

Episode 24: Loui Lord Nelson on Universal Design for Learning

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Speakers: Alex Schiwal, Loui Lord Nelson, Tatiana Perilla

Alex Schiwal 00:00

Music Hi, and welcome to the Mental Health Crossroads podcast, where we explore the intersection of mental health and developmental disabilities. This week, Tatiana interviews Loui Lord Nelson about universal design learning. Thanks for listening. We hope you enjoy. *Music*

Tatiana Perilla 00:25

Hello, everyone. And thank you for joining us on the Mental Health Crossroads podcast. I'm joined today by Dr. Loui Lord Nelson, who is gonna be talking to us about universal design for learning. Thanks for joining us today, Loui, and for being willing to share your expertise on this topic, which I do want to say going forward, I imagine we'll be saying UDL. So I want to go ahead and clarify that it's an acronym for Universal Design for Learning. To start us off, do you mind telling us a little bit about yourself and your experience working with people with disabilities and their families?

Loui Lord Nelson 00:55

For sure. I'm a formal special education teacher and so in that role, one of the things I took very seriously was that I partnered with families on a daily basis to find the best methods and strategies for my students in that general education setting. It was an inclusive setting. I always began the year by calling all of the parents of the students on my caseload, and I'd introduce myself and we'd set up a plan of how to work with one another, how to communicate with one another. I always asked them what gifts they saw in their teenager. I would always have some parents who are a little stunned by this question, it would be like, 'Hmmm, they're a teenager', *Laughter* but then they'd share. Then when I would have my one to one with each student, then I got to share that with them. It was just always a neat experience, because sometimes the kids were like, 'Really? My parents said that?' I'm like, 'Yeah, totally. So you know what, I expect that from you too, because that's a gift for you.' It really helps set a tone for the year. I'm not saying everything was roses and lollipops by any means. But I am saying that those partnerships were just really, really, really important in how we moved through the year.

Loui Lord Nelson 02:13

After I left the classroom, I received my PhD from the University of Kansas and actually it was in Families and Disability Policy. Our research work was solely focused on family quality of life and partnerships between families and professionals, and how to improve both of those areas. From there, I went on to work for Noble of Indiana, which is an Arc of Indiana affiliated with the Arc of Indiana, and I was the director of a Center for Family Leadership. So that tapped into again, what I see as incredibly critical, family empowerment, and how families can connect with other families to help provide some leadership information, and just general support.

Loui Lord Nelson 03:01

It was soon after that, actually, that I was asked to interview and then I accepted a position of the UDL coordinator for Bartholomew Consolidated School Corporation (BCSC) down in Columbus, Indiana. And that's where I helped teachers who worked with over 14,000 students learn about and apply Universal Design for Learning. That district was really connected with CAST, the creators of UDL. I'll tell a little bit about them later on. But it's thanks to George's connection, George Van Horn, the Director of Special Education, and then I grew into connection with them. And then I applied for one of the two postdocs at CAST. And so after four years at BCSC, then I took on a CAST postdoc for a year and that was cool. I worked alongside with professional development folks, got a little bit of research, and other projects. That's where I wrote my first book, which is called Design and Deliver: Planning and Teaching Using Universal Design for Learning. Since then, I've worked with educators around the world on their implementation of UDL. I think it benefits all learners. We all do in the UDL community, we believe that. It really is set to help students who are marginalized be successful. While it's definitely for all students, students with disabilities are essentially a bellwether for when you know that you have successfully implemented UDL. Because, again, all students should be gaining and succeeding. So there's a little bit of background.

Tatiana Perilla 04:47

Thank you. That was a great response because like right off the bat you gave us a great point to remember about universal design, I think, is how it benefits everybody. And a lot of conversations or articles you read about it, it does talk about the benefits for people with disabilities or certain groups. But it seems like if it's done well, everybody is going to end up benefiting.

Loui Lord Nelson 05:07

Yeah. Absolutely.

Tatiana Perilla 05:08

I appreciate that response. Can you give us a little bit of an overview of what universal design is? Because there's universal design, and then more specifically about the UDL framework and its history?

Loui Lord Nelson 05:23

Yeah, so universal design is from the world of architecture and structures and that's about making things physically accessible. Ramps, and curb cuts, and such. Universal Design for Learning builds on that. Ron Mace was the creator of Universal Design (UD). And when David Rose, Anne Meyer, and others were looking to name what is now Universal Design for Learning, they were looking at UD and thinking, that is just really what we're talking about when we talk about the accessibility part but we're talking about a different milieu (meaning physical or social environment). We're talking about learning, 'Hey, let's call it Universal Design for Learning.' That's probably not exactly how they thought about it. *Laughter* But anyway, there's a shortcut to it.

Loui Lord Nelson 06:10

So to talk about UDL and to help people understand that, I'm going to tap into everybody's imagination for a second. If you're listening, and you want to close your eyes, because you're not driving or something like that- but anyway, be safe. *Laughter* Use your imagination. I want you to envision a classroom where every child feels valued and is connected to what they're learning. That every child is learning how to tap into their motivation, or what learning is, and what motivates them to learn. And in the same classroom, every child is learning what resources to request, or they find resources that they can use so they can build their knowledge in a more constructive and imaginative way. And in this classroom, every learner is learning how to set goals and determine strategies that will help them reach their goals. A really important reason why each learner has these experiences is because they're not only seen and respected as individuals. The teacher understands that, each learner, their needs vary based on the topic, the design of the lesson, the materials available, and even the relationship that learner has with the teacher and other learners. All of that affects how that teacher designs that classroom environment. What I've just described to you is a classroom that's been intentionally designed so that every day every learner has experiences to build those really important skills of being purposeful and motivated, resourceful and knowledgeable, and strategic and goal directed. That's the goal of UDL. That's it. The goal of UDL is that they will come away with essentially those six characteristics. But the reason that we can plan for that is because we understand something called variability, which is that not only is every learner different, but we're different in ourselves and our own learning based on the context. And so I've listed out kind of what the context is...

Loui Lord Nelson 08:10

The framework is based on research from neuropsychology, and psychology, and education, and special education. It was created by the organization CAST, I referenced it a little earlier, about 30 years ago. CAST is an education research design organization, and it's located in Boston. It was way fun to live there for the year during the postdoc. *Laughter* I loved it. The founders of CAST originally, they worked in a clinical setting, and it focused on students with

significant learning needs. They were transfixed by these blooming possibilities of personal computers and the opportunities that students with disabilities now had both to learn and express their knowledge and skills. What they noticed was that the skill building, and the confidence building, and the knowledge sharing that went on in the facility in that clinical setting, it didn't translate to the classroom. And so while the students made gains in the clinical setting, they didn't have access to the same tools and the same strategies in the classrooms. Then the CAST founders had an aha (moment of realization) and they knew that wasn't the child that needed to change, it was the environment. And that aha is now deeply embedded in CAST's mission of, "until learning has no limits". Because that is all about saying we're not going to limit you, student. We see you as a learner, we see you as a student who learns because you have all this variability in the way you learn, and we don't want your learning to have any limits. We see your potential. That aha moment of it's not the student. The issue doesn't lie in the student. The issue lies in the design of the environment.

Loui Lord Nelson 10:05

UDL has grown up a lot since then. I can talk through the first graphic organizer, in 2008... I believe that for this podcast, I gave a link out to the CAST guidelines, cast.org. But you can also do udlguidelines.cast.org it'll get you there. I want everybody to think about the periodic table of elements right now. I know that's gonna take you back to high school or college chemistry days and maybe those were bad and I'm sorry- but! *Laughter* Think about the periodic table of elements! That table is organized into groups and on top of that you can find out the atomic number, the symbol, the name, the atomic weight, even the electrons per shell, and some of them get really specific. Some of the graphic organizers tell you which of the elements are found in the state of gas or liquid or solid or unknown, which is really interesting to me. But anyway. You can find out subcategories. All of that was to say that the periodic table of elements is a graphic organizer of those elements, but there's a lot more to chemistry than what's in the periodic table of elements. Alright. So let's flip to the UDL graphic organizers that we call the UDL guidelines, it's the same thing. The UDL guidelines are an organization of concepts of Universal Design for Learning, but it's not the end-all be-all of everything behind UDL. I like to explain that.

Loui Lord Nelson 11:39

But before I get into it, I'm not going to talk about necessarily the organization of the guidelines right now, because I know we have a limited time here. But I would encourage everybody to go out and look at those guidelines, because you will see a couple of things that I want to point out, you'll see pictures of brains across the top. That's to help remind us and ground us in the fact that this is all based on neuropsychology and the neurosciences. You'll also see that there's much more educator-friendly language there because it talks about the brain's networks, but then you get Engagement and Representation and Action & Expression (headings used in graphic organizer of guidelines).

Loui Lord Nelson 12:18

I want you to pay attention to the fact that the three columns are different colors, to help people understand that the research was categorized just like a periodic table of elements. Everything's categorized, but it's interconnected because our brains are interconnected. Next, down the left hand side, you'll notice the words Access and Build and Internalize. That's because that top left row says that's where we're giving students access to learning. Next row, Build, they're building on the skills they've been learning, and then Internalize. Those are the kinds of activities that we're doing with our students to help them really take learning into themselves, so they're blossoming as these expert learners. But we do all of these things, all of the time, with all of our students. We don't just like march down. It's interconnected. Then finally, at the bottom, when you look at that you see that the descriptions of the expert learner are there because when you do these things you're helping take students toward becoming an expert learner. And you want all of these things to be part of the environment. So there you go.
Laughter

Tatiana Perilla 13:25

Thanks for mentioning that graphic organizer. I had looked at that before, and I really liked how it was structured and how- The website gives a lot of detail! Because it doesn't just have the blocks and list things and leave you to figure out what each point means on your own. Like I'm seeing here, I can click on each one, it takes me even further.

Loui Lord Nelson 13:43

Yeah, you can go down a rabbit hole of sorts. I tell people, if you're really starting with this or just new, choose one of those blocks. Like you could choose Recruiting Interest, which is the top left hand block under Engagement, and just stay within that block and read that information. Because we can all get click happy and end up someplace else. *Laughter* And we're like, "I don't know what I'm learning about!", so then just back up and leave yourself in that block. It's just a nice way to start investigating and looking.

Tatiana Perilla 14:15

I see that one of the things it talks about, minimizing threats and distractions, and it ties a little bit with a question I was gonna ask you is... We know that UDL helps everybody, it can help all learners. I was curious about how does this impact mental health and how does mental health [affect learning] vice versa? Because it can affect their learning, I would imagine. I was wondering if you have any examples about that, or how that falls into this framework?

Loui Lord Nelson 14:41

The answer to that is yes, definitely, UDL can support healthy mental health. I'm not a mental health expert, I want to say that, but I can say that I completely understand/recognize that the

brain is totally interconnected. When we create an environment that helps our learners build on those connections they move toward the outcomes of expert learners. So I introduced or talked a little bit... The principle Engagement is the far left one, we just talked about that a little bit, and that stems from what we know is our affective networks. The affective networks, they're deep in the center of our brain. So that's like the amygdala, people talk about that, a lot of people know about the amygdala. When you get stressed or scared or something, then that like literally pulsates and then send out emergency messages (Loui imitates alarm sounds). *Laughter* But also included in there is the brainstem, that's like the very thing that keeps us alive. We now know through neuropsychology, that emotion is rooted there, no *inaudible*. But all of that helps us connect with learning. And when we appropriately initiate and engage that part of our brain, which it does by nature anyway, but in a way that's helpful then our students are able to connect. So the majority of my students who were identified as having mental health needs, either due to disability or just life circumstances, the supports and the ideas that are within the principle of Engagement were definite supports. All of the guidelines can help. So let's say for example, under Representation, there's a guideline about language and symbols. That's all about clarifying vocabulary, symbols, syntax, structure. It's about helping students break down/put together text and mathematical notations. It's about understanding across languages, using multiple media to do this.

Loui Lord Nelson 16:43

Okay, so Loui, how does this support mental health? Well, if you're in a classroom, you're a student, and you can't decode the story, you don't know how to read the words but you know that your teacher is using a strategy called Popcorn. That's where one kid reads and then either that kid gets to choose who the next person is, or maybe the teacher is just kind of owning the whole thing, sage on the stage (describes a teaching style where the teacher is not interactive and dominates), and they're controlling which kid reads. If you don't decode well, you're now panicking. The amygdala is going crazy. That takes up your learning power. You're the student, you're freaking out but maybe quietly. But you can't focus, you're not listening to the story. You're not comprehending what's going on, you're not learning, you are stressed out- that's not good. That's just not healthy mental health, right? So instead, students need to have a different way to decode the text. And maybe they would read it with a partner, or listen to an audio book, or they listen while they're at a computer and they watch the screen as the words are rolled in there. It's reading it out loud to them. All of these ideas are embedded in those checkpoints, under that guideline. All of these things are there to help the teacher go, 'oh, here are some options that I can provide to my learners' so they feel safe, so those threats are minimized, those distractions are minimized so now they can be a part of it. Another part of this little story is that popcorn reading, not good. It's way less important than comprehension, right? We want our students to comprehend and you would never see something like that in the UDL framework. *Laughter* It's just not- it's not healthy. But, the framework in its entirety it can really help support students' mental health.

Tatiana Perilla 18:33

Would you mind sharing with us how incorporating UDL into our training, into our resources can increase accessibility and just even comprehension of information?

Loui Lord Nelson 18:45

I utilize Universal Design for Learning whenever I'm designing any of my trainings or any of my resources, because I want them to be accessible to every type of learner out there. I encourage anybody to do the same thing. No matter what you're planning on, you could be in business, you could be in health sciences, wherever you are. It goes back to these reasonings that I was just providing before. It helps you understand and think through what kind of barriers there are for learners. We all come to teaching and training from our own lens. And no matter how broadly we have studied or talked with others, or even how empathetic we are, we come from our own lens. What Universal Design for Learning does for us is it helps us expand our lens and have some aha moments about 'okay, these are some experiences other people have, I may not have had them or I can't even fathom having some of them', that might be a comment in somebody's head. But instead what you have is a guiding tool that help you think through all of the barriers that participants might encounter within a training setting, or within any kind of setting that you're designing.

Loui Lord Nelson 20:11

I'm in the midst of helping design online training for educators in Malawi. Like everyone else in the world, things are shut down there and even more recently. This is a country where educators are not experienced using the digital community for learning, it's just not a part of what their country does. They have access to technology. Many, many people do. But it's just been rare. We are working really hard to not only take the content that we need to deliver, but how we're going to design that digital space to ensure that everyone can stay connected with it, that they find interest in it, they can stay connected with it, and that they have that wherewithal that we all need to just stay regulated within digital learning. So using my experience and then we can just kind of place that over maybe something that you guys would be developing, it's the same type of thing. You think deeply about what your environment is going to be with face-to-face, or digital, or hybrid. Then from there, you think about what those learning experiences are. And that's the best way to use the framework.

Tatiana Perilla 21:30

Does looking at the guidelines, that we were looking at earlier, help you think of all these different things that maybe you weren't considering before? Such as the setting and your audience.

Loui Lord Nelson 21:40

Yes. Now, I have been deep, deep, deep into Universal Design for Learning since 2007 so I have a lot of it already kind of ingrained in who I am and how I operate. *Laughter* But I will say that, again, anytime I develop a training whether it's a one-hour workshop, or whether it's multi-day, or this is a long-term relationship, I've got my guidelines next to me, and I'm running through them and just kind of doing a... It's not really a checklist because we don't want people to think, oh, I've checked off all nine boxes, I'm quote unquote, doing UDL. It's not that way. Instead, you do want to make sure that you're touching on or that you are purposefully using pieces from each of those nine guidelines. But it's the purposefulness of it. So you have to be able to honestly answer what's the purpose of using this guideline? What's the purpose of using this guideline? So the question drives us to do more thinking and reflection than just check, check, check, check, check. I've been into plenty of classrooms where teachers did the check, check, check, check, check, and you can see it. Because it's rudimentary. It's really... 'I provided them three different ways to do that assignment.' But then the support and the interaction with the students and the desire to have them be successful across all of those three activities, it's not there. Instead of the 'Oh, I gave it to them', it's kind of like tossing the ball out versus going in and being that support. It's a very different way to go after it. Yeah, so I definitely still use the framework. *Laughter* All the time. I mean, the graphic organizer, when I'm looking at it, yes.

Tatiana Perilla 23:38

Thank you. I've heard people use the term UDL before in reference to assistive technology or technology-based learning. Can you clarify for us, is technology required to use UDL on trainings? Or is it just sometimes? Can you just elaborate on that a little bit?

Loui Lord Nelson 23:56

Yeah, sure, sure, sure. UDL was definitely influenced by technology and assistive technology from the get go, I gave some of that in the history. The founders found this flexibility in learning they've never ever seen before, so that was really critical. They were excited about the potential, but since that time, the framework has shifted based on what's known about how the brain learns. What learners need are options that lead them toward the lesson goal and provide them with opportunities to gain skills toward becoming expert learners. So when the UDL framework suggests using multiple media for communication, you'll find that under the guideline of Expression & Communication, that media could be hand-drawn pictures, songs sung by the teacher or the students, natural objects used to symbolize or replicate another object. None of that is tied to technology. I'll tie back to the work within rural Malawi and actually also rural Uganda. There's definitely technology in those countries again but not in all the schools, and in some cases, there's no electricity in the schools. So I'm still working with those teachers to bring UDL to life in those classrooms, and it can be done. That said, it's true that technology can create a lot more options in learning, and specific to students with disabilities there is an opening that is provided when you use that technology. So while UDL

doesn't require it, you'll see references to technology throughout all nine guidelines. The AEM Center, which is A-E-M now, but it's affiliated within CAST, and it's the go-to location for information and resources. For students with disabilities, and for all other learners, the most important thing that we need to think about with technology is to help students achieve the learning goal as part of a collection of choices. So while we're offering them access to the technology, some students aren't going to choose the technology once they become proficient in understanding their own learning needs. That's where we're taking them, so that they own their learning so deeply that they're like, 'That little computer game over there was kind of fun to play the first three times I played it, but I found out that it really didn't help me learn my spelling words, like I know I need to learn them. So I'm going to use this strategy over here, which is far more effective for me, because I want to meet my learning goal. Yeah, it's fun to play the game, but I want to meet my learning goal.' Now that student has internalized their learning, and that's just beautiful to see. But they only do that when we provide that option for choice, and that option for exploration, and we also guide that with self-reflection. Give our students time to self reflect and reflect with others about their own learning needs.

Tatiana Perilla 27:04

Thank you, that leads me a little bit into my next question. You made that point about how engagement really helps improve learning. Part of MHDD, our national training center, and even other organizations, we work on developing information and resources for people with disabilities in their families. But so a lot of what we have is just written materials, so is it important for us to consider UDL when we're developing these materials? And how can we incorporate the framework into just written materials? Maybe you don't have that chance for engagement with somebody.

Loui Lord Nelson 27:40

Right, yeah, within written materials that's really interesting and huge. One of the best things about the framework, again, is it helps us really think about how we're engaging the learning brain, or engaging the brain and the action of learning. It reminds us to think about things that are maybe not in our kind of mental pathway. When we're thinking about written tools, I prefer to find a language use that is more familiar. We can pass along a lot of good quality research-based information without having to inundate people with terminology and jargon. The wonderful thing about the digital-based written information or text-based information is that you can have links. We can do a hotlink in there. It doesn't necessarily have to send them to another resource out there on the World Wide Web, we can build within our own systems' link so they can click on that and it'll bring up another text box to help describe whatever that piece of jargon is. Because sometimes we can't get away from the jargon. But we can thoughtfully create something that's text-based that offers clarity around that. There are also tools that are in any PC and Apple device that help people with listening to whatever text they have. There are really easy step-by-step guides on how to set that up in the computers, so AEM has links to

those things but people can even just Google, how do I make my computer read to me. That's all in our accessibility options within our computers. And so even reminding people that- if they don't like to read something that's about two pages long or five pages long or whatever- they can listen to it if they want to. Now you've provided another option for your audience to gain access to the information that you are providing. And then the last part of that is that when you're providing these options, it actually makes you write differently. Because we write text based on these formalized guidelines that we've all learned over the years and how to write, but then when we read it out loud, we're like, 'oh, that is not how somebody talks', most of the time. *Laughter* So it might shift how you guys write things down, or how you construct the newsletters, or the information sheets, or the fact sheets. It might change how those are written. And that can be a good thing, because it could create more accessibility.

Tatiana Perilla 30:41

Those are great points. Some of those I make sure to think about when I write fact sheets, but you brought up some great points I hadn't even thought about such as having the computer read it back. I'm like, hmm yeah, that's a good point. Because I even noticed when I read it to myself in my head I'm emphasizing certain parts, but someone else reading it who doesn't know me might not be emphasizing the same parts, and it might not make sense. That's a great tip. To sort of recap, you talked about having it read back to you, reminding them that they can have it read, including links, which I think is a nice way to increase engagement, and watching the language that we use and that jargon which I think is a great point. I had to learn how to write differently based on coming from grad school to writing fact sheets. Like who is my audience? Am I writing for academics or am I writing for individuals and their families who are just coming here to learn about it and get some helpful information?

Loui Lord Nelson 31:33

Right.

Tatiana Perilla 31:33

Those are really good points I think everyone can take away. As a parting message, are there resources that you would recommend for people that are getting started with UDL?

Loui Lord Nelson 31:44

Yeah, first and always first is to know about CAST. Their website is www.cast.org. And that's where you're going to find that interactive display of the UDL guidelines, like we referenced earlier. You'll find technical assistance for accessibility, that's that AEM center. Learning resources and other online tools in there.

Loui Lord Nelson 32:07

If you want to hear teachers and educators talk about their use of UDL, I have a podcast called UDL in 15 minutes. Surprise, surprise, each episode is 15 minutes and the educators share concise stories. It's an interview about their use of the framework. And then specific to mental health, I have a few episodes that I would probably recommend. There's episode one with Kim Babeau, Episode Four with Laura Taylor, Twenty-Nine has Diana-Grace Morris and others, Thirty-Seven with Kelley Culp, Thirty-Nine with Dan Marsh, and then Forty with Megan Gross and Lisa Yamasaki. All of the episodes, I think, are golden. I know, that's my opinion. But anyway, people are just so heartfelt in sharing their experiences and they're wonderful. They're true, they're honest. And so I think you can find things in any of them, but those specifically...

Loui Lord Nelson 33:05

I have a card game that I created about UDL and so I think it's a more engaging way to learn about the framework. It's called Go Fishing with UDL. So it's based on that premise of Go Fish that we played as kids. I did create virtual play instructions for people, so you don't have to be sitting next to somebody and playing go fish right now.

Loui Lord Nelson 33:28

I also have a coloring book that takes people into those underlying aspects of UDL. I gave that comparison with chemistry before, because there's more to the framework than just what you see on the guidelines. And I wanted to make that an engaging way to learn about it, so there's a little coloring book. If you want to dig deeper, I have the book, Design and Deliver. The second edition comes out in February. They're accepting preorders now. I'm really jazzed about the second edition because I added a lot more interactive pieces. And then finally, but equally as important, CAST has their own publishing arm, and I have books that are published through them also, but it's just a plethora of excellent authors and excellent resources. So CAST publishing, you can get there through cast.org. I would say that's a healthy place to start-places. Those are healthy places to start. *Laughter*

Tatiana Perilla 34:23

Thank you, and they sound like they're engaging too with the ways that they teach it. I really appreciate you talking to me, Loui. I got to learn a little bit more about this myself and yeah it definitely makes me want to look into it more. I appreciate you giving us all these resources to be able to do that.

Loui Lord Nelson 34:39

Very good. Well, thank you. And I really appreciate the invitation! This was fun to talk about. I love talking about how UDL interrelates to all sorts of different topics. I think it does, and I think it can be helpful, and you asked great questions to help bring that out so thank you, Tatiana.

Tatiana Perilla 34:55

Thank you! *Music*

Alex Schiwal 34:58

Thanks for listening to this episode of the MHDD Crossroads podcast. We hope you enjoyed it. For more resources and trainings, visit our website at mhddcenter.org. For any of the resources mentioned in this episode with Loui Lord Nelson, make sure to look in our show notes for all of the links. Follow us on social media at mhddcenter.org and make sure to subscribe and share our podcast wherever you get yours. Thanks. *Music*