

90 - Transforming Early Childhood Education through Augmented Reality

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Audience: Current Active & Enrolled Students

Episode Transcript

Host Dr. Shipley: Hello everyone and welcome to Early Childhood Chatter with Dr. Shipley and Dr. Heald. We will upload a new episode every other week on Wednesdays.

Host Dr. Heald: Twice a month we come to you with a 10-minute professional development with new ideas for you to try.

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Today, we are thrilled to have Dr. Savannah Thomas with us today. Dr. Savannah Thomas is the founder and chief executive officer of LumaKids.

This is an innovative learning solutions and tools company. She is an early childhood educator of 15 years with experience in the classroom and in leadership in the United States, United Arab Emirates, and Saudi Arabia. Her favorite thing to do is soak up all the moments being a first-time mom to a beautiful, curious 14-month-old.

Welcome, Savannah.

Savannah Thomas: Thank you.

Host Dr. Shipley: Yes, Savannah. We are so excited that you're here with us today, and you're going to talk about transforming early childhood education through augmented reality, which is super cool and something that I don't know much about, so I'm excited to get to chat about this. But first of all, why did you choose this topic?

Savannah Thomas: Well, I have had an interest around tech for many years. And so actually, when I was working on my doctorate degree, I was researching the cognitive ability of pre-kindergarten children through the use of tech in their classroom.

And so that's kind of when it started, and of course, that was a good maybe like eight years ago when I first started my doctoral journey. And so just over time, I've just continued to have that interest. And so back in 2015, I actually took this crazy leap and moved to Abu Dhabi, which is in the United Arab Emirates.

And most people are more familiar with Dubai. It's like the neighbor of Dubai. And while I was there, I was serving initially as a kindergarten teacher, and then I transitioned to leadership.

And I was working with predominantly second language learners in that school, and they were three-year-olds through five-year-olds. And they were on the brim of like trying new tech and just really trying to understand how to have our youngest learners learn English. And so I had found a few different tech tools that were really good.

However, they didn't really offer all the things that I thought would be beneficial for those students to learn English. So that was kind of like how I kind of got started and just where the interest came from. And of course, that was eight years

ago, and times have changed a lot. A lot has changed in education since then, and so that's kind of where my love of tech in early childhood kind of started to evolve.

Host Dr. Shipley: Okay, so that's perfect. So I want you to break down for us, though, for people like me, and Steph may know more about this because she is real techie.

What is augmented reality exactly in the classroom? What would we see if we walked into the classroom, and this was going on?

Savannah Thomas: Okay, so of course, it's emerging now in education in general, but especially in early childhood. So augmented reality is actually different from virtual reality. I feel like a lot of people are talking about like the VR sets and virtual reality.

Now, in virtual reality, it's basically you're in a digital space or a digital world, whereas augmented reality just kind of refers to technology that enhances our real world by actually overlaying digital information over that real world. So like in my case, the flashcards that I have, we're overlaying an image, which is a 4D image, as well as sounds, and then in some parts, text.

Host Dr. Shipley: Okay.

So does that make sense?

Host Dr. Shipley: Yeah, yeah, yeah, definitely. I mean, and that's what I wanted to like just fill with that look like because you are right. I was thinking augmented reality, virtual reality, there's so many things out there right now, like how's it all working? So thank you for explaining that.

Host Dr. Heald: And I'm super intrigued because like Dr. Shipley said, I love technology and I think the more we can use it to supplement the great teachers that we have in the profession, the better off we are going to be. So I'm really excited. Talk to us about some of these specific tools or experiences that our educators can tap into.

Savannah Thomas: Okay. So when we're talking augmented reality, if we're thinking about what the research says, and again, it's emerging. So there's not a lot of studies that really support the magnitude that this technology provides for our youngest learners.

However, I will say of the studies that I found, and it's less than 20 studies that have been done, and less than 10 of them have actually been in the U.S. and the other 10 have actually been abroad. But that research does say that augmented reality in an early childhood setting increases engagement, it significantly improves its conceptual skills, it offers improved behavior for students. And we all know that when we keep our students engaged in the process, it does reduce the risk of continued behavior challenges, right? It also accelerates learning.

In my case here with the Lumi kids, I actually had native English speakers do all the pronunciation for all the objects that you can experience with our augmented reality. So we have that pronunciation and that speech component. And then we know that it also just supports high levels of participation, whether that's talking with the teacher, talking with the peers, collaborating, just really being engaged in the learning, or what I like to say in the play, because we all know that play is a child's work, and we know that play is the gateway to learning.

And I know there's so much controversy, you know, with the different systems having different beliefs. But for me, I really do believe in the power of play for learning. So, when we're using this augmented reality and these flashcards in the classroom, what does that actually look like? What can our students do, per se? What can the teachers do? And we're thinking of things like they're repeating the names in the sounds, you know, whether it's an animal or a vehicle or whatever it is.

They're talking to each other about what they see. How many times do we talk about turn and talk or think, care, share, that type of thing? And again, like that's imperative when we're talking about early childhood development. You know that communication piece is so important.

They're taking the animals for a walk, let's say, you know, you're doing scavenger hunts, you're building habitats where you're really cultivating some of those STEM skills, you know, your mathematics, your engineering, and then you're actually going to use the tech to put your animal in the habitat that you created. You know, one of my favorite that I'm working with a couple of schools right now, I'm gearing up for the fall to do some pilot studies. And we're talking about like, you know, the famous going on a bear hunt, you know, but imagine going on a bear hunt, but you're screen sharing what is a bear in the middle of your classroom and you have a bunch of four and five year olds like, "oh my goodness, what is that? Like, how is that in our classroom? Oh my goodness, it's magic", you know, and then you're there and you have that cultivating that sense of wonder and that sense of curiosity.

Like, just think about the types of questions that students are going to ask, you know, with the age group.

Host. Dr. Shipley: I'm really excited. Yeah, well, that's so cool because I have a nephew who's four, he's getting ready to go to pre-K and he would love all of this. I mean, I think he's on his iPad too much.

And that was one of the things that I looked down. One of the things that we ask the people who are going to be on our show is what is the most important thing? And Savannah wants everybody to know that not all tech is bad. And I totally agree with you because sometimes I think that teachers do overuse technology in the classroom, but this seems so engaging.

So I guess, where do you get something like this? Like, where can the teachers, what are the programs? I don't, again, I don't know.

Savannah Thomas: Well, I will say that it's new, right? There are some augmented reality on the market now, but I will say that most of what I've seen through my research is not geared toward early childhood. OK, so I've seen stuff like for medical students, you know, where it's the human body or the brain and they're these super dynamic, you know, models.

However, that's not really appropriate or developmentally appropriate for our early childhood age student.

So with Lumi Kids, we offer our flashcards that are geared for early childhood age, which is typically around three to eight. Now, I have one school working right now on a pilot study and the curriculum coordinator actually emailed me last week and she said that she's finding her first graders and her second graders this summer are the most engaged.

And then she has her pre-K. She said who are just like just really excited and just wanting to play with them all day. So Lumi Kids, you can find us at www.lumikids.co, but also on Amazon.

So, if you go to Amazon.com and type in Lumi Kids, you can see kind of what we offer in terms of our flashcards. And then, of course, like on social media, you can actually see them in action in classrooms. You can see them.

I'm using them with my daughter, who's only 14 months. And I will, as you mentioned, there's so much, again, controversy over tech. And is it appropriate for early childhood learning? And, you know, as with everything, I would say in moderation.

But what's so special about augmented reality is that they're not it doesn't have the same addicting components as some of the other learning games, you know, like they're not going to be playing, trying to earn coins to spend. You know, it's not that type of it's not which I'm not knocking that like everything has its place. But this is a completely different type of experience.

Like this is ultimately to promote collaboration, to promote communication, to promote fine motor skills. Because once you you use the flashcard because you download a free app and you literally just point your device's camera at the

flashcard and your image generates, OK? And it's in your physical environment wherever you are. And then you can use your fingers to maneuver.

You can decrease and increase the size of the image. You can move it around. As I mentioned earlier, you can screen share it.

You could take selfies with it. You could do all of these different things. So we're promoting fine motor.

You know, it's a lot of skills that we're cultivating. And as of right now, they're like I haven't found many tools that do this. I will say I am going to name drop another company that I would love to partner with where I think they have a tool that's really developmentally appropriate for early childhood education, which is also on Amazon.

It's like the Osmo. I'm not sure if you're familiar with that. But that's probably the the other tool that I've seen that really promotes our early years foundational skills.

And then, you know, giving students that opportunity to have fun like the play is really important, you know, and again, like with our images, they're all realistic images. So, you know, like when they when they see the image like they'll associate it with the the real the real thing, if you will.

Host Dr. Shipley: Super cool. That's it's all super cool.

Host Dr. Heald: Yeah. And I'm excited because I think it's a way, right. We have research that shows that even our youngest learners have these digital brains. The brains have actually been rewired and we are in a society that can't ignore the fact that there are tech tools at our, you know, at our fingertips and they're at our children's fingertips. And we have to figure out a way to best and effectively in a developmentally appropriate way, use these tools.

And I think you bring up a great point that it really, truly is not taking the place of a teacher, but supplementing the instruction from a teacher, supplementing the play, supplementing all that's going on. And Savannah, I just I'm excited. I want to see more of this.

I'd love to see an example of this, actually a visual example of this. So hopefully we can have you back at some point at the conference to kind of talk through that. But let's leave our listeners with three takeaways.

Savannah Thomas: Oh, of course, the first thing that I would say is that tech can be developmentally appropriate for early years learners. Don't be afraid. Don't shy away.

But again, with moderation, it can be appropriate. And the right tech is not going to it shouldn't cost you an arm and a leg for one. It shouldn't.

You shouldn't have to like continue to pay for subscriptions for it. And it should be something that you can engage in with a child. So it's not like you just leave them to their device.

It should be something that is interactive with you. And the third takeaway would be that augmented reality provides an interactive and immersive experience that is, one, memorable. We're talking about a wow factor, but also it's here and it's our it's part of our responsibility as educators who are serving humanity to prepare our children for what's to come.

And so here is an opportunity to do it developmentally appropriate.

Host Dr. Shipley: I love that because I think that we all have reservations when it comes to technology. I know I did when I was in my classroom.

I wanted to be the one doing everything. And so, and technology, as Dr. Heald knows, it's it's tough to learn. It's something that as adults, it's it's tough to learn. All of these four- and five-year-olds know way more than we do.

So, Dr. Thomas, as we wrap up, what is one challenge that you have for our listeners?

Savannah Thomas: I think that the biggest challenge that I have been finding, besides the resistance of something new, right, resistance of something new and the other big thing is just people feeling like having access to this, to something like this is more difficult than it actually is. In our case, it's a free app and a deck of flashcards that you can use for a multitude of things.

So it's highly accessible. It's easy to use. And so don't be afraid, let go of your fear.

Host Dr. Shipley: Right. And that that is something that is that is tough to do. So we like Dr. Heald said, we are super excited to have you back on here because I want to know more.

And I think as times change and it gets better, there's going to be so many cool things for you to talk about. So thank you so much, Dr. Thomas, for being here. And we can't wait to have you back.

Savannah Thomas: Thank you so much for having me. It was such a joy.