

## Tiered Supports for Individual Learners

Susan Sandall: My name is Susan Sandall, and I am very happy to be here with you all today. And I am going to talk about tiered supports for individual learners in early childhood programs. And another way that we talk about this topic in sort of everyday language is: How is it that we can provide just the right amount of help to support individual children and individual learners? And along the way today, I'm going to give you a little bit of our history and how we came to talk about our version of tiered supports and how our work has evolved as we continue to study how to best include all children and how to meet their needs in early learning settings. So, here we go.

What I'm going to do today is first of all describe tiered supports to meet the needs of individual learners, and then I'm going to use Building Blocks as the framework for tiered supports, but I'm going to talk you through how that framework relates to the Head Start Center for Inclusion, which is the work that Gail Joseph and I did, before we entered into our current endeavor, which is the National Center on Quality Teaching and Learning.

So, I'll talk about how the Building Blocks framework relates to these kind of newer models that we show and use. And then, I will also be sharing some of the evidence to support this approach, and in particular, to support the educational practices that are encompassed within this approach. Before I talk you through each of these graphics, let me just briefly give you a definition that I'm using for this term "tiered supports." Or, it's sometimes called, referred to as multi-tiered systems of supports. And what that means is comprehensive and systematic approaches that incorporate ongoing child assessment and instructional decision-making to address the concerns of children with widely varying learning needs.

So, in all of our classrooms, in all of our early learning environments, we have children with quite varied learning needs. And we are often puzzled or challenged by how to address those needs between the -- when we're in the midst of these active, busy classrooms. So, that's kind of the general definition. And the other thing that all of these approaches have in common is that the instruction and intervention, or the educational practices, are organized by levels of intensity of the practice.

So, now we can take a look at these graphics that I have here on the screen. On the top left is probably the most general of these graphics. And most of you have seen some version of this before. So, in this triangle, we see how response to intervention and positive behavior support are often portrayed.

So, there's a strong foundation for all children, and above that, some more specialized interventions for some children or some of their learning objectives, and on the top, more intensive interventions for a few children or for a few of their learning objectives. So, that's kind of the general, most commonly seen graphic, I think, to portray this idea of tiered systems of supports. Then, if you move to the top right, you see how we portray the Building Blocks framework. And I'm going to talk through the Building Blocks framework in a moment; but one of the things that you'll see right away is that there's an additional tier, and it's above the foundation. We talk about curriculum modifications and adaptations. And we'll talk more about that in a second.

In the bottom right of this slide, you see the teaching pyramid that comes to us from the Center on Social Emotional Foundations of Early Learning, or CSEFEL. And that particular graphic is going to be familiar to a whole lot of people on the call who have either read about or trained with our CSEFEL partners. And you'll see that once again there are more than three tiers in this particular approach, that there's greater attention to the foundation and to work force development. Now, to the bottom left, you see the House framework. And so, as we've evolved in our thinking about levels of support, this is how the National Center on Quality Teaching and Learning now thinks about this notion of a strong foundation, and then, at the top, the roof, how to portray highly individualized teaching and learning. So, all have components that represent effective teaching practices, they all have a strong foundation, and they are all organized by these sort of increasing levels of intensity to meet children's learning needs.

I'm going to add one more to the mix. And this one may be familiar to a few of you. So, about eight or nine years ago, Gail Joseph, as the principal investigator, and I had another center funded by the Office of Head Start, and that was the Head Start Center on Inclusion. And this is how we portrayed these levels of support within that model. And one of the things that we were particularly interested in thinking about and studying and working with teachers about was how do we get at, how do we connect to Head Start's concept of individualizing? And so, this is the graphic that we used for a while within that center. And just as an aside, the materials that were developed as part of this center have been rolled into the National Center on Quality Teaching and Learning, but our website still exists, so you can go there as well.

All right, and then here is the House framework, and this is the way that we currently portray this notion of levels of support, or tiered supports, within the National Center on Quality Teaching and Learning, and we refer to it as the Framework for Effective Practice for including all children and all of their learning needs. But you'll see that we have added two pillars to our house. We added the research-based curricula and ongoing child assessment. So, pulled them out and named them particularly in this particular framework.

Well, let's see -- let's see what each of these levels has for us. So, for today, I'm mostly going to use the Building Blocks framework to kind of frame my work and my talk. And Eileen Schwartz, Gail Joseph, and I, and a host of other colleagues worked together on this now almost 10 or 15 years ago initially with work that was funded through the Department of Education and was named as the Early Childhood Research Institute on Inclusion. And that name says what we were trying to do. We were trying to better understand the facilitators of inclusion within early childhood classrooms and programs. What was it that made inclusion work? What was it that teachers and teaching teams were doing when they successfully included all children and met their learning needs? Now, that was funded by -- through the Early Childhood Research Institute on Inclusion, but in fact we had all been early childhood teachers as well as researchers, and so we brought our experiences to this work as well.

So, we had already been doing a lot of thinking about what it was that maybe we were almost doing intuitively to include all the learners in our classrooms. And then we set out to do this more systematically in this particular study. And then, as I've mentioned to you, it evolved over time to include our work with Head Start through the Head Start Center on Inclusion, and now with the National Center on Quality Teaching and Learning.

All right, let's look at the foundation, or the blue block. When we -- when we sort of framed this notion of building blocks, we referred to the foundation as a quality early childhood program. And we thought about what was it that was a quality early childhood program. It was safe; it had a balance of activities. It had some activities that were child-initiated and activities that were teacher-initiated. It provided activities and experiences that were interesting and engaging for the children. And certainly it was built on principles of developmentally appropriate practice and based on current child development science and theory.

As we have learned more over time, learned ourselves and learned from our colleagues, we have really started to kind of unpack or get more descriptive of what that quality early childhood program is. And we now talk about engaging interactions and environments. So, we talk about a well-organized learning environment and we talk about creating positive social emotional climates for children and we talk about engaging children in lots of interesting, positive interactions. So, as you're listening to those terms, you're also hearing that we've learned a lot from our colleagues at the University of Virginia and really thought about what it is, what it takes to have a quality early learning -- or early childhood program. And so, that's -- that's the foundation. That's what needs to be in place for all children.

And this is just a visual glimpse at what that might look like in a classroom with an engaging environment, interesting things to do, and interactions with adults and with other children. But for some children and for some of their learning objectives, a child might need just a little bit more. So, we're looking at the green block now in our block tower, and we call these curriculum modifications and adaptations. They're fairly small, relatively easy-to-implement changes to the learning environment, the materials, and so forth, but they can make a big difference for the children and the teachers. So, these are relatively small, and here in fact is how we talk about or define curriculum modifications. It's "a change to the ongoing classroom activity or materials in order to facilitate or maximize a child's participation in planned activities, interactions, and routines."

So, a couple of things as we look at this definition. One is that in early childhood classrooms, the curriculum is much more than a set of lesson plans or a set of activities. It really includes, very purposefully, the social and physical environment. So, as I talk about some of these modifications, I think you'll see that we're really trying to examine how it is that teachers can take further advantage of their environment in order to increase a child's access. So, that's what this is all about, increasing a child's access and participation. So, the situation is such that the child, for whatever reason, is not taking full advantage of the learning environment. So, how can we increase access and participation? And these changes are relatively small, but as we said, they can have a big impact.

And when we were initially doing our work with the Early Childhood Research Institute on Inclusion, we thought, perhaps naively, but we thought that if we went into classrooms that had been identified as very good, very strong, very positive, inclusive early childhood classrooms that we would be able to see what it is that the teachers did to modify or change or adapt to better include all the children. And we saw a few changes. Our observers reported back that they saw a few changes to the materials and maybe different ways that the teachers might be interacting with children.

But when we looked really closer, we thought there's a lot more going on here than meets the eye, and how can we figure that out? How can we find out what it is that teachers are doing to include children with varying learning needs, varying learning challenges? And so, we embarked on a focus group study because we thought we needed to talk to the teachers. And so we talked to them in focus groups, and we -- it turned out that we had 13 focus groups that were held across the nation, and these were small groups of teachers who were working in early childhood programs and classrooms that included children with disabilities, children with other special needs, children who for whatever reason were kind of struggling within their classrooms. So, they had lots of experience.

And with these teachers in the focus groups, we discussed how it was that they modified their curriculum, how they modified their learning centers, and how they modified their routines. What did they do in order to increase children's participation? And we came up -- they came up with thousands of different kinds of modifications, and there were over 500 unique modifications that they described to us. And we then took that long list of modifications and sorted them into eight categories, and we had them confirmed by another group of experienced teachers and inclusion experts. And these are the modifications.

So, by far the most popular set of modifications were environmental supports, or changes to the social, physical, or temporal environment -- the schedule, the materials, the furniture, the room arrangement, and the groupings of children. Another way, another category, is materials adaptation. So, this is making things bigger or more salient or, in many cases, more secure. We also had a category called simplifying the activity, where teachers told us about how they broke things -- broke activities down into smaller parts and figured out ways to help the child be successful within their learning activities and experiences. Teachers also told us that they took advantage of child preferences, preferences for activities or toys or people.

In some cases, teachers used special equipment. And the children had already learned how to use that special equipment, like walkers or voice output devices or things of that nature, and then the equipment was being used to increase access to the activities. And then, here are two more: Adult support and peer support. So, two more categories that were ways that teachers could purposefully think about how to increase other children's access and participation in learning activities. And so, what did the adults and the peers do? Well, they join in children's play, they model or they demonstrate, and they encourage participation.

And finally, there was an eighth category that we ended up calling invisible support. So, there are some other things that teachers do. They do things like they plan the order of turns within activities and things of that nature that are really invisible to the eye but have been planned ahead of time. So, these are the types of curriculum modifications that emerged from that focus group study and that we have now continued to study. And there is research support for these types of curriculum modifications, especially for environmental arrangements as well as for preferences or choice making.

And then, another type of modification that, if you're using your memory, you say, oh, visual supports: I didn't see that in the previous list. And that's right. So, visual supports actually cut across all of our previous eight categories. So, visual supports might be process charts; they might be visual activity schedules, or they might be photographs or pictures that support verbal directions. And there's an increased amount of research that supports the use of visual supports in all of these sort of -- for all of these sorts of purposes. Interestingly enough, when we talk with teachers, there are some teachers who already know about the research, and they say, "well, I'm using this modification, because I already read about it or I heard about it."

And there are other teachers who say, "well, I'm trying it out; it works, and so I added it to my toolkit." And so, in both of those ways, teachers helped us understand these categories or types of curriculum modification. We use curriculum modifications all the time. There are lots of them. We can use them -- we can use more than one at a time. And they're really -- think of those as kind of tweaks to the curriculum and to the environment and to the materials. But we also know that for some children or for some of their learning objectives, those modifications aren't going to be enough. Some children will need more learning opportunities; they'll need more practice; and one of the ways we think about this is a little bit more in terms of dosage of the intervention.

So, now we're looking at the yellow block. We call this embedded learning opportunities. So, more intensive, a little bit more specialized. This is how we think of embedded learning opportunities within the Building Blocks framework. Teachers identify what it is that an individual child needs to learn or needs additional practice on. What is it that they're going to teach? Then they think about when and where. When can I provide additional instruction on that learning objective, and where within my classroom activities and schedule, and how is it that I will teach or provide this additional instruction?

So, teachers then, teachers and teaching teams, create short teaching episodes and then embed them within ongoing classroom activities and routines throughout the school day. And, as I said, these teaching episodes focus on a child's individual learning objective or learning target. So, let's think for a minute about what that might look like, and beyond these words, what does that mean? So, think about a child who is not learning their prepositions or spatial relationships. And so, they're not able to follow instructions that include prepositions like on or in or under or next to. And so, the teaching team has decided that this is important; we need to provide additional practice opportunities, additional instruction. Well, they might design these short teaching episodes and then embed them within directions that they give very planfully, during transition time or during free choice time or during snack time.

So, it's focused on the piece that's individualized for that child, learning prepositions, but it's embedded throughout the day. So, we can think about another child, a child who is learning how to write his name but he needs extra practice. So, the teacher and the teaching team think about: Where is it that I can provide that additional practice? How can we get enough practice opportunities, learning opportunities for this child to really get better at writing his name? And they might decide that as the child moves from activity to activity, he will sign in to each of those activities, sign in on a clipboard or another piece of paper.

And so, several times during the day, he'll get practice. But it's fairly natural practice. It's been embedded into the ongoing activities and routines. So, I've touched on the advantages of embedded learning opportunities and why we think that this is a particular way of providing more targeted, yet individualized instruction for children who need extra practice, but it might be particularly beneficial for some children. And it involves minimal changes to classroom activities, because we're going to use the same activities and routines that everyone's already participating in. And that should increase a child's motivation to participate and learn, because they're doing the same sorts of activities, participating in the same learning experiences as the other children. And that means that the skills are being used, those targeted skills are being used in the natural context, or in the natural settings where the child needs to learn and practice those skills. They're also being used with a variety of people and materials; And so, that should -- excuse me, that should enhance generalization. So, that should really enhance the child's learning.

So, let me just kind of talk through where we are with the research findings related to embedded learning opportunities. Recently, in 2012, Pat Snyder and her colleagues completed a systematic review of the literature to see where we are with embedded instruction and what do we know, and what have we found out, thus far. And before I move into the other bullets, I'll point out that this term "embedded learning opportunities" is one of a variety of terms that's used for a naturalistic teaching practice that goes by such names as "embedded instruction," "naturalistic teaching," and in fact builds on the seminal work of Betty Hart and Todd Risley, and they referred to it as "incidental teaching."

So, there are a variety of terms for this practice that I'm going to talk about, or I have been talking about. So, what do we know from the review of the literature? We know that embedded instruction is effective for teaching a wide variety of skills to young children. So, we have examples in the literature of teachers using embedded teaching or embedded instruction to teach a child to count, to do a variety of self-help skills like dressing or using fasteners, like zipping and buttoning. Children have learned how to identify colors within the context of their activities and routines through embedded instruction or embedded learning opportunities. Embedded teaching, embedded instruction, embedded learning opportunities has also been used to teach social and language skills like greeting others and taking part in conversations.

So, a wide variety of skills have been taught. And a variety of instructional strategies have been used in an embedded format. So, a wide variety of prompting strategies, prompting and fading strategies, things like least to most support or time delay, and similarly with using feedback and using different variations of feedback strategies to help children learn those skills. All have been embedded in the activities and routines of the school day. We also know from a number of studies that embedded instruction or embedded learning opportunities does seem to enhance generalization. We just said that that was one of the proposed benefits of this approach, and in fact we have studies to support that contention. And we also have a few studies that have asked teachers who participate in the studies themselves, "Well, what did you think? Did you like this approach? Does it fit with your style of teaching? What did you think?"

And we have some studies that tell us that teachers assess embedded instruction favorably. And that's important, because even when we find out that a teaching practice, an educational practice is effective that is evidence-based, it needs to be viewed favorably as an acceptable practice by teachers, if we expect teachers to use that practice. And so, we think it's a mighty good thing that teachers assess this particular approach favorably.

We've learned a few more things. So, one of the things that we've learned from observational studies is that teachers in their classrooms differ in the extent to which they can apply embedded instruction or embedded learning opportunities. Some teachers are using this set of practices fairly often. It seems to come -- come to them without -- while they plan for it, it fits with how they are teaching. But there's a whole range. So, some teachers struggle with embedding instruction within kind of the busyness of all those other activities and all of those other things that they need to think about. Luckily, we also know that coaching, practice-based coaching, can make a difference in helping teachers learn and use embedded instruction or embedded learning opportunities. And so, a study that we completed fairly recently looked at the impact of practice-based coaching on teachers' use of embedded teaching or embedded instruction.

And then, finally, we've also tried this out with our preservice teachers, or our student teachers, and again, we've found that student teachers -- I'll use that term -- student teachers can learn and use embedded instruction in their field experience placements. So, we have, as I said, a fair amount of support for embedded learning opportunities, embedded instruction, and more and more research is happening over time. And I'm going to come back to this picture again, because this is -- this probably looks like many classrooms that you've been in, preschool classrooms that you've been in. And if we look at the activity in the front, that looks to be some kind of creative arts or creative expression kind of activity. And so, that's what the teacher has planned. That's what we see first off.

But now let's think about how that teacher might have individualized within that activity. So, there may be some curriculum modifications that are going on for these children. So, there might be some specialized writing implements that were selected because maybe they're bigger, or they might have selected particular materials because it was a child's favorite color, or maybe some of those pieces of paper are taped to the table to make them more stable.

So, there are all sorts of ways that the teacher may have already made curriculum modifications or adaptations to this activity, as a way to increase the child's access to the activity. So, now I can participate; now, I can engage with the learning activity. And those were fairly simple, but they had to be planned ahead of time. So, those are the modifications that might have taken place. Within this same activity, there might be some embedded learning opportunities.

So, we think that what we're seeing here is creative arts or creative expression. But it's possible that for one of these children, the child needs additional practice on some specific vocabulary. And so, the teacher is embedding some turns, some trials, some episodes for that child, so that he or she gets additional practice on those vocabulary words. Then, for another child, maybe -- maybe he needs more practice, more instruction, on actually learning and using the other children's names. Maybe, just the usual hearing of the names during the school day or during circle time is not enough. And so, he needs more, more practice, more instruction on learning names. And so, the teacher embeds some additional turns, some additional episodes, where that child learns and practices the other children's names.

And I think you can imagine that there would -- could be all sorts of individual learning targets that could be embedded within an activity like this, or within the sensory table that you see in the background, the sand or water table, or any other sort of activity or routine that happens during the school day. When we have talked about in Building Blocks, this idea of targeted instruction, this kind of mid-level, more intensive intervention, we mostly talk about embedded learning opportunities; but, there are some other ways to provide more targeted support for individual children.

One way is to use specialized curriculum, or domain-specific curriculum. So, that would be another option. And another possibility for providing more targeted instruction is to think seriously about using small group instruction as the mode for delivering that targeted instruction. One of the things that we're finding out is that in typical early childhood classrooms, many times teachers are relying on large group time or circle time, as the time for delivering instruction or teaching on concepts and skills. And for some children who need more individualized support, we need to start thinking more about how to plan for more small group time, so that it's more customized and the child will get more individualized attention.

So, we're looking at that more and more. All right, let's move on. We're at the top of our block tower, and we're at the red block. And now we're thinking about, for a few children or for a few of their learning objectives, even more explicit instruction might be needed to help that child make progress. And that might be in the form of more precise teaching, more precise prompts and more precise feedback, or even more practice opportunities or increased dosage. And when we think about children or their learning targets that might require this level of intensity; it might be for children who have particularly unique learning objectives; it might be for children who have -- just simply have not made progress on some skills that seem to be necessary to take advantage of classroom situations, skills like imitation or following simple directions.

Or, as you see in these pictures, it may be that the child has a unique learning objective, like using a piece of assistive technology. And so, they might receive that instruction in a more explicit or intensive way, and then, the intent would be that then these pieces of equipment would be used to help the child access the regular activities and routines.

Here we go. Okay, so a couple more pieces that we consider key ingredients to building blocks and certainly, key ingredients to the whole notion of tiered supports for individual learners, and that is the absolute necessity for ongoing child assessment and then using that assessment information to make data-based decisions about teaching. In the Building Blocks approach, we did not set out to design a new assessment system.

We decided that we wanted teachers to take advantage of what was already in place. So, our approach can be used with assessment practices like counting behaviors or making observations and writing notes or collecting work samples, but doing it regularly and often enough to see whether or not the child is making progress, the individual child is making progress, and then using that assessment data to make decisions. What do I do? What do I do if the child is making progress? Maybe, we may provide a little bit more practice, so the child can truly master the skill, and then maybe we move on to a new skill that's our focus of instruction.

But what do we do if the child is not making progress? Now, we need to do something different. We need to change the way that we're doing our teaching. We might need to break down the learning target into smaller parts. We might need to change the how, the how we're providing instruction. But if the child is not making progress, we need to do something differently. So, those are two key ingredients of tiered supports, tiered models of support. The third one that I've listed here is the importance of planning. And one of the ways that we have -- we encourage teachers to plan is to use an activity matrix. And the activity matrix might look like this.

So, what you see is the names of the children in the class, and on this one there's just room for three, but the names of the children in the class would be listed across the top. And then, in the left-hand column we have the schedule of activities or experiences that the children will participate in throughout the day. And then, in the cells of the matrix, what you see are the individual learning targets for those individual children. And you'll see that they're spread out, so they're getting practice at various times during the day.

And the teacher and the teaching team have also thought about what are the best times to provide that practice. So, they've thought about their resources, the number of adults who are available, and the needs of the children in the class, and all of those other sorts of things. The activity matrix can be used for planning instruction. So, for each of those skills, it might require a curriculum modification, it might require embedded learning opportunities, or it might require more explicit instruction. But it can be used to help organize and plan teaching. And we're also learning from teachers that they've used the same matrix to collect their ongoing child assessment data. So, that tells them when the child will be learning and practicing that skill, and they can make counts or take notes on this matrix. But the important thing is that planning is important to make this framework work.

Okay, as I wrap up, I want to take a look at how those building blocks that you've been seeing in the block tower have become the House framework. So, now, in this picture, you see that at the bottom is our foundation, the quality early learning program that includes creating a climate of social and emotional support; it's well organized; it has positive and productive instructional interactions, and the tiers or levels of support that we've been talking about have moved up, but they're still there, and they become the roof of our house. And there you have the pillars of our house, research-based curricula and teaching practices and ongoing child assessment.

And this framework is really helping us to think about how to support school readiness and learning for all children. And today we spent most of our time focusing on the roof and looking at these levels of support are providing just the right amount of support to individualize for children within our learning environments. So, with that, I thank you; thank you for listening. And we'll see if we have any questions. Gail?

Gail Joseph: The number one question, as always, is: When can you get these slides? And, of course, they're always -- in a little while, the whole recording is put up on the ECLKC. And if you have further questions, we're actually out of time, but that was such a lovely presentation, and if you have further questions, Susan has graciously put her personal email up there, so that you could ask some follow-up. But we would also just encourage you to peruse the Head Start Center for Inclusion website as well as the ECLKC National Center for Quality Teaching and Learning materials, because there continues to be great updated 15-minute in-services and more related to supporting children with special needs. So, with that, it's time to sign off. Thank you again, Susan, for spending the morning or afternoon with us, and thanks to all of those who joined us.

Susan: Thank you, Gail, and thank you everyone.