CIDDL Research and Practice Brief 6 Interview Transcript

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Nicholas Hoekstra: Okay hello, and welcome to the CIDDL research and practice brief series, my name is Nicholas Hoekstra. The purpose of the CIDDL Research and Practice Brief series is to have conversations about the innovative use of technology in special education, early childhood education, related services and leadership preparation programs. So, today I have with us Dr Kavita Rao, professor of - Professor in the Department of Special Education at the University of Hawaii to discuss with us some of her work around universal design for learning the use of technology to support students with disabilities - and all learners – and teacher preparation in rural and remote areas. So welcome Dr Rao.

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Kavita Rao: hi Nick, thank you for inviting me to do this interview.

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Nicholas Hoekstra: And thank you very much for for accepting. So, to start with, Dr Rao, in your work you frequently discuss how the UDL framework is at the heart of curriculum design to meet the needs of all students and can foster meaningful inclusion of students with disabilities. Could you tell us a little about how UDL can be used by General and special education teachers to support all learners?

2:26

Kavita Rao: Yes, I love this question because I am really passionate about UDL as an instructional design framework. So, as you mentioned, it is, to me, at the heart of designing curriculum that can be lessons that can be anything that you're doing in the classroom during the day. The key for me in terms of UDL is the process of using UDL. Many people look at the guidelines, they see those principles, guidelines, checkpoints and think "Oh, here's a bunch of strategies." They are a bunch of strategies, and they're great strategies, but I think the key, the power of using UDL is when you think about the thinking process behind using UDL. So, some of my co-authors and I and also CAST has published on something called the UDL design cycle, which is really a step by step process about thinking about learner variability in the classroom first, then thinking about the actual goals of your lesson or the curriculum or whatever you're developing, and then identifying where the barriers lie in that curriculum, given your learner variability. So that is part of the thinking process behind UDL. So if you do that first, and then you start applying UDL to whatever you design, You're, you're going through a process where you're taking those guidelines and applying them intentionally to reduce barriers. So...That to me is at the heart of the UDL, using UDL, the process of using UDL. So in your question you asked how it can be used by general and special education teachers. So I think this is where UDL is really useful to both gen and special ED teachers. For the

general education classroom, teachers can use that UDL design process to look at the lesson that they are planning for everybody and analyze where they can put in supports that will address the learner variability in the classroom. That can be your students with disabilities, that can be your language learners, that could be just students who need some different strategies for that particular lesson. For the special ED teacher, it can be really useful to look at UDL in a way, when you're planning with your general ed. co teacher or when you're planning a lesson for a resource room, similarly you can use that UDL based process to analyze where the barriers are and then design the lesson to reduce those barriers.

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Nicholas Hoekstra: Great, so it doesn't fall solely on the special education Professor, or educator, or solely on the general education educator, it's kind of a collaboration between the two of them.

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Kavita Rao: Absolutely, I mean, I think the biggest point with UDL for me is it really can be used by anybody designing anything. So it can be used by the special ED teacher, gen ED teacher, it can be used by curriculum developers, it can be used by, you know, somebody developing a tool for students. They can they can use the UDL framework to consider where, how to reduce barriers and provide supports. So I think the biggest part again for me is the process element of using UDL. So rather than you I don't see the UDL frame framework as just a random menu of options, it's a very intentional menu of options when you think about "what is my goal," "where are the barriers" and "how can I now use UDL to address those barriers."

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Nicholas Hoekstra: I understand, very good. Do you mind asking, do you mind if I ask one of the things that I've read in your work, which I thought was very interesting, is how UDL can be combined then with something like an evidence-based practice. Would you mind just speaking briefly to that, to how UDL also supports those other practices that educators might be more familiar with. Absolutely. So there's many evidence based practices and i'll speak to special education, in particular. We know that special education teachers need to use evidence based practices with students to ensure effective outcomes, but sometimes when we think about "how do we integrate that practice into the classroom" so, for example, if you are using i'm going to use SRSD - self regulated strategy development - as an example that's an evidence based practice that many teachers use. If you're integrating that into the classroom, you can still analyze what students might need around that, where can you add more flexibility or some supports along with a practice that you're already using. So one of the things that when i'm doing when i'm teaching my teacher preparation classes I emphasize that UDL is not just an add on, it's not a new thing you have to do. You can do the things you already do, use the strategies you've been you've been using or you're learning to use if you're a pre service teacher, what UDL

gives you again is a framework to think about where and when you can do certain strategies to reduce the barriers. So, again, with an evidence based practice, you may you may have the core components that you are going to do for the EBP, but you can consider the other factors around that that might make the practice or the intervention that you're doing more suitable for the environment or for the students that you're using with. So, again, it's it's not it's not really an add on so much as a way to think about what you're doing and how to make it work for the learners that you're working with. Excellent, that makes that makes sense, thank you. And now speaking of different populations of students, your work, your work also addresses UDL Your work also addresses, excuse me, UDL for English language learners. Could you describe some ways in which UDL can be applied to to ensure that culturally and linguistically diverse students can thrive in our classrooms?

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Kavita Rao: Great, I love this question. Because I think the beauty of UDL, as any of us who use UDL know, is that when you start using UDL strategies in your lesson planning and start planning with UDL, you start broadening out your lesson to support all learners. So that includes the students with disabilities, that can include your language learners, your your culturally and linguistically diverse students. So the beauty again of that when you start putting in flexible supports, you kind of inherently start making lessons more accessible and reducing barriers for many different learners. But there are some specific things for language learners - and this can be English language learners or multilingual learners if you're in a situation where you have children learning in a second, third language - The The one thing that I think that can be especially useful about a UDL process for teachers is to think about the variability of those students. If you look at your culturally and linguistically diverse students, they they're going, they're going to come from very different backgrounds and experiences and ability levels and needs. So if you are a teacher of ELLs, there's not just one set of strategies or a couple of strategies that you would do for a lesson. You might think about the variability of the ELLs in that particular classroom. So, for example, some of the variability factors for ELLs can be the age at which they immigrated to the country, it can be their prior schooling experiences before coming to the country, it can be their language proficiency in their home language. So all of these variability factors are going to affect how your language learners learn in in the in the classroom. So if teachers start thinking about that design process that I spoke about, for the first question, and thinking about the variability even amongst the students who are receiving services for, let's say, English language learning, they can then put in some of the UDL based strategies to address the different needs even of the ELLs. And I just want to point out, on your slide, Nick, the very first reference there, the Torres and Rao book called UDL for Language Learners that is a book where my co author Carrie and I have really gone into depth on these issues of how, even within language learners, there's a lot of variability, and we've given we provide several classroom vignettes of how

you can apply UDL to lessons focused on language and literacy development.

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Nicholas Hoekstra: that's excellent. No, it's an important detail to remember: just because we have the term English language learner there's no reason to to assume that all of those students are coming from the same even initial first language backgrounds. i've been in classrooms where i've been learning a foreign language with people from a range of countries and, obviously, we were all very distinct. So that's a that's an interesting aspect to consider.

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Kavita Rao: Yes, absolutely, that's something that I think I mean teachers have so much to deal with that sometimes you're like, "okay these students need this," but sometimes, if you look at the variability, you can get a little more nuanced about what's going on, even with a group of students.

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Nicholas Hoekstra: Excellent. Now, I guess, getting into a little bit discussing technology, in your work, you discuss ways in which technology can be used to... in the classroom to support students with disabilities. Could you speak briefly on the intersection of UDL, technology and especially online learning?

11:09

Kavita Rao: OK, I really love this question and I really I could probably speak for about an hour too. I know we only have about 15 minutes for this whole interview, so i'll keep this brief, but. So technology and UDL just go hand in hand, so I do want to be clear, I know this is a question that always comes up: "do you have to have technology to do UDL?" No absolutely not, there are many UDL strategies that don't require technology. However, if you have access to technology and digital tools in your classroom or you're setting, it, that really facilitates the use of many UDL strategies, because technology and digital tools are inherently multimodal. They give you environment, environments where students can bring together video and audio and graphics and texts and so digital environments are really wonderful to enact many UDL based strategies in the classroom. And then the online learning piece, especially with the pandemic last year, I think we all kind of got thrown really quickly into online learning, so I think many K through 12 teachers got to really see where technology, where the pros are of using technology for students and where some of the cons are for using technology for students. But I think, if I have to answer this question in a short in a short soundbite, I think the biggest thing for me that has emerged in the past, maybe i'd say the past three to five years, i've been i've been doing UDL technology, and technology and online learning for a couple of decades now, but just in the past five years or so we've seen just the ubiquity of mobile devices and Apps and there's just so many things that all learners now have. In the past, there were the classic assistive technologies that you, you know, that those were on the IEPs for the students with disabilities, they were the technologies that students were mandated

to have to support their learning needs. One of the beautiful things now is that many of the instructional tools and the Apps that we all have on our laptops and our iPads and our phones or smartphones, Those have assistive features with with within them now. so, for example, we can invoke text to speech features on our laptop or on our mobile devices easily without buying anything new. Similarly there's all kinds of features like highlighting and contrasting and speech to text and i'm just giving you a few examples, but I think the key now as educators and teachers is really understanding how the tools that we use every day: what is assistive about them? What are the assistive features? And then, once you identify the assistive features; again, using the UDL design process that I talked about, thinking about how you can invoke those features in a lesson, how can you get kids using those features? So we now no longer have to go out and buy an expensive assistive technology necessarily. In some cases, you might still have to do that, depending on the child's need, but, in many cases, those tools are now at our fingertips already and the key, I think, as teachers, is knowing what are some of the assistive features that are built in and how can I make sure that all my learners have access to those and can make choices about using them. I will also add one thing that I think is important about using the assistive features of technology or instructional technology is both the teacher knowing what those features are and then how to use them, but also giving kids practice opportunities to use those features. Because, just because they're on the technology tool, it doesn't mean that the student or the child will automatically know that it works, that they can use it or it's good for them. So I encourage the teachers that I work with to develop lessons where all students get to maybe experience the using the annotation feature, the highlighting feature, text to speech, whichever features that you're using. And then, allowing the students to make choices about which ones they liked, which ones helped them, and they can continue to use them. So again, to make this into kind of a sound bite, I think the most important thing these days about the intersection of UDL and technology and online learning is really looking at the fact that instructional and assistive technologies have kind of merged, and seeing how you can best use that to support all our students. The detail that you, you mention there which I really like to hear is that providing opportunities for all students to use these technologies, because I think, in the past, sometimes we've made the assumption that, maybe, text to speech is good for the students with visual impairments without considering that text to speech might also be useful for other students within the classroom. And if we don't give those students an opportunity to experiment with it and test it out, you know, they'll never know that here's this resource that they've been missing out on. So I love that that that notion that we need to be giving opportunities for all the students to to experiment and to use these these different, these different technologies and these different assistive technologies. Absolutely, and I think that the key there is also choice, like letting students know that it's there, giving them all a chance to experience it, and then making the choice - if they're old enough, of course, if you have really, really young kids you may not, you know, they

may not be ready to make the choices themselves, but if you're working with like elementary upper elementary on to secondary it also empowers students to know that "hey, this works for me, I really like this" and there are some kids who might want to use text to speech   some days, but not other days. And that's perfectly fine. You should also be able to invoke and use the tools when it works for you.

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Nicholas Hoekstra: I love it that's that's great. And, finally, to our last kind of major question here, so you have worked in teacher preparation in many places that have rural and remote populations, such as the US affiliated Pacific Islands. What are some considerations for teacher preparation for remote and rural populations?

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Kavita Rao: Yes, so I have; before I was a professor at the University of Hawaii, I worked in the islands of Micronesia and American Samoa training teachers and often online. And this was back in the early 2000s when the technology was less developed for online learning. And then more recently in the past decade, i've been working at the University of Hawaii where we serve many islands in Hawaii, Hawaii, and so again, I work with rural and remote teachers. So some of the things that I think are really important for teacher preparation in rural and remote areas is understanding the needs of the populations and the teachers that you're training in those areas. So one of that is just really kind of having a cross cultural dialogue and not just assuming that we are the teacher educators, we know what we're telling you. So one of the ways that i've done that is using synchronous learning opportunities robustly to engage with my students that i'm working with; the students being the teacher candidates that i'm working with. And it's interesting because when I first started doing this, I think, like 15-20 years ago, there the synchronous technologies were much harder to use. We were using things like illuminate - a technology - and people have to download things and it was sometimes harder to connect. These days I think we've moved really far and people are using Zoom and Google Meet and, most of us now, know how to use it, because of what happened last year with the pandemic. So, I think the key would be using those synchronous connections to have more of a dialogue, as you're as you're teaching the strategies that you need to about, you know, as if you're a teacher educator, you are an expert in strategies that you need to teach teacher candidates. But, really, also dialoguing with the teacher candidates in the location that you're in through synchronous meetings about "what are the scenarios you're working in?" "what works for you?" "what do the children in your areas need?" So that's one thing: using the synchronous connections to kind of have a cross, a cross-cultural dialogue. Because the issues for rural and remote places are very different from urban schools and the schools where your teacher education facilities might be. The other other really important thing that I learned when I was working with teachers, especially in the US affiliated Pacific is when our teacher candidates are in rural and remote areas, they themselves might be isolated. So they might not have a group of teachers, teacher

candidates to talk to. They're not coming into a university and sitting in a classroom with each other if they're if they're doing online learning. So one of the things that I used to do in the Pacific is have certain days, where, If the if the group i'll give an example: I used to work in the Marshall Islands and I would have the teachers in the Marshall Islands on Saturdays would get together in one room. They would drive from wherever they were, and I would log in and work with them. And it may not it didn't have to be a class session, it was just me logging in and talking with them. And they would have each other in the same room. So, along with the synchronous sessions, I found that if your teachers are in a place where they can actually come together in person, if it's convenient, that was a strategy that people really appreciated. Because they could make those connections, talk to each other, and not feel as isolated as learners. So those are just a couple of strategies that I that I would suggest working for rural and remote populations with teacher preparation. I think the biggest thing is not assuming that what we know in our urban more urban city environments is the same as wherever our teachers are. So really listening and dialoguing with teacher candidates about what's going on in the schools where they are.

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Nicholas Hoekstra: The learning process is a two way street. You know we can learn as much from what we teach as, and from who we teach, as as the people who we teach can learn from us. I think that's I think that's something we need to remember in all facets of our life.

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Kavita Rao: Absolutely, and I will just add to bring it back home to the UDL and technology piece, in all of these cases where i've done teacher training with remote and rural teacher candidates, I really applied again the UDL design process. I keep going back to that. But i've looked at what are the barriers in the ways that I might be teaching and how can I reduce those. And one of the things I found for the teachers I work within the US affiliated Pacific islands is, many of them spoke English as a second, third language. They had their own home languages. And I realized that just having them read texts or a textbook was maybe not the best way to do things. So what I would do is I would find videos and multi modal, multi modal pieces and record audio. And in back in the day, when the Internet was we didn't have as much connectivity, so I would actually burn it onto a DVD and mail it out to people ahead of time, so that they had multimodal materials to get the same information rather than just textbooks. These days, you don't have to burn a DVD, you could probably upload it somewhere and have them download it when they have connectivity, but I think those are important to to really think about providing information in multimodal formats. Especially if you are working with rural and remote teachers from different language and cultural backgrounds.

22:00

Nicholas Hoekstra: I think that's that's great advice. i'm sure we could spend the entire day

discussing these topics, but unfortunately we have to cut it short. But I want to thank you, Dr Rao for joining us today, this has been a super interesting conversation I myself have really enjoyed it. We appreciate your time and work, obviously. For more information on the CIDDL research and practice briefs, as well as other resources for higher education and related services, please go to ciddl.org. Don't forget to follow us on social media, subscribe to our channel and leave us a message. So thank you all for joining us, thank you, Dr Rao for your time. And yeah have a great time of day, wherever time it is that you're watching this. Thank you.