

The NDBI Navigator/ *Notes*

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ISSUE 03

**Leading the Way in NDBI
Strategies & Support**

By The NDBI Navigator™



Monthly Newsletter

ONLINE COURSES

The NBDI Navigator Academy

<https://courses.thendbinavigator.com>

All Courses

BA30: Implementing the ESDM to Enhance Social Engagement in Young Autistic Children

23 Lessons

\$20.00



All Courses

ESDM Advanced Workshop Supplemental Modules

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All Courses

T19: NBDI Essentials for Autism Providers

Technicians

55 Lessons

\$25.00



All Courses

T18: Patterns in Play (Autism Providers)

Technicians

23 Lessons

\$10.00



All Courses

BA29: Patterns in Play: Using Play Schemas to Promote Engagement

43 Lessons

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All Courses

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Master Class

3 hours

\$75.00



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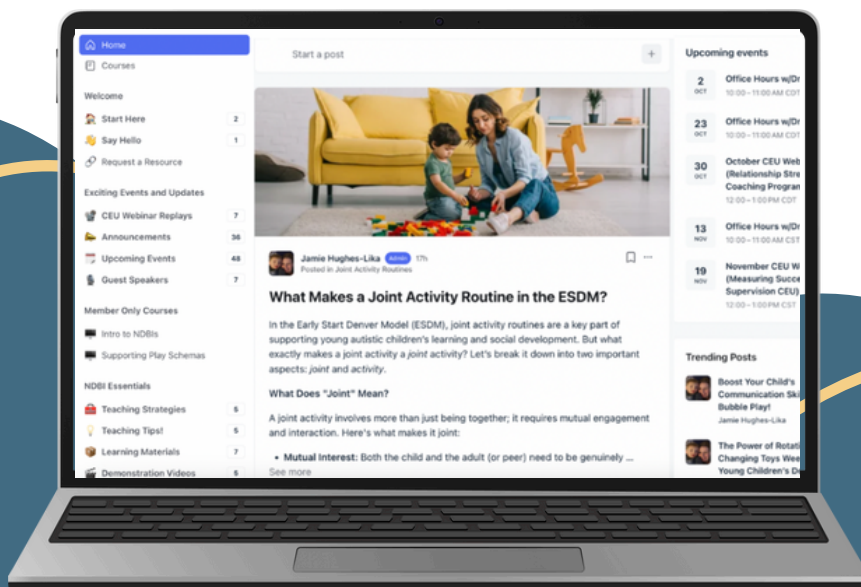
Biweekly Interactive Q/A Discussions W/ Dr. Jamie



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The NDBI Navigator/ *Notes*

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Letter From the Editors

Dear NDBI Community,

Welcome to the third issue of The NDBI Navigator Notes! We're excited to bring you another edition filled with practical strategies, research insights, and community-driven discussions to support your work with autistic children and their families.

This month, our Research Roundup takes a deep dive into behavior professionals' knowledge and beliefs about NDBI practices. As the field continues to evolve, understanding how professionals perceive and apply NDBIs is key to ensuring high-quality, developmentally appropriate interventions.

In Playful Possibilities, we're getting creative with an everyday household item—plastic containers! These simple yet versatile materials offer countless ways to engage children in play-based learning, supporting communication, problem-solving, and motor skills in fun and meaningful ways.

Our Ask & Answer section features a thoughtful reader question about a 2-year-old who becomes easily frustrated when pauses are introduced in familiar routines. We'll explore why this might be happening and share strategies to support smoother transitions and engagement.

As always, our goal is to provide you with actionable tools and insights to strengthen your NDBI practice. We love hearing from you—if you have questions, ideas, or topics you'd like to see featured, reach out! This newsletter is a space for collaboration, learning, and growth.

Wishing you a month filled with joyful connections and meaningful progress,

Dr. Jamie & Dr. Sienna
Editors, The NDBI Navigator Notes

Jamie Hughes-Lika, PhD, BCBA-D, LBA, IBA
Sienna Windsor, PhD, BCBA-D, LBA



Dr. Jamie



Dr. Sienna



Research Roundup

Keeping up with the evidence base: Survey of behavior professionals about Naturalistic Developmental Behavioral Interventions

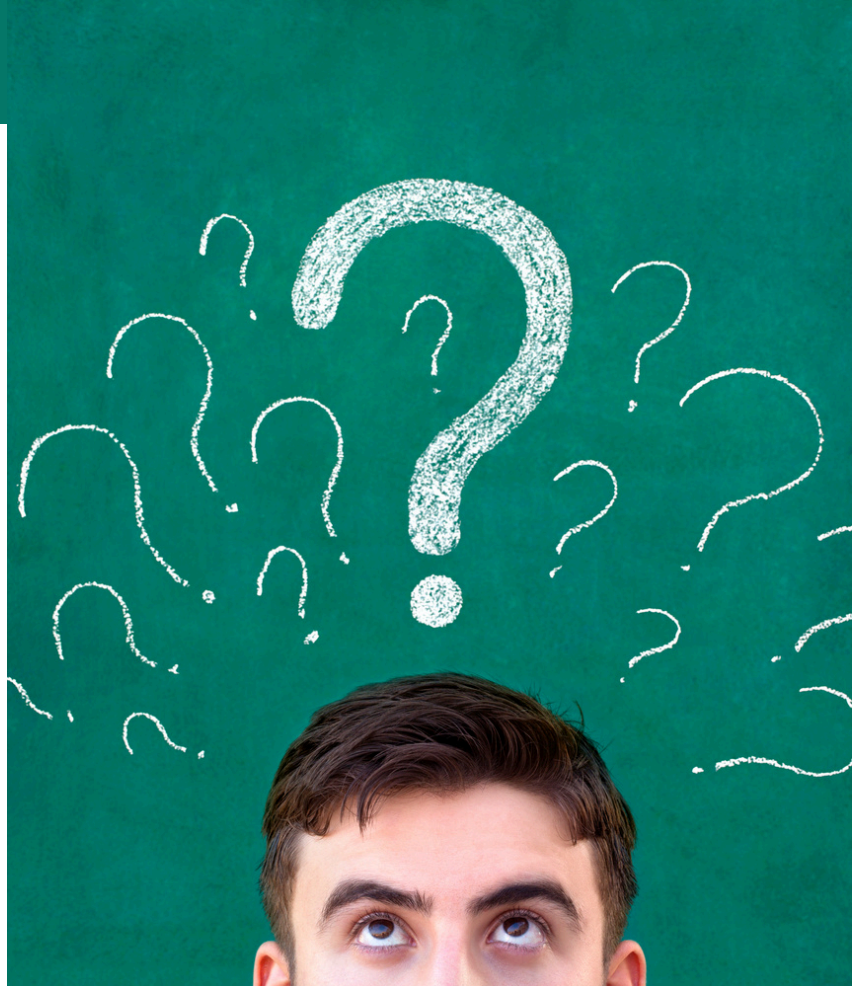
Key Takeaways

This study surveyed behavior professionals working with young children on the autism spectrum to understand their knowledge and use of Naturalistic Developmental Behavioral Interventions (NDBIs). Despite strong research evidence supporting NDBIs as effective for fostering social communication and developmental growth, most of the 901 professionals surveyed, including both Board Certified Behavior Analysts (BCBAs) and Registered Behavior Technicians (RBTs), reported varied familiarity and minimal formal training in these methods. Though many participants described the emphasis on teaching in the natural environment that is often characteristic of NDBIs, fewer reported familiarity with specific procedures and practices such as play expansions and teaching in home or play routines. The study highlights a gap in training and calls for changes to align professional practice with current evidence-based interventions.

Hampton, L. H., & Sandbank, M. P. (2022). Keeping up with the evidence base: Survey of behavior professionals about Naturalistic Developmental Behavioral Interventions. *Autism*, 26(4), 875-888.

Reflection Questions

1. What are some barriers identified in the article that prevent behavior professionals from learning about and implementing Naturalistic Developmental Behavioral Interventions (NDBIs)?
2. What challenges might behavior professionals face when integrating NDBIs into existing service models?
3. How would you respond to concerns that implementing NDBIs falls outside a behavior professional's scope of practice?



Explore More NBDI Articles

Dueñas, A. D., D'Agostino, S. R., Bravo, A., Horton, E., Jobin, A., Salvatore, G. L., ... & Pellecchia, M. (2023). Beyond the task list: A proposed integration of naturalistic developmental behavioral interventions to BCBA training. *Behavior Analysis in Practice*, 16(4), 977-992.

Frost, K. M., Brian, J., Gengoux, G. W., Hardan, A., Rieth, S. R., Stahmer, A., & Ingersoll, B. (2020). Identifying and measuring the common elements of naturalistic developmental behavioral interventions for autism spectrum disorder: Development of the NBDI-Fi. *Autism*, 24(8), 2285-2297.

Vivanti, G., & Stahmer, A. C. (2021). Can the early start denver model be considered ABA practice? *Behavior Analysis in Practice*, 14(1), 230-239.



Creating Meaningful Connections and Fun with Plastic Containers

Playful Possibilities



Welcome to our new series, "Playful Possibilities: Everyday Items, Endless Fun," where we explore creative ways to use everyday household items to foster learning and interaction for young autistic children. In this article, we'll dive into the surprising potential of plastic containers and how these items can be used to create fun, interactive play experiences. By incorporating Naturalistic Developmental Behavioral Intervention (NDBI) strategies, we'll show you how to enhance attention, boost motivation, and support social engagement using this simple household item.

Everyday Items

Creative Play with Plastic Containers

Plastic containers are often overlooked as toys, but they offer a world of possibilities for open-ended, imaginative play. When combined with NDBI strategies, they become a powerful resource to help build foundational social and communication skills. Let's take a look at how this everyday item can be used to create meaningful connections through interactive play.

Endless Fun

1

Stacking Towers

- **Description:** Use different sizes of plastic containers (and lids) to build towers. Encourage the child to stack them as high as they can before they tip over. Or, before you knock them over together.
- **Learning Opportunities:** This activity helps with fine motor skills, visual performance skills, turn-taking, and problem-solving as the child decides which container should go on top.
- **NDBI Strategies:** Narrate the actions as you and the child build the tower (e.g., ‘block on’ ‘tower crash’ ‘fall down’). Remember to use clear words and phrases that the child can understand and might be able to repeat (e.g., up, on top, uh oh, down, so big, crash, boom, etc.). Offer the child choices about which container they want to stack next, whether they want to knock the tower down themselves, have you knock it down, or, even better, knock it down together. If you are playing in the kitchen, you can keep some of the plastic containers in a cupboard or on the counter where they are out of reach. This environmental arrangement strategy will provide you with opportunities to have the child follow a point, reach for the item, request using sounds, words, or phrases, gesture to be picked up to reach the container, and more!



- **Description:** Fill plastic containers with different materials (e.g., rice, beans, small bells, etc.) to create shakers. Let the child explore the different sounds by shaking each container and discovering which makes the loudest or softest noise. *Always supervise young children when using small items to ensure they do not put them in their mouth.*
- **Learning Opportunities:** This activity helps with sensory exploration, cause and effect understanding, and auditory discrimination.
- **NDBI Strategies:** Exaggerate your facial expressions as the child shakes the containers. You can pretend to be startled or scared, happy, or excited. Watch the child's reaction and see if they find your animated actions entertaining. If so, watch for them to orient or shift their gaze toward you before you react. You can change the pace of your actions. Take one of the containers and shake it slow, shake it fast, or mix it up. Did that capture the child's attention? Did they copy you? Observe what the child is doing and imitate their actions. Did they notice you copying them? You can also use the filled containers as drums. What sound do the containers make when you and the child bang on them? Can you create a rhythm by banging the 'drums' together to promote shared engagement?



3 Hide and Seek Items

- **Description:** Hide a small toy or snack inside one of the containers, mix them up, and ask the child to guess where the item is hidden. Take turns and let the child hide the item for you to find.
- **Learning Opportunities:** This game builds anticipation and focus as the child waits for the hidden object.
- **NDBI Strategies:** Provide verbal hints or gestures, offering the child the opportunity to make guesses and engage in the discovery process. Celebrate with enthusiasm when they find the hidden item, reinforcing the joy of shared play. Exaggerate your gestures when it's your turn to find the hidden item. You can put your hands on your hip and make a thoughtful facial expression, put your hand on your chin while you're 'thinking,' or raise your arms in an 'I don't know' gesture. You can point to, knock on the lid, or tap the top of the container to help the child locate the hidden item while showing interest in gestures and actions.



Enhancing Attention - While stacking the towers, you can make silly sounds each time the child adds a container. This technique helps them shift their attention between the stacking activity and the fun sounds, enhancing their engagement and focus. The higher they build the tower, the more nervous you can pretend to get with your facial expressions (e.g., use wide eyes, an open mouth, gasps, etc), and when it is time for the tower to fall down, you can pretend to be scared. Place the container on your head to see if the child will notice it and reach for it or request for you to hand it to them so they can continue stacking.

Boosting Motivation - For some children, the big event for the activity can be highly motivating (e.g., block tower falls down, find the hidden item, etc.). Other children might need you to try other strategies to help maintain social motivation during the activity. If they enjoy stacking tall towers, you can assist them by lifting them up so they can place the containers on top, especially when the tower gets too high for them to reach on their own. For the hidden item activity, try using wind-up toys. When the child finds the item, they'll have a chance to ask for your help in winding it up, providing another opportunity for communication. There are wind-up toys that spin, flip, turn, or move quickly—observe which ones the child enjoys the most to boost their motivation.

Supporting Social Engagement - For the sound shaker activity, if it's safe and there's no risk of the child putting items in their mouth, you can give them a spoon to help fill the containers before sealing the lid. Some children enjoy the visual and auditory effects of pouring items that make different sounds. You can support social communication by offering the child choices of which items to pour. For the stacking towers activity, animate your facial expressions and gestures (ways to maintain both attention and motivation), which can also help support shared engagement. You can place the containers around the room so that both you and the child need to run and find them before stacking the next tower. Remember to place a few containers where the child can't reach them (in sight, out of reach) so there are opportunities for the child to request help.

Conclusion

The beauty of using plastic containers (and other everyday household items) is that they provide low-cost, accessible tools that can spark creativity and social engagement in young autistic children. By incorporating NDBI strategies like offering choices, adjusting your energy to match the child's, and sharing excitement during play, these simple items become catalysts for learning and interaction. Stay tuned for more creative ways to foster fun and learning in our "Playful Possibilities" series! Whether it's laundry baskets, plastic containers, or other household items, the opportunities for play and connection are endless.



Serve and Return

Reciprocal interactions between a child and an adult

How-to-Hub

Welcome to the How-To Hub! This month, we're diving into responsive interactions, known as "serve and return," which is a cornerstone of fostering communication and social engagement in young children. Coined by researchers at Harvard University, serve and return likens these exchanges to a tennis rally—a back-and-forth interaction where both child and adult actively participate. This approach is critical for all children but particularly essential during infancy and toddlerhood, as these early interactions lay the foundation for lifelong learning, emotional health, and resilience.

Serve and return is more than just “playing” with a child—it’s an intentional, responsive interaction that builds communication skills, social engagement, emotional regulation, and a strong foundation for lifelong learning and relationships.

About This Strategy

What is it?

Serve and return describes the reciprocal interactions between a child and an adult. A "serve" is any attempt by the child to communicate or engage—through gestures, vocalizations, facial expressions, or actions. The adult "returns" by responding meaningfully, validating the child's attempt, and encouraging further interaction. Serve and return is more than verbal exchanges. It involves tone, touch, eye contact, smiles, gestures, and other nonverbal cues. These interactions help children feel safe and connected, promoting emotional regulation and brain development.

Serve and Return Support

How to Support High-Quality Serve and Return Interactions

1. Be Observant: Notice subtle attempts to communicate, like gestures, eye gaze, or sounds.
2. Slow Down: Focus on being present and tuning in to the child's cues. Serve and return is about connection, not completing tasks.
3. Be Responsive: Match your response to the child's serve, whether vocal or nonverbal. Add words, gestures, or actions to sustain the interaction.
4. Create Opportunities: Engage in unhurried one-on-one time to foster uninterrupted exchanges. Use play, routines, or shared activities as a natural context.
5. Reflect and Adjust: Pay attention to what works and where challenges arise. Discuss strategies with peers or caregivers to enhance the interaction quality.

During Social Interactions

- ◆ **Serve:** A child looks at the adult and makes a sound during a social game of tickles when the adult pauses.
- ◆ **Return:** The adult responds with an exaggerated smile and excited tone, “Here come the tickles!”
- ◆ **Serve:** A child reaches for a toy that is out of reach and looks at the adult.
- ◆ **Return:** The adult says, “Oh, you want the truck!” and picks up the child to help reach it.

During Movement-Based Play

- ◆ **Serve:** A child sits on a swing, waiting to be pushed, and smiles at the adult.
- ◆ **Return:** The adult pauses and says, “Ready... set... [pause]... GO!” waiting to see if the child vocalizes or gestures before pushing the swing.
- ◆ **Serve:** A child splashes in the bathtub.
- ◆ **Return:** The adult joins in, saying, “Splash! Big waves!” while exaggerating the movement to create a fun, shared interaction.

During Playful Problem-Solving

- ◆ **Serve:** A child watches as the adult puts a shoe on their hand instead of their foot.
- ◆ **Return:** The adult pauses and asks, “Wait a second... is that right? Where does my shoe go?” to encourage problem-solving and engagement.
- ◆ **Serve:** A child reaches for a toy, but the adult pretends it’s stuck.
- ◆ **Return:** The adult playfully struggles and says, “Oh no! It’s stuck! What should we do?” encouraging the child to problem-solve or ask for help.

During Toy Play

- ◆ **Serve:** A child reaches for a toy in a closed container.
- ◆ **Return:** The adult holds up the container and waits, saying, “Oh, the toy!” before modeling for the child to sign or say “open.”
- ◆ **Serve:** A child hands the adult a toy that needs to be turned on (wind-up toy)
- ◆ **Return:** The adult pauses and models, “Go!” or “Wind it” before winding it up.



Encouragement as You Begin

You're already making a difference by engaging in meaningful interactions with your child. Serve and return is all about connection, and even small adjustments can lead to notable progress in communication and engagement.



Your Questions, Expert Insights

Ask and Answer

Welcome to the Ask and Answer section of the newsletter, where we address your most pressing questions about Naturalistic Developmental Behavioral Interventions (NDBIs). This is your space to explore the “how-to’s” of integrating NDBI strategies into your practice, gain insights on common challenges, and discover practical solutions from experts in the field.

Whether you’re curious about coaching caregivers, adapting NDBI for a specific setting, or fine-tuning your intervention strategies, we’ve got you covered. Each month, we select reader-submitted questions and provide thoughtful, actionable answers to help you make an impact in your work with autistic children and their families.

Have a question you’d like answered in the newsletter? Send us an email at support@thendbinavigator.com

Together, we can learn, grow, and empower each other to deliver meaningful, evidence-based support.



Reader Question

"I work with a 2-year-old who gets easily frustrated when I pause during a familiar routine. How can I help them tolerate small changes?"

Our Answer

That's a great question! Many young children, especially those who thrive on predictability and routine, can become easily frustrated when familiar activities don't go exactly as expected. The key is to introduce small changes gradually while keeping the routine engaging and predictable enough to maintain the child's sense of security.

Step 1: Identify What Makes the Routine Comforting

Before adjusting the routine, consider why the child enjoys it. Ask yourself:

- Does the child rely on the sequence of steps to feel secure?
- Is the child drawn to specific sensory elements (e.g., the rhythm of a song, a movement pattern, a preferred object)?
- Does the child expect specific words, gestures, or cues from you?

By pinpointing what makes the routine reinforcing and predictable, you can introduce small adjustments without disrupting the core aspects that help the child feel in control.

Step 2: Introduce Predictable Variations

To help the child tolerate small changes, start with minor, playful adjustments that still honor the routine's structure. Here are some ways to do this:

✓ Use Visual or Auditory Cues for Change

- Before pausing or changing a routine, signal what's about to happen. Try saying, "Wait... let's do something silly!" before adding a small variation.
- Use a visual countdown (fingers counting down, a visual schedule) to prepare for upcoming changes.

✓ Modify One Small Part of the Routine

- If the child expects a certain movement (e.g., bouncing on a ball), try pausing for just one second before continuing.
- If the child sings a song a specific way, slightly change one word (e.g., instead of "Twinkle, Twinkle, Little Star" say "Twinkle, Twinkle, Little Dinosaur" and see if they notice).
- If the child plays with a specific toy, slightly change how it's used (e.g., roll a car backward instead of forward).

✓ Introduce a Playful "Oops!"

- Purposefully make a tiny mistake ("Oops! Did I do that right?"), then wait for their reaction. This encourages flexibility in a fun, low-pressure way.
- Example: If the child expects you to stack blocks in a certain order, stack one upside down and pause to see if they react.

Step 3: Use a Scaffolding Approach

Some children may need additional support before they feel comfortable with changes. Try:

✓ Offering Choices to Give Control

- If the child resists a change, let them have some say in how the activity continues.
- Example: “*Should we go fast or slow this time?*” or “*Do you want me to say ‘Ready...set...GO!’ or ‘1-2-3-GO!’?*”

✓ Pairing Changes with Reinforcement

- If the child successfully tolerates a small variation, immediately follow up with something they love (a preferred action, verbal praise, a fun sound effect).
- Example: If they accept a slight pause in their routine, celebrate with an exaggerated reaction: “*Wow! You waited! High five!*”

✓ Using a Countdown Strategy

- If the child struggles with waiting, try counting down before resuming the activity (e.g., “*Wait... 3-2-1... Go!*”).

Step 4: Expand the Changes Gradually

Once the child begins to tolerate small adjustments, you can:

- Gradually increase the level of change (e.g., pausing slightly longer, introducing a new step in the routine).
- Expand the concept of flexibility to other activities, helping them generalize these skills.
- Acknowledge their progress! Recognizing even small moments of flexibility helps reinforce their ability to handle changes.

By introducing small, predictable variations in a fun and engaging way, you can help a child build confidence in adapting to change—without overwhelming them. Over time, these small steps lead to greater flexibility and resilience in play and daily routines.





NDBI Webinar Events



April NDBI Essentials Webinar (April 24, 2025)

Developmentally Appropriate Practice - Mallory Ndalo, BCBA



May NDBI Essentials Webinar (May 14, 2025)

Understanding/Addressing Barriers to Individualized Care
Dr. Giacomo Vivanti, PhD



June NDBI Essentials Webinar (June 26, 2025)

NDBI Caregiver Coaching - Natalia Santamaria, M.Sc.



July NDBI Essentials Webinar (July 10, 2025)

AAC and Supporting Communication - Janet Harder, R-SLP





NDBI Events at the 51st Annual ABAI Conference Washington, DC May 22-26, 2025

Implementing the Early Start Denver Model (ESDM) to Enhance Social Engagement and Play Skills for Young Autistic Children (5/22/25)

NDBI SIG Annual Business Meeting (5/23/25)

Supporting Parents to Implement Effective Interventions (5/24/25)

Gestalt Language Processing and the Natural Language Acquisition Protocol: Considerations for Autism Intervention *If Not the Natural Language Acquisition Protocol, Then What? Best Practices for Language Intervention (5/26/25)

Examining Naturalistic Development Behavioral Interventions (NDBIs) Through a Behavior-Analytic Lens: A Systematic Review of Interventions for Linguistically Diverse Learners With Developmental Disabilities (5/26/25)

Implementation of Classroom Pivotal Response Teaching (CPRT) for Autistic Students in India (5/24/25)

SAVE THE DATE

2nd Annual NDBI Connections Conference



When

October 23-25, 2025



Where

Live and On-Demand via BehaviorLive

Check Out What's New!



Friday-Saturday Event

Pre-Conference Workshop

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RBT-Student Track



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Dr. Sienna

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Individualized Intervention

Assessments, goal setting, and one-on-one teaching.



Coaching and Family Education

Support using NDBI strategies with your child across daily routines to address challenges and achieve goals that are important to your family



Consultation and Training

Resources and guidance for families, educators, and organizations on autism spectrum disorder (ASD) and developmentally appropriate practice in early childhood