HARPUR SCHWARTZ:
Good afternoon, everyone. This is Harpur Schwartz with AUCD. I would like to welcome you to the join webinar for the early childhood special interest group, step up AT for early learning. Before we begin, I would like to address logistical details. This webinar schedule for one hour, we have CART captioner available. If you would like to ask that, click the close caption button to view subtitles.

If you like to make them smaller or bigger, click on the captions again. A newsroom option allows you to adjust and move your captions as you feel. This webinar is being recorded. It will be posted to AUCD webinar library. If there a time for Q&A, feel free to submit questions in the chat box for the Q&A session. I will now turn it over to Doctor Mary Beth Bruder, to introduce our speakers for the session.

MARY BETH BRUDER:
Thanks, Harper. And thank you for everybody joining us today. This is a much anticipated webinar, because as Michelle Remembers, we try to have this before COVID. It is a very very important topic. And that we actually had another webinar. So, I'm glad everything is on schedule. Michelle and I were just talking about things getting back to normal. Schools are opening, kids out and about, and they are more needed for assistive technology, and not just constructive technology.

So, Michelle Schladant is here with her colleague, and she is at the Miami mailman Centre. She has been very active there in the early childhood arena. Heads up, assistive technology, and she has been a lot of work there. So, she is a professor of clinical pediatrics at the Miami mailman Centre child develop meant and she is a project director. So, I will turn it over to Michelle and a colleague, so she can teach us everything that we need to know over the next hour. Thank you, Michelle.

DR MICHELLE SCHLADANT:
Thank you Mary Beth. And welcome everybody who was tuning in today. I have the pleasure of presenting with one of my colleagues Doctor Lydia Ocasio-Stoutenburg, who has years and years of experience in special education. We are here to talk to you today about our Step Up AT program for early learning. It is a program specifically designed to help support early childhood educators, and parents, in the use of assistive technology to support early learning.

We are going to talk to you about lessons that we have learned in a post-pandemic world. As Mary Beth mentioned, we are both from the University of Miami,
SPEAKER (MALE):
Centre for child about me. In the next hour we have a lofty agenda. We are going to talk to you about 18, how to use assistive technology for supporting early learning. We will provide a brief overview of our Step Up AT program, website and resources that we have developed.

We would talk to about a two-year pilot that we'd conducted. I'm right in the middle of our pilot, COVID happened. So, we had lots of lessons that we learned, and we will be ending our presentation to what we learned from our COVID experience and how we have revamped our program for better sustainability. Then we will end with some takeaways, and hopefully have a chance to answer some of your questions, if you have any.

So, if you are tuning in with us and you would like to write in the chat box. Tell us your name, your role, where you are from. Share with us how you envision assistive technology supporting early learning in your state, district or community. So, we will take a moment to have people write in the chat box. If we do not, then we will keep moving right along.

I see we have some of our colleagues from Miami tuning in. So, hello to our team. All right. New Hampshire and Maine, program director. We have a speech language pathologist from Denver. Deaf mentor from Memphis, Tennessee offering virtual mentoring sessions. Welcome, everyone. Betsy, hi, nice to see. Texas technology access program. Robotics, using robotics to offer activities to children with autism.

Welcome, everyone. We are glad to have you joining us. It looks like we have 0 to 5 parent advisor at the Tennessee school for deaf. Doctor Ocasio-Stoutenburg is in special education and she oversees our community outreach efforts and is part of our research team. So, let's get into assistive technology for early learning, just to give you a very brief overview. So, as early child educators, we know that early learning, and specific early literacy skills, are the foundation for academic success in young children.

Early literacy skills encompass concepts such as print, alphabet knowledge, phonemic awareness, and vocabulary developing. These skills, we know from research, are essential and necessary and often times taught in early childhood settings. These skills are necessary for kindergarten writing.

We also know from the research that young children with disabilities may need support in accessing these skills, which are foundational for kindergarten readiness. We also know that children with diverse abilities may also have needs for other learning needs. These include the need for support in the area of communication, social and emotional development, transitions, play, independence and self-care, making choices, and connecting between home and school contexts.
So, to help bridge that gap for children who struggle with various early learning skills, there is a concept called assistive technology. Assistive technology, essentially, is any tool or taxation -- adaptation to help a child do something that he or she could not do without it.

When we are talking about assistive technology, we are talking about specific tools to help meet the needs of a child. And it can be any child come across any needs, any activity, such as learning, player communication. It goes beyond computer or digital technology. I will show you some examples that show that assistive technology can be a very simple adaptation to something very complex, such as a computer.

The problem is that often times teachers in early childhood settings may not receive the training to implement assistive technology. Well, we have found in our research is that sometimes teachers have training and special education, and have some knowledge to help support the needs of children with diverse learning abilities. However, most of the teachers that we have worked with, they have had very limited training, specifically in the area of assistive technology.

This is consistent with what we have learned in the research. Some contributors to this lack of training may be that traditional professional development activities may be expensive, time-consuming or inconvenient.

So, some examples of assistive technology to support early literacy activities can be something as simple as a teacher pairing a book about trains with a toy train. So, in this picture we see a toy train as visual support to help during a story book about trains. To support letter knowledge, a teacher can use magnetic letters as visual support while reading an alphabet book.

Other examples of assistive technology can be the use of a multi-message recordable communication device, to help a child make words that rhyme with "cat" to help support phonemic awareness. And to help with vocabulary instruction, we see to children taking turns using a two message communication device to read the repeatable line of the story.

So, as you can see in these examples, these are very simple or sometimes called low-tech or no tech types of assistive technology, to help support a child in participating in these early literacy activities. So, to help train teachers in using these types of assistive technology, we developed a program that was funded through the US Department of Education office of special education programs called Step Up AT. And we have our website on the slide. It is www.stepupat.com.

You are welcome to go to our website and see the resource that we have developed. We will talk more about those resources in the next few slides. But, essentially, what Step Up AT is, as a tailored
coaching program to coach teachers and parents to adopt evidence-based assistive technology practices - and we will talk to a little bit more about what those AT practices are. These AT practices are designed to help improve early learning outcomes for young children with disabilities.

So, now I will turn it over to Doctor Ocasio-Stoutenburg, who was going to talk a little bit more about what our program is.

DR LYDIA OCASIO-STOUTENBURG:
Good afternoon and thank you. So, I wanted to talk to you today about how we designed our program. So, we really looked at creating a shared vision. This is how we realized that we needed to go out our program to be really responsive to our stakeholders. So, we, as Step Up AT team in our resources, would provide some ongoing support to schools, teachers administrators and support staff.

This includes teachers aides, because they're working in tandem with the teachers in the classroom. And the TA support kids with disabilities throughout the day. As well as an inclusive classroom. That support would provide support to students and families as well. We are including families in this initiative because we want to connect the home and school context together to make it more effective, and so that the kids have wraparound support with 80. We have these double arrows because we are talking about sharing our resources, and we learn from each other.

Although we designed our program, we are developing as a interdisciplinary process. So, who was Step Up AT fork? It is for schools to increase the use and knowledge among all personnel and make sure it is always considered for children. So, we know that assistive technology should be considered for all children with disabilities. But, we want to know that all school personnel know that and have access to it.

For teachers, we want to increase their use in the classroom and increase their opportunities for participation in everyday activities and increase comprehension in early learning activities. This includes everything. Circle time, small group activities, transitions - we want to make sure that it is going to be considered and included across the school day.

What we learned also, I will be include in our program, is that all students benefit from assistive technology. So, of course we are maximizing access for children with disabilities. But, we also noticed that our children without disabilities are also enjoying the access, playing with their peers in ways that they may have not have access to.

So, we are very intentional about how it aims to help students with disabilities. We also talk about families. So, it is going to help families in their learning, communication and other development of skills at home and are their environments. So, we think about making requests at home, communicating at
home, and other activities at home that are going to build those liveries -- literacy skills.

How do we deliver it? So, there are many ways that we deliver it. We are intentional about building this bilingual, online modules for teachers and parents. This is been a part of the past five years of our work, developing that so that we are responsive to what our teachers and parents and families and students. Being able to have access where they can log in at any time of the day and access their learning.

But, they also have access to the lending library through our statewide program, Florida alliance for assistive services and technology, FAAST. So, parents able to get a loan a device for 30 days, see the works for their children - which is really effective and responsive to their needs. We have found that our teachers are able to also ask these devices and see what is working in their classroom.

Another feature of our program is his practice-based coaching. It is hybrid. It is able to do it virtually and impersonal learning. We will talk a little bit about practice-based coaching in a minute.

So, emphasizing how we developed our program. He aligned the practices to the division of early childhood. So, knowing that the teachers and staff are going to conduct assessments to determine the 18 needs of the student. Arranging the environment to make sure we are in including participation in early learning activities. Positive behaviour support.. So we are looking for children who may have autism or other behavioural needs our support, helping them with those transitions and helping them with their routines throughout the day.

Throughout AAC device, facilitating communication. Across this and other shared materials, it can be low-tech, high-tech or no device. It does not have to be a high tech device like an iPad. Adopting the learning environment for students with hearing and vision difficulties. Also adapting writing activities to increase participation. So, we know sometimes that their children with fine motor difficulties, and they can be very difficult. So, we want to provide some access for that as well.

An switched access support to encourage child independence. So, again, making choices that are important in early development. We are also going with the recommended practices. It is expanding that to identify the child's needs. So, we know that inclusive classrooms that we want to maximize axes far to do with disabilities who needs important things that they may not necessarily be able to do.

So, what are we going to do? Adapt the environment in order to meet those needs. Again, it can be reading time, circle time, singing, a teacher reading about. It can be almost any activity. We are going to plan for and provide eight opticians. So, this is what we are doing with the DEC recommended practices.
So, I mention practice-based coaching. And it is centred around our program. This is what I mentioned in the slide about the double arrows, about working together. Not just with our programming team personnel, but supporting the coaches so it can be sustainable, supporting our teachers and families and children that we serve. It is going to be delivered, the coaching, through a four-week cyclical process. So, we have cycles of learning in which they can access different modules.

What is also important are these debrief sessions. So, if they were delivered virtually. They are really important. They are opportunities for teachers to really reflect and work with a coach and decide what they're going to do next, what they can do to improve the delivery of 80 for the children. Observations are conducted in person. So, both were also important in another adaptation that we had to make because of COVID.

Now we will talk about our pilot study, and I will turn it over to Michelle.

DR MICHELLE SCHLADANT:
As I mentioned, we developed our program in the first two years of our project. Then, we conducted a two-year pilot study to evaluate the impact of our program on teachers use of assistive technology - teach our children use of assistive technology, and the impact on children's early literacy skills.

So, what we did is conducted a randomized controlled trial, investigating the impact a right AT intervention for early childhood programs. We recruited six specialized preschool programs serving children with disabilities ages 3 to 5.

We conducted the pilot in for community-based schools -- preschools and two District-based preschools, in the nation's fourth-largest school district, in Miami-Dade County. We delivered the intervention, how we delivered our intervention, teachers and teacher aides were trained as a unit. We utilize practice-based coaching and teachers and teachers aides had access to our online modules and resources which were developed and then are available on our website.

So, our two-year pilot study methodology. Our controlled schools, in year one, became intervention schools in year two. We collected quantitative and qualitative data. We used -- we developed a teacher 18 knowledge belief and you survey. We developed an 80 teacher observation checklist to observe teachers use of AT during early literacy instruction. He also developed a child AT use observation checklist to evaluate children's use of AT during early literacy activities and remeasured the developer.

We conducted focus groups with teachers, teachers assistants parents and administrations. And we analyse the data using repeated measure ANOVAs, and grounded theory methodology using systematic coding procedures for emergent themes. Like I mentioned, context matters.
We worked with both district-based schools and community-based schools. So, District-based schools are schools that support children with and without disabilities, they surcharged with disabilities and IDEA parts C and B. They have access to districtwide ESE resources and assistive technology to provide to the students.

We also work with community-based schools. These are often schools that are contacted by the school district that are contacted to serve children with disabilities under IDEA parts C and B. They may be privately or independently resourced or funded, but they serve children with and without disabilities. In the future, we are now beginning to work with head start programs, and these are programs that have historically serve economically disadvantaged preschool children.

They serve children with and without disabilities, and serve children with disabilities under IDEA part C and B. They have some access to district resources. So, in year one, as I mentioned, we conducted a two-year randomized controlled trial. In the middle of our randomized controlled trial, COVID happened.

So, we are going to share with you our year one findings, and then are your two findings. We will also talk to about the adaptations that we had to make because of COVID and where we are moving forward. So, in our first year findings, we worked with, in our interventions, we worked with two intervention schools. They were community-based preschools, contracted by the school district.

We worked with two intervention schools and we had to control schools. We had 13 teachers in our intervention, and 25 in the control group. For the children and parents we had 52 in intervention and 47 in the control group. We had a question here, did you look at differences across different types of early childhood classrooms?

In our year one and two development phase, we looked at inclusion based classrooms. But, in our pilot they were all special education classrooms. So, specialized preschool classrooms, serving all children with disabilities. So, our year one finding, as compared to the control group, we did find increases in - significant increases in teacher knowledge and knowledge and belief from pre-to post.

We also saw children AT you significantly increase from pre-to post. The good news, in terms of early literacy skills, is that all children in both intervention and control groups, made gains in their early literacy skills. But we did not find any significant difference between our control group and our intervention group when looking at early literacy skills. We will talk a little bit more about that finding in a bit.
In terms of our qualitative findings from our focus groups, we found that teachers reported increased engagement across activities. Teachers valued the teacher assistants being trained alongside them. So, teachers and teachers aides were trained as a unit. Teachers appreciated the role of the coach, it was instrumental in presence and creating resources to have a coach working with the teachers.

Learning how to implement AT verses learning about AT. So, having the coach work alongside teachers, help them learn how to implement assistive technology in early literacy activities versus just observing a module and learning about what assistive technology is. So, actually having that on-the-job, practical experience with the coach, teachers valued that.

Parents of children with disabilities reported appreciating the streamlined AT resources available on the website. It was a "whole new world" for teachers and students I have access to assistive technology. Parents reported requesting more assistive technology at IEP meetings. And we are looking, in a post hoc analysis, at the IEP and AT considerations. So, we do not have them yet, but we are looking at the data to see there any differences in AT on the individualized education plan.

So, I will turn it back over to Lydia, who will talk a little bit more about our qualitative findings.

DR LYDIA OCASIO-STOUTENBURG:
So, I want to speak to how important it is to gather stakeholder perspectives on the use of AT, because it speaks more to exactly what changes are being made and how. We look at the role that this is had, the impact it has had on the teachers in their and structural delivery -- instructional delivery. But, the changes that they are seeing in the students and observing, as well as the families. These are things that we normally do not have access to.

We can see delivery through coaching, but we cannot really see exactly how it is going to be implement it on the day today. It is why we have been very intentional on focus group data. So, this has been a teacher was been talking about the lending library and howitzers provided access to resources. She says that, "the lending library has been amazing because we don't have any switch toys here. You don't have it. And being able to borrow those and having, you know, seeing the kids engage with them and actually like to participate, even if it's just touching it, and getting a smile was huge for me. I'm getting like goosebumps. It was huge for me, you know, because... Some of these kids I've had a ready, this is my second year with them and... You get nothing out of them for like the longest time and then you see them actually like smile for something. I'm going to cry."

So, you see these are making a difference. And this is a quote from a parent. "It gave at least are some more tools to communicate with sometimes he also took home which is good. It looks like it helps them, communicate more. He's almost nonverbal... He now points more to staff and I think it has, it has helped him. And they told us what they were using here and will be could use at home. So
we have tried to do that, and I think that was helpful."

So, these are all really important features of early childhood development. So, let's talk COVID-19. So, what modifications do we have to make based on covert? So, our program began in 2020. At that time, teachers receive direct coaching and supported the teacher aides. Now they're going to receive indirect support from the coaches. Midway through March schools closed, so everything shifted to remote learning.

The focus of the coach moved to helping the teacher deliver remote instruction, but also to help the parents. There were kids at home trying to provide resources, not being able to get those resources the parents. Not being able to send home worksheets. Parents sometimes not having printers and being able to print those out. It was really tough on the teachers.

So, some of that coaches shifted to supporting the teachers with instruction to this virtual delivery, but also helping the parents because we were into mitigation with the parents as well. Also, our observation tools. So, we adopted that to interviewing teachers. That was really important, to interview them and to find out their experiences now.

So, we also modified the interventions, because of COVID. So, through coaching, the Step Up AT program was at two schools, with one month remaining in coaching. So was modified with each school to work with teachers virtually until the end of the program. So, we continue to support all the way up until the end.

The coaching protocol also had to be modified to continue learning, the practice, and debriefed/generalized their insights to integrate AT into their fertile teaching practices. So, considering that support but virtually.

Parent engagement also took a different spin. So, we had to reach out to particular families offering coaching and virtual demonstrations. So, some of the models were already -- modules were already accessible. But, we had to introduce them to Zoom.

Now we will talk about some modifications that we had to make to our methods. So, remember we had six schools in year two, in total. Two intervention schools, to control schools, to follow-up schools. There were four types of data collection. Classroom observation, literary assessment, surveys and focus groups. So, for the classroom observation, we adapted th AT use observation tool into an open ended questionnaire.

So, teachers would respond through zoom in their virtual interviews. We also used interview-based literacy assessment to those same virtual interviews. Our surveys, we made available in electronic
format. They were sent to teachers and parents via email, so they can just click on the link and also respond that way.

The focus group will also conducted through Zoom for teachers and parents. So, for year two pilot study, the quantitative findings, the teachers and TAs in the intervention there were 27 and in the control there were 18. The children and parents enrolled in the study, in the intervention there were 34 and the control was 51.

Again, to schools. So, the community-based schools that were contracted with the school district, and also the district-based prekindergarten special education program. So, we had those unique identities of those two schools.

I will talk a little bit about why that is important. So, in our qualitative findings, the AT teacher knowledge increased for both the intervention and control groups. So, positive trends for the 80 teacher and child use for the control group, but it was not statistically significant. All children in the control and intervention group improved an early literacy and there were no significant differences in that.

So, let's look a little bit further into that. We did ad hoc analysis on that. Comparing the year one and near to intervention schools. So, just looking at the schools that received the intervention. So, the hypothesis was that children's AT use will have a positive impact on their early literacy skills.

We found was a positive association between the changes in children's AT use, in year one and tier 2, and changes in their early literacy skills in those same years.

The second hypothesis was that the teachers AT use will have a positive impact on children's early literacy skills. And we saw a positive association between changes in teacher AT use and changes in children's early literacy skills in year one and two.

In our qualitative findings, it reveals how COVID was a magnifier and a bridge. It was an magnifier because it was magnifying some of the issues that were already there. But, also a bridge and providing supports for things that might not necessarily existed before.

So, whether the magnified? It magnified the digital divide. So, there was some schools and families who did not have those resources, and did not have access to the support they needed, even for their own instruction. There were research and access barriers for teachers and teacher aides. So, we are talking about community-based schools who may not have access to the same resources that the District schools have.
Teachers were scrambling, not just in our district, but also all over the country. Teachers were scrambling to provide remote instruction. That was challenging. There was the loss of in person coaching and truncated program. I was really significant because the in person coaching, and being able to be there for the teachers and really examine what they could be doing better or what they want to improve on our giving them the positive feedback, it was kind of lost.

Parents were also managing therapies in remote work, so that was a struggle and a challenge and schedule. Also, children with disabilities were struggling with virtual instruction and screen time. So, a lot of the families noted how children were nonverbal or children what difficulty just staring at the screen, trying to be engaged as much as possible through virtual delivery.

But, here's where it was a bridge. So, children was using AT at home, communicating and making choices. It also increased access for parents through Zoom. So, the coaching program, being able to reach out to virtual delivery also minimize them having to travel to a site and participate. So, some of our parents were not able to do that before.

The coaches primed the teachers for technology and 80. So, this shift that everybody had to assistive technology and virtual delivery, the teachers were ready primed and the coaches were there supporting them do that. The students and families also have familiarity with the virtual platform. So, a lot of the therapies that children were receiving with the telehealth and Zoom. So, they had that familiarity through the virtual platform.

It also increased communication and transparency through home and school, because that was a lot more communication had happened as a result of this. It also levelled the resources for community schools. So, even though everyone was really shifting to that, we saw that minimized from schools that may have had fewer resources and less access.

It also involved a lot of checking in. So, promoting the understanding of family needs. So, while there was the shroud of we are not sure why pears are not engaging. Taking a peek at what is happening in the day of the life with parents and caregivers with children with disabilities, we were able to understand that better. Here are some of the quotes will be pulled out. I have a magnifying glass to show how it was magnified.

"My problem was how to get access to these print something that should be nice and in colour. Now the printed out in black and white. Which is not the same, especially for visuals for the kids with visual impairments. It was insane." This was the teacher talking about not being able to Print things out, to provide the visual contrast for students with visual impairments.

This is a Parent quote. (Reads). So, really talking about the schedule and how they shift remote was
really hard on a lot of families. Now I will talk about the bridge. So, here are some of the quotes.

"I don't know if the coach was in there. I think I would've just kind of given up. I felt so awful about Zoom like I kept saying to the coach and doing it wrong. She was there, like every day. It was a big support for me because I was so terrified. My parents are so nice in return. So it worked out great. I can believe that I learned so much about virtual, you know, teaching and distance as much as I've learned in the last time since the last module."

And here's a parent talking about participating versus being virtual. "I know I couldn't have done that, even if it was available last year, just because there wasn't really a virtual platform before. Now people can call in with the Zoom and just have a short conversation and see how things are, which didn't really exist before."

DR MICHELLE SCHLADANT:
I will unmute. Some of the limitations on lessons learned. Obviously we had a small sample size of classrooms. That definitely had an impact on how our results. The impact of COVID, and having to adjust midway through our study. We notice the difference between District level schools and community-based schools, and the level of AT support.

So, our control schools in year two, they were District schools that had a direct line of AT specialists and AT support and resources. So, our control group, it is not clear what sorts of AT supports and resources they had access to during the program.

As you mentioned, there were differences in how the teacher assistants were coached from the first year of the pilot to the second year of the pilot. In the first year, teachers and teachers assistants were coached directly. In year two, teacher assistants were coached indirectly. We did that for two reasons. The first reason was that in year one, it was logistically very challenging to get coverage in order to directly coach the teacher assistants.

The second reason why we coach the teachers indirectly in year two was that we wanted to help provide - we did the train a trainer module, where we wanted teachers to take more ownership of helping support the teacher assistants. So, we had our cultures --coaches coaching the teachers, who were then supporting the teacher assistants.

So, we made that shift in the second year of our coaching, primarily because it was challenging to have the direct coaching to teacher assistants. We measured child outcomes for children with diverse abilities, and we found that it was a huge challenge. So, we are lurking -- looking at how we can better measure child outcomes.
We use an adapted early literacy skills call assessment called the bridge. He adopted it - it is a portfolio assessment, but we adopted it as a teacher interview to track early literacy skill development. We wanted to know if there were other assistant technology missing that had it impact on. So, in our future years, we are going to be looking more closely at how we can measure child outcomes to look at the impact of assistive technology is having on children's access to early literacy and early learning.

So, we're looking at things such as increased participation, increased engagement, and those types of child outcomes. Another big lesson learned was that in working with our schools, and both years, there was a high degree of teacher turnover and poor sustainability of assistive technology after our project ended. So, we found that as our coaches finish the programs and left the school, that the follow-up and the continued use of our resource decreased dramatically.

So, we see the need to look at how we can better provide resources to keep the program sustainable after our "expert coaches" leave the school. Then we learn to focus group data, more about parent engagement and the struggles and challenges to engage parents in that home-school connection.

What we have learned from COVID is that parents are dealing with multiple days, competing demands, multiple children. Some Trojan -- some parents have multiple children with special needs. So, bridging that homeschoo connection continues to be a problem, and we are looking at better ways to how to deal with parent engagement.

So review and reflections. Where we are moving forward. I think one of the biggest lessons that we learned is how important, at the start of a program - or even before program begins - how important it is to establish buy-in and gather feedback from all stake key holders. In our pilot, we engaged the schools in all phases of development and implementation of our project, we learn that we have to do more engagement of our stakeholders.

So, as we are rolling out our project for phase 2, we are working with Headstart schools. We have had a series of meetings to establish repertoire, gather input and feedback from administrators, district level support people, teachers and parents - to identify what coaching looks like, what resources they have in the school, what immediate needs they have for assistive technology, with their understanding of assistive technology is, the data they collect, and how we can streamline the process to reduce the burden of our program moving in to provide the intervention at the new school so we are working with.

So, we have lots of meetings, focus group sessions and interviews, to gather information and really establish that rapport with the schools, before we start our interventions moving forward. So, findings from the series of meetings and focus groups that we've had with future schools we are going to be working with. Teachers have a range of backgrounds and experiences. They have some experience in special education, some prior knowledge of assistive technology or instructional technology - thinking
that it is assistive technology.

So, we are seeing some misconceptions about assistive technology, the teacher and teachers aides works together as "work spouse". The schools that we are going to be working with, the primary disability served is autism spectrum, development to delay and speech language impairment. Moving into Headstart, we are going to be moving into an inclusive setting, where children with disabilities are in classrooms with children without disabilities.

So, this will be a new setting that we will be working in. We have seen the anticipated need for AT for communication, behavioural and engagement. Challenges continue to be, whether they are virtual or in class. As of right now, students are returning back to school. So, we are anticipating that all students will be, all children will be in school. Not all children have individual education plan. We have some children who are part services, some children while not been identified yet but they clearly have a need for additional support.

The use of AT, so we do see teachers using visual schedules and communication boards. As I mentioned, understanding of AT, it might be conflated with broader technology learning platforms. So, there may be some misunderstanding about what is considered assistive technology.

DR LYDIA OCASIO-STOUTENBURG:
So, now they want to talk about a new model, our post pandemic Step Up AT 2.0. We found that we really need to be responsive. All of the rapport, the focus groups, the interviews, finding out how they do coaching, looking at the information they gather, looking at the support they provide to the teachers, it was all informative. It is not only informing our research, but it is informing our program and intervention.

Because we want to turn it around and make it customized to the school and the setting. Full, our plan is to have our educational coordinators and our peer coaches to support teachers in their use of AT in early learning. That is very very important at the program level. For a teacher and teacher aides to receive practice-based coaching to support the use of AT inclusive practices. So instructional support at the teacher level. So, the teacher and teacher aide level.

Then finally the child and family level. He won increase early learning among children with disabilities alongside their parents, inclusive practice and cross learning environments. So, when our program is no longer there, we can provide enough support that when we are exiting the school, when we are exiting head start, they can continue to provide support on their own assistive technology.

DR MICHELLE SCHLADANT:
So, we have created, moving forward, is this open source one-stop shop for AT learning. In addition to
the resources that we have on our website, we are developing a curriculum cross walk so that school-based coaches can have easy to follow up-to-date resources, a coaching manual designed for autonomy and "what works", so that people in the school can provide coaching to the teachers without the need for outside coaches to provide the instruction.

We have the 80 coaching modules that we have developed, we are developing more video models for what 80 strategies and devices look like in practice. Some more coaching for teacher support personnel. Revamping our videos and resources for parents, and bilingual virtual workshops. We are exploring new technology and platforms for discourse.

We are utilizing our platform called Torsh moving forward, as it is platform where coaches and teachers can work together to upload classroom observations and provide feedback. It is very easy-to-use. Some in the classroom records the teacher during a lesson and uploads it to the website. The coach views and provides timestamp feedback. We have embedded forms provides a useful way to track fidelity.

And it allows the people supporting the coaches to provide feedback as they are coaching the teachers. We are using technology-based coaching technology. We are using a robot called Kubi, which is the iPad adapted remote control device, where the coach can go in and conduct virtual classroom observations.

We are using Bluetooth headphones, so that we can provide bug in the air coaching to peer coaches who are learning how to coach teachers.

DR LYDIA OCASIO-STOUTENBURG:
So, as a recap of our key strategies that we learned. So, what do we learn from this? These are key takeaways. Develop flexible strategies and technologies for virtual coaching and learning. So, some of those technologies are also in response to the needs. The implementation in inclusive classrooms and home contacts, it was super super important. Again, providing a wraparound support.

Being responsive to contacts, the resources and language supports. Understanding that our teacher and teacher aides may not be able to print all of the resources they need or have access to what they need. So, we are developing classroom toolkits. Access to the AT lending library and customized classroom toolkits, like we said. Transparency and communication are super important, which is why we are developing all of these communication with the personnel and creating this rapport.

So finally the training the trainer model for sustainability. So the stepup team will master coaches support pair educational coordinators for teachers and the teacher aides. Finally, I just wanted to leave for this quote. It is from a parent in year two. "I think all of us are driven by a deep desire to help our
kids. So, I would definitely say this is just another avenue to help you keep with communication, and I know it's like communication is a big thing for our kids with special needs."

Thank you.

DR MICHELLE SCHLADANT:
Thank you. In the last few minutes, do we have any questions, comments, feedback?

MARY BETH BRUDER:
I think you guys did a great job. Thank you. I like how music loosely you guys build the model. I do not think people understand how hard you have to work to do an integrated approach and to come up with some really specific revision of the model.

Two things that resonated was the participatory approach, which is the way to realize to ensure that systems change. And the second one, which I join you in the frustration of looking for good child's outcome measures. Especially if you are not going to do a year, where he can look at regressions or something. But, when you are just trying to get it.

I encourage you to keep doing your own checklist of which will looking for. But, this was just a really great presentation of taking up concept and bailing it. -- Building it. I think there's a question in the chat. Betsy, can you unmute?

SPEAKER:
I think it got answered. I was just wondering about the differences that you saw. It sounds like it was may be more speculative, but that you do think that there are differences across the different types of settings.

DR MICHELLE SCHLADANT:
Yes. So, in our first two-year development phase, we worked with head start programs, inclusive programs. So, we had children with and without disabilities in the classroom setting. In our pilot study, our two-year pilot study, we only works with specialized classrooms.

Moving into this new phase of our program, we will be working with Headstart. So, it will be an inclusive setting.

DR LYDIA OCASIO-STOUTENBURG:
And just to add, we were just discussing, this morning at our team meeting, that because of the pandemic there have been many more challenges that teachers and administrators are observing in children, especially with communication and getting back into those routines after losing it for so long.
So, the demand for the support to assistive technology is definitely there. We want to be responsive to that as well. So, just recognizing the impact that the pandemic has had on children, especially children with disabilities.

DR MICHELLE SCHLADANT:
And I will also say that we found a huge gap in access to AT services for community-based preschools. So, we are going to continue our efforts to work with community-based preschools that may have indirect better serving children, who have in the individualized educational plan, but do not have the access to the resources.

MARY BETH BRUDER:
And that is not unique to Miami. I will say that we see shortages and specialized programs, we're just not doing what we should with AT.

HARPUR SCHWARTZ:
Thank you everyone, and thank you Michelle and Lydia for the presentation. We are at 4 PM. So we will say goodbye now. Thank you again for joining us today. As a quicker manner, the archive will be shared and will be posted to the AUCD webinar library. Thanks and I hope you enjoy the rest of your day. Take care.

MARY BETH BRUDER:
Thanks, everybody.

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