

Disabilities Dialogue: Effective Instruction: Embedding IEP Goals

Tamarack O'Donnell: Welcome, everyone. We're so glad you're joining us again for round three of Disabilities Dialogue. For those of you who are joining us for the first time, we're excited that you're here with us today, and we hope you get some good ideas and content to bring back to the teachers that you're working with. I'm Tamarack O'Donnell.

Dawn Williams: Hi, I'm Dawn Williams.

Tamarack: We're curriculum specialists here hosting from the National Center for Quality Teaching and Learning. Many of you already know, but Disabilities Dialogue happens on the third Friday of every month. It's at 10:00 a.m. Pacific time, 1:00 p.m. Eastern time. And, of course, everyone is welcome, but the content really is designed to try and support you as disabilities di-- or disabilities coordinators in your role as you work to support children with disabilities and the teachers and families that are also working with those kids.

Dawn: Okay, so our agenda for today: We are going to do an interview with Dr. Jen Fung. We're going to tell you a little bit about her in a minute, but we're going to be asking her about strategies for embedding IEP goals into daily activities. Then we will also have a Q&A segment, as we mentioned, and quickly go over some resources. If we don't have time for the resources, which we suspect we might, because we've got a lot of information we want to share with you, we're going to be putting all the links to the resources in the chat as well, so when you see that come through, you can just click it and open it there.

But then we also send out a follow-up document for this, and you should receive that through your email. And that comes at least a couple weeks after the webinar. And all these are being recorded and will be posted on the ECLKC. All right, so we'd like to start off with Amanda Bryans from the Office of Head Start. Now that she's on, Amanda, can you say hello to us, make sure we can hear you?

Amanda Bryans: Hello, everybody. It's a pleasure to be here, and I'm so glad to see so many people have joined.

Dawn: Yes, yes. Fantastic. Thanks for being here, Amanda.

Amanda: Well, it's my pleasure.

Tamarack: If any questions come up that Amanda can answer, I'm sure she'll pipe in here and there to answer any questions that you guys might have. So we're very fortunate today to have Dr. Jen Fung joining us to talk about embedding IEP goals into daily activities. She has worn many hats in the field of early childhood. She's been an infant/toddler teacher; she has been an FRC; she has supported people consulting for children with -- for children who have behavioral issues. She's currently working with a team who is increasing child care providers' capacity to support children with disabilities, and she is currently the assistant director of the applied research unit at the Haring Center.

Dawn: Yeah, so the Haring Center is one of our partners here at NCQTL, and her research and training institute on inclusive education, they are really nationally recognized for their work around supporting young children with disabilities. And Jen is the associate director of the applied research unit there. Okay, so today's objectives.

Tamarack: So today Jen is going to be talking about what is embedding? How do teachers take IEP goals and actually provide instruction for them in the classroom? So, we'll start by giving sort of a brief -- putting a brief emphasis on the importance of breaking down learning goals. Then Jen will hop on and let us -- give us some nice information about what it means to embed instruction and what are those strategies that you can actually use in the classroom to work with kids in their natural setting. And then at the end, we'll kind of briefly overview a planning tool called the activity matrix, which allows you to plan for instruction to make sure that teachers are really prepared to embed those opportunities throughout the day.

Dawn: That's right. So when we talk about effective instruction for children with disabilities, and we're thinking about the IEP goals that they may have, it all begins with the plan around breaking down their goals. So really quickly, we just wanted to tell you, we have a whole in-service suite on breaking down goals. And we're not going to go into a lot of detail with that today, but here's just a quick slide about how to do that.

So the first step in breaking down the goals is determine the child's progress on the goal. Then we break down the goal into smaller parts, one, two, or three different parts, depending on how you want to do it. And then you order the parts for teaching, starting at the current level of progress. So really quickly, that's where it all begins. And then we can get into more specific strategies that Jen's going to tell us about. So, Jen, thanks for being on today.

Jen Fung: Happy to be here.

Dawn: Oh, fantastic. Okay. So our first question for you was, we're talking about effective instruction and embedding goals into daily activities. What is different about planning instruction for a child who has an IEP?

Jen: Yeah, that's a great question. So, I think of it really as two different factors. One is the goals that are going to be targeted and then one is the type of instruction that children will need. So, when we're thinking about the goals that are going to be targeted for young children with disabilities, they're much more specialized and much more specific than the skills that we're targeting with all children as part of the curriculum or the program standards.

And then as far as the learning characteristics of young children with special needs, many of our learners need more opportunities to practice and be taught skills. Really that intensity of instruction needs to be increased in order for our kids to make progress towards these goals. And for a lot of our young kids with special needs, the use of specialized instructional strategies can be very important.

Dawn: So to make progress, a child with disabilities really needs more opportunities, more intensive instruction, and effective instructional strategies.

Jen: Correct, yes.

Tamarack: So, Jen, can you just kind of give us a nice summary, as we kick into this topic, of embedded teaching?

Jen: Yeah.

Tamarack: How is this different than the instruction we're providing for other kids?

Jen: Yeah, so embedded teaching is really a set -- the use of a set of specialized strategies, and we'll talk about what a few of those are today, but it's -- the use of these strategies is really targeted towards increasing the learning opportunities and the teaching that we're providing to young children with special needs. One thing that's really special and unique about embedded teaching is that these teaching strategies are embedded, they're intentionally, planfully inserted into the ongoing daily classroom activities and routines that are happening as part of the high-quality general education curriculum that we know teachers are using.

Because these skills are being taught within the context of these ongoing activities, that reinforcement and that motivation for kids to participate and engage and learn is really a part of the teaching episodes that are happening within those activities, because these are engaging activities that our kids are motivated to participate in anyways.

Dawn: Mm-hmm.

Tamarack: Right.

Dawn: So does this mean that we're not necessarily pulling children out to do some of these things, that we're really doing this in the classroom?

Jen: Yes, that's exactly right. So that's the beauty of embedded teaching and learning, is that the strategies we'll talk about can be successfully and have been shown in the research literature to be successfully inserted into these ongoing daily activities to really help kids maximize their progress and their learning on these instructional goals. So this isn't talking about setting aside a special time that's just for instruction on IEP goals; it's really thinking about, okay, when are good times to teach these skills, and how can we embed it throughout a child's day? And, in fact, by doing that, we're actually able for many kids to get more instructional opportunities in throughout the day than we would if we set aside a special time for instruction.

Tamarack: Right, because it's happening throughout the entire day in a variety of activities.

Jen: Exactly.

Tamarack: So I'm a teacher and I'm ready for this, and I'm thinking, "Okay, I want to do this, I want to embed instruction." How do I do it? So, how are these strategies different than what I might already be thinking I'm providing for children in the classroom?

Jen: So really when we're talking about the bottom block, we're talking about engaging interactions, high-quality interactions, high-quality activities that children are going to engage in, and then teachers take advantage of these teachable moments and use hints and scaffolding and trial and error and really try to match their level of support that they're providing to what the child is showing at that moment that they need. Most kids will readily learn from this type of instruction and these types of strategies.

When we're talking about what's happening at that top level in the roof with this embedded teaching, we're really talking about some more individualized strategies. You know, these children have already had an opportunity to access and learn from those engaging interactions that are happening at the bottom block level, but they're showing us that they're not making the progress that we would expect them to see or that other children are making.

So, the goals that we're targeting are much more specialized. We know that the children don't know these skills. So we're actively teaching, and the teachers are initiating the instruction rather than waiting for sort of these teachable moments to occur that we're going to take advantage of.

Tamarack: So we're not talking about like, say, teaching colors to all the children in the classroom, because that's a general goal for all the kids.

Jen: No, no. We're talking about something that's much more specific than that. So, here's another way I kind of like to think about it and break it down, some comparisons between those high-quality instructional interactions at the bottom block level and those embedded teaching strategies that are used in the roof level. So with those learning targets at the bottom block level and those high-quality instructional interactions, like we said, those are a part of the scope and sequence of what's being taught and what all children are learning, whether it's part of the curriculum or whether it's part of your program standards, but then in the roof, with the embedded teaching, these are really driven by the child's individual learning goals. What those interactions also look like, you know, at that bottom block level, the learning is reciprocal, like I said. The teachers are really taking the child's responses and the feedback that the child is giving them in the moment to think about how they're altering or changing or providing a different level of support for the child.

With embedded teaching at that roof level, the instruction that we're going to be providing to support the child to, you know, do a specific behavior or show us a specific skill, we're planning that ahead of time because we know we're trying to elicit a specific behavior from that child, because like we said, we know that this is a skill that this child doesn't know. They've already shown us that.

So we're not going to wait and see based on their feedback how we're going to alter our support. We already know that they don't know, so we're going to provide a certain level of support for them.

Tamarack: Yeah.

Jen: So I just wanted to show a couple of sample IEP goals. These IEP goals will look very familiar. All of you working with young children with disabilities in your programs and your classes have seen lots of IEP goals. But this is just another example of the level of specificity that these goals and these learning targets for our young kids with disabilities are at. So you can see that first goal there: Camilla will use a variety of communicative forms, like gestures, signs, word approximations, short phrases, with familiar adults to get her needs met.

So that using communication, using gestures, that's not something that we necessarily have to actively teach most of our learners. That's something that most of our kids are learning through observation, through just repeated opportunities to observe and practice. And that second goal, that social-emotional goal, Landon will identify and label the feelings of familiar adults and peers who are outwardly expressing emotions, again, that is not something that we necessarily need to actively teach.

Maybe, we do some more modeling around some of that emotional vocabulary and then kids through that practice and those repeated opportunities will learn that. But when we're talking about our young kids with disabilities, they're not necessarily accessing that modeling and that practicing and really learning these goals so that they're able to use the skills independently.

Dawn: Right. Okay. So that really helps kind of ground it for us in giving us some specific goals to look at as they talk about more of these specialized instructional strategies. So what are those?

Jen: Great question. So there are lots of specialized strategies that can be used to embed within these ongoing daily activities and routines that are a part of the classroom curriculum. But today, because we have a short time, we're only going to talk about two, two that are really widely used and pretty easy to use once you kind of get the hang of it and are able to plan for these types of instruction. So the two strategies we're going to talk about today is the teaching loop, which is an instructional strategy that's a little more teacher-directed, and I'll explain that a little bit more, and what we call naturalistic teaching strategies, which are still very much planned and orchestrated by the teacher and the classroom staff, but rely on the child to initiate an interaction, and then the adult provides a level of support to help kind of close that teaching loop.

Dawn: Oh, Jen, this is going to be great, because now people are about to get a whole bunch of different strategies and ideas that they can use to help individualize IEP goals for the children in their classrooms. So, if you've got some paper near you, if you want to keep track of some of the things that she's about to -- knowledge she's about to drop for us, is just the way that I would say it, please go ahead and do that, because they're going to be coming at you. Here are the strategies.

Jen: Absolutely. Okay, so the first strategy is the teaching loop. And for many of you, this is going to be a familiar concept. Some of you may have heard it referred to as a discrete trial, a planned instructional sequence, a complete teaching episode. There are lots of different ways that people refer to this instructional strategy.

But the important thing to take away is that this strategy has four specific components that the teacher really needs to use in order to make this a successful teaching strategy for our young kids.

So the four steps are: Providing the child with a cue; giving the child assistance, because as we mentioned, we already know they don't know the skill, so we want to provide that help and that assistance to help them get it right, right off the bat. The third step is observing the child's response. And then the fourth step is giving immediate feedback. So let's get into each of these steps just a little bit more, talk about what some of these look like and why they're important.

So, that first step of providing the cue, this is really, really important because many of our young children with disabilities, some of their learning characteristics or their learning needs really make it difficult for them to kind of observe what's happening in the classroom and take advantage of that. For some kids, because they have deficits in observational learning, really attending to what's going on, they might have deficits in receptive language and being able to understand what's said to them, they might have deficits in imitation, so observing what's happening and trying it out themselves.

So ways that we know that many children learn, because of their learning needs, we need to make those expectations much more explicit to children. So make the expectations of what we're wanting them to do or a certain way that we're wanting them to perform, much more clear to them. So we do that in the form of this very clear cue. So cues can be in the form of a verbal cue, which might be a direction or a question, you know. So with that first IEP goal of using communication, we might give a verbal cue of "show me what you want" or "tell me what you want." That makes it very clear to Camilla what's expected of her and what we're going to help her learn how to do. Or in the case of Landon, who's learning to identify emotions, we might give the simple verbal question cue of "How does he feel?" when Landon is observing a friend crying, right? Cues can also come in the nonverbal form.

So that might be a gesture or an expectant look from a teacher. That might also be the environment cuing the child to act a certain way. So it might be that we know that Camilla needs to learn to request, but we don't necessarily want to give her a verbal direction to start that teaching loop, so we might give her something we know she wants but in a container that she can't open. So she's going to need= to request for help. The environment is providing that clear cue that she needs to communicate in a certain way.

A couple other things to think about when we're providing these cues is really making it very understandable and explicit to the child of what's expected of them. So using language at the child's level, just where they're at. So for some kids that might be shorter phrases, fewer words. And really being -- giving directions that are what we call positive and observable. So rather than saying "don't do that" or "stop that," tell them what they're supposed to do. So "walking feet in the hallway, please" versus "stop running," right? So those positive observables. It really tells kids exactly what we want them to do.

Tamarack: So what I'm hearing you say, Jen, is the cue really is what's setting the stage for the learning opportunity. So a teacher who's ready to help a child work on requesting with a peer has their eye on a peer, they've set it up so that the child's sitting next to that peer at the table, the stage is set, the cue is there.

Jen: Yes.

Tamarack: Okay. Thank you.

Jen: And one thing to think about, and we'll talk about planning for these instructional opportunities later, is just what you said, the teacher knows exactly what the child is working on, they've either orchestrated the activity or the environment. Like you said, they've positioned Camilla next to a peer so that she's able to request from a peer. But if they're going to give a verbal cue, they've also planned in advance just what that verbal cue is so that they are really ensuring that that verbal cue or whatever the cue is meets Camilla's level of understanding and where she is in sort of her learning progress so that we can ensure she'll be as successful as possible. So that planning is so important.

Dawn: Yeah.

Jen: Okay, so the second step in the teaching loop is to provide assistance. So when we're providing assistance, we really are providing help. And this is our teaching: assistance is teaching in the teaching loop. Because, like we said, we know that this child doesn't know how to do this, we don't simply want to give cues over and over and have them make repeated mistakes.

Because one of the things we know is that making these repeated mistakes, one, it wastes our instructional time, which can be limited in a busy classroom. It wastes the child's time. For a lot of our kids with special needs, sometimes those mistakes can sort of become habit and might be built into a response that they might give when asked a specific question or given a specific cue. And for a lot of kids, when they're making these repeated mistakes, they can get really frustrated, and so their motivation to engage with the teacher and engage in these learning trials and these learning opportunities can really decrease if they're making repeated mistakes.

So we really, when we're thinking about planning for this instruction, in addition to thinking about, okay, what kind of cue am I going to provide, we really want to think ahead of time, what type of assistance am I going to provide this child? What's going to help them get the answer right? So there's lots of different types of assistance that we can provide, lots of different prompts; you've probably heard these called prompts. But physical prompting or physical assistance involves physically helping the child do something, get the answer right. A verbal cue or a model is the adult modeling the answer.

So in the example of Landon, and if we give him the cue, "How does your friend feel right now," we might say, "He feels sad." So we're providing that verbal model and telling Landon what we expect him to say and how we expect him to respond. A gestural prompt is the adult pointing or somehow cuing the child to the answer. So you can see in the photo there that that teacher has asked the child, where's the yellow shape, or where's the heart? And that teacher is gesturing to the shape that she wants the child to pick up or point to or, you know, manipulate in some way.

So she's asking a question about a concept, what color or what shape. She's gesturing to the -- or the adult actively demonstrating and doing themselves the behavior that we want the child to do. So if we're, for example, working with Camilla, who's working on increasing her communication, if we're demonstrating and working on her pointing to request something she wants, we might give her the cue, "Show me what you want," and then we might point to the item that we're holding up for her, so providing that model of what we want her to do.

And then an expectant look is a teacher's best friend. So especially with some of these strategies where we might be arranging the environment or sort of manipulating the activity in some sort of way, like the example I gave where we're giving Camilla an item we know that she wants but it's in a jar or a container that we know she can't open, we might give her access to that and then just simply look at her and let her know that we're waiting, that that expectant look lets her know that we're waiting for some sort of response from her.

So you can see that these different levels of prompting and these different levels of assistance, they range from something that's very highly supportive in physical prompting and something that, you know, if it's a skill that can be physically helped along, if we physically prompt a child, we pretty much know that they'll get that answer right, and they're very likely to perform the skill we want them to. And then it sort of gets less and less intrusive and less and less helpful, and really we want to be very playful about what type of assistance we're providing. One, we want it to match the behavior.

So if I'm trying to prompt some sort of verbal requesting or verbal answer from a child, I can't use physical assistance, right? So we want the level -- the type of assistance to match the skill we're trying to teach. But we also want to make sure that we're kind of hitting that sweet spot, that the assistance we're providing is hopefully just enough to help the child get the answer right so they're learning and they're able to experience what it feels like to get that answer right, but that it's not too much assistance. Because a lot of our kids, they might tend to get reliant on some of this assistance. And a too high of a level of assistance can kind of hide their progress. So it's this balance in really trying to figure out what's enough but not too much.

Dawn: Jen, this makes me think, with some of these strategies, I think like the look is a thing that teachers do, modeling is something that teachers do, so what is the difference in using these strategies, but what makes them effective when supporting IEP goals different from what you would be doing for the whole foundation?

Jen: Yeah, I think a couple things. One is really how intentional and how planful we're being. So like you're saying, a lot of these strategies are things that we're doing anyways. We're commenting, we're modeling language, but that's in response to that teachable moment that the child is initiating and kind of starting, and we're relying on their feedback and their performance to let us know what type of assistance we need to provide.

At this level of support with the embedded teaching, we're planning ahead of time. Because like we said, we're not going to wait for the child to show us that they do or don't know and what type of support they need when we're planning for instruction on these IEP goals, because we know that they don't know it. So we're planning to provide that support right away.

So that's the other thing is the timing of the assistance. Again, in those bottom block level of those high-quality instructional interactions, the teacher's scaffolding. We're waiting for the child to show us what they're interested in, and then it's sort of this back and forth reciprocal. With the assistance in the teaching loop, that assistance is coming immediately after the cue. We're really not giving the child a chance to respond necessarily, because, like I keep saying, we know they're likely not to do it. We know they're either going to get the answer wrong or not respond at all. So we want to provide that assistance right away after we give the cue so that we can prompt that correct response. Does that make sense?

Dawn: Yeah, absolutely. It's timing, it's the planning.

Jen: Exactly. Yep, yeah.

Tamarack: So we set the stage, we're planful, we're ready for a teaching opportunity to occur, we've provided some kind of cue that's right at that sweet spot. What's the last step in closing the loop?

Jen: Yeah, so the last two steps, the third step is really observing the response that the child gives us. So we're sort of looking at three different kinds of responses. The child will hopefully get it correct. That's what we're looking for. The child might get it wrong, even with some assistance, and that's going to be feedback to us that we need to really think about what type of assistance we're providing. Or the child might not respond, which is still not getting it right, but it's different than responding but in an incorrect way. So we really want to provide that assistance, see how the child responds, and then, like you said, the fourth step is providing feedback to really close that loop.

So the type of feedback that we're providing as teachers is really based on what the child's response is. We want it to be contingent on what the child's response is. So everybody, every learner needs response -- or I'm sorry, feedback on what they're doing and what they're saying, whether that's confirming it or providing a little more help and helping them expand on their answers. Providing feedback is a part of a good, high-quality instructional interaction anyways, but again, the level of planfulness is sort of what makes this different than what's happening in that bottom block level.

So if we observe the child's response and they get it correct, we're going to provide positive feedback. Camilla and give her access to what she did and access to the item that she pointed to. So that is very motivating and very reinforcing and hopefully increases the chance that next time she wants something, she'll be likely to use that, that point that we were helping her learn how to use. So providing that positive feedback on what the child did correctly, letting them know, yep, that was the right answer. Great job.

If the child responds incorrectly, we also want them to know that. So we just want to provide what we call a really gentle error correction. So we want it to be given to them in a very kind of neutral and friendly -- this is not punitive; we're not punishing them for not getting it right, but we want to let them know, "Oh, nope, try again." Or if we're asking Landon, "How does your friend feel?" and he says, "Happy," we say, "Oh, look again," you know, "Your friend feels sad," right? So we're sort of starting over where we're getting their attention, we're making sure they're attending to what we're asking, we're redelivering the cue, and then we're providing a higher level of assistance so we know that they get it right.

So we really want to end that feedback or that teaching loop with the child performing the answer correctly. And then if the child does not respond, then we want to see, you know, maybe this was something where they weren't listening or they weren't attending or they didn't understand we said, so we want to try again and redeliver that cue and that instruction and then provide the assistance again to hopefully help them get it right. So, again, these different types of strategies for feedback are not that much different than what you might use at the bottom block level, but how playful we're being about how we're using them and how explicit we're being in the feedback that we're giving children, that differs a bit at this top level with embedded teaching.

Dawn: So I'm really seeing this work often with children with disabilities, and I'm wondering, about how long does the teaching loop take until the child actually starts getting that skill? I'm sure it absolutely varies by the child, but if there was -- is there some way that you could kind of answer that question for us?

Jen: Yeah.

Dawn: Give us a sense of the time and effort.

Jen: Right. It varies, like you said, it varies by the child and sort of what level of need they have as far as what level of support is required for them to really access this information and make progress. And also for a lot of kids depends on the skill. Some skills -- you know, requesting, that is a really powerful skill. That's something that once the child learns, like, oh, this point gets me something, I have power and control over what's going on in my environment, a skill like that, children are able to learn pretty quickly.

But something that's a bit more abstract and less concrete, something like those social-emotional skills of labeling and identifying emotions, for some kids that might take some practice. With these repeated learning opportunities, we generally suggest that teachers try to embed 10 learning episodes on a goal, kind of within the context of a day. That's a general rule. Sometimes you're able to get more, sometimes you're able to hit right at 10, sometimes you get less; we know that there's variability. But with those 10 teaching trials, roughly, per day, you usually expect to see kids make progress in a week or two. They might not be performing independently and have that skill fully learned by the end of those two weeks, but you might -- you should be starting to see them need less assistance to perform those skills. So it's tricky to say, but with this level of intensity and the planning by the teachers to provide these repeated teaching trials, you should expect to see some progress fairly quickly.

Tamarack: So, Jen, I hear you talking about the skill and how long it may take depending on the level of difficulty and where the child is. How about the teaching loop itself? Would you say that that brief teaching interaction at the table when you're encouraging Landon to recognize how his peer is feeling, is that something that's going to take a lot of a teacher's time in the classroom?

Jen: No, it doesn't. And what you're saying about providing that teaching opportunity at the table, I also just want to really stress the fact that this teaching loop and this strategy, discrete trial, whatever it is, this can be embedded; it doesn't just have to be at the table. It can be at snack, it can be at recess, it can be at circle time. As long as it has those four components, it should be really quick. It's only a few seconds.

What makes it more efficient and easy to use is that planning. So we know exactly what we're going to say; we know what materials we need, if materials are needed; we know just what assistance we're going to provide. So once we've figured that out, we can do these. These are very quick, like I said. This teaching loop is fast. Sometimes if you're not looking for it in a classroom, you might miss that it's actually happened.

Tamarack: Great. So thank you so much for sharing with us all the nuances of the loop. Now that we have a handle on that, can you share some other more -- some other concrete strategies that disabilities coordinators can take back to teachers in the classroom?

Jen: Of course. So the second sort of category of strategies I'd like to talk about are naturalistic teaching strategies. So, again, just like the teaching loop, you've likely heard of these strategies and you may have heard them referred to as a different, you know, naturalistic milieu teaching, milieu teaching, incidental teaching. So people refer to this sort of category of strategies as many different things, but really what they're referring to is a set of strategies that are planned and intentionally used by teachers but that rely on these brief repeated episodes within the context of activities.

A couple things that set these apart from teaching loop, because the teaching loop can be brief and repeated and is embedded within the context of activities, but the naturalistic teaching strategies, they rely on the orchestration or manipulation of an activity or the environment by the teacher and then the student is the one who sort of initiates that learning episode, and then the teacher follows through and closes the loop with a specific level of support and feedback for the child. So rather than being adult-directed like the teaching loop, where the adult is providing that cue, "Show me what you want," "How does your friend feel?" the adult is sort of starting that teaching loop, in this case, the adult is making it more likely that the child is going to start the teaching loop by manipulating the environment somehow, but they're waiting for the child to initiate that teaching loop.

So there are several different strategies, specific strategies under this umbrella of naturalistic teaching strategies, and I'll talk a little more in detail about what these look like. But environmental arrangement is a huge one. So I keep referring to this, and we'll provide some more specific examples of this in a moment. A mand-model, so that's an example where once the child sort of initiates this teaching loop by, for example, Camilla picking up the container that has her toys in it that she can't open and looking at it or handing it to the teacher, the teacher will provide that model, a direction to her, "Oh, tell me you want help," or "Tell me help" right? So that's the mand-model.

But Camilla versus the teacher just handing the jar to Camilla and saying "Tell me you want help," the difference with this type of teaching strategy is that Camilla's noticed it; she's picked it up; she's interacted with the container somehow; she's gestured towards the teacher that she needs something. So she's started that teaching episode. We know she's interested. A time delay is simply that Camilla hands over the container or reaches towards the teacher with the container versus the teacher giving her that mand-model of "say help," the teacher might just provide that expectant look and wait for her to say help if we know she might be a little further along in her learning progress and she doesn't need that high level of teaching.

And then incidental teaching is where the child initiates some sort of interaction, provides some sort of response, and then the teacher takes advantage of that by helping them expand on what they've already done. So maybe reaching and using a gesture is something that Camilla's already really proficient in, and whereas before, when she was first learning these gestures, we would have really honored just that reach, because we knew that was something that she wasn't really likely to do very frequently.

Now, we know Camilla knows how to do it, so when she does that reach, when she initiates that teachable moment by reaching towards us, we're going to say -- if she's working on signs, we might say, "Oh, tell me you want help." So we're honoring, oh, you told me you wanted that, now let's increase the stakes a little bit, and we'll show her what we want and maybe help her use that more sophisticated behavior, and then we'll close the loop by opening it for her and giving her access to that toy. So it's sort of nuanced.

A lot of times we are using these same strategies that we might have been using in the teaching loop. But we're really manipulating the environment and relying on children to initiate these episodes that we then take advantage of and provide support within.

Tamarack: So, Jen, this sounds like something tangible. It sounds like something that is doable in a busy classroom, that a teacher can kind of seize on these opportunities where the child's initiating and build on them. Can you give us some more strategies that teachers can use in the classroom and that are pretty concrete and we can make our little list?

Jen: Yeah, absolutely. So the thing that I really like to help teachers use and become really familiar with and really confident using is that first strategy of environmental arrangement. Because, like I said, and we've talked about, a lot of teachers are using that time delay, a lot of teachers are using that mand-model, a lot of teachers are using those incidental teaching, but if we're just waiting for those opportunities to arrive, we're probably not going to meet those 10 learning trials per day. But through the use of environmental arrangement and really doing what we call -- people call this creative communicative temptations, or creating communicative environments, creating environments where children are going to have that need to communicate and where they're much more likely to initiate that interaction with the teacher, the people and their environments.

We get really good as teachers at meeting children's needs and knowing what they're wanting and sort of meeting their needs before they have the need to communicate. So for a lot of people, this can feel a little bit different, but creating those communicative environments can be so, so helpful for us in making sure that we're able to get in the number of teaching opportunities we know our kids need, and really giving kids a reason to communicate. So the strategies you see here on the screen fall under that umbrella of environment arrangement in this naturalistic teaching strategies, and there are lots of different strategies under the category of environmental arrangement.

This list certainly isn't exhaustive, but it's something that you see used really frequently and very successfully. So one is the use interesting materials. So providing materials that we know children are going to want to interact with, comment on, ask for more of, ask for a turn from a friend. That commenting, requesting more, requesting from a friend, those are all really common IEP goals. So just by having these materials in place, we can bump up the likelihood that children are going to want to talk about them or communicate about them.

Dawn: You hit them up for the opportunity to do it.

Jen: Exactly, yeah. So then the second strategy we really can build on that use of interesting materials and give kids that need to communicate. So having the materials in view but out of reach, so the child's going to need to ask for them, ask for more, ask for help getting them, whatever that skill is that we're targeting for the child.

So you've heard me refer to several times of putting a favorite toy into a container that a child can't open. That's a really, really common one. Having shelves in the classroom that are at just that right level that kids can see what's on them but they can't reach them themselves. And then there's no furniture in front of them that the children are going to be likely to try to climb up to get themselves because we know our kids are good at problem solving. But really getting kids' attention to what they want and then making it more likely that they're going to need to communicate for that item.

Materials that kids can't operate or can't use independently yet is another really common one. So a lot of our kids, a lot of common materials I see people use in this category are like little wind-up toys, or lots of kids like to do art and are really excited about using those dot markers, the dot art markers, the bingo daubers. You put the lid on those dot markers really, really tight and have them out for the child to play with and freely access. Sometimes those can be really, really tricky to open. The wind-up toys, tops, things -- if a child is going to drink out of a juice box, give them the juice box and don't put the straw in for them, right?

So things that the child is going to need help with to be able to complete a sequence or play with the toy independently. So those are just a few. You can see that in the interest of time, I won't go over all of these. But I know that these are things that teachers are doing a lot that are in their bag of tricks. But the combination of really being playful, again, it's that intentionality of, okay, we know Camilla is working on this goal of requesting. How can we change our classroom environment just a little bit to make sure that in every area, in every routine, there's going to be that need for her to communicate?

Dawn: Right, okay. Setting it up so she's got lots of chances to practice.

Jen: Yeah, exactly. So with the example -- oh, go ahead.

Tamarack: Looks like you have some examples of how we might teach those skills using the strategies you've talked about.

Jen: So this is just, you know, again, really getting at that level of support and that level of intentionality that we need to have to really make sure that we're providing enough opportunities and the right type of assistance for the kids to get these skills correctly and really start to learn these skills. So these are just a couple examples of planning forms that I might use or that I have used to plan for these types of instructional strategies to be used within the classroom.

So the one that you can see right now is with Landon and identifying emotions. This is a planning tool that I would use to really plan for that teaching loop. You can see exactly there what cue am I going to give: Who feels sad? How does he feel? So I'm planning for what verbal cue that is. What type of assistance? Maybe, right now Landon isn't at the level of assistance where if he's looking at a book and I ask him, "Show me the one who feels sad," I don't need to physically prompt him to do that, I can just gesture to the picture.

So that's the level of assistance I'm planning to provide ahead of time. What I'm looking for him to do, that child's response, I want him to touch or point to the correct face in the book that I'm looking at. And then I'm even going as far as planning what that feedback that I'm going to provide to him will look like. So if he gets it correct, I'm going to say, "You're right, that is a sad face. Thanks for showing me." And continue that motivating activity of turning the page or keep coloring on the worksheet that he's working on, whatever the activity that this teaching loop is being embedded within. And then you can see I've also planned for what I'm going to do, what my response and my feedback to him will be if he gets it incorrect. So, again, these strategies aren't that much different than what you might be using, but how you're planning for them and putting them together to be that complete learning trial, that's where the difference is.

Tamarack: And then embedding them throughout the day so they're getting practice after practice after practice in a variety of settings.

Jen: Exactly, yeah. So that's really what the advantages of embedded instruction. These teaching strategies, these specialized strategies have their specialized names. There's a specific technique and how you want to use them correctly. But once you've planned for them and once you really understand and are clear on what this should look like and when I'm going to use it, embedding these into the ongoing daily activities, really it doesn't require any changes to your classroom activity, aside from maybe some of those materials or sort of the way we're structuring things to create those communicative temptations, but we're not changing the very nature of the activity, right, that that's part of the ongoing classroom curriculum. Because these are activities that are fun and engaging and we know teachers work really hard on planning, and because the child's peers and friends are participating in them, the motivation to participate in those activities and participate in those quick, repeated learning opportunities and trials with the teachers, that motivation is really enhanced because we're not asking them to do something special or something different than what other kids are doing.

Because kids are being taught these skills in the natural context of these activities and routines that are happening in the classroom anyways, that can really enhance their independence, it can enhance the skill generalization that we know some kids with disabilities have a difficult time with. We're teaching them right off the bat to use and learn and perform these skills with a variety of different materials, in a variety of different activities, and with a variety of different people. So it takes some practice and some planning to learn, but it shouldn't be scary to teachers to use these strategies.

Dawn: Well, that's helpful and comforting to know, right? This is something a disabilities coordinator could take. You could think about these advantages and help explain it for some teachers to try some of these new strategies in the classroom. So as you've been presenting, intentional planning has been screaming in my head the whole entire time. So I know we've got a way that we can help people be more intentional and planful for this.

Jen: Yes, yes, absolutely. So really thinking about organizing the learning. Dawn, like you said, breaking skills down, that's the very first step. For some of these skills, you know, you saw Camilla's learning goal of using gestures to communicate her needs. That's a huge skill, you know. What those communicative requests look like. It could be a gesture, like a point or a reach. It could be a sign, like more or help. It could be a single word; it could be multiple words. So, that's an example of we can break down and build. So that's really, really important first step is thinking about how is this skill going to be broken down so that it's more manageable for the child to learn and it's more manageable for the teachers to teach. That's really, really important.

And then the second thing is thinking about how and when are we going to teach, just in what activities are we going to teach and embed teaching on these important IEP goals? So the most important, useful tool you can use to organize that learning in that way is the activity matrix. So the activity matrix, again, it should be a really familiar concept to most -- [Audio drops] -- can really use this tool to help support teachers in their planning.

So, the activity matrix is just a visual representation of the activities and the routines that are happening through the day, and then by child, what their learning targets are. And then the team really decides together, okay, what is a good goal to work on that skill of identifying emotions? When is a good time to work on teaching Camilla to request? And just as important, when is a good time not to do that?

Transitions: It can be really, really hard to teach during transitions because those are busy times; we often have limited staff. So thinking about when's a good time, when's not a good time, when do we have the resources, and what activities really lend themselves well to embedding instruction on these specific goals for kids. So, when we're creating an activity matrix, we really want to think about what those routines are, what those activities are, and kind of list them in that sequential order across the column there, and then across the top, list who the children are.

And then really start to think about, like we said, when are good times, when aren't good times to embed instruction on these learning goals. So a couple things, a couple tips about getting started on using an activity matrix if this is a teacher or a classroom that hasn't used this tool or strategy before is really making sure that you have the right materials. So that's a big part of the planning. I keep talking about Camilla and her goal of requesting. When I'm working on that skill, I really want to make sure that during those times -- during the free play, during the meal time, during the class activity -- that I've manipulated the environment, that I've got those containers -- you can see right there in the picture -- that she can see through but can't open.

I want to make sure that those materials are there during those routines and activities so that I am readily able to present them to the child so that they're engaged with them already, and I can then follow through on that learning trial, that learning episode, whatever strategy I might be using.

A couple other things to think about with that tips for implementation, planning as a team, if possible, can be really beneficial because then everybody knows exactly what the child is working on, exactly what that instructional strategy we're using should look like, and then, because everybody's clear and everybody knows, we're more likely as teachers to provide those learning opportunities during those routines that we've identified, and therefore Landon and Camilla are more likely to get that high number of learning trials we know they need to make progress.

And then one more thing, really just sort of thinking about how manageable this is and how teachers kind of do need to practice and become comfortable and become fluent with these skills and these specific strategies, is just start with one goal initially. Make it easier for yourself starting right off the bat. Pick that most important goal and start working on that. And then as you get better with it, as you get more comfortable with it, because you will, these are really easy strategies to learn, then add that second goal, add that third goal, start focusing on adding that instruction kind of throughout the day.

Dawn: Okay.

Tamarack: All right.

Dawn: Thank you, Jen!

Tamarack: You covered so much in such a short time. It's very exciting. I think we have a lot of things to think about and a lot of things that disabilities coordinators will be able to go back and share with teachers and families on creative ways to give children lots of opportunities to learn.

Dawn: For sure.

Jen: I hope so.

Dawn: I know we only have a little bit of time left, but we have Dr. Gail Joseph on the line with us. Gail, can you say hi to us? Make sure we can hear you.

Gail Joseph: Hi, can you hear me? I just got unmuted.

Dawn: Hi, Gail. Welcome.

Gail: Hi. And I see that our time is ticking away. I've been listening. It's been so great to hear Jen and to hear all of the great ways that we can use this in the context of our Head Start classrooms.

Dawn: Yeah, it really has been. And there are a few questions that we had come in. Someone's asking about effective strategies for infant/toddler classrooms. Is there anything we could offer about that?

Gail: Well, Jen is certainly the expert on that, so I bet she can take it away.

Jen: These strategies are definitely appropriate for infant/toddler classrooms, especially the use of those naturalistic strategies, but also the teaching loop. I know in a lot of the child care settings that I'm doing some work in and a lot of the Head Start classes that we're working in as well, these strategies are being used successfully. And then looking at the research literature and what research says about how successful these strategies are with children of different ages, there's lots and lots of research that supports the use of these strategies with infant/toddler classrooms as well as older children. So there's that research and there's that success in the practical application that I know we've seen. So these are definitely appropriate for that age group.

Dawn: Oh ok. Thanks. We lost you just for a minute. So then there was another question about how do you help teachers understand how to effectively embed instruction for their classroom with several children with disabilities? So you've got more than one child with disabilities. That often happens in classrooms. So how can teachers really effectively do that?

Jen: Gail, do you want to take that one?

Gail: I will, and then I have to go in one minute. So I think one of the greatest organizational tools for that is one that you've already kind of thrown up there, I see, in the chat box and one you've addressed, which is that idea of using the activity matrix in which you can think about multiple children across kind of that top -- actually, it looks like there's an example right on the screen, right? So we've got Landon, we have Camilla, they each have individualized learning goals that we need to address, and right there you can see that within the context of one day, you could address multiple individualized objectives at the same time. So I just can't overemphasize enough the importance of having this planning tool, this activity matrix, because it really helps you organize and think about where you have the most -- the best opportunity to embed multiple trials, as you said, across their specific learning activities and goals.

Dawn: That's right. So Jen and Gail, we just want to say thank you so much. We're out of time, but we tried to do a whole lot in a little bit of time, but we really appreciate both of you being here and giving us your time today. Thank you. You can turn off your headset now if you'd like.

Tamarack: And for those of you who didn't have your questions answered today, there will be follow-up via email to make sure that all your questions are addressed. So thank you for sharing those with us and for giving us your feedback and filling out the survey, and have a wonderful day.

Dawn: Thanks, everyone. We'll talk to you next month.