking about William Shakespeare. And more to the point, starts speaking about "Romeo & Juliet." And the reason I got really scared about this is because I was sitting at the back of my class, and right next to me was a desk stacked high with the book, "Romeo & Juliet." And I started connecting the dots. I'm like, "Why is she talking about 'Romeo & Juliet'?" And I'm like, "Why are there so many of the books there ...?" And then BOOM! I was like, "Oh, my goodness. This crazy English-loving person is going to make us read 'Romeo & Juliet' out loud on the first day of Grade 9." And it's, like, I don't know, four minutes into English. And sure enough, it happens. My teacher says, "Class, how else can we even pay justice to 'Romeo & Juliet' than to read it out loud together?" At which point she starts handing this book to everybody.

Talking about strategies, I will share a really good strategy with you right now. It's one that I learned when I was four years old. Whenever you're in a really, you know, high-pressure situation, all you need to do is make yourself invisible. And this is all you need to do. If you ever need to be invisible, just close your eyes. Right? Like, "I can't see you. You probably can't see me." So this is my strategy. I have the book in front of my face, and I'm thinking, "Oh, my goodness I dodged a bullet here. Teacher can't see me." I was very wrong. I became, like, the perfect target. And my teacher came over and put her hand on my shoulder and said, "You! Why don't you come up and read the part of 'Romeo & Juliet'?"

[SLIDE – The Tragedy of Romeo and Juliet]

[Image: Zoom in to first page of play showing dialogue]

[DJ Cunningham]: And just, you know, for effect, I actually scanned a page of this book to show you how insane this was. I mean, for the average person, I think this is challenging. But for me, this was an impossibility. So there I am standing at the front of my class. And my palms are sweaty, my heart's racing, and line after line is being read out loud. And finally it's my line. It's my turn to read. And I



remember taking a deep breath, and I looked at the class, I looked at my book, and I opened my mouth, and nothing came out. I just -- I was frozen in time there.

Again, I mentioned about high-pressure situations. One of the things that happens in high-pressure situations is something called "fight or flight" takes over. I'm sure many of you have studied psychology at some point in time. So I mean, to break that down, fight or flight takes over. It's when you're kind of in danger you either fight, you know, your way out of a situation, or you run. This was a high-pressure situation. So fight or flight took over. I'm not proud of what happened, but this is kind of how it went down. I had this book in my hand. And I looked at my poor Grade 9 teacher, and I heaved the book at her. That was my fight. And my flight became this. I just ran. I just took off and I started to run. And, I mean, the majority of you work with kids like me, so you can really appreciate this. We're not the most planned people in the world. So when I started running in my class, I didn't really have much of a plan other than to run. And as I started getting toward the back of my class, I noticed there was no windows anywhere. Or rather there were no doors anywhere; there was only windows. And thank God it was September and I was on the first floor of my school because there was one open window. And my plan became this: I'm going to run as fast as I can and Superman myself out of that window and be totally free. So I do it. I commit, I run, I Superman myself out through this window and I'm like, "I'm free!" I mean, that was way less embarrassing than, you know, standing there with my Grade 9 teacher having to sound out the words of "Romeo & Juliet."

It sounds like a bad train wreck, but the train wreck is actually not quite over. I Googled my school for you all to see. I grew up in Scarborough. This is Sir John A. McDonald in Scarborough.

[SLIDE – Image of a High school]

[Image: Aerial view of Sir John A. MacDonald Collegiate Institute, showing courtyard in the centre of school building]

[DJ Cunningham]: Here is where my English class was. Oops. It was right, kind of around here. Which means when I went through and jumped out of the window, I found myself in the center quad with absolutely nowhere to go. So I needed to actually pull myself back into that classroom. Weirdest thing though, man, everybody was like, cheering for me and giving me high-fives. I met my principal that morning too. Mr. Ambrose. He was a good guy.

But something interesting happened. After that class, I decided not to go back to English for some time. Clearly that wasn't working out. And again, I think a lot back to that Grade 9 teacher because when I think of heroes in my life, she is definitely one of them. And I so appreciate teachers and I applaud you so much because in my opinion, you all have the most important job in this world. Like, seriously. And the reason I know this is because this person changed my life trajectory completely. And when I think about it, you all have the chance to shape our children, which is literally the future of this world. So what other job is there, what more privileged job is there? So, you know, from the bottom of my heart, I thank you for all that you do. Because this person changed me forever. And this is how it kind of happened.



I didn't go back to English for some time. And I'm sitting in my cafeteria one day and I see that teacher, that Grade 9 English teacher, walk in. Okay? And she stares right at me. And I immediately got nervous. I'm like, "Why is this crazy English-loving person trying to find me?" Like, leave me alone. And she walks over and I'm sitting there with all my friends. And she looks at me and she asks me this life-changing question.

She looks at me dead in my eyes and she says, "What are you so afraid of?" And me, being me in Grade 9, like, my obvious response was, "Afraid of? Nothing!" You know? "I'm the king of the world!" But, she nailed me with the question again. She looked at me and she said, "Why are you so scared?" And she was smart because she saw my total demeanor change. She kind of grabbed me and threw me into the hallway. And I just had this whole burst of emotions start flowing through me. And through tears I looked at her and I said, "You want to know what I'm afraid of? I'm afraid that I'm stupid. And I'm afraid to disappoint my mom. And I'm afraid to disappoint my dad. But most of all, I come to school every single day and everybody is learning, everybody is doing stuff, and all I'm thinking about is, 'How do I get out of the next situation? How do I get out of this class being unscathed?'" And again, you have to recognize this is not pretty. Like, this is a lot of tears, so you would think that the teacher would, I don't know, hug me because that's normal. Not my teacher. I remember she looked at me and she goes, "DJ! That is fantastic information!! Thank you so much for sharing it with me!"

And in hindsight, what I've come to realize is she was thanking me because I'd advocated for myself for the first time ever. And she said, "I had no idea English was so scary." And she said, "We have to get you back to Grade 9 English." And it dawned on her, "I need to use some sort of strategy to get you back in there where you feel safe." And this is what she came up with. She said, "Whenever we have to read out loud, I'm going to say to the class, 'Class, next period we're going to read out loud.' And that is your call to action to come and find me after school. And what we'll do together, we'll sit down, we'll go through all the pages that have to be read out loud, all the paragraphs, and we'll mark one for you. So you can go home, you can sort yourself out, practice, and come back to school with some confidence and read out loud." And I agreed to it. And we gave it a shot. And one day the teacher says, "Class, next period we're going to read out loud." I'm like, Boom! Call to action. I run and find my teacher after school, we sit down, find a paragraph for me, make a big mark next to it. I go home, I rehearse it. And I remember coming back to the school the next day being very excited but incredibly scared. But, you know, super excited all at the same time. And I'm sitting there in English class and my teacher starts calling people to read out loud. And then my paragraph comes up. And the teacher says, "DJ, would you like to read this paragraph?" And I stand up and I read in front of a group of people for the first time, really, in my life. And it was amazing. And what was so, kind of, extraordinary about that moment -- it wasn't so much that I had a whole bunch of joy or pride inside of me. The feeling was a release of anxiety. And that's critical to know. Because what that teacher did for me by, you know, taking an approach, taking a strategy and implementing it with me, took away all of my anxiety. And when that anxiety left, something magical happened. I began to listen in class and participate. It was unbelievable.

[SLIDE – History]

[Text on slide:



History

Image: Clock labeled left hand
Happy face labeled right hand.]

[DJ Cunningham]: One other example of how this, kind of, idea of taking a look at a strategy and implementing it into a class to support somebody like me, came in the same year, but with my history teacher. I love history. History is, like, one of my most favorite subjects of all time. And I remember hitting Grade 9 history being super stoked. I loved my teacher, a man by the name of Mr. Scott. He's a storyteller and I just got it. Except he asked questions all the time.

And something that's interesting about kids like me with learning disabilities, we always feel that people are staring at us and judging us, even though it's not really the case. It's an inward battle that we have. So whenever questions are asked, we always want to put our hand up because we feel like if we don't, then people are going to think that, you know, we're stupid. And so the teacher would constantly be asking these questions. And things I kind of knew the answer, but it just took a little bit longer for me to be able to turn it into words. So the teacher would ask a question, I'd kind of throw my hand up. It wasn't completely there yet. Teacher would say, "DJ! Answer the question." And, like, boom! the idea was gone. Again, it was kind of like, you know, deer in the headlights. Or like, you know, when you had somebody's name on the tip of your tongue and you just couldn't quite get there.

And so as a result, I didn't like English nearly as much. And all I was thinking about was, you know, the time. When is class going to be done? When can I get out of this? This is horrible. I'm not happy. And I truly wasn't. And it was sad because history was such, you know, a passion of mine. To the point that my teacher took me aside after one class and kind of sat me down and said, "DJ." Like, "What happened to you, man?" When I got you in Grade 9, at the beginning of Grade 9 you were so excited about history, but now you're just ... you know, you've flat lined." And you have to understand that the timing was kind of interesting. My whole experience with advocating for myself had just kind of happened in English class. So I kind of took a deep breath and then remembered what I did there and tried it again with my history teacher. And I looked at him, I said, "Sir," you know, "you make me feel stupid when you ask questions all the time and I can't put my hand up."

And this really, you know, perplexed my teacher because I think he thought he was a pretty fair nice guy. So he was a little uneasy that I called, you know, him making me feel, you know, stupid. So he did something interesting. He basically said, "DJ, come back to me in one week." And I was like, "Okay." I go away for a week and he goes away. And what he did is he learnt about my LD. He went and looked at my OSR, dug up my IEP, worked with my resource teacher. Educated himself. And then when he came back, sat me down and said, you know, "I've looked you up, buddy. And there's definitely some things we need to figure out." He said, "First of all, you have a serious confidence problem and you always feel like you have to answer your questions. That's why you're constantly putting your hand up." And he said, "The second thing," you know, "executive function, it's slower with you. So this is why it takes more time for you to come up with the answer." And so he said, "Let's do this. For, you know, executive function, I'm going to start asking my question three times. And asking it three times, it will give you the time to come up with an answer." And we tried it and sure enough, every single time this teacher asked a



question, I would -- or he would ask it in three times. And it gave me the chance to process the question and find the answer.

And then he said, "Now that we've taken care of that, we've got to take care of the confidence thing." And he said, "Let's do this." He said, "Let's use a strategy called the Right Hand, Left Hand Strategy." And effectively what this was, he said, "Whenever I ask a question and you have no idea what I'm talking about, put your right hand up. And I promise you, I assure you, I will never ask you to answer that question." And I thought this was cool, right? Because literally whenever he asked the question, I could put my right hand up and basically have a pass. And I loved this man because I really got into it. You know? I was kind of a little bit cocky with it almost where the teacher would ask a question and I'd be like, "Yup! Yeah, yeah. I got this one." So, you know, this made me very happy. It was fantastic.

And then he said, "Whenever you do actually know the answer to a question, put your left hand up and I promise you every single time I'll ask you to answer it. And that'll give you some confidence." And again, "Because I'm asking it three times, you'll have the chance to process it. The chance to understand the answer, throw your left hand up, and answer with confidence." So I again I absolutely, you know, I loved this. I thought it was fantastic.

[SLIDE – History]

[Text on slide:

History

*Image: Happy face labeled left hand
Frowning face labeled right hand.]*

[DJ Cunningham]: It was funny though because one day he was asking questions and, again, I really liked putting my right hand up because, you know, it made me feel really smart because I knew he was never going to ask me the answer. And one day he asks a question and I'm like, "Yup! I've got this one!" And I'm looking around and, like, nobody else had their hand up. It was so embarrassing. That did not make me feel happy.

But it's kind of interesting. Take a look at these two separate cases. Right? Teacher was able to, kind of, identify some of the needs that I had and then develop an approach to support me. But then I started thinking, "How are we able to create, kind of, a more UDL approach using these two specific strategies?" And what I mean by that is, how can we take a look at, say, asking that question three times? If we started doing that for every question that we ever asked, how many more people would we be able to engage into answering questions? And I kind of challenge you to try that out. You know? Continue with asking questions and answering -- or choosing people to answer pretty quickly. But then make a -- you know, choose a day that you switch over to asking three times. And what's amazing is when you ask the question the first time, you'll see the same five hands go up. Right? You ask a second time and you'll probably see three or four more hands go up. You ask, you know, a third time, you're going to see five or six more hands go up. That, there, is truly a UDL approach. I mean, that is something that is essential for



some like me, but benefits so many others. And then what we can start doing, taking a look at that good, kind of, pedagogical approach, how can we start inserting some technology into it?

[SLIDE – Technology]

[Text on slide:

Technology

U.D.L. (Universal Design for Learning

Image: Speaker with sound waves

Check mark

Bar graph with arrow representing growth.]

[DJ Cunningham]: So if we go back to, kind of, that first idea in that English class -- if we take a look at that and start understanding, how can we support that universal design of learning with technology?

[SLIDE – Voice Thread]

[Text on slide:

Voice thread

Image: Laptop showing a video chat on the screen with the Romeo and Juliet cover shown in a window on screen.]

[DJ Cunningham]: There's a couple of programs that you can use pretty quickly. There's one called Voice Thread. It's phenomenal. Basically what it is a landing page that your class has access to and they can upload video or audio content. So imagine the ability to reduce the stigma of reading out loud for all of your students, simply by uploading the chapter of "Romeo & Juliet" that has to be read out loud, and then allowing students to choose what paragraph they want to read. And throughout that evening or throughout a couple of days, they can practice, they can record themselves, and finally when they find a recording that they're confident with, they can upload it.

[SLIDE – One Note]

[Text on slide:

One note

Image: Laptop showing the Romeo and Juliet cover surrounded by face icons each representing an individual student and a single stick figure icon representing the instructor. Next to each face icon is either a speaker icon indicating the student uploaded an audio file or a film strip indicating the student uploaded a video file.]

[DJ Cunningham]: And you can kind of mimic this idea in One Note. Exact same concept. You can share, you know, a notebook with your class, and the class can do the exact same thing where they can upload video and audio.

[SLIDE – Google slides]



[Text on slide:
Romeo & Juliet Act 1
Google slides

Image: Laptop showing the title page of a slide deck and the cover of Romeo and Juliet.]

[DJ Cunningham]: Or if you're a Google school, you can use even Presentations. You'd be able to use Google Presentations where you, again, have listed out the chapter that has to be read, and then kids take a separate slide and they can upload the video of them reading out loud. So very quickly, we can start following that good pedagogy that we're already doing and start thinking about, how can we tap technology into it without having to recreate everything?

[SLIDE – #classcode]

[Text on slide:

#classcode

Image: Teacher standing in front of a classroom full of students. On the board next to her is the twitter logo and the hashtag #classcode.]

[DJ Cunningham]: And when we think about the other side, the other example -- my history teacher -- we're seeing lots of classes beginning to use Twitter in the classroom. And a really effective way to help - again, give students the time to process information and to answer questions -- is simply having a screen with Twitter open. Have a hashtag for your class and when you ask a question, instead of immediately choosing somebody, just have answers polling up behind you. And you can start talking to a couple of those questions -- those answers, rather. And it also allows people to answer with some anonymity. So no more, "Do I feel afraid that I need to put my hand up every two seconds?" Because nobody knows who the Twitter feeds are coming from. So in this case, if I answer once or twice in a class, I don't have that insecurity again of everybody knowing that I'm not participating.

Kind of a fringe benefit on this one, which is interesting, we've seen a lot of teachers implement this. And they're very surprised at some of the messaging that goes up. And what I mean by that is teachers will ask a question and students feel more comfortable saying things like, "I am really lost." Or, "I'm not quite sure where we are in the lesson anymore." Which, you know, tells the instructor, "Hm. Maybe I need to pivot my approach and try again." I mean, this is really starting to be a good DI tool as well.

But the concept here is, how can we take a look at really good, kind of, pedagogical approaches that we're using, and how can we start looking at that Universal Design Learning concept and engaging that through technology?

[SLIDE –AT and the 21st Century Classroom, Lead with Pedagogy, follow with Technology]

Image: Globe labeled U.D.L. (Universal Design for Learning)

Image: Graph labeled D.I. (differentiated instruction)

Image: Gear labeled Functional usage of tech

Image: Stick figure labeled reframing A.T. (assistive technology).]



[DJ Cunningham]: So, I mean, we've talked a lot about UDL and how it works. But let's talk about DI for a second. So again if we kind of go back and take a look at some Ministry documents, differentiated instruction is so incredibly important.

[SLIDE]

[Image: Laptop with text on screen]

Text on slide:

Differentiated instruction. Students with learning disabilities may particularly benefit from assessment and instruction that are differentiated to take into consideration their strengths, interests, learning styles, and readiness to learn. Any of the following elements can be differentiated: the content of learning (what students are going to learn and when); the process of learning (the types of tasks and activities); the products of learning (the ways in which students demonstrate learning); and the affect/environment of learning (the context and environment in which students learn and demonstrate learning).]

[DJ Cunningham]: And a part of differentiated instructions is really understanding students' strengths. And really understand their learning styles and their readiness to learn. And let me tell you, understanding this information is so incredibly important. And what I mean by that is before I truly understood how I learned, I felt, you know -- I felt I didn't have that independence.

[SLIDE]

[Text on slide: Important Dates]

Grade 4

Grade 9

Grade 12

Embarrassed = low self esteem

[Image: Magnifying glass]

[Image: Frowning face]

[DJ Cunningham]: But once I learned how I learned, everything changed. And it also allowed me to start viewing the world differently, understanding that everybody learns a little bit differently. So by creating a lesson that is taking into context, kind of, multimodality approach, I'm able to engage more learners. For me, I learnt about how I learn in, kind of, a really interesting way. In Grade 12, my guidance counselor told me that I should join the Army. That was a good option for me. So me being in Grade 12, not really knowing what to do with my life, I listened. And I marched myself down to the local recruitment office. And I enlisted myself into the Canadian Forces.

[SLIDE– Canadian Army]

[Image: Map of Ontario with labels showing Canadian army bases CFB Petawawa, CFB Borden, LFCATC Meaford]

[Image: Illustrations of airplanes]

[Image: Patch showing paratrooper symbol (parachute with wings attached)]



[SLIDE – CFB Petawawa]

[Text on slide:

CFB Petawawa

Image: Photograph of soldiers

Image: Photograph of parachute training]

[DJ Cunningham]: And something really interesting happened in my military time. And again, to kind of set this up, you have to recognize that when I left high school, kind of, three days went past and then I was, you know, on a bus to Land Force Central Training Area in Meaford, Ontario, to start my Q-1 12 infantry course. And in school, learning was so very hard. But all of a sudden, in my basic training, everything just started to make sense.

[SLIDE – CFB Borden]

[Text on slide:

CFB Borden

Image: Photograph of helicopters landing]

[DJ Cunningham]: And it's hard to put into words. Honestly, everything just -- soldiering just came easy to me. To the point that people would come to me and say, "DJ, I need your help." You know? "How do you field strip an assault rifle?" And in my head I'd just know how to do it.

And believe me, you have to understand, this never happened in high school. I never had anybody come to me and say, "DJ, edit my essay." That would be bad. I spell very phonetically. I would take a look at your very good writing and be like, "Ohh, oh! There's a lot of work here!" and, like, start, you know, rewriting it in my own language. So that never happened. But all of a sudden I'm in the army and stuff makes sense. And my officers start putting me into leadership scenarios. And I start, you know, getting myself to the point where I'm responsible for a small group of soldiers. And it was very confusing. Because, again, what's kind of -- you know, it's very tragic actually when we take a look at the LD population. And a study kind of supports this. There's a researcher by the name of Lovett out of SickKids, did a study that found that kids like me, we always look at our failure as us being the root of that problem. We always feel we are the reason we fail. But whenever we succeed, we never believe we are the ones that led to that success. It's more like we got lucky or the task was super easy.

So what was interesting about all of this was that my CO on kind of, the graduation day, came over to me and recognized me as being the second out of the entire group of people in basic training. There was, like, 600 of us. And he said to me, you know, "Congratulations. You're number two out of 600." And you have to understand, up until that point, all I ever thought the reason why I was doing well, was because I was lucky or things were easy. But when that moment happened, a little switch flipped in my head. And I thought, "If the Canadian government thinks I'm number two out of 600, maybe I'm smarter than I've led myself to believe." And that led me down a path of really understanding, you know, how I learnt.



And what I mean by that is when I take a look at my military training versus my education training, I kept asking what was so different.

[SLIDE – LFCATC Meaford]

[Text on slide:

LFCATC Meaford

Image: Photograph showing soldiers standing in line, being inspected]

[SLIDE – Zoom back out to Canadian Army slide]

[Image: Map of Ontario with labels showing Canadian army bases CFB Petawawa, CFB Borden, LFCATC Meaford

Image: Illustrations of airplanes

Image: Patch showing paratrooper symbol (parachute with wings attached)]

DJ Cunningham]: Why did I succeed so much in the army but never really succeeded in school? And I've come to realize this one really important thing. The military is one of the best examples of an organization that differentiates their instruction.

[SLIDE– Graph]

[Image: Graph that shows different learning styles. Along the x-axis are the labels V for visual, S for sequential, A/O for auditory/oral, and K for kinesthetic. The graph has one blue line representing expected level of knowledge retained when the students are taught lessons aimed at each learning style.]

[DJ Cunningham]: Every one skill we learnt, we were taught in four very different ways: visual, sequential, auditory/oral, and kinaesthetic.

And I remember learning how to shave. There is an army way to do everything, including shaving your face. And one morning we get up at, you know, 0500, march to the parade square, and our drill sergeant tells us to start shaving our faces. But before he does that, he pulls out a massive wash basin. And he says, "Class, attention!" And we all snapped to attention. And he tells us to put eyes on him. And he starts shaving his face. And he's doing this for all of the visual learners to see that visual way of shaving a face. The army is great at kind of booming auditory instruction. So for all the auditory/oral learners, the military was really potent at yelling at us. So these people were totally taken care of. They were understanding what that process was. For the sequential people, right after all this happened we were marched over to, kind of, our tent line. We were sat down and we were issued Canadian Forces field manuals on how to shave your face. So people that are more sequential-oriented -- I mean, reading makes sense to them, linear approaches -- they could read, they could understand, they would be able to recite. Totally taken care of. And then kinaesthetically-speaking, my goodness, we were shaving our face, like, I don't know, four or five times a day. So we're always practicing that.

But what was fascinating is when we take a look at, say, my learning profile. We started understanding that I learned very, kind of, differently than other people. And I actually want to pull in another poll



question because I'm just kind of curious to get a lay of the land when we start thinking about how we learn. I want to ask you this question.

What do you think, kind of, your largest learning tendency is? Is it visual? Is it sequential? Is it auditory/oral? Or is it kinaesthetic? So we're going to pull up a poll question and I'm curious to see what you think you are. Take a second and fill this in.

[SLIDE – Poll question- What type of learner do you think you are?]

[Text on slide:

What type of learner do you think you are?

Visual

Sequential

Auditory/Oral

Kinesthetic

I don't know]

[DJ Cunningham]: So, fascinating. As all these are coming in, I'm definitely seeing that it's a diverse group. And what's interesting about this, we find there's a lot of visual learners, which is probably why you chose to come to a webinar where you can watch a lot of visuals. But there we have it. We can take a look and we can kind of start understanding, Well, what does a learning group look like? And how can we start targeting a multimodality approach?

[SLIDE- Poll results- What type of learner do you think you are?]

[Text on slide:

What type of learner do you think you are?

Visual: 50%

Sequential: 18%

Auditory/Oral: 18%

Kinesthetic: 11%

I don't know: 4%]

[SLIDE – Graph]

[Image: Same graph as above that shows different learning styles. A second, curved, green line is added to represent how one student's results may vary when taught lessons aimed at each learning style.]

[DJ Cunningham]: And so what the army did is they did that. They took a look at all the different learning processes, and they started creating a mechanism that taught to each of them. And the reason why I succeeded so well is I look very different than the average person. The average person is kind of between, like, the 40th and the 70th percentile. But I have what are called peaks and valleys. And we find a lot of our LD students, they have these peaks and valleys.



[SLIDE – Graph]

[Image: Same graph as above that shows different learning styles and average student's results. A third gray line is added to represents how DJ's results vary when taught lessons aimed at each learning style. For visual learning style, DJ's results are very high.]

[DJ Cunningham]: So visual, very strong. Just like the majority of you.

[SLIDE – Graph]

[Image: Same graph as above that shows different learning styles, the average student's results, and DJ's visual learning results. The gray line is extended to show sequential learning style, DJ's results are very low.]

[DJ Cunningham]: Sequential ... that's where my challenge point comes in. I'm pretty low. I'm kind of in, like, the 13th percentile.

[SLIDE – Graph]

[Image: Same graph as above that shows different learning styles, the average student's results, and DJ's visual and sequential learning results. The gray line is extended to show auditory/oral learning style, DJ's results are high.]

[DJ Cunningham]: Auditory/oral, I guess I'm pretty good.

[SLIDE – Graph]

[Image: Same graph as above that shows different learning styles, the average student's results, and DJ's visual, sequential, and auditory/oral learning results. The gray line is extended to show kinesthetic learning style, DJ's results are very high.]

[DJ Cunningham]: And then when it comes to something like kinesthetic, this is kind of where my super power is, if you will.

So when we take a look at this learning profile, it's no wonder the military worked out for me. Because they were able to train to, kind of, three of my strong points. And what's interesting, what we have found, is even today, kind of, 75% of an academic assessment happens in that sequential area. I mean, if we take a look at EQAO for instance, it's so incredibly sequential. So this was really empowering for me to know. For myself, to help me understand how I learn. But what's even more empowering is for teachers to understand how their class learns.

And again, I want to pull up another poll question because I'm just kind of curious here. How many of you would feel they have an understanding of how their class learns in terms of these different learning profiles? And are you using, kind of, any sort of tools or techniques to understand that? So I'm going to go to ask a poll question to come up here. And let's just see if we are kind of mindful of that right now.



[SLIDE - Poll Question – How do you learn how your student learn?]

[Text on slide:

How do you learn how your student learn?
Pen and paper Learning Profile Assessment
Web based Learning Profile Assessment
Observation
Other]

[DJ Cunningham]: Are we using any sort of tools to help us understand how our students are learning? So take a second, fill in this poll question, and we'll kind of see where the lay of the land is.

[SLIDE- Poll results- How do you learn how your student learn?]

[Text on slide:

How do you learn how your student learn?
Pen and paper Learning Profile Assessment: 19%
Web based Learning Profile Assessment: 9%
Observation: 62%
Other: 9%]

[DJ Cunningham]: All right. This is amazing. So we're finding that the majority of the group, it's truly through observation. And we find, kind of, the next area would be pen and paper. And then kind of on the low end would be web-based learning, profile programs. Now the next question I have for the group is, how long do you think it takes you in order to understand how your class learns? So whatever mechanism that you're using. I'm curious to know how long does it actually take for us to get a good, deep understanding of what those learning strengths, what those learning tendencies are, of our class.

[SLIDE - Poll Question – How long does it take you to get to know how your students learn?]

[Text on slide:

How long does it take you to get to know how your students learn?
I know within the first day of school
I know within the first week of school
I know within the first month of school
I know within the first six months of school
I do not know how to identify individual learning styles]

[SLIDE - Poll results – How long does it take you to get to know how your students learn?]

[Text on slide:

How long does it take you to get to know how your students learn?
I know within the first day of school: 4%



I know within the first week of school: 11%
I know within the first month of school: 54%
I know within the first six months of school: 26%
I do not know how to identify individual learning styles: 4%]

[DJ Cunningham]: Fascinating. So what we're finding is its kind of like 55-56% of you -- so, just about half of you are finding that it's within the first month of school that you really understand that. And then we're finding it's kind of within the first six months of school. And here's what's challenging around this. That's a lot of time before we really understand our students. Before we really can understand how it is that we can really differentiate that instruction appropriately for the groups in front of us. And even further, how it is that we are able to create, kind of, that Universal Design for Learning approach. So, I mean, part of what I'm always thinking about is, how can we extract these -- this idea from students sooner than later.

[SLIDE –AT and the 21st Century Classroom, Lead with Pedagogy, follow with Technology]

[Image: Globe labeled U.D.L. (Universal Design for Learning)]

[Image: Graph labeled D.I. (differentiated instruction)]

[Image: Gear labeled Functional usage of tech]

[Image: Stick figure labeled reframing A.T. (assistive technology).]

[DJ Cunningham]: So understanding learning and how kids learn definitely starts going into that concept of DI. When we start differentiating our instruction, we start supporting all of those different learning modalities of students. And then that's where technology comes into play. And I'm talking about the next kind of pillar. Functional use of technology. And what I mean by that, up until now, Ontario has done a really good job of getting technology into the schools. I mean, with our SEA program and just how well-funded special education has been, and all of the massive AT tech initiatives.

[SLIDE – Tech]

[Image: One side of a seesaw that is weighted down on one side with three circles]

One circle labeled software

Second circle labeled computers with image of laptop and YouTube video

Third circle contains: tablet, SMARTboard, iPad, Livescribe, smart phone and images of headphones and microphone.]

[DJ Cunningham]: But what we have definitely noticed is there's a disconnect between that technology and learning the technical side of it, versus really understanding how it could be used in a more functional way. And I kind of go back to that original thought -- and you all said it well -- so many of your students have computers, but so few of them actually bring them in to class.



So it's showing us there's a disconnect between technology and using it in the 21st century learning classroom. And for those of you that are involved with the SEA program, again when we look at Ontario, we do find that there is a massive abandonment rate around SEA technology. It just sits idle. And one of the key reasons why this is happening is there's a lack of understanding of how to use this in a more pragmatic format. And let me try to dive into this.

[SLIDE – Strategy]

[Image: The other side of the seesaw that has only one circle on it, labeled understanding strategy.]

[SLIDE – Graph]

[Image: Graph that shows different learning styles. Along the x-axis are the labels V for visual, S for sequential, A/O for auditory/oral, and K for kinesthetic. The graph has a blue line representing expected level of knowledge retained when the students are taught lessons aimed at each learning style. A second, curved, green line is added to represent how one student's results may vary when taught lessons aimed at each learning style. A third gray line represents how DJ's results vary when taught lessons aimed at each learning style. This line shows great variation with high peaks and low valleys.]

[SLIDE – Graph]

[Image: Same graph as above that shows different learning styles. The green line representing how one student's results may vary is removed. A new green line is added that spans between DJ's results for lessons aimed at each visual learning style auditory/oral learning style. The green line is labeled: bridge the gap.]

[DJ Cunningham]: So when we think about learning profiles, we can start, kind of, understanding, how can we bridge that gap? And when I went to Trent University, which I love -- Trent alumni! Right? Yes. Awesome school. I love Trent because when I landed on their doorstep, they were really interested in this question. And when I hit their disability services office, they hooked us up with a whole bunch of tech. And the whole concept was, how can we use this tech -- and software primarily.

[SLIDE – Assistive Technology]

[Image: A cloud contains the name and logos for: Dragon, iPad, Premier Literacy, wordQ, Ginger – the write solution, Read & Write, Kurzweil Education Systems, and SMARTidea.]

[DJ Cunningham]: How can we use this to kind of bridge that gap? And we were given everything. Kurzweil, WordQ, Dragon, you know, some of the first versions of Read&Write.

[SLIDE]

[Image: Arrows link the image of the cloud from the previous slide and the graph of DJ's learning results with the label: bridge the gap.]

[DJ Cunningham]: The whole concept was, how it can bridge that gap using technology?



[SLIDE– Application Gap]

[Image: Graph of different learning styles. Along the x-axis are the labels V for visual, S for sequential, A/O for auditory/oral, and K for kinesthetic. The graph has a blue line representing expected level of knowledge retained when the students are taught lessons aimed at each learning style. A gray line represents how DJ's results vary when taught lessons aimed at each learning style. This line shows great variation with high peaks for visual, auditory/oral, and kinesthetic learning styles and a low valley corresponding with sequential learning. An arrow points upward from the lowest point on the graph. At the top of the graph are the logos for various assistive technology including: SMARTideas, YouTube, Dragon, wordQ, speak Q, iPad, Siri, and Microsoft]

[DJ Cunningham]: But what was interesting was even though we started categorizing and mapping technology that should support, kind of, these different learning strengths -- like again for me, comprehension is a big issue. It's a very sequential process. It's kind of my low point. So let's just, you know, pump all that text into some sort of audio format so I can listen to it, where we start using that very high, you know, audio tendency. So this is the Kurzweil example. Let's scan our work and have a student read it out loud. But here is the challenge. There's a huge application gap. Kids didn't have a process to follow. Or kids don't have a process to follow in order to understand, what are all the steps that I need to do in order to actually comprehend that piece?

And I'll try to break that down a little bit more. It's been found that out of the box, a program like Kurzweil, it's going to have little impact in comprehension. It needs to be coupled with a learning strategy. When it's coupled with a learning strategy, that is a learning process built out that can be aided by the technology. So if I apply something like SQ4R, which is, you know, a well-known comprehension strategy, using Kurzweil, then comprehension explodes. Same thing with writing. If I simply go to SMARTideas or any sort of graphic organizer, I don't have a process to follow. So the technology in itself isn't going to aid me. It's the learning strategy. Its towers -- think, organize, write, edit, rewrite, share -- that is the process that I can follow starting with the graphic organizing, the brainstorming/think stage, and the organizational stage. That was that what we, you know, consider the application gap. It was -- there was not enough understanding of which strategies would really benefit students to help them overcome their areas of challenges. And then roll in the technology to action that strategy.

[SLIDE – Strategy and Tech]

[Image: One side of a seesaw that is weighted down on one side with three circles

One circle labeled software

Second circle labeled computers with image of laptop and YouTube video

Third circle contains: tablet, SMARTboard, iPad, Livescribe, smart phone and images of headphones and microphone.

Image: The other side of the seesaw that has only one circle on it, labeled understanding strategy.]

[SLIDE – This is not a visual strategy]

[Text on slide:



This is not a visual strategy

Image: Screen showing a YouTube video of two men eating a meal.]

[DJ Cunningham]: So, I mean, one of the shifts that we're beginning to see is this functional approach. And one of the things that we noticed is when we started talking about strategy and visual learners, you know, a lot of people make these great big assumptions, like I said with SMARTideas -- put them on that tech and they're cured. For me it was YouTube. The thought was I'm such a strong YouTube -- or I'm such a strong visual learner, all I ever have to do is watch YouTube and just magically it will all be sucked into your brain. This is not a visual strategy, people. I got lost in watching very funny YouTube videos for half a day to entire day to an entire weekend. Like, nothing progressed on because I was just watching YouTube. And I thought that, you know, it was visualized stuff coming into my brain and it was a visual strategy. It is not a visual strategy.

[SLIDE – Functional Focus]

Image: Cube icon labeled Comprehension: super six, SQ4R, KWC

Icon of three sheets of paper with computer cursor arrow labeled Organization – TJS, Piling/Filing, check list

Light bulb icon labeled Idea generation – TDTT, Fish bone, Rapid writing

Sheet of paper icon with check mark labeled Study & Test Taking – self test, process of elimination, Q-Star

Keyboard icon labeled writing – TOWERS, note taking strategy, outlining

iPad icon with magnifying glass on screen labeled research – RAN, KWL, PMI chart.]

[DJ Cunningham]: Really we need to start looking at, kind of, a more strategic approach, a more pragmatic approach to couple up strategies and technologies for students.

So one of the areas that we've been working with teachers and students on is creating what we call Functional Focus. And what I mean by that, we've basically asked a whole bunch of people, what are all the things that you do in school every single day? What are all the tasks? And we were able to build these six buckets. So these six buckets are effectively the six things that kids do on a daily basis. And what we can quickly learn from students is they have strengths and weaknesses of these buckets. So for me, you know, one of my huge weaknesses is comprehension and writing. Research is a big challenge for me too. So in understanding where is the area of need, we can start layering in strategies. And by layering in strategies, students, much more pragmatically, can understand the need that they have, find a strategy that is in line with some of their learning strengths, and then try to action that strategy.

[SLIDE – Research]

Image: iPad icon with magnifying glass on screen

Text on slide:

Research – RAN, KWL, PMI chart]



[DJ Cunningham]: You know, a great one is RAN, for instance. It's a research strategy. It's something that I use all the time. It's a process. It's a graphic organizer process that I can follow. And using RAN, it is a visual learning strategy.

So before even introducing technology, what we find is really beneficial for students is sticking with the learning strategies. And this takes me all the way back to our theme. Let's lead with the pedagogy first. Let's lead with the learning strategies that we know and that we know work. Have students learn those first, and then start bringing in the technology.

[SLIDE – Functional Focus]

[Image: Cube icon labeled Comprehension: super six, SQ4R, KWC

Icon of three sheets of paper with computer cursor arrow labeled Organization – TJS, Piling/Filing, check list

Light bulb icon labeled Idea generation – TDTT, Fish bone, Rapid writing

Sheet of paper icon with check mark labeled Study & Test Taking – self test, process of elimination, Q-Star

Keyboard icon labeled writing – TOWERS, note taking strategy, outlining

iPad icon with magnifying glass on screen labeled research – RAN, KWL, PMI chart.]

[SLIDE – Cloud gear learning]

[Text on slide:

Cloud Gear Learning

www.cloudgearlearning.com

Image: cloud with gears inside]

[DJ Cunningham]: One of the tools that we've been working on here at LEARNstyle is basically developing a process of which you can go through and start viewing these strategies, and then techtorials. In fact, we have a beta version of it. It's open to the world right now. It's called Cloud Gear Learning. And effectively it's what I just showed you.

[SLIDE – Functional Focus]

[Image: Cube icon labeled Comprehension: super six, SQ4R, KWC

Icon of three sheets of paper with computer cursor arrow labeled Organization – TJS, Piling/Filing, check list

Light bulb icon labeled Idea generation – TDTT, Fish bone, Rapid writing

Sheet of paper icon with check mark labeled Study & Test Taking – self test, process of elimination, Q-Star

Keyboard icon labeled writing – TOWERS, note taking strategy, outlining

iPad icon with magnifying glass on screen labeled research – RAN, KWL, PMI chart.]

[DJ Cunningham]: It's basically this, except when you click onto any of these buckets, you will be shown strategies videos. They're two-minute videos simply talking about the strategies. All right? If we take writing for example again and take a look at towers, it'd be a two-minute video just on think, organize, write, edit, rewrite, share. After that there is what we call a techtorial. That is a three-to-five-minute



video simply showing students how to action out that strategy using technology. So how can we use Midamo for the think and organize? How can we import, or rather export, that into Google Docs, where we can start writing? How can we pull down Read&Write to start editing that work? How can we then rewrite using prediction? And then how can we share that with a buddy using Google collaboration tools in order for them to start looking at the work and supporting us on it? So it is showing the technical elements that action out that strategy. And that's how we start seeing AT in particular becoming way more pragmatic and functional in the 21st century classroom.

[SLIDE – Cloud gear learning]

[Text on slide:

Cloud Gear Learning

www.cloudgearlearning.com

Image: cloud with gears inside]

[DJ Cunningham]: So again, write this down if you haven't already. You will get this presentation, so you'll have a chance to check out Cloud Gear Learning. And as I said, it's an open beta resource right now, so feel free to love it, share it, and use it as much as you want.

[SLIDE –AT and the 21st Century Classroom, Lead with Pedagogy, follow with Technology]

[Image: Globe labeled U.D.L. (Universal Design for Learning)

Image: Graph labeled D.I. (differentiated instruction)

Image: Gear labeled Functional usage of tech

Image: Stick figure labeled reframing A.T. (assistive technology).]

[DJ Cunningham]: So we've talked about, you know, the need for UDL to kind of move AT into this 21st century classroom, the huge importance of DI, our real new focus on technology from the tech side of it to kind of a functional usage model of technology. And this really brings us into, how does this all begin to reframe AT?

[SLIDE – Special Education]

[Text on slide:

Predictive text

Text to speech

Electronic agendas

Electronic dictionaries

Graphic organizers

Word processors

Voice recognition]

[DJ Cunningham]: Well, when we start looking at AT, it is so incredibly siloed right now. I mean, if we look at education, really for the last 20 years, technology has been completely siloed. You have your administration technology. You have your special education technology. Instructional. And so on and so forth. And what this started leading to was a real stigma around the use of special education technology.



So everything I've said up to this point in time is somewhat, you know, not going to move anything forward because kids have this stigma around using special education technology. So we can have the greatest strategies and have the best tech, they just won't use it because they don't want to feel different.

[SLIDE – Technology in Education]

[Image: Five boxes

Text on slide:

Administration – email, attendance, online report cards

Special education - Text to speech, electronic agendas, electronic dictionaries, graphic organizers, word processors, voice recognition

Instruction – PowerPoint

Communication – school website

General education – word processor]

[DJ Cunningham]: You have your administration technology. You have your special education technology. Instructional. And so on and so forth. And what this started leading to was a real stigma around the use of special education technology. So everything I've said up to this point in time is somewhat, you know, not going to move anything forward because kids have this stigma around using special education technology. So we can have the greatest strategies and have the best tech, they just won't use it because they don't want to feel different.

[SLIDE – Education Technology]

[Image: Two boxes

Text on slide: Administration – email, attendance, online report cards

Education Technology - Text to speech, electronic agendas, electronic dictionaries, graphic organizers, word processors, voice recognition, PowerPoint, school website]

[DJ Cunningham]: So everything I've said up to this point in time is somewhat, you know, not going to move anything forward because kids have this stigma around using special education technology. So we can have the greatest strategies and have the best tech, they just won't use it because they don't want to feel different.

So we really need to start looking at a way, how can we reframe this image and start referring to "special education technology" simply as "education technology"? And it really, throughout North America, this conversation is really happening. And we've begun to do a good job of switching that focus. We've brought all these siloes into one area and we call it Education Technology. So now no longer is the Read&Write program or the Kurzweil program special ed. SEA, it is simply Education Technology. Instead of kids being SEA kids, they become tech ambassadors to their classroom.

And one of the greatest, kind of, evolutions in education technology has been Cloud computing. Because for the first time ever we can have a singular platform that every student has access to. And quite literally, we have normalized the AT in one huge, like, swoop, if you will. So Read&Write, for instance,



it's a domain-wide resource. The Google Read&Write extension. Every single student has it at a school board. So no longer is it just there for the special ed. students, everybody has it. That's normalization. Because now me as a special ed. student, I'm looking at my best bud who does not have an LD, and he's using prediction because he's trying to, you know, advance his vocabulary. It's normal for me to use prediction now because normal kids are using it.

[SLIDE]

[Image: One frame comic of man shovelling snow off of stairs while children, one of which is in a wheelchair, wait to enter the building.

Text on slide:

Child in wheelchair – “Could you please shovel the ramp?”

Man – “All these other kids are waiting to use the stairs. When I get through shoveling them off, then I will clear the ramp for you”

Child in wheelchair – “But if you shovel the ramp, we can all get in”

Clearing a path for people with special needs clears the path for everyone!”]

[DJ Cunningham]: You know what? There's a -- I really love this cartoon. I came across it probably five years ago. I have it, like, right up beside me in my office. I've drew -- I pull such inspiration from it. If you take a look at this, I think it does the best job of describing why this is so important and how simple this can happen. So if you take a look here you'll see the little guy in the wheelchair. And he says, "Could you please shovel the ramp?" And the custodian says, "All the other kids are waiting to use the stairs. When I get through shoveling them off, then I will clear the ramp for you." But the little guy in the wheelchair says, "But if you shovel the ramp, we can all get in." Think about that. "If you shovel the ramp, we can all get in." So why is it that we are calling special ed. software special ed. software when really it's not? I mean, if we use it for every single student, it really becomes kind of like the, you know, the digital pencil case of the 21st century classroom. I mean, there is -- back in the day we had dictionaries. Now there are e-dictionaries. Back in the day we had spelling aides. Now there are e-spelling aides. So on and so forth.

So if we can start reframing it, normalization will happen. Stigma goes away. That functional approach can work. And then all of the UDL and DI pieces start firing on all cylinders. This is a critical piece. And what's exciting about this is this normalization starts really changing the whole conversation around, you know, what the language of education is.

[SLIDE - Normalization]

[SLIDE -Technology]

[Image: Speech bubble containing stick figure, box of software with CD in front

Speech bubble containing clock, pencil, calendar

Speech bubble containing drawing of a school, document icon

Text on slide:



Assistive Technology – Personal spell checkers, special education laptops, text to speech programs, graphic organizers

Accommodation – Different learning environments, extra time on assignments, scribes for test taking, extra time on tests, oral assessment

Teacher Centric – Lecture style, singular assessment, individual work (worksheets).]

[DJ Cunningham]: Instead of "assistive technology" or "accommodation" or "teacher-centric," things start evolving. And it's "education technology." It's "differentiated or alternative assessment." It's very much "student-centric." And this is going to start really, really creating success for kids. It's going to create kids for you as instructors. And my goal is if we can take this approach utilizing all the things I've talked about this afternoon, that you'll have the wherewithal, you'll have the strategies, you'll understand the technology, so whenever you get yourself into a situation, you'll know how to navigate yourself through it.

Instead of "assistive technology" or "accommodation" or "teacher-centric," things start evolving. And it's "education technology." It's "differentiated or alternative assessment

[SLIDE]

[Zoom in on slide described above.]

[SLIDE – Innovation]

[Text on slide:

Education Technology – BYOD, 1/1 classrooms, cloud revolution, universal accessibility

Differentiation/Alternative Assessment – Podcasts, student learning targets, self-pasted assessment, documentaries, wikies, website assessment

Student Centric – Blended learning, flipped classroom, anytime collaboration, self-guided learning, Learning Management Systems.

Image: Thought bubble containing facebook and twitter logos, venn diagram, diagram of flipped classroom and illustration of a globe]

[DJ Cunningham]: " It's very much "student-centric." And this is going to start really, really creating success for kids. It's going to create kids for you as instructors. And my goal is if we can take this approach utilizing all the things I've talked about this afternoon, that you'll have the wherewithal, you'll have the strategies, you'll understand the technology, so whenever you get yourself into a situation, you'll know how to navigate yourself through it.

[SLIDE]

[Animation of stick figure navigating through laser beams of a security system.]

[DJ Cunningham]: And ultimately at the end of the day, I really -- you know, my passion is people with learning disabilities. And everything I've talked about is 100% general and applicable. And when we do use all those tools in general education, we start creating a massive place of potential for students with



learning disabilities. I mean, I would love to get to the point that no longer will we let disabilities disable kids. But rather we will let their disabilities enable them to go off and do amazing things.

[SLIDE]

[Image: Photographs of celebrities who have learning disabilities and the logos of companies that were founded by people with learning disabilities.]

[DJ Cunningham]: And if you take a look at my final slide here, these are all people who either have a learning disability or ADHD. How wonderful would it be to start throwing a whole bunch of your students' pictures onto this slide?

Thank you all so very much for your time. It has been a pleasure. And with that I will hand things over, and I hope we have time for some questions.

[SLIDE-Q&A]

[Cindy Perras]: Thank you so much, DJ, for providing our participants with such pedagogically-sound and important information on assistive technology. So, if anyone has questions, you may either click the Raise Hand button on your control panel to be unmuted and ask DJ a live question, or you may type your question into the chat box on your dashboard and I will read your question to DJ.

Okay. So DJ, we do have some questions coming in here. First question. "Excellent presentation. Would DJ be willing to look at AT resources -- our AT resources website to see if it's still relevant?" Would you be prepared to look at websites of different schools and school districts?

[DJ Cunningham]: I -- absolutely, yeah. It would be our pleasure to do that. And we do do a lot of that consulting with school boards where we come in. And we have an interesting kind of perspective being that we're working with many school boards, primarily here in Ontario, and we can see what different AT packages look like all over the place. And then being tapped in heavily to Microsoft and Google -- we're both a Google partner and Microsoft partner -- we have a good understanding of what's coming down the pipeline. So definitely would love to share some of that knowledge with you. So absolutely. Perhaps if you can connect with me, I'm simply DJ@learnstyle.com. I would be loved -- I would love to start that discussion. Thank you so much for the question.

[Cindy Perras]: All right. And DJ

[DJ Cunningham]: And thank you so much for liking the presentation.

[Cindy Perras]: We have a question from Chris. "Students with AT meet many different teachers in their school career. Some of whom know how to integrate assistive technology into the curriculum, and some who don't or won't. How do we help these students navigate through these various learning environments without having them become discouraged? Especially if they don't have the skills to advocate for themselves?"



[DJ Cunningham]: That is a fantastic question. And it's one of those points which we think about all the time. And primarily what we do at LEARNstyle, we do direct-to-student SEA training. We complete about 15,000 SEA training sessions per year. And one of the big focuses we started to shift was more onto a student independence model. And that's where that functional focus concept came from. And where we're at now is, how can we rely on the student's understanding the strategies they need and the technology they need? And not so much put that stress and strain onto our teachers. And one of the hopes is evolving Cloud Gear Learning, which we've started, as we will be able to create a strategy resource that kids independently can go on and start learning the strategies which make most sense for them.

In terms of the advocacy side, that's a challenging piece. And I can give you kind of a tip that I've used in the past. Before I had the courage to advocate for myself -- and a resource teacher taught this to me -- they showed me how to write a "Dear Teacher" letter. And effectively what this was, with the help of my resource teacher it was everything I needed to say to advocate for myself, but in a letter. And that was way less scary to do it in that kind of supportive format and in that way that I didn't have to confront the person physically or in person, that I could hand it off to them. And that was a huge strategy that I used. So a "Dear Teacher" letter is a really great tool to help kids advocate for themselves when they don't have the confidence yet to do it.

So two options are take a look at that Cloud Gear Learning for kids to become more independent, and then perhaps try that idea of a "Dear Teacher" letter for students -- to support them in their advocacy.

[Cindy Perras]: Thank you, DJ. Two great suggestions. And I would like to mention to our webinar participants that on the LD@school website, we do have examples of self-advocacy pamphlets that students have created and that they can use, particularly when they're transitioning from one grade or one class setting to another.

Okay, another question. This one from Monica. "DJ, do you know what AT tools are available in French?"

[DJ Cunningham]: There are a lot of AT tools that are available in French. Some of the primary ones that we're seeing right now are things like WordQ. There's a French side to it. If you're looking at something more web-based, Read&Write for Google has come out with a French side to it. So again, these are technologies that are completely in French. Not just, like, mimicking -- not just taking, kind of, English languages and doing voiceovers with French. It's actually, like, French text-to-speech engines built right into them. So if you look at a lot of the mainstream AT, you should be able to connect with the various service providers of those ATs and find the French side to it. And again, the majority of ones that are being used in schools do have that French connection to it.

If you're coming up short, again feel free to reach out to me perhaps at a later date and I can take it a little bit further and list some out for you that we definitely see here in Ontario. Thank you for the question.



[Cindy Perras]: Great. Thank you, DJ. Next question. "What do we need to do to support the shift from AT in spec. ed. to education technology, special ed. to DI, and to shift the focus on individuals with learning disabilities to the learning environment?" I know that's a multifaceted question, but maybe focusing more, DJ, on the first part

[DJ Cunningham]: Sure.

[Cindy Perras]: About, what do we need to do to help support the shift from spec. ed technology to educational technology?

[DJ Cunningham]: Yeah. And first of all, I love the question. I love this question so much because this is the high-level thinking and approach we need to start having. And these are the high-level conversations we need to start having with our largest influencers and decision makers.

I'll start actually with the second half of the question. Michael Fullan once said, and I think it's brilliant: in order to, kind of, institute systemic change, you need to have a 30% buy-in. And it's been proven at this point. If you can get -- if you can convert 30% of an overall population, then systemic change begins to happen. So one of the first things I always say to people is be a part of that 30%. You know? Make the choice to change and start showcasing and just modeling for others what that change looks like. And as we start, you know, getting more and more people on board, a tipping point will happen. When we get to that 30% point, the teachers that are looking at it in a more traditional way will start looking at, kind of, this new way. And will start asking the questions. And slowly we will convert an entire system over. Definitely doesn't happen overnight. It takes time for this to happen. But that 30% is a very tried, tested, and true thing.

And to the first question, which really speaks to all of the other specific points you said with DI and UDL and so on and so forth, we have to be really cognizant of our language. And especially in special education we've been using the term AT for so long that we just still use it in our, kind of, daily vocab. And even for myself, it took a lot of discipline to never use that word "AT" anymore when I am presenting to a board or to a group of teachers where they are looking for that shift. So we can start simply by erasing AT and replacing it with "education technology" into our own vocabulary.

And the second component of that is find the really high-yield general ed. pieces that are in our traditional AT and showcase how they can be used for general ed. A great example of this is in Read&Write or Kurzweil or any program that has highlighting features. That is such a natural piece of learning for every student is highlighting material. So again, as a special education teacher, if you can get in front of your school and say, "I'm going to show you an education technology. We're taking what's happened in the past, highlighting and textbooks, but now doing it over the computer. Here's Read&Write, here's the highlights ..." Because you've introduced it as a general tool -- general ed. tool -- because you've never used that term "assistive technology" or even said "this is a spec. ed. initiative," you're going to have way more people listening to you. It's fascinating. If you're in front of a group of teachers, the second you introduce yourself as special education or, "Here's a special education



initiative," or from the spec. ed. department, you will see many of the teachers turn off. Because in their mind, "Well, this doesn't relate to me." You know? "I don't have special education kids in my class." Even though we all know that they do.

So those are going to be my two points. Become a part of the 30%. Right? And then start really being disciplined into how you are referring to education technology. Take all the spec. ed. talk out of it and showcase those high-yield, general ed. tools. And use that as a door opener to get people engaged in this education technology.

[Cindy Perras]: Thank you. Wonderful answer, DJ.

[SLIDE – Other Questions?]

[Text on slide:

Image of LD@school logo

Email: info@LDatSchool.ca.

Twitter: @LDatSchool

Image of LD@school logo.]

[Cindy Perras]: That's actually all the time that we have today. So we're going to end our live question and answer session. Several of our webinar participants did send in questions and I would like to reassure them that those questions will be answered. Should anyone else have further questions, please email us either at info@ldatschool.ca or you can send us a tweet to @LDatschool and we will ensure that your questions get answered.

[SLIDE – Registration now open for school boards!]

[Image:2016 Educators'Institute Logo

Text on slide:

August 23rd & 24th, 2016

Hilton Mississauga/Meadowvale.

Public registration opens June 1st.]

[Cindy Perras]: LD@school's third annual educators institute will be held August 23rd and 24th, 2016 in Mississauga. Registration for school boards is now open. And public registration begins on June 1st. Additional information on our bilingual institute is available on the LD@school website.

[SLIDE – Upcoming Webinar]

[Text on slide:

Strengthening Executive Functioning Skills in the Classroom

Tuesday, May 31st

With:

Dr. Christine Purcell, Clinical Psychologist

Dr. Marc Crundwell, Clinical Psychologist

and **Jennifer Newton**, Educational Coordinator



from the Greater Essex District School Board.]

[Cindy Perras]: Please mark your calendars for the next LD@school webinar on Tuesday, May 31st. Dr. Christine Purcell, Dr. Marc Crundwell, and Jennifer Newton, all from the Greater Essex District School Board, will be presenting on strengthening executive functioning skills in the classroom. Information on how to register for this webinar will soon be posted on the LD@school website.

[SLIDE]

[Text on slide:

Thank you!]

[Cindy Perras]: On behalf of the LD@school team, I would once again like to thank DJ for his presentation. And thank you to all of our participants for joining us. Please remember that we will be sending out presentation slides as well as a short survey following today's webinar. The feedback we receive through this survey provides us with important information for producing future webinars. As a reminder, we will be sending out a link to this recorded webinar in approximately three weeks.

Thank you again for participating in this LD@school webinar. And have a wonderful day.

