>> Welcome. Welcome to -- interpreter? My fault. Ok. Welcome to our presentation on pragmatics. We are thrilled that you survived Day 2 and that you are still with us. We hope to present to you some interesting content and I have a fabulous group of people presenting with me. So, let's just dive right in. This is us. I am Amy Szarkowski. I am companied by these wonderful people so we have some professionals. We have deaf adult, we have a parent, and we are all going to be talking about pragmatics from our various lenses. And, we all have done some work on this pragmatics topic and we will be sharing that with you throughout the course of the presentation today.

Although we come from these various backgrounds we all share the support of families of children who are deaf or hard of hearing and the desire to do something about pragmatics. So what is pragmatics?

>> Well, it can be defined in lots of ways. Turns out that it is defined in a lot of different ways. Especially if you look at different fields of discipline. So, pragmatics for a linguist, is different than pragmatics for a psychologist is different than what pragmatics means for a speech language person. We can think of it in terms of sensitivity to your communication partner. We are looking at children who are deaf or hard of hearing that's one of the things we want to be mindful about.

Aconsiderably, producing comprehending information in social context. Very often, you will hear people describe pragmatics as the social use of communication. But what we will be talking about is that before we have formal, formal, real, what we might think of as communication, we are laying the foundation pragmatics. We want to think of it in every way with communication partners and using those to understand and relate with other people. Repeatedly I find myself thinking we don't learn language just to have language like to to know a lot of vocabulary. We learn it in order to connect with other people.

One of the things I think that's really important for us to promote among children who are deaf or hard of hearing is that ability to use whatever their communication capacities are in order to successfully connect with others.

It's also really important, because pragmatics helps to shape our social cognitive development. Our understanding of the world is influenced by interactions that we have that shape our language and our language is shaped by those exchanges. Right? So that dynamic of going both ways. We do know from the literature it's not vast and extensive. We want to build it but we do know that pragmatics is an area that's sort of a missing piece in social interactions for children who are deaf or hard of hearing and clinically, we know that if you have worked in this field, you might see children whose language scores might be really good and yet there's a vulnerability around how are they using that language ability with peers for example? But also, the other thing can be true. That it can be true that a person who is deaf or hard of hearing on formal language measures might not -- might be here, and yet they have pragmatic strengths like the ability to read the room. The ability to understand others S we want to understand how pragmatics and language are both related and also separate from each other. We also know from Deaf and Hard of Hearing adults looking back we have a paper that's looked at that and we asked Deaf and Hard of Hearing adults, one of our panelists among them, to describe what were your experiences with pragmatics? When we asked very successful highly educated interesting adults to talk about pragmatics, they say that's an area where I struggled. That academically maybe I was fine, but the area when people would tell a joke and I might not quite get it or I didn't want to appear stupid. So adults who are deaf or hard of hearing have helped to inform this work, too. And let us know that it's important, as well.

So thinking about using language broadly defined to relate and connect. And recognizing things that, you know, culture plays an influence in how we do that. There's nuance, shared understanding, inside jokes, all of those are aspects of pragmatics that if we are only looking at the surface level of how our children who are deaf or hard of hearing communicating, we might be missing. For example, my dad came to visit last week. My dad's a truck driver and my brothers do heavy construction. So, if they start -- it's like a low-boy and he's telling me this joke and I have to pull in the recesses of my mind. But if you see my dad and my brothers talk about it, they can throw out -- it's like a hydraulic lift and they are cracking up and on the floor. It's its own culture. Your family probably has inside jokes, too. We are talk about people from various cultures and when they are different cultures, among family members, providers, but even within cultures there are ways we connect with other people that are important to understand, as well.

Maybe your family has a particular joke, you do something every summer so when you talk about camp that has a very particular meaning for you. We want children who are deaf or hard of hearing who are part of those family systems to understand those nuances and inferences and those inside stories, as well.

Pragmatics develops early and we can support it. So we want to emphasize that. Here are a couple of examples. I will let you read these. Read it for you? Ok. By 12 months some of the things that we expect are communicative attention. Children who are 12 months of age are using gestures and vocalizations to let us know their understanding of the world. By 24 months they are asking questions, requesting information, acknowledging different partners that a two-year-old can communicate with one care giver differently than another care giver and they know that difference. By three years or 36 months asking please, sharing stories, telling about what happened. Those are expectations and those fall under those areas of pragmatics abilities, too.

The reason I hesitate a little bit around that is of course there are differences in children's language development and so it might not be exactly on par but this is just an idea of saying even at these young ages we are expecting children to communicate and have different reasons for their communication, to be able to get attention. To be able to show differences in parents and things like that.

This is just a timeline. Just an example from one of the papers that's included in the pragmatics supplement. There's a series of papers all of which are free for you to download. We will talk about them more as we go. But this idea of you can map on pragmatic development on the course of other development. As we are thinking about promoting communication and language abilities, for children who are deaf or hard of hearing we want to emphasize the idea of let's be thinking about, promoting and tracking pragmatics.

>> I need to get to the microphone before I start talking. We want to highlight again people may find it surprising to see us talking about concepts like attachment as related to pragmatics. As we dug into the literature we were trying to better understand why some children who are deaf or hard of hearing may have delays in pragmatics. As we looked at it, we realized we need to start from the very beginning. Because as Dr. Szarkowski just showed us, pragmatics skill development starts in those zero to eight month age range where we are really talking about communication that happens before symbolic language. Before the emergence of sign or spoken language or any other communication system. So the building blocks and the foundation for pragmatics really start very early. And they start because all communication is relational. They start through relationships with their care giver. And so, we wanted to really draw early interventionists' attention to the importance of attachment which, again, in the literature, also has been defined several different ways depending on what body of literature you are going to. But for the purposes of this presentation, we will talk about it as that affectionate bond between an infant and care givers that lays the foundation for the infant's set of security and what their internal working model is of what relationships should be like.

And through that care giver's responsiveness to the child's cues, that back-and-forth nature of social nature of communication is modeled. So think about all the things that care givers do very early on that help the child recognize the back-and-forth nature of communication. Whether it's imitating something that the child does. Making a silly face and imitating their face back at them. Whether it's using touch to communicate to them that something is about to happen. Or to help comfort them. That gives them both a sense of security and a sense of the dual nature and reciprocal nature of communication.

So, we would make the argument that supporting attachment in early intervention also supports pragmatics. And this may feel like stepping outside of the comfort zone to some of our early interventionists. But we are going to hopefully provide you with some information and help you recognize some of the ways that you are probably already doing this. Maybe without calling it an effort to support attachment and to support pragmatics. And we also want to make sure that you have some resources and some guidance. We can't, in the course of a really short presentation, give you all of the information but we hope to direct you to some resources to know to help support families. We would draw your attention also to the paper in pediatrics where we talk about and highlight the importance of these relational factors in developing pragmatic skills for children who are Deaf and Hard of Hearing.

So one of the ways, and Karen, I joked with her yesterday, that really I could just reference her amazing keynote yesterday and then step aside and open it up for questions. But she really highlighted a lot of the importance of early intervention focusing on coaching that care giver sensitivity and responsiveness to infant cues by helping care givers be attentive and responsive to their child's cues or their distress by really, some care givers may not be aware of the needs to follow their child's gaze to what the child is interested in in order to establish a shared reference point for communication. Sometimes that's a skill that needs to be kind of directly coached and modeled. The idea of really supporting environmental modifications to promote visual access. So I have had a lot of families recently tell me especially some of our families of children who are deaf with disabilities how they love those new modern cribs with the clear slats. Because especially if their child is not mobile in the crib, that provides more visual access for the child to recognize when the parent is coming and going. And they feel like it helps establish a sense of security for their child and it gives that -- it's an environmental modification that provides that visual access for the child.

And also, the idea of establishing consistent routines. If you are a child who has reduced hearing and aren't able to access other cues that another care giver is about to leave whether they are environmental sounds or the care giver explicitly telling you in spoken language that you are leaving before you have access through other means. That can be distressing. And that can affect their kind of sense of safety and security. Right? So -- if you have established routines that every time I am going to go in my car to go to work I shake the car keys, that gives that, even before you have learned, you know, another representation of that visually through sign or another language, that lets the child know what's about that happen. So these are all things that sometimes are not intuitive to parents who are adjusting to this dynamic of how they experience the world versus how their child might be experiencing the world, that are really important.

One of the other things that I often see is the need to respond to all forms of communication. We are really used to thinking and a lot of our lit are tour and a lot of our early intervention systems inadvertently emphasize communication as a singular thing. Or like a production of a sign or spoken word when lots of other things are communicative like a reach to continue an activity. Or a point. Or even an approximation of vocalization or an approximation of a sign or eye contact. Referencing. Right? So sometimes parents really need to be alerted and their attention drawn to. They can feel frustrated when they feel their child isn't communicating and what a relief to hear -- oh. They are communicating. That is my child's vocalization or how they tap their foot three times every time they want something. That is them communicating to me and that helps establish that attachment between the child and the care giver and also it's an important pragmatic skill.

It's particularly important to match the strategies to the infant's unique needs. So I think about our children who are Deaf-Blind and how disorienting it can be if you aren't used to looking for those cues when a Deaf-Blind child turns their head in the opposite direction of a sound that they have heard, because they are trying to listen more intently and that can look like they are orienting away from the care giver and you I have seen care givers sometimes misinterpret that as the baby feeling like an adversive reaction to their care giver. So it's really important to be able to coach care givers to understand that in fact your child is attending to you. It just looks different. So, those are just a few examples and I know Karen's going to go through several more. I want it highlight also that in addition to kind of considering those child factors and how to support that, we need to consider, we have heard from so many families, it was such a like powerful and lovely day today, to hear from so many families about their experiences of stress and the impact on the family of caring for their child's especially children who have additional developmental or medical needs. And so, one of the -- we know that that stress can contribute to care giver depression, it can definitely impact their ability to engage with their child and to engage with their child's network of support providers. To also help support them and engaging with their child. So, some of our efforts need to be really driven at increasing care giver support. We also really need to be aware of and screening for those signs of mental health concerns and especially post partum depression in care givers. At the end of this presentation, there are resources that contain, you know, one, one is a very specific link specifically for post partum depression. Another also. If we screen for those things we need to be able to follow up and connect families to supports if concerns are identified. And so, it's really important to partner with your local mental health agencies, with the child's primary care physician. To be able to connect the family to those supports when needed.

>> Ok. Hello, everybody. I'll take it off. I'm too short. So most early interventionists that I nowhere not trained in early intervention. Most were trained in deaf education, special education, or speech therapy. Now those three professions have very different feelings about approaching children, working with children and families that early interventionists do and very different approaches than what our thoughts are with attachment, early attachment, leading to pragmatics development. So we think a lot about what can an early interventionist do if you are a teacher and haven't been trained in this? We tried to think of simple things that early interventionists can think of. Number one, like Debbie said, it's awareness. Awareness. Knowing that I am a teacher, I am used to my lesson plans. I am used -- I'm a therapist, used to putting a child in the highchair and working with the child one on one. But really, it goes back to that mom and that dad and that family and the connections that are being made and recognizing the journey that this parent is on. Because it's a journey like no other. But, thinking about sensitive strategies that you can teach that parent, how they are communicating with their baby, supporting emotionally as Debbie said, that's so, so important. We talked yesterday in a few other presentations I have seen about just backing away and letting them be. That's the first step. That's the first step. Providing all the natural interactions. Like I said, a lot of educators don't know how to be natural. So how can you as a supervisor or early interventionist or a coach support others in learning how to do that. Providing access to all communication opportunities brings that fluidity, the maleable process, the flexibility and ability for parents to relax a little bit. Not sharing just one or two, but really saying these are all the opportunities you have. It takes some stress away for families when you approach it lightly. Balance in the family and professional relationship. And remember in your role, we are walking into these families' homes and it's an honor to be there and knowing that that relationship that we develop is the first step, as well. You have to build trust so that they understand that you are there for them and you aren't going to just tell them what to do. As Debbie said, with more stress, they aren't going to make that connection with their baby. Parent-to-parent support and deaf and hearing -- it brings a sense of awareness and connection that they never imagined. And watching deaf adults interact with deaf babies, parents can learn the very basics of connections, of early language, visual strategies, other things we know.

So, pragmatics come with interaction and dynamic interaction. A lot of us were trained to teach the child to tell the child to tell the parent. But we have to focus on the reciprocal information and the reciprocal relationship between us, the baby, the family and backing away and showing the family how to do that with their baby. So recognizing all of those moments that you see a parent do that and highlighting that is so critically important.

>>> Looking at the style of parent communication and pointing out that's language. That's communication, that's the first step. Makes families feel more grounded, more comfortable and again this first step to pragmatics. As I was reading, I was reading an article the other day and it talked about quantity versus quality. A lot of us in years past would say, narrate their world. Narrate, narrate, narrate. But that's talking to the child. It's not expecting anything to come back. And it's not -- it's not the quality. We want to really highlight quality. Instead of just talking to the child. That's kind of high level and yes, the child, if you are being visual and using visual strategies will pick up some of that, if they are using auditory strategies they will hear those words and that's important. But more important is the quality.

So I wanted to share this new resource that's just been put out by a group of us deaf adults that are working internationally to change visual strategies, connections, attachment bonding, early language acquisition with families and deaf and hearing children. This is death leadership international alliance. If any of you're are out here at deaf or hard of hearing would like to join us, we would love to have you. It talks about visibility but also intention and being realry intentional with your language and the ability of language so that children see that often and see the interaction happening.

There's talking about attention-getting devices and systems and processes. How are you showing the child that something's important? How can you do that visually? Because regardless of if the child is using visual language or spoken language, these visual strategies are important for all children. All babies. And looking at the pace that you are communicating with children again we don't want to bombard them with narration. We want to make it slow and intentional. And with that, because we are running out of time especially, I am going to turn this over to Sara because I really want you to hear the parent's perspective.

>> Thank you, Karen. I just want to hear you guys talk. So just a little bit of a parent perspective. I have a child who is late identified and honestly, at 17 months, I was so distressed about this that I felt like I was holding a little stranger. And thankfully, while my audiologist was not really a people person, once the EI people came into my life and my husband's life, we realized that we did know how she was communicating. We still knew what she enjoyed and what she didn't enjoy and from that we built language. I appreciate the idea that attachment builds language. I had this mental block, but somebody help immediate over it. One ever the things that I think really helped us with her progress in learning these abstract concepts that I really hope she would learn, you know, faith, her dad's stupid jokes, knock-knock jokes. Our family history. You know, that's the stuff we want our kids to know. It's not the MoU that get us excited, the 300 words on the frequently signed whatever whatever. Who cares? I just couldn't see how we would get from here to there. But, when I learned about the concept of pragmatics, it was during the family assessment and realizing that I didn't ask her any questions. I didn't think she could answer. So I didn't ask her any during those videos. And when that EI professional sits down with you and explains why that's important, like the lightbulbs go on. And the next thing that happened was I was at a workshop and I wish there are more workshops where parents and professionals can go together to learn. Because I sat at this thing with Brenda schick lecturing on the theory of mind. And my mind was blown. Of course she didn't know the concepts like think, opinion, dream, because I wasn't using them. I didn't know how to sign them necessarily and I didn't know how to explain them. So let's just avoid them. That's smart. So, I made myself a list and the preschool teacher next to me made herself a list and we began to just expose her to all of those things. And about two weeks later, she said her first "I wish" something would happen in the future and we had a discussion at age 4 and a halfish about a nightmare that she had because I tried to explain dreams. And that just wouldn't have happened if I hadn't had help to open that door myself. One thing I kept on my refrigerator for years was this post-it note that said are you getting a divorce? To remind me to keep my facial expression match to what I was saying. Because my husband and I would get so intense, like even if we enjoyed the same movie, we would be like yeah that was great. And then she would see "mad," even though the words didn't match. And, I thought she had more auditory access than she did at that point. So, I had to learn to make those expressions match. And that was something that early intervention helped me to learn.

Making a chaotic fast-paced home more deaf friendly. My suggestions would be we had three other kids at the time she was learning language. Some older, some younger at that point. And, we kept a schedule with visuals. I did the car keys thing. We did the phone pictures like we are going to this place today and I would have a picture of it on the phone. There are so many more easy ways to do it today. But, just having visuals is something parents need to learn. It doesn't come naturally. At all. And always our question was -- is this a developmental thing? Is it something we can help with? So that's something to take back to your early interventionist. This is a picture of that daughter who, at this point, was having her own little COD A hearing tested and the audiologist is hard of hearing. So it was just one of my favorite pictures. And, sadly, that child is hearing. [Laughter] Maddie said I'm still the only one and think it surprised her that she didn't have a -- that she even wanted a child who was deaf. And her husband, so smartly said, well we can try again. [Laughter] so the tools that helped us I think were those theory of mind words. It's just something concrete that parents can understand. And similarly the mental state verbs. So think, dream, opinion, and then adding the feelings states into those, as well. Teach the emotions. Checking meaning with her to always be mindful that she might not have understood. I think I did a pretty good job at that. I'm not sure I always taught -- I don't think she's reading the room yet. We just have a huge discussion where they gave me a big list of things where she thought I had disrespected her as a 24-year-old. And, yeah -- that's probably how it looked to her. But that is not what I meant. So, we will work through it. Parent-to-parent support, the things I tried to do since I learned this with the families that I meet is -- just noticing that early communication. If it's positive, do it again. And add to it. If it's not, then step away. Because your child's telling you. And then tell your child what you are seeing. You don't seem to like that. You're making the face. Give parents something to talk about in that narrate your day thing. Lord, that is dull.

The think alouds where you are thinking oh, I forgot to get the groceries, I am going to need to change my mind about dinner. All of those things. It is hard to do. And, you want to, if you are signing, also sign to yourself so that the child can experience that think aloud. And you are exposing the child to the language that way. Making social conversation accessible. Not only does it need to be within that listening bubble, if you are using listening. But signing in front of your child even if they aren't paying attention. Just think about how can I get that -- what is the word -- incidental learning. Thank you. Just lost it. Book sharing of course is very important to reading, talking about the characters, what are they going to do next? Also, really critical.

We know that a child who is getting fluency in language is good at jokes, telling rhyme, even lying. That's a pragmatic skill and think that's something families can understand. A typical four-year-old lies. Our kids with hearing loss, not that we would encourage lying, but it's a typical stage of development and you want to sort of promote it. Also, assigning roles and, you know, play. You be the dad, I'll be the mom. We will do this. A child needs to learn how to do that. The why, think you all touched on it. But for me, it's if a child isn't -- if skills aren't promoted for pragmatic language, what are the chances that they will be really successful in making friends? And being able to stand up to adults in self-advocacy? That's what we are asking this small person to do. To tell an adult that they are wrong.

To date. To be employed. You know. All of these really complex skills. We have to focus on. This is a little girl getting ready for preschool. And then we are on to resources. And we are out of time. We are so glad that you are here and we don't want to disrespect those coming after us. There are lots of resources here. We have mentioned the supplement and we have a series of papers if you are interested in reading an academic article, we have published on that topic. We invite you to approach us, reach out to us, let us know if we can assist you with pragmatics. Thank you so much. [Applause]