

Brilliant Bilingual Preschoolers

Marley Jarvis: Hi, everybody. Flo, welcome, Bienvenido's. This is our first Front Porch of the year, Brilliant Bilingual Preschoolers. Happy to have you here with us today. In case you've never joined a Front Porch before, I figured I would tell you a little bit about what that is. It's a series we do for a year.

It's a webinar series for teachers, for family child care providers, home visitors. But typically, we're focused on preschool-aged children, 3 to 5, including Head Start, migrant, seasonal Head Start, American Indian, Alaskan Native programs. Real broad view. But, again, focus on ages 3 to 5. And we try and introduce you to some research around various topics in child development.

Today our focus is on supporting dual language learning, and the brain's role in that as well as language in general. And some strategies to keep in mind as we're supporting and working with preschoolers who are dual language learners. And, of course, this includes children with disabilities or suspected delays, which often get left out of this conversation around bilingualism. I'm going to make sure to include that from the outset here today.

My name is Marley Jarvis, and I am from the National Center on Early Childhood Development, Teaching, and Learning. It's kind of a mouthful, it gets shortened to NCECDTL. I'm based at I-LABS, which is the Institute for Learning and Brain Sciences. I-LABS, we're a partner organization. And we are an Interdisciplinary Research Institute at the University of Washington. And we're based there in Seattle at the University of Washington. But, again, we're a partner organization with NCECDTL. And we're dedicated to understanding human learning in general. But we definitely have a focus on early learning and the brain.

Today we're talking about the linguistic backgrounds of children that we work with and the language backgrounds. And that really makes up a part of our stories that we're sharing and giving power to. This is true, not only for the children that we're working with, but ourselves as well. I thought, model that with a little bit of my linguistic background. It's primarily English. I come from an English only speaking household. I was born and raised in California, United States. But my family moved to Spain when I was pretty young.

Then I started attending a Catalan-only speaking school, and then also the community speaks Spanish there. Then we move back to the United States in middle school. Now my dominant language is definitely English. I certainly come from a mostly monolingual family. And I'm no longer fluent in Spanish, Spanish, or Catalan. It's been a really long time. And these languages don't play a large role anymore.

But there's this really interesting thing that happens when I travel back to Spain or interact with friends from that part of my life. You know, sometimes I dream in Spanish or Catalan. And words that I – if you would have just asked me how to say or how to translate something, I wouldn't have been able to tell you. But suddenly they pop out in a social context. Like maybe

I'm at the corner bakery ordering, and suddenly I'm speaking Catalan with that person in that social context.

And sometimes certain ideas or concepts or talking about people or places are easier and more natural for me to think about in Spanish or Catalan, even though English is my dominant language. And it depends on the context where I learned those things or the people that I had those relations with and what language gave the things the most meaning. I just wanted to share some of my own linguistic background is that it's complicated.

Sometimes there's this fluidity of language and culture and social meaning that is so fascinating and rich. And just like ourselves, the children in our care have these really wide-ranging experiences with language. I just want to make sure that we are always aware that it's not necessarily this very clear cut and dry here are the languages that a child might speak and what that means to them, that there's really a broad diversity and fluidity of language and culture. And it's really part of all of our stories and something that we can honor.

And I'm really excited that you are going to have a chance to hear from Dr. Xigris Soto-Boykin today in this webinar. She has a role here at NCECDTL. But she's also an assistant research professor and senior scientist for bilingual learning at the Children's Equity Project at Arizona State University. A whole wealth of information and wonderful, wonderful stories to bring today.

I had a chance to chat with her and record several videos and personal stories that we're going to show for you here today at a couple different points. Her passion for leveraging the success of bilingual children stems from her personal experience as a person who learned English at 11 years old, and her professional experiences.

She's a bilingual speech-language pathologist. She was an AmeriCorps reading tutor and also an early childhood researcher. I hope you're excited to hear more from her in a bit. I also want to ground ourselves here at the beginning in sort of shared language and definitions. I think it's a helpful thing to do. Today we're talking about brilliant bilingual preschoolers, dual language learners. Sometimes that get's called DLLs. But dual language learners is what that acronym means.

In Head Start, dual language learner refers to a child who is acquiring two or more languages at the same time. It also refers to a child who's learning a second language while continuing to develop their first. While I'll use bilingual or dual language learner today, remember, we're talking about children learning more than two languages as well. We prefer the term dual language learner to some perhaps more antiquated, outdated terms like English language learner or limited English proficient.

These terms really center English as the other language that's being learned. And, really, the term dual language learner, it's more inclusive and representative of our broader society today. For many reasons, we tend to use dual language learner in Head Start. In thinking about children who are dual language learners today, we also want you to think about understanding

bilingualism and supporting children who are dual language learners really as an issue of equity. To give a brief definition of equity, that means fair and just treatment to all children, families, and those who support them. Equity enables everyone to achieve their full potential.

There's full definitions of equity in your Viewers Guide. If you haven't found that yet, you should be able to find your Viewers Guide in one of those widgets at the bottom of your screen that you heard about in the waiting room. The Viewers Guide, you can follow along to today's talk there to the webinar. There's various places to take notes and some discussion questions. But at the end of it is a really great list of resources. I want to make sure to call your attention to that here at the beginning.

Then another core tenet for today is that bilingualism really is a strength and that it's central to our identities and to our culture. That language and culture is really intertwined. And, really, no amount of scientific data can measure the importance of language to who we are as individuals. I want to call that out up front. But, of course, science can help us better understand how our brains work and how we learn. That's the piece that I'm going to share with you today, how we learn languages in general, the brain's role there; and how to support this process for all children.

That brings us to our learning objectives for today. The first one is to be able to describe the brain's role in supporting dual language learning. Then the second learning objective for today is to implement strategies to support preschoolers who are dual language learners and, importantly, including children with disabilities or suspected delays in that. We're going to chat a bit about how brain development really serves as the foundation for all learning. This, of course, includes language development. And this is true whether a child is learning one or many languages.

As many of you are probably familiar, there's just this magical time in early childhood, the first few months, the first few years of life, a child's brain is growing faster than it is at any other point in their life. There's just an enormous amount of brain growth going on. And a big part of that, though certainly not all, is language development. Language learning is a huge part of this enormous brain development in the first few years of life.

And, again, that's true, regardless of how many languages a child is learning. And there is an incredible power in early childhood to learn languages. And that language learning really happens in partnership through social interactions with caring adults. No matter how many languages a child learns, there's a single language system.

I think our thinking on this has really evolved, and you'll hear about this from Dr. Xigris Soto-Boykin later, that it's not really additive. I think we used to think about learning more the language — learning more than one language is sort of collecting these separate distinct languages that are then compartmentalized in the brain. But we now know that's not quite how it works. Really, languages that we learn, they're becoming part of the range of linguistic resources available to the child to communicate and make meaning. But there's this single language system.

Now, we can learn language at any time. But as I said, there's this particularly wonderful window of opportunity in early childhood where just our brains are very well-suited for learning languages. I wanted to repeat that message because it's a really important one to send families and education staff because many are receiving the incorrect message, some sort of outdated biased messages that they should wait to speak a home language until, quote, proficiency is met, in whatever other language that they may be learning, which might be English.

We know from research that a strong foundation in any language, including a home language, is what other languages build from. Again, this single language system really supports all language learning. And we know from research that our brains are primed to learn different skills at different times. This is just sort of a graphical depiction of this. You know, as we get older, the plasticity of our brain, which is sort of our ability to change and learn new things, we can learn new things throughout our lifespan. This is an amazing thing of our brains. But there's special sensitive periods for different skills.

Language learning, the sensitive period for that tends to be in the early years of life, roughly before the age of seven, though that's kind of a fuzzy – it's not a hard-and-fast rule. It's a pretty broad generalization. But roughly there in the early childhood window. Another interesting thing is that when children are learning more than one language, that sensitive period expands, sort of delays the closing of that sensitive period. I also wanted to mention that sensitive period in early childhood, that's true, not just for spoken languages but includes signed languages like American Sign Language, ASL.

Really, this wonderful window of time for learning language, number one, it's in early childhood. We don't want to push it off and wait because we do have this really wonderful window; And two, that it doesn't matter which language is spoken, signed, a home language, whatever that may be. The takeaway is not that we can't learn these skills later in life but, rather, our brains are incredibly well-adapted to learn not just one but multiple languages early on in the first few years of life.

[Inaudible] show you a little video from I-LABS, this is a video from a study with younger babies, about 11 months. And we're looking at what's going on in the brain when children are learning either just one language or two or more. What you're looking at here, the white thing that baby is sitting in, is a special brain scanner called MEG, does MEG, which stands for magnetoencephalography. And, essentially, it's looking at where brain activity is in the brain in real time. We can see where things are active.

In this video, you'll see a child first, a bilingual English Spanish child being fitted with a special cap that she wears for her session. Then you'll see her listening to sounds as she sits in that imaging machine. And all languages are composed of sounds, but not all languages have the exact same sounds. Some sounds are specific to English and some are to Spanish and some are shared. Thus, which sounds very similar if you're a native or not a native Spanish speaker but are two distinct sounds in Spanish. And, again, you can download that Viewers Guide. You'll see a link to the full video in case you want to go back and watch it again or use it in a training. But we'll go ahead and watch the snip of that now.

[Video begins]

Narrator: Our researchers first prepared the babies for data collection. They used the hat and a special digitizing pen to track the shape of the baby's head. This procedure allowed us to continuously monitor the baby's head position as they moved in the MEG machine. Then we brought the babies into the MEG room. The magnetoencephalography, or MEG, machine is safe, noninvasive, and completely silent.

By detecting changes in the magnetic field, it precisely pinpoints both the timing and the location of activity in the brain. A baby set on a special highchair beneath the MEG helmet with their parents sitting nearby. The babies listen to a stream of sounds such as da's and ta's.

Teacher: Da, da, da, da, da, da, da.

[Video ends]

Marley: I'm going to show you a little bit of data from that. Again, bilingual babies and monolingual babies sitting, listening to sounds that were either from English or from Spanish or from both. And now some of that data here. And we're looking at the strength of the brain activity, the baby's brains response as they're listening to those sounds.

In the babies that were only learning English or just from monolingual households, their brain had a stronger response to the English sounds and didn't have as strong of a response to the Spanish sounds. However, the babies who are growing up in bilingual environments, Spanish English, their brains had a similarly strong response to both Spanish and English sounds.

It's this really lovely early example of how our language experience early on – remember, they were about 11 months – is already starting to shape our brains. Now, I wanted to point out something here that's very important is notice that the bilingual babies, that blue line, their brain activity wasn't diminished in English just because it was picking up on the Spanish.

I think there's often this common belief that there's some sort of arbitrary limit to language learning and that learning more than one language then comes at a cost to another. This is just one way of looking at that. But, again, some data here just very clear that there's no cost to learning more than one language. Our brain is very, very good at that and is actively going to respond to the languages that we have experience to. In fact, there's actually many benefits to learning more than one language. We're going to hear about that here next.

Part of it comes also from that same study. There was another interesting finding that I'm sharing with you. And the short version is that there was increased activity in the prefrontal cortex part of the brain of the bilingual babies. The prefrontal cortex, that's this part right behind your forehead. It is sort of the center for executive function skills, which is big buzzword. They do a lot of really important things. Our executive function includes planning,

our ability to pay attention, to solve problems, switch between tasks and multitask. A lot of really important academic but also just life skills take place using our prefrontal cortex.

When you're looking on the right, part of that strange looking brain, that's from the data from that paper. The yellow and orange areas, that shows where the bilingual babies had stronger activation than the monolingual babies. And we know about this in adults. Adults who are bilingual, we see this pattern where bilingual adults have that increased activity in the prefrontal cortex. But it's exciting to see this in bilingual babies too. Again, the experiences that we have really shape our brain in a very real way. And it's in line with a growing number of studies that show that being bilingual comes with some advantages, including mental flexibility and cognitive control.

Back to these executive function type tasks, part of it is the ability of our brain to switch from one task to another. Again, a whole bunch of things fall into this executive functioning skill. If you want to learn more about that executive functioning skills, it's part of the approaches to learning domain in the ELOF, Early Learning Outcomes Framework. You can find a link to the ELOF in that resource list and your Viewers Guide. Feel free to dive into that and learn more.

And, of course, this is not to say that bilinguals are the only people who can have cognitive flexibility. This is a really wonderful area that we can all improve with practice so just practicing things that do require us to inhibit our impulses and remember rules and switch back and forth. You can start to think about games, for example, that might do this. Things like red light/green light or Simon Says, these are great examples of the kinds of games where you have to inhibit your impulses and sort of practice these things. They can be great to do with all children or yourself.

Again, anyone can exercise their cognitive flexibility. But we're talking about this with the context of bilingualism because children who are bilingual, they're getting practice doing that naturally. And you can probably think of why. You know, you're switching between languages. You're inhibiting impulse to speak a language in some context but not others. And you're getting a lot of this practice throughout the day. It allows them to be faster and more accurate at switching between tasks, paying attention, inhibiting impulses. And research suggests that translates to other learning domains.

And importantly is that these findings do seem to extend beyond typically developing children, too. One recent study looked at young children with autism who were bilingual and found that they had fewer challenges with executive function skills. Things like impulsivity and cognitive flexibility. Again, truly important to see more inclusivity in these kinds of studies. I wanted to share one with you here.

Some additional benefits of bilingualism. Infants raised in bilingual environments tend to show greater ability to control their attention, increased memory flexibility to remember actions and generalize that information. And in that study, interestingly, it definitely showed across this economic background.

Also, from brain science research, we know that children who are bilingual have more efficient communication between different regions in their brain, which is really interesting. Then later in life, not in early childhood but towards the end of our life, we know that being bilingual is related to stronger cognitive abilities as we age, including delayed onset of neurodegenerative disorders things like Alzheimer's disease.

Given all of these examples and many more, I want to end this section by returning to the idea that bilingualism is a strength. This next little bit, I wanted to chat about language development, particularly milestones, and comparing language milestones with children who are monolingual because this is something that comes up quite a bit. There's a lot of misconceptions here. We will spend a little bit of time talking about this today.

We'll start with a quick pulse check. And I'm going to ask you to do thumbs up for yes, thumbs down for no, because I'm curious if you've ever been told or heard that learning more than one language confuses children or causes delays. Here is that. Again, thumbs up for yes, thumbs down for no. Have you ever been told or heard that learning more than one language confuses children or causes language delays? I'll give you a little bit of time to fill it out. This is something you have heard or been told yourself.

Answers are rolling in. I'm going to give you guys a little bit more time. I'm going to go ahead and that looks like. That's always really interesting. Thanks for filling that out. Quite a few of you all did say yes, this is something you've been told or heard. It's still pretty pervasive. There were some no's, which is great. I'm glad not everybody is being told this. This is definitely not true.

Just to be very, very clear, this is not true. But, unfortunately, it's a pretty common misconception. And I think importantly for us to know is that it's still often passed on by important trusted people like doctors and teachers and other professionals. I think it's really important, then, for us to be prepared to counter this misconception for both families but also for educators.

Some people are told that — or believe that bilingualism puts children at risk for language delays. But really, there's no research suggesting that. And I also want to say that it's very important to include ASL or signed languages in this discussion. Language milestones, whether it's first words or combining words, vocabulary size, things like that can be achieved in any language. That includes both spoken and signed languages.

I think that's important to make sure that we're including not just spoken languages in these conversations, but we'll chat about this a bit more in a second. This is just sort of a simplified graphical depiction of some of these language milestones. First words, that tends to happen around the first birthday, and then later between — maybe around 18 months to two, start combining words, these very, very short, short, short two-word sentences. It might be like go playground or vamos patio. And the later, after age three to four, like having slightly more complex sentences with vamos al patio de recreo. Let's go to the playground.

And, importantly, there's huge variability between children so from child to child, not depending on what languages they may be learning. That's really where we see the most variability. Importantly, if we look at this trajectory of children's language development, really, regardless of how many languages they're learning, these classic language milestones, they're reached at the same time. Again, tons of variability. But it's not because of the languages that they're learning. It's just from child to child. Children who are simultaneous bilinguals so they're learning multiple languages at the same time, they may reach these milestones at the same time in both languages.

Now, children who are sequential bilinguals, they might be learning another language later, after they're learning a first. They might reach the milestones at staggered times, maybe months or years apart. But this isn't the same thing as a language delay. And, again, I want to call out sign languages such as ASL. In particular here as some practitioners and specialists, they may still be recommending that a family of a deaf or hard of hearing child hold off learning ASL in favor of prioritizing spoken language. And I want to be clear that this is not supported by research. This is denying a child language by – that they would get through a signed language.

There's nothing inherently better for language learning from a research perspective about a spoken language. And in fact, research tells us that Deaf children who are learning ASL, for example, do meet the usual language milestones. For example, they might begin to babble with their hands, and this happens around the same time as hearing babies babble with their voice.

To summarize all of this, learning one language, whether spoken or signed, does not take away from a child's ability to learn another. What's important is to think about what are the things that we know that children need for language development in general. That's lots of rich social language input from people who speak those languages well. You might refer to that as a language model or have heard that and that includes home language and also signed languages.

Another way of looking at that is from this study here. For example, let's say we have a bilingual child that hears their vocabulary over time in one language that they're learning and in another language that they're learning. And that second language, now let's say we'll look at a child who is monolingual in that second language.

Now, if we look at the bilingual child's combined vocabulary from both, it looks about the same. But, importantly, think about what that might look like if you are assessing that bilingual child in just one of those languages. I think some of these misconceptions really stem from this, that we really need to make sure that we are assessing children in all of the languages that they know. And we'll circle back to this later in the webinar. I'll show you a resource about assessment.

But I think this is critical that we're not undervaluing all of the languages and the linguistic resources that children have. To learn a little bit more about the current thinking about bilingual language development, bring in this first video here with Xigrid. We'll listen, and she's going to talk about some of the latest research about bilingual language development.

[Video begins]

Xigrad Soto-Boykin: Hi. My name is Dr. Xigrad Soto-Boykin, and I am a speech language pathologist and an expert on early childhood and disability. I currently work as an assistant research professor at The Children's Equity Project at Arizona State University.

I wanted to share two main things about bilingualism that are really important to consider as we think about how to best support children who are dual language learners, children who are bilingual, and specifically those who are bilingual who also have a disability.

The first thing I wanted to share is that our current understanding about bilingualism has shifted. Originally, we thought that bilinguals had two separate language systems with some shared features across the languages. And, oftentimes, we would hear terms like cross-language transfer, or we would focus on providing instruction on one language at a time.

But currently, there's new research coming out by Dr. Ophelia Garcia and colleagues that have really thought about bilingualism as a unitary language system. And what that means is that individuals that are bilingual share features across languages and then choose which features to use, depending on their communication partner.

A simpler way to think about this is that a person's bilingualism, it's like a beautiful necklace comprised of beads that are different colors. And some of them are even meshed together to really represent how it's all connected. It's a string of knowledge about language, and then you select what beads to use, depending on who you're talking to.

This is really important to think about because it changes this idea that children need to have perfect language in these two separate ways. But, rather, we think about how do we integrate everything that children know across their two languages to foster their bilingualism and to help them be successful communicators. This is particularly important for children that are dual language learners with disabilities.

[Video ends]

Marley: I paused her video there because I wanted to dive in and talk a little bit more about that really lovely metaphor that Xigrad shared so how we can think about a person's bilingualism like a beautiful necklace comprised of beads that are different colors to represent a string of knowledge about language that is all connected as one integrated system.

Bilingual, multilingual children, I mean, they exist out in the world as multiple bilingual children. You know, these languages are not in isolation, like two monolingual children one but really this fluid continuous resource like this necklace. When bilingual children are communicating, they're selecting what beads or pieces of language knowledge to use, depending on who they're talking to or what they're talking about is a little bit what I was sharing earlier of, if I'm in a bakery and they're speaking Catalan to me, sometimes those words come out. It's all about what language resources are available to the child and what the context is.

This is especially true within our formal education settings. We really need to recognize, celebrate, and allow for children to use all of these beads. Thinking about our more formal education settings like a classroom type space, that may be more historically English language centered. It's really important to provide that support in the space and encouragement for minoritized languages in particular.

One of the ways we see this blending and selecting of beads is in something that we sometimes call code-mixing or code-switching. Using one or more than one language in a single situation or single sentence. Like, in this example, this child is asking for more and might say, *Yo queiro otro, please!* An outdated misconception but sometimes comes up is that people think that this means that child is confused. And this is not at all the case.

We know that a child will pull some of those beads, depending on the situation. They have access to another language. They might use that word to fill in the gap if they know that word in a different language. A really important thing here, though, is that when bilingual and multilingual children code mix, they're actually following grammatical rules of each language. They're rarely breaking grammatical rules, showing a pretty high linguistic understanding of both the languages that they're using.

And I also want to be clear that just if a child is using a code-mixing like this, it doesn't necessarily mean that they don't know the word in another language. We can't always assume that. Sometimes there's important cultural context to code-mixing and mixing languages that's not just showing just that simple choice of vocabulary. I want to acknowledge that, for sure. And, in general, doesn't indicate confusion, a language delay, or inability to keep those languages apart. It's really a strategy.

And adults use it, too, not just children. There's a resource that I included called *Code Switching, Why It Matters and How to Respond* in your Viewers Guide, so I encourage you to check it out if you want to learn more. And I'll show a video example of code mixing here. We'll watch it and then chat about it.

[Video begins]

Child: Where?

Educator: Do you want me to take off my veil? So, people can see? What can I do?

Child: [Unintelligible]

Educator: You took it off? OK. Have you left it at home? I cannot take off my veil.

Child: [Unintelligible]

Educator: You wanna braid? You wanna...? Can I open it here? It is too big; I can't do it. You can braid your hair. Shall I do it for you? Can I braid it for you?

Child: Yeah

Educator: Thank you. You want a braid? I did for you. OK. You want to have it or you want to put it back?

Child: [Unintelligible]

Educator: Shall I take that out? What? Mom will say why you did it?

Child: I...

Educator: You want a braid?

[Video ends]

Marley: We were watching an educator and a child switch fluidly back and forth from Somali to English. And they mostly spoke in Somali, especially they were talking about her head covering. But they switched to English when talking about braids and braiding hair. Both topics are around the head and the hair, but that language switch can be meaningful in a cultural context. It doesn't necessarily mean that they don't know the word braid in either language.

I also wanted to take the opportunity here just to note that the term code mixing can be seen as English-centric or at least monolingual dominant in terms of a term there because it's describing the bilingual experience from a monolingual viewpoint of mixing in an extra language. I wanted to introduce another word here. Some people prefer a term popularized by Dr. Ophelia Garcia, who was mentioned in Xigrid's video, called translanguaging. And that's what's on the slide here, just in case you're interested in learning more about that distinction.

And it may feel like a subtle distinction, especially if you yourself only speak one language. But part of this important distinction is what we call code-switching or translanguaging does not just mean, again, like I said, that the child doesn't know that one word, so they're mixing it in. But in this video, we can't assume that they don't know the word braid, the child doesn't know the word braid in Somali. But there might be different cultural or social meanings in using that word in English.

It's an important shift here to see bilingual and multilingual children as using the full spectrum of language resources available to them, that necklace that Xigrid talks about, rather than drawing from separate isolated languages. Okay. I'm going to rewind just a little bit. We're going to jump back into that conversation with Xigrid. And we're going to back up just a little bit before where we left off the last time.

Xigrid: To really represent how it's all connected, it's a string of knowledge about language. And then you select what beads to use, depending on who you're talking to. This is really important to think about because it changes this idea that children need to have perfect language in these two separate ways but, rather, we think about how do we integrate everything that children

know across their two languages to foster their bilingualism and to help them be successful communicators.

This is particularly important for children that are dual language learners with disabilities, which is the second main point that I want to make today. In terms of children or DLLs with disabilities, it is really crucial to ensure that we don't forget their bilingualism and that we communicate with parents that it's good to be bilingual.

Research supports that children can develop as strong bilingual communicators, even when they have a disability. And the severity of a disability does not impact their capacity to be bilingual. In fact, being bilingual and having a disability, it's really important because then we're really able to focus on how we can support children thrive within their community context.

As providers who work with preschoolers, one of the ways to do this is to make sure that we infuse the home language, even when we're in a primarily English environment. Some of the ways to do that is to work with interpreters and community partners to identify keywords that can be connected between English and that home language. One other way to do this is to make sure that, whenever we're using communication devices or visuals that we're representing different – all the languages that the child speaks and that we're providing models across the child's entire linguistic repertoire.

This means providing English models, working with families to provide a model in the home language; and, for children that use multiple modalities to communicate such as sign language and pictures, we're modeling all those things at the same time or at least strategically. Working with people that are fluent in these different modalities or languages to help children become as successful as possible.

It is the job of all of us to coordinate our services to ensure that bilingual children with disabilities are getting the supports they need to foster not only their development, general development but also their bilingualism. This really aligns nicely with the Head Start performance standards coordinated approach. And it really is all of our jobs, whether you speak the child's home language or not, to really create an environment that is supportive, that really values children's entire linguistic repertoire, and that we're doing our very best to help all children, specifically children that are bilingual, with disabilities thrive.

Marley: Huge thank you to Xigrd for that. Just to recap, an important point that she said is that children with disabilities can learn multiple languages and also really benefit from bilingual environments and supports alongside their peers. I know Xigrd talked about that.

But just to recap some of the suggestions there, you can bring in a child's home language by working with interpreters, family, and community partners to bring in some keywords from home language. And then communication devices and visuals used by a child to communicate, even across multiple modalities, they really should represent all of the languages that a child is learning. And providing language model so that term again – people who actually are fluent in

all of the languages, it means you get to work with people who are fluent, including signed languages.

We're supporting a child's entire linguistic repertoire, not just the language, languages that we speak as the adult educator. And home visitors may find that some families need a little extra encouragement to use their home language, again, due to often some misinformation that they may have received. You can communicate with them the benefits of a strong home language foundation.

And it's also important to remember that some parents and families have faced discrimination when they use their home language. There's some very real hesitation here. They may want their child to learn English as quickly as possible so that their child does not have the same negative experiences that they have had. Other families may have immense pride in their home language. It's just important to take time to connect with families and answer their questions.

Just show you a resource here. It's a great one for thinking about how to gather and use language information from families. And for many children who are dual language learners, they're spending a lot of time in spaces where the dominant language and culture may be different from their own. A big part of this is building an environment for belonging. Of course, that starts with us. You know, we have to look at our own biases, whether implicit or explicit.

Sometimes we're making assumptions about children who are dual language learners and their families without even realizing it. We might assume what languages they speak or where they were born, how well they speak English, and what family traditions they have. This is another great place to share another resource, our Professional Learning Guides to support dual language learners. And the first one focuses on a lot of what I was just talking about, reflecting on your own beliefs and cultures. Again, you can find a link in your Viewers Guide for that as well.

One of the important strategies we've heard from Xigris is to infuse home language into the learning environment. You can do that in a variety of ways. You know, you do know a few keywords; that can be very helpful. You can make sure that signs and labels and communication devices are available in a child's home language. You can also make an environment that's truly representative of the children and families. And a good way to think about this is to ask yourself about the environment. Can I see the child in the environment, even when they are not there?

Share one more video here. For all children but especially children who are dual language learners, it's really important to allow them opportunities to share their thinking. They need a chance to practice the languages that they're learning and use that in back-and-forth conversation. That can be in prioritizing small group time in the daily schedule. We're going to watch a video of a teacher working with children during group time.

[Video begins]

Teacher: Como se dice banana in English?

Student: Banana.

[Speaking Spanish]

Teacher: I'm sorry. No siento. In Espanol. Banana in Espanol? How do you say it? Como se dice? You said banana in Espanol too? Jose is banana? Banana in Espanol? It is? You learn something new every day.

Student: An apple.

Teacher: An apple. I know that one. That one's manzana.

Student: Yeah.

Teacher: Right? Okay.

[Speaking Spanish] You see this, Vinny? This is something like we just did. This is a pattern too. Banana.

Student: Banana.

Teacher: Break.

Student: Break.

Teacher: Apple.

Student: Apple. Banana, break, apple. Banana, break.

Teacher: What will come next? What will come after break?

Student: Apple.

Teacher: I think you got it.

[Video ends]

Marley: It's a pretty short video, but I thought it was a really nice example of the teacher working in multiple languages. And she's encouraging the children to share their knowledge and help teach her to use a new word. And it can be challenging to provide those opportunities, even in small group time, to provide even more time for children to share their own thinking. But that's so helpful for language learning.

That's something you can either help train staff or be aware of in your own work is just always on the lookout for those opportunities to engage one on one, maybe ask them something they're working on or what they're playing with and sort of those open-ended questions. That's a really wonderful, powerful thing for language learning, no matter how many languages that they're working on.

The last strategy here is it's more of an approach. Thinking about weaving in culture throughout the day. We were just watching something about a math-based activity. How might that be culturally relevant. This is a really nice example from connecting math to animals and objects and art that were important to the Port Gamble S'Klallam tribe, which is a great example of this.

And there's a couple of tools that can help in thinking through how to do that. One is Making It Work. This could be a whole webinar unto itself. I just wanted to make sure to point out this resource. It is a really wonderful way to think about implementing cultural learning experiences for young children throughout the day into their current curriculum. Again, I've linked that in your Viewers Guide.

Then this other piece that I've linked in the Viewers Guide has to do with thinking about a strengths-based approach but, in particular, thinking about screening and assessment. When screening a child, if programs don't take into account a child's home language and they're screening in English only, they may mistakenly identify a language delay or disability when there isn't one. This is a big part of providing equitable services.

Programs must have a qualified bilingual staff member, contractor, or consultant do the screening. And if that person is not available, the program must use an interpreter together with a qualified staff member. And if the program can show that there is no qualified bilingual staff person or interpreter, then the screening may be conducted in English. But they have to gather and use other information to help evaluate the child's progress. And for ongoing assessment, it's really important to take in the child's language and culture into consideration.

There's links and tools here. This is obviously a very big topic. But there's a tip sheet and a bunch of other information on this that I invite you to explore. It takes a lot of careful planning, time, resources to support children who are dual language learners, so it's helpful to ground ourselves in our why. The last video of Xigrid here is her talking about her why. I wanted to share that with you all here before we end today.

Xigrid: The last thing that I wanted to share with you is just my personal story as a speech-language pathologist and why I'm very passionate about talking about disability and bilingualism. My first client when I was a speech-language pathology graduate student was a Mexican American child that, at the time, was nonspeaking and whose family only spoke Spanish. I met him for the first time when he was three years old.

I graduated. I started working in the field, and I was doing home visiting. And I found his name again on the list of clients, potential clients. And because I knew him and I really liked the family and the child, I wanted to work with them. And so I did.

By the time I started working with the child again, he was eight years old. A lot of time had lapsed. He was using – he was still nonspeaking at eight years old. But even when we met – when I met him at three and then when I started working with him again when he was eight, started providing him services that were bilingual.

I wasn't sure exactly how much he was understanding in either language. But because the mom spoke Spanish, I thought it was really important to continue to foster that Spanish language skill. Long story short, we take him to McDonald's so he can use his communication device. And he orders fries, his favorite thing. Who doesn't like fries? And once we sit down to the table to eat, I'm looking at his mom and talking to his mom. And all of a sudden, I hear a sentence that says, I want hugo, which means I want choose.

This child communicated for the first time orally using Spanish and English in the same sentence. This is a beautiful real example of what it looks like when we support children's environment to build their entire linguistic repertoire. His beautiful necklace at that moment had Spanish and English. If we had not provided that bilingual input, this child would have had a truncated linguistic repertoire.

This story really just connects the research with what I just said about disability and bilingualism. And, once again, it just reifies the importance of ensuring that all of us do what we can to really help children that are bilingual, specifically children that are bilingual who also have disabilities, the opportunities to thrive.

Marley: I love that. And a huge thank you to Xigris for sharing her story with us. And we are just about out of time. We're going to go back to where we started is that this is all part of leading with equity. A few final thoughts to leave you with.

We can work to use equitable practices so that all children and families have consistent and equitable access to all services and supports and feel like they belong, regardless of what languages they may be learning. Remember that children's brains are built to learn two or more languages at the same time. It's just how our brains work, and they're wonderful at it. And the enormous amount of brain development that occurs in the first five years of life, this supports children who are learning more than one language as well.

Also, just a reminder that bilingual language development is similar to monolingual language development. There's also many cognitive benefits. We know that social back-and-forth interactions builds a child's brain, which forms a strong foundation for language learning, and lots of quality experience builds children's language skills in each of their language. We know that children and adults learn best in environments that are linguistically and culturally relevant.

Finally, creating a learning environment whether in the home or a group care setting that's supportive of children who are dual language learners can really have a positive impact on their development across learning domains.

Leave you with a few more resources here. The Dual Language Learners Program Assessment, this helps programs assess their management systems and services to ensure the full and effective participation of children who are dual language learners and their families. It's essentially a comprehensive questionnaire. It helps programs evaluate how well they're supporting dual language learners and then gives resources and suggestions. It's available on ECLKC. It's linked in your resource list. It's great.

One more to share with you is that we also have two IPD courses that focus on understanding equity and building belonging. They're both available to you on the IPD. And as a reminder, the IPD courses, they offer certificates of successful course completion. You can use that for PD hours and CA certifications. And I wanted to thank you so much for your time and your attention. And, of course, thanks for all that you do on behalf of children.