10

The Joint Attention Triangle

Sharing Interests with Others

Chapter goal: To help you teach your child how to share interest in objects with you.

Why Shaving Interests and Attention (Joint Attention) Is So Important

So far we've been emphasizing how to increase your child's interest in paying attention to you. You've now learned (and, we hope, are using) methods for encouraging your child to pay attention to your face, voice, and actions. By teaching and promoting turn taking, imitation, and nonverbal communication, you've been showing your child the power of two people communicating directly with one another. Your child has learned that looking at you, coming to you to express his needs and desires, following your lead (and seeing you follow his), and enjoying activities with another person all have rewards that your child may not have grasped as easily as other children do. The importance of this is huge for your child's learning potential, both in structured educational settings and in the all-important social world, where children gain so much new information and understanding by interacting with others.

But these *dyadic* (back-and-forth) interactions aren't enough. Now it's time to teach your child how to share his attention to objects and other interesting events in the world with others. This capacity to share attention with others is called *joint attention*, or *triadic attention*. *Triadic* means "three-way" and refers to the three points of the attention triangle—your child, you, and your child's focus of interest. Joint attention allows people to share information, emotion, or meaning about an interesting event.

Think about a time when you were at lunch with a friend and you noticed something unusual or interesting. You likely looked at the interesting spectacle and then were naturally motivated to share what you were seeing with your friend. After first looking at the interesting spectacle, you looked back to your friend, then commented on or pointed at the spectacle, and then looked back again at your friend to see if she was looking at it too and to notice her expression. You were sharing your attention with your friend. This *triangle of attention*—the three-way interaction involving two people and an object or event—is joint attention. And it is a fundamental building block for young children's communication and language learning. Studies we authors and our coworkers have carried out, as well as other studies, have shown that children's joint attention skills are strongly related to their later language abilities.¹

Parents and their young children often share moments of eye contact, smiles or other expressions of interest, gestures (pointing, showing, and giving), and sounds or words to communicate about something one or the other has noticed. They might communicate about things like these:

- The names of objects: Mom holds up a round blue object in her hands and, as her daughter reaches for it, says, "It's a balloon."
- Actions happening in play: Dad points to the open spot in the puzzle and tells his son, "The tiger goes here."
- Instructions: A toddler finishes her drink and then hands her empty cup to Grandma while she looks at her and vocalizes, clearly communicating "I want more."
- Experiences to share: A child points to a dog across the street, and Mom looks and answers, "It's a doggie."

A fundamental skill required for joint attention is the child's ability to shift her gaze back and forth between you and the object. Before joint attention develops, children focus their attention mainly on either an object *or* a person during play, but they aren't yet able to shift their attention back and forth, to focus on both the object and the person. At about 6 months of age, children learn to shift their gaze back and forth between an object and a parent's face. This skill contributes greatly to the joint attention skills and the related social, communication, and language learning that comes from it.

What's Happening in Autism?

Two difficulties seem to interfere with joint attention development in ASD. First, as we have said earlier, children with ASD are a little less socially oriented to

¹Toth, K., et al. Early predictors of communication development in young children with autism spectrum disorder: Joint attention, imitation, and toy play. *Journal of Autism and Developmental Disorders*, *36*(8), 993–1005, 2006.

Thurm, A., et al. Predictors of language acquisition in preschool children with autism spectrum disorders. *Journal of Autism and Developmental Disorders*, *37*(9), 1721–1734, 2007.

begin with. They seem to be less motivated to share and engage socially than other children are. Second, children with autism have difficulty learning to shift their gaze from people to objects easily and frequently. They tend to focus on objects more than people, and they may sustain their attention to objects for a long time. They may struggle to attend to multiple people or things in an environment, even when no demands are imposed. Sometimes their attention gets "stuck" on the first thing they are noticing, and they have difficulty flexibly disengaging their attention from the first object and moving on to the next. Most early intervention approaches focus one way or another on teaching young children with ASD to shift their gaze from objects to people and back. Our goal in helping you teach your child joint attention is to help him communicate with others about his shared experiences in the world. Without intervention, developing spontaneous joint attention skills is one of the harder skills for young children with ASD to learn.

Why Is It a Problem?

Without joint attention, children with autism tend not to share their thoughts and emotions about objects and events with important others, and so they lose out on these learning opportunities that contribute greatly to enhancing language, social, and cognitive development. Joint attention also involves reading another person's cues and understanding the partner's desires or feelings about the object—in other words, reading the partner's mind. When joint attention is limited, so is the ability to understand the meaning behind any situation (what something is called, how an object works, or what should happen during an activity) by looking at and following people's eye gaze and gestures.

Equally important, joint attention appears to strengthen children's desire to appreciate, value, and seek out social attention and praise from others when something fun and enjoyable happens. Remember how excited you were to share something you did with Mom and Dad when you were a child? It might have been a drawing you completed that day at school, or a great move you made during a board game, or when you tackled a new feat that you thought was impossible to do. Chances are that you looked right into your parents' eyes, gave a huge smile, and beamed with delight as they congratulated you on your success. This experience does not have to be different for children with autism. We want them to enjoy the excitement, praise, and pride that can result from social interactions. But to make this happen, they need to understand and use joint attention.

What You Can Do to Increase Your Child's Joint Attention Skills

In its most basic form, joint attention involves the ability to shift eye contact or gaze between a social partner and an object or event. Once gaze shifts occur easily, children start to use three main gestures to share attention—giving, showing, or pointing at the object or event—while making eye contact. Joint attention also involves sharing feelings about an object or event through gaze and facial expressions. The child looks at the object and then looks at the adult with a smile or frown, communicating her feelings about the object or event. How can you work with your child to develop joint attention? You are already doing some of the work, by doing things you have learned in earlier chapters:

- 1. Drawing your child's attention to your face and eyes (Chapter 4)
- 2. Positioning yourself in front of your child for all activities to assist with eye contact (Chapter 4)
- 3. Pausing and teaching your child to use her body (talking bodies) to communicate her needs to you (Chapter 7)
- 4. Developing a number of sensory social and object routines that you do together (Chapters 5 and 6)

Once you have increased your child's eye contact and your child's gesture communications, you and your child are ready for the three specific steps toward joint attention skills:

- **Step 1.** Teach your child to give you objects.
- Step 2. Teach your child to show you objects.
- Step 3. Teach your child how to point to objects to share experiences.

In the following pages, we describe how to carry out each of these steps, give you some ideas for activities to try, and suggest what you can do to solve problems that may come up.

Helpful Tip

When you ask your child to give an object to you during play or caregiving activities, be sure to give it back as soon as you get it. If your child does not get it back right away, she will not be very motivated to give it to you. Remember the ABC's from Chapter 9: If the consequence of giving you an object is losing it altogether, you will not have reinforced giving—quite the opposite!

Step 1. Teach Your Child to Give You Objects

Rationale. Joint attention is a kind of turn taking, and it cannot occur unless your child is willing to hand over an object on request and then get it back. Because your child may not have the built-in motivation to interact in this way, you'll have to teach it "from the ground up," starting with the fact that an outstretched hand is a request for the child to give you an object he is holding. Your earlier work with turn taking (Chapter 6) has provided your child with a foundation for this skill. Continue working on this skill to lay the foundation for joint attention skills.

L Activity: Teach Your Child to Give Objects to Get Help from You

Teaching your child to give an object to you when she needs help with the object is an important initial step. It motivates your child to learn the gesture, because the action that follows (your help) works in your child's favor! That gesture becomes much more powerful, however, when your child learns to use eye contact as well as giving to communicate a need for help. When your child makes eye contact and gives an object to you for help, your child has made a powerful communication about her goals.

Here are ideas for teaching your child to give you objects to receive help:

- Begin by showing your child a clear container (plastic zipper bag, lidded plastic container) that your child cannot open by himself, and that holds a highly motivating object. This could be a favorite snack during snack time, a favorite bath toy during bath time, or part of a favorite toy during toy play (e.g., the pieces to a puzzle). Your child will see the objects inside the bag and should reach for it when you offer it. Give the container to your child. Your child will likely struggle to open it.
- Then reach your open hand to your child while saying, "Need help?" Prompt your child to give you the container, take it and open it quickly, and give it right back, saying, "Here's the [object name]."
- Repeat this in various activity types across the day—bath toys in containers, food at meals in closed bottles or containers, fun toys in containers during toy play. Always use the same cues: your outstretched hand and the words "Need help?", "I'll help you," and "Here's the [object name]."
- As this becomes a familiar routine over a few days or so, see whether your child will initiate the request. Give the container as usual, but do not offer your hand or ask about help. Wait, looking expectantly at your child. Your child is likely to hand you the bag. Say, "You need help. I'll help," and then "Here is your [object name]" as you hand back the open container. Celebrate! Your child now knows a way to ask for help.
- Once your child spontaneously and routinely hands things to you for help, start to work on encouraging eye contact when he asks for help. To do this, start as described above and wait for your child to initiate the request for help. Wait a little after your child has given you the object. If your child is making eye contact after he hands it to you, open it immediately, with

your script. If your child is not making eye contact with you, then do not open the container. Instead, just continue to hold it in your hand and look at your child expectantly. Chances are that your child will briefly make eye contact. When he does this, quickly catch his gaze and immediately open the container. If your child doesn't spontaneously look at you when you wait to open the container, ask, "Need help?" without moving the object. If your child makes eye contact, immediately open it. If your child still doesn't look, move the container near your face while looking at your child and ask again or shake the container. Wait for the gaze and then open it. Notice what is happening here. You have shifted the reinforcer (opening the container) so it now follows eye contact, rather than giving. Over time, this should increase your child's use of eye contact and giving to request help.

• As your child becomes more skilled at giving the object and making eye contact for help, wait for them to occur together before you give help, and reward them consistently when they do by immediately helping your child. Your child will learn that giving plus making eye contact equals a powerful communication.

Here are some ideas for how to set up activities for which your child needs your help:

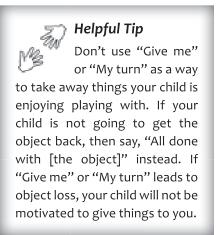
- Use toys or items that your child cannot activate or act on without you: bubbles, balloons, kazoos, other musical instruments, or spinning tops and gyroscopes. When she gives you the item, blow it, play it, or make it go.
- Divide drinks and snack materials into smaller portions or pieces, and teach your child to offer you the bowl, plate, or cup to request more from you.
- Package pieces of favorite toys (puzzles, blocks, pegs, windup toys, little cars, etc.), in containers, and give them along with the script.

Activity: Teach Your Child to Give in Response to Your Open Hand and the Words "Give Me" in Many Situations

Here are some ideas for encouraging your child to give you objects in response to your cues in a variety of situations:

• Ask your child to give you bites of dry cereal, crackers, or other finger foods during feeding activities at the table. Put out your hand, say "Give me," and pretend to eat it. Really ham it up with sound effects and smiles, and then give the food back and thank your child.

- If your child picks up a piece of food and doesn't want it, ask for it back with "Give me." Or, put something on the high chair tray or your child's plate that your child does not want. As your child picks it up to get rid of it, immediately ask your child to give it to you by extending your hand and saying, "Give me," so you can remove it.
- At the end of a meal, have your child "give" a spoon, plate, or cup before you take it off the tray and lift him out of the chair. This is helping with "cleanup," a nice habit to cultivate.
- During diaper changing, hand the diaper to your child and then say, "Give me." Offer your hand, take the diaper, thank your child, and continue the change!
- During bath times, ask your child to give you various toys she is playing with, and then give them right back.
- During dressing, have your child's socks and shoes right there beside your child. Hand the sock to your child (while saying, "Here's sock!") and then say, "Give me sock." Do the same with shoes.
- During object play, ask your child to "give me" a block, a puzzle piece, or whatever little object is part of



the play. Go ahead and put it in place, and then give one to your child. This is turn taking, and you are each giving the other an object and a turn. Very nice!

• Practice "Give me" frequently during the day, two or three times in each activity, until it is learned. Then keep it up.

Summary of Step 1

If you have followed along and carried out the preceding activities, you now have ideas for how to help your child give you objects throughout activities. This step begins the process of using joint attention to share things for help. The next steps will address how to expand the skill into sharing thoughts and feelings about the activities, but for now, see if you agree with most of the statements in the following checklist. If so, you are now armed with important skills for teaching one particular type of joint attention—knowledge you will use in **Step 2**. If not, start experimenting during play and caregiving routines until you have found some methods that work for each statement.

Activity Checklist: Am I Teaching My Child to Give Objects?

- My child and I regularly take turns during object-based joint activities.
- _____ I know how to pause and wait during my turn for my child to look and/or respond to me with a behavior.
- _____ I have set up various objects in containers, and my child gives them to me for help.
- _____ I provide clear cues for my child to give me objects by stretching out my hand and using simple language in my request.
- _____ I make sure to give each object right back to my child.
- _____ I have ideas for how my child will need my help during objectbased activities (toy play, mealtime, bath time).

Andrew's parents have created several turn-taking games and are now ready to teach their 18-month-old son with autism how to give objects. They decide that creating opportunities in which Andrew will need their help might be more rewarding to him than taking the object out of his hands. With bubbles, Andrew's mom begins by placing the bubbles with the lid tightly closed on the floor, where he can easily see and touch it. As soon as Andrew spots the bubbles, he rushes over with excitement and picks up the container, ready to play; however, he quickly realizes that he cannot open the lid by himself. This is where Mom comes into action! Before Andrew becomes frustrated, she says, "Andrew, you want bubbles? Give me," and extends her hand (palm facing up). She waits a second to see if Andrew will comprehend the action, and when he does not respond, she adds, "I'll open bubbles. Give me," and again moves her hand closer to him. When he does not respond, she quickly helps him place the bubbles in her open hand and without delay unscrews the lid while saying, "Open bubbles" and then "Blow bubbles," followed by blowing bubbles for the two of them to pop. She opens and blows right away to reward his giving.

After blowing bubbles a few times, Mom closes the container lid and hands the bubbles back to Andrew. He tries to open the container and cannot. Again Mom says, "Give me bubbles," and extends her hand toward Andrew. This time Andrew holds out the bubbles, and she helps him place the bubbles in her hand while saying, "Give me bubbles." Again she quickly opens and blows the bubbles for Andrew to enjoy, and together they pop, clap, and stomp on bubbles. She closes them and gives them to him again. This time he puts them directly into her outstretched hand. Within a few more practice sessions, he routinely gives them to her, and even picks them up from the table and offers them to her for help, but not always with eye contact.

Now Mom takes the bubbles from him, but then waits momentarily before opening them to see if Andrew will look up at her. This is a change in the routine, and Andrew does look up at Mom to see what happened. She immediately responds by opening and blowing bubbles, and in doing so she rewards Andrew for combining

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his eye gaze with the gesture. She doesn't expect Andrew to look at her every time he gives her an object (no child does that), but she does want it to happen more often and become easier for him to do.

Joshua is a 3-year-old with autism who loves playing with trains. His dad has developed reciprocal back-and-forth games with other toy activities and sensory social routines, but does not feel successful when trains are involved. Joshua is protective of his trains and has his own agenda for how the game should be played. This usually involves lining up and rolling the trains on the carpet, and he doesn't want Dad to touch them or change the routine. Joshua's dad thinks that building in opportunities for help might work in his favor for creating a joint activity routine with trains. He decides that using the tracks, which Joshua cannot do alone, may be even more appealing to Joshua than running the trains on the carpet.

Dad begins by connecting some track sections together as Joshua is rolling trains on the floor. He quickly shows Joshua how to roll trains on the track, and them gives them back fast. Joshua loves this! It's a lot easier to roll trains on the track than on the shag carpet. After Joshua rolls the trains back and forth a few times, Dad takes out a piece of track, then another, until there is only one short one left. Joshua wants a longer track and reaches for a piece, trying to fit it in, but he can't. Dad reaches over to help. Joshua wants another one, and Dad helps again. Joshua picks up the next one, but now Dad extends his hand and says in simple phrases, "Need help? Give me." Joshua gives it, and Dad puts it in right away. Joshua then picks up the next piece, and again Dad says, "Give me." After another piece, Joshua looks at Dad

"We found so many ways to use trains and cars to build joint attention and language. My son loves both types of toys. We could hand out cars or trains individually upon request. We could make the trains and cars do fun things that he might not have thought of trying. I found that trying to help with building track was generally too slow to keep my son's attention (he would just find ways to make it work without being properly assembled), but there were many other possibilities, including running cars or trucks rapidly uphill and downhill, building structures into which the vehicles could crash, and hiding vehicles as a game (like peekaboo) without actually taking them away for long. By setting up a game in which a train rushes down a track to crash, I also encouraged joint attention by pausing, so my son would wonder why the train wasn't moving. This encouraged him to use words to ask for the train to move, and gradually to use eye contact more. At this point, he'll look right at my face to find out why I'm not doing what he expects!"



Helpful Tip

If your child doesn't spontaneously make even brief eye contact after several attempts at waiting to solicit eye contact when she gives for help, then try positioning your face very close to the container or object your child has given you—either by holding it up close to your face, or by moving your body so that you are at eye level with the container or object.

and gives a track without any cues from Dad-spontaneously combining gaze and gesture to get help.

Step 2. Teach Your Child to Show You Objects

Rationale. Showing involves sharing interest in an object by getting your partner to look at your object. Children hold things in front of parents, make eye contact, and draw their parents' attention (often by vocalizing), so that the parents will look at the object and make some sort of comment. It's a very important skill, because it gets people to label objects and so builds children's vocabulary. It also opens the door to social attention, praise, commenting, and other intrinsic features that motivate children to want to share things with others. How can you help your child learn about showing?

L Activity: Help Your Child Learn about Showing Objects

Here are some ideas for motivating your child to show objects:

- First, show your child things. While you are in front of her, say, "Look! Look at the [object]," and hold the interesting object in front of your child. This should encourage your child to shift her gaze to the object. As soon as she does, name the object. Do this many times each day with objects your child is interested in.
- If your child reaches for the object after you show it and her gaze shifts to the toy, hand it right over. This rewards your child for looking when you ask her to.
- Think of the toys, materials, and objects your child comes into contact with each day. Since you and your child are already taking turns with these items, start holding them out to show what it's called, how it works, or what new actions can be done with it before you give it.
- During toy play, hold up an object and call your child's name: "Alex,

look!" When he looks, name it ("It's a ball," or "See the balloon"), then do something with it (roll or throw the ball, or let go of the inflated balloon). Pairing the concept of "showing" with a fun and interesting effect also rewards the look and is likely to strengthen your child's response. He will understand how fun and exciting it is to pay attention to Mom and Dad when they say, "Look!"

- At meals, while your child is focused on his plate, pick up a container of a highly preferred food and say, "[Name], look" while showing the container. After your child looks, hand over some of the food.
- In the bathtub, show your child different materials or new actions to do. First call your child—"Carissa, look"—and when she looks, hold out the toy ("See the duck") and perform the action (make the duck tickle Carissa or splash the water).
- At bedtime, as you are looking at a book with your child, point to a picture while saying, "Look, it's a [object name]." When your child shifts his gaze to the picture, make an interesting effect (sound effect or action with the book).

L Activity: Teach Your Child How to Show Things to You

In Step 1, you taught your child how to give for help by making a specific gesture (your outstretched hand), saying, "Give me," and then helping your child give over the object. What you will teach your child now is how to show things to you by building on the "give." Once your child consistently looks when you show him objects, you can begin to teach your child how to show.

Here are some suggestions:

- Find a time when your child is holding an object. Get right in front of her, and then say, "Show me. Show me the [object]"—and hold your hand out to your child as if you were requesting a "give" (your child should be able to give easily before you start working on how to show). Be sure to emphasize the word "show," because that will be the cue that tells the child that you are not asking her to give it to you, but rather to show it to you. When your child tries to hand the object to you, in response to your request, don't take *it*; instead, admire it very enthusiastically (e.g., "Wow! What a cool bear!") and let your child keep it. Your child has placed the object in front of you, and your enthusiastic attention is the reward for showing.
- Practice this many times a day, in many different activities. You can touch the object to admire it, but you don't want to break your child's contact

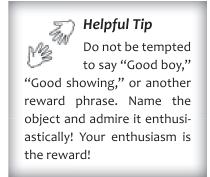
with it. Showing means holding something out for another to see without giving it, and this is what you are trying to teach.

- After your child is routinely holding the object out toward your hand when you say, "Show me," stop offering your hand and see if your child can respond to the words alone. If he does, admire it enthusiastically as before. If not, then offer your hand partway (partial prompt), but not all the way. As you keep practicing, do less and less with your hand until your child is responding just to your words.
- Now, after your child is showing objects to you consistently, wait for eye contact. Ask your child to show, but hold back your enthusiastic comment until your child looks at you. Your child may well look at your face to see why you are not responding. As soon as she looks, admire the object enthusiastically. Continue to wait for the gaze combined with showing to comment; expect your child to show and look at you. If your child doesn't look, then quietly speak her name, make a sound, or draw her hand to your cheek; once you have the gaze, respond enthusiastically! Continue this way, slowly fading your prompts. Your child will likely begin to show while making eye contact and to look more often.

• Note: Be sure to name the object as you admire it, every time. For young children, showing is a powerful way to elicit words from parents, and it

helps build their vocabulary. A typical response we use is "Car! What a [neat, cool, big] car!" In this response, the child hears the key word twice. Language learning is a secondary goal here (and everywhere).

 Think about several daily activities you do with your child-breakfast, getting dressed, toy play, snack time, diapering, sensory social routines, lunch, running errands, going to the park or playground, reading books,



bath time, and bedtime. How many different objects do you and your child come into contact with? Take advantage of these different activities to help your child learn to show different objects. If you can practice this two or three times in four to six activities each day, you will be providing your child with lots of learning opportunities.

• Be sure to continue to show your child objects and use the "look" instruction all the time you are teaching "Show me." Showing and looking when others show are two sides of the same joint attention act. • Be sure to continue to use "Give me" throughout the day, so your child doesn't forget about the correct response to "Give me" while you are focusing on "Show me."

Summary of Step 2

If you have followed along and carried out the preceding activities, you will have taught your child to show you objects on request. See if you agree with most of the statements in the following checklist. If so, you are now armed with important skills for expanding your child's joint attention skills—knowledge you will use in **Step 3**. If not, go back to the start of this section and start experimenting during play and caregiving routines until you have found some methods that work for each statement.

Activity Checklist: Am I Teaching My Child to Show Objects?

- _____ I am able to elicit my child's attention to the object by saying, "Look at the [object]."
- When my child looks at the object, I quickly name it and do something fun or rewarding with it that my child enjoys.
- _____ I know how to show different objects to my child across different activities.
- _____ I know how to help my child show me an object by saying, "Show me the [object]," and extending my hand if needed.
- When my child shows an object by handing it to me, I do not take the object, but instead respond enthusiastically with positive attention and praise.
- _____ My child is able to show objects to me with eye contact (although it may not happen every single time).

What about Andrew? Andrew loves water, and his parents think that bath time might be a fun time to show different objects and actions to him. Dad goes through his usual routine of filling up the tub with bubbles and placing Andrew in it—but instead of dumping in all the toys at once, he decides to show each one to him, starting with a plastic fish. Dad says, "Andrew, look," and when Andrew does, Dad responds with "It's the fish," and hands it over to him. He lets Andrew have a few minutes to play with the fish, describing the actions he does with it and doing fish faces for Andrew to imitate. Next he says, "Andrew, look what I have!" He waits for Andrew to look up before spraying him with the squirting whale, a routine he loves. Andrew laughs and reaches for the toy, which Dad labels, "It's a whale." As he washes Andrew, Dad continues holding up an object every few minutes to show to Andrew, and waiting for him to look before naming it. By the end of bath time, Dad is surprised and delighted at how many times he has been able to get Andrew's attention by saying, "Look," and how quickly Andrew has learned the routine.

What about Joshua? Joshua's mom wants to engage with her son when he plays with trains. She thinks about what she could do that might make him enjoy showing his trains to her, and she decides that adding train sound effects and singing some of his favorite lines from train songs might work. The next time Joshua is holding a train, Mom says, "Show me your train," and holds her hand out. He doesn't want to give her his train, so he ignores her request. Mom repeats her request and lifts his hand in the air a little. She's careful not to touch the train or his hands too long, because she doesn't want him to think she's trying to take it away. As she helps Joshua show the train, she responds with "Ooh, I see the train. It goes choo-choo," and she moves her hands in a circular motion. She makes a little song and dance out of it: "The train goes chug-a-chug-a-chug-a-chug-a-choo-choo!" She stops, and he looks up for more. Then she asks Joshua again to show his train, and again slightly lifts his hand toward her while singing the verse. She decides to elaborate the routine and sing the "Little Red Caboose" song in its entirety with gestures, so that Joshua can enjoy the activity a bit longer before she asks him to show a train to her. Once she has finished, Mom says, "Joshua, show me that train," and points to a different train on the ground. Joshua picks it up and, while he doesn't yet hold it out to Mom, he does look from the train to her. Mom responds immediately, "There's the train! I see it!" and extends Joshua's hand toward her, followed by singing the song. Mom continues the routine, asking Joshua to show her a different train, helping him do the "show" gesture (if he doesn't respond on his own), and responding enthusiastically. She also starts pausing briefly for him to look at her before singing the song, so that she and Joshua can share the excitement.

Step 3. Teach Your Child How to Point to Objects to Share Experiences

Rationale. Pointing typically develops after giving and showing. It's an important tool because your child can use it to share interest with you in objects and events that he is not touching—a bird in the sky, the lights overhead, a dog on a leash, a lion at the zoo. It is another means to comment about something your child sees, and therefore another route to a learning opportunity. As with the other gestures, it is easiest to teach your child first to comprehend pointing and then to produce it.

L Activity: Help Your Child Learn to Follow a Point

Here are suggestions for teaching your child to follow your point:

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- To teach your child what pointing is all about, use your finger to point to, tap, and draw your child's attention to an object very near your child—something your child is looking for or may want. As you point, say something like "Jamie, look. A cookie!" For instance, point to pieces of food on the table in front of your child that she will want to pick up. Point to a puzzle piece that your child will want to pick up and put in the puzzle. Point to the place in the puzzle where the piece should go ("Jamie, it goes here!"). When your child follows your point to the object, help your child as needed to achieve her goal with the object (this is the reward for following your point). For an object your child wants, instead of giving it, put it down and point to it ("Here's the car!").
- If your child does not follow your point, reposition yourself, the child, or the object to help him complete the action. Point to something that is close by, between you and your child. Keep pointing while your child picks up the object, so that your child sees the relationship between your point and the object placement.
- Before using the give-to-me gesture (opening your hand while saying, "Give me"), point to the object you want your child to give you. Point, direct her attention to the object, and then turn your hand over into a "Give me" gesture and help your child give you the object. Give your child a lot of experience with following your points in all kinds of settings. Within a few days, you will probably see your child starting to follow your point and understanding what it means. When your child consistently follows your point, you know that she has learned its meaning.
- As your child learns to follow your point and touch, start to put more physical space between your point and the object you are pointing at, as you continue to say something like "Steffy, look! The baby!" Start by having 6 inches of space between your finger and the object. Later increase it to 12 inches, then 2 feet, then 3 feet (things on the floor, couch, or bed are appropriate for working on longer distances). Now you know that your child knows that pointing directs his attention to something important. Make sure your child gets the object after looking!
- Position objects or toys your child really likes out of reach and point to the objects, saying "Timmy, look! The jack-in-the-box," waiting until your child looks at the object before getting it down and giving it over.

There are many opportunities in your existing routines to help your child follow your point. During your turns, think about how you can vary the activity by pointing to different things your child might attend to.

Here are some ideas for different ways to demonstrate pointing:

- During toy play, use toys that have multiple pieces, so that during play you can point to where the next item might go—the place for a puzzle piece, the top of the tower for block stacking, the hole for the peg or shape that matches. Or hide the last piece on the floor nearby, and when your child is looking for the last piece needed to complete it, say, "[Name], look" while pointing at the needed piece.
- Point to button-activated toys, so that when the button is pushed, the fun effect will happen.
- Use picture books with large, clear pictures (but not too many on a page), because there is something on each page to point to and show your child.
- Try toys that might be a little difficult for your child to use on her own, so that your pointing to show how to operate them will help your child succeed.
- Point to things you know your child will likely want in all kinds of settings—to cereal on his high chair tray, to the next ring that goes on the ring stacker, to bath toys.

Activity: Teach Your Child to Point to Request Objects

Now it's time to teach your child to point! To learn pointing, your child needs to be able to reach with her hand consistently toward distant objects to request them—to indicate choices and desires without having to touch the objects. You have started working on this in Chapter 8.

Here are suggestions for teaching your child to point:

- If your child can use a reach to communicate a request (rather than as a way to grab), hold the object slightly away from your child (e.g., "Do you want a drink?") to elicit your child's reach. Then very quickly mold your child's hand into a point ("Point; point to cup"), and bring the tip of your child's index finger over to touch the desired object. Then immediately give the object ("Here's the cup!"). It works a little better at first if you hold the object in your less dominant hand and shape your child's point with your dominant hand. Don't worry about molding a perfect point. Just work toward extending your child's index fingers.
- Pointing is a challenge for children with ASD to learn, and you will want to help your child practice many times a day at times when your child really wants something (it's the getting it after pointing that rewards your child's

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point and builds the skill). Practice especially at meals, during object play, and during bath time. Try to practice it several times in each activity in which your child is "requesting" an object with her body. Once you give the object to your child, let her have it for a few minutes. You don't want to take it away and ask for another point; that would be very frustrating for your child!

- You should see, over time, that your child begins to extend the index finger without your having to shape it first. That's great! Don't expect a perfect point. It will evolve over time. A spontaneous approximation to a point, without your hand molding, is much more important than a perfect point.
- After your child is pointing spontaneously to objects within reach, you want to teach your child to point "through the air," without having to touch the object. This is called a *distal point*, while the closer one is a *proximal point*. To teach a distal point, hold the object a little out of your child's reach. As your child extends the point toward the object, give it to him without having your child's pointing finger touch it. Start with a 4- to 6-inch gap. Once your child is pointing easily to things just out of reach, hold it back more–12 inches. Then farther–18 to 24 inches. Now your child has a distal point. Now present things from the side or above. Help your child point to things in all directions.
- Once your child has mastered the distal point, provide a choice of two objects while naming the objects ("Andrew, car or truck?"), so your child can point to choose. This works well for larger things-cereal boxes, shirts,

"Picture books were a wonderful resource for my son. We were able to find books with his favorite types of objects and then build more and more on the images. At first, we just used the books to encourage him to point. As he learned to point to things on request, he began to point to the things that interested him the most, to share his enjoyment of them. With time, we were able to ask more and more complicated questions. We initially asked him to point to objects, then to specific colors or shapes, then to parts of objects (for example, 'Where is the wheel?'), then to more abstract things (for instance, 'Which is your favorite car?'), and so on. I was able to find books that showed facial expressions as well, and that was a huge help in practicing recognition of expressions. Once he had the idea of pointing to things in the books, it opened up all sorts of possibilities for learning." milk or water bottles, bath toys, and so on. Pointing to choose is a very functional skill. Be sure to name the choices; this is a great vocabulary builder.

As with the giving and showing gestures, we teach pointing first without expecting eye contact. But once your child is using pointing easily and consistently to request, start to expect eye contact after the point gesture before giving your child what she is requesting. This requires that you be in front of your child and offer things directly in front, so it is easy for your child to make eye contact. Once your child points, hold the object back and wait patiently for your child's eye contact before you release the object. If you need to, call your child's name or make a little sound to encourage her to look at you. Slowly increase expectations that eye contact will follow pointing to an object routinely.

Here are some specific ideas for teaching pointing to request objects:

- You can provide your child with lots of opportunities for practice by controlling multipiece materials, such as puzzle pieces, pieces for a shape sorter, pegs for a pegboard, or Legos, Tinkertoys. Have your child request several of them as you offer them by pointing.
- Putting little round dots or stickers on objects as "pointing targets" helps some children learn pointing more quickly. Each time, they will touch the dot with their point. After they learn to do this spontaneously and it is well established, you can peel off the dots, and they will continue to point.

Activity: Teach Your Child to Point to Show or Comment

Children can use pointing to express several meanings. It can mean "I want this" (requesting). It may mean "Do this" (regulating another person's behavior). It may mean "Attend to this" or "I'm interested in this" (the showing or commenting function). The commenting function is really important for language and vocabulary, as well as social development. It is how typically developing children get parents to label objects of interest. We have already talked about teaching pointing for requesting and teaching giving to get help or to get someone to remove something. Now we shift to helping your child learn to use pointing and gaze as a way of showing or commenting.

Here are suggestions for teaching your child pointing to show or comment:

• Pointing to show is a more complex way of showing. Your child needs to have mastered showing on request before you start to work on pointing to show. One of the best ways to encourage pointing to show or comment

involves developing commenting routines around books that have several very clear pictures on a page, or picture albums, or puzzles with pictures. In any of these routines, while facing your child, point to each picture in turn. When your child looks at the picture (short pause), name the picture (you have done this earlier, in teaching your child to follow a point). When you do this, you are modeling pointing to show/comment. When your child looks, make interesting sound effects to add to your child's engagement with the activity. Be sure your child is attending to each picture you point to. When your child's interest wanes, the activity is finished. Do the same books in the same way for a week or so; it builds up your child's learning about the routine, and your child's interest and attention will likely expand.

- Once your child enjoys and really understands this activity as a pointing and naming activity, you will begin the variation. Be sure to be in front of your child. Begin the activity, *point to the picture, but do not speak*. Don't name the picture. Just wait, ready to speak. Your child will likely look up to you to see why you are not naming. When your child looks at you, name the picture and make the sound effects. If your child doesn't look, refer back to the ideas in the preceding section. Do a few more pictures in the regular way to establish a pattern or theme, and then do this waiting variation again. Continue this way for a few days. You will probably see your child learn to use looking to cue your speech. You have taught the child to use eye contact as a way to get someone to produce a label—that is, as a way to initiate commenting.
- The next step involves teaching your child to use her own point to get you to comment. Position yourself in front of your child. Now, rather than your pointing to the pictures, let your child do the pointing. If she already does that spontaneously, great. Otherwise, take your child's hand and help your child point to each picture while you provide the word and sound effects right after the point, just as before. Once this becomes a set routine, provide less and less help with the point, until your child is leading the activity by pointing to each picture and you are responding to your child's point with a word.
- Once your child is initiating pointing to pictures for you to name, begin the activity, and when your child points to the picture, do not speak. Just wait, ready to speak. Your child will likely look up to you to see why you are not naming, and when your child looks at you, you name the picture and make the sound effects. Do a few more pictures for your child in response to pointing without requiring eye contact, and then do this waiting variation again. Continue this way for a few days. You will likely see your child learn to use pointing and looking to cue your speech. You have

taught the child to use point and gaze as ways to get someone to produce a label—that is, as ways to initiate commenting. Your child is now combining pointing and gaze both to initiate and to comprehend commenting, just as it occurs in typical development.

- Generalize this skill by playing the point-and-name game in many situations. Bathtub toys allow for the point-and-name game. Crackers in the high chair work fine if you line them up and point and count. You can also do this with blocks in a line on the floor, with little cars, with objects on the coffee table, or with utensils at the table.
- Show your child objects outside by pointing and naming. Help your child show you interesting things outside—a flower, a dog, a bird, a sprinkler running—with the point-and-name game. (Remember, the showing routine is also a naming routine.) As you do pointing and showing in more and more situations, you will start to see your child spontaneously point to something, in order to show you something for you to name. This is a huge step and opens up a world of sharing thoughts, feelings, and words for your child.

Summary of Step 3

If you have followed along and carried out the preceding activities, you will have taught your child how to give, show, and now point to objects across different communicative functions (to request an object, to ask for help, to make a comment, to share an experience). See if you agree with most of the statements in the following checklist. If so, you are now armed with important skills for expanding your child's joint attention skills. If not, start experimenting during play and caregiving routines until you have found some methods that work for each statement.

Activity Checklist: Am I Teaching My Child to Follow My Point and to Point to Objects?

- _____ My child is able to follow my point to attend to, place, and pick up toys, food items, or other objects.
- My child is able to make a point (with my help, if needed) when I offer an item or a choice between objects.
- _____ My child is able to follow my point to pictures during book routines.
- _____ When I point to a picture and pause, my child looks up at me during book routines.
- _____ My child points to pictures and looks at me during book routines.

I feel confident that my child and I have the tools to share activities with each other.

What about Andrew? Andrew loves balloons, so his parents think of several ways to work on pointing during this activity. First they start the usual routine or theme in which Andrew communicates to them (by blowing) to blow up the balloon and let it go flying around the room. After a few instances of this, his parents vary the game by kneeling next to Andrew so that he won't see where the balloon lands right away. Since his parents know where the balloon is, they are able to point to its location and help Andrew follow their gesture to pick up the balloon. They make sure he doesn't put it in his mouth (to prevent choking) by being right by his side. Instead, they point to the balloon in his hand and ask him to give it to them. Since his parents have been teaching Andrew to give objects, he doesn't need to see their outreached hand to understand their request and is able to give the balloon. His parents repeat the new game of Andrew asking them to blow up and let go of the balloon, waiting by his side for the balloon to land, and then pointing to its location. It works so well that Andrew starts looking at his parents before the balloon even lands for their cue.

Next, his parents move on to teaching Andrew how to point. His mom blows a little air into the balloon and then points to the slightly inflated balloon, asking Andrew, "More blow?" Andrew makes a sound in response, so his mom blows a little more and then stops. This time she helps him point while making a sound, and then she blows two more times into the balloon before stopping. Again she points to the balloon, asking Andrew, "Blow?", and then takes his hand to point to the balloon before continuing to blow. She does this several more times until the balloon is large enough to let go. She releases the balloon, and Dad points once Andrew looks at him for where the balloon has landed. When Andrew gives her the balloon, Mom goes through the routine of blowing a little air into the balloon at one time before having Andrew request more by pointing to it. Although he doesn't point perfectly, Andrew does tap the balloon with his finger, and that's good enough for Mom and Dad!

What about Joshua? Joshua has several train books that he and Mom usually look at when Mom is getting him ready for bed. Mom places the book between them on the bed and points to pictures that she notices Joshua looking at—"You see the caboose," or "Yeah, there's the smoke." After a few more pages of commenting on what Joshua sees, Mom points to a different picture on the page and says, "Joshua, look! There's the black train," and makes a train whistle noise to add effect. He looks up at her, so she points to the train on the next page and makes the whistle noise again. She continues pointing to the pictures Joshua sees, as well as those she wants to show him.

Mom gradually starts to pause once she's pointed to the picture, because she wants Joshua to look at her. Once he does, she makes the whistle sound or names the picture. Over the next few nights, this is their new routine with train books, and it's not until the next week that Mom helps Joshua point to a picture before naming it or adding the sound effect. She continues pointing to pictures as well, so that Joshua doesn't have to point to a picture on every single page. This could be too much of a new skill to make him do in just one night. But each night during their bedtime routine, Mom helps Joshua do a little more—point to a few more pictures or wait for him to look at her before turning the page. The next 2 weeks are marked by definite improvement in Joshua's ability to share books with his mom. He eagerly chooses which books he wants to take to bed, and when Mom asks, "Where's the red train?" or "Do you see the conductor?", Joshua is excited to point to the picture and say "Train" or simply vocalize a sound. Recently he's started pointing to pictures on his own, in anticipation that Mom will acknowledge them or make the sound effect. Mom and Joshua can enjoy their special time even more, now that he has different behaviors to express and share his enjoyment.

Chapter Summary

Young children with autism face big barriers to understanding and using joint attention to coordinate and share their interests with others, and their lack of sharing often results in fewer and fewer opportunities to communicate and learn over time. Yet children with ASD are capable of making enormous gains in joint attention and other types of nonverbal (and verbal) communication. The crucial techniques involve creating many, many opportunities for your child to share attention with you, and for you to share with him or her, directing gestures to the child and prompting your child to make gestural responses. Remember that typical toddlers are communicating nonverbally with adults all day long. They have hundreds (maybe thousands) of learning opportunities in a day. You are creating these kinds of opportunities for your child. This is a necessary step for verbal language development. The work you are doing at this level is paving the way for speech. As we have discussed in Chapter 7, gestures and gaze are our first language—a language we use forever in social interaction. It is joint attention that allows your child to share likes and dislikes, desires, interests, thoughts, requests, and feelings about objects and events in the world. Gestures, eye contact, and facial expressions give direct access to other people's thoughts and feelings. Teaching your child how to use gestures and gaze in everyday activities to communicate preferences and interests helps your child learn what communication is all about: It is an intentional and powerful system that influences other people.

Learning how to communicate through gestures and gaze can prevent some of the problem behaviors that are often associated with autism, by giving children useful communication tools for expressing their needs, preferences, and wants. It provides your child with a strong base for further language learning with built-in, powerful, natural rewards.



Refrigerator List

Goal: To teach your child how to look at and share interest in an object or toy with you, by using the key joint attention behaviors: giving, showing, and pointing.

Steps:

- ✓ Giving is a powerful request for help!
- ✓ Teach your child to give to you and give it right back!
- ✓ Have your child "look" before you hand things over.
- ✓ Showing begins as giving without the "take."
- ✓ Pointing tells your child where to "look."
- ✓ A child's point commands language and action!
 Give your child this powerful tool.
- ✓ Add gaze to each step to finish it off!

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11

It's Playtime!

Chapter goals: To help you (1) increase the number of learning opportunities in parent–child toy play, and (2) support constructive, varied, independent toy play.

Why Vavied, Flexible Toy Play Is So Important to Learning

Young children spend most of their free time playing. If they are not in the middle of care routines or naps, they are playing with the people and objects around them. Playtime has a number of important functions:

1. Young children use play to build new skills—trying again and again to climb the stairs, to put things in and take them out of containers, to push the car, to fit the puzzle piece, or to arrange their toys just so.

2. They also use play to practice skills they have already mastered. It's easy to see how much pleasure young children receive from "exercising" their skills in play.

3. They vary their play and try creative new ways to use their toys and other objects. And they can turn almost anything into a plaything—plastic storage containers, rags, boxes, sticks, and sand work, just as well as the newest creative plaything from Grandma.

4. Young children also use toy play to practice social skills. We see this in the way they like to have others join in their toy play. They learn by watching what others do with toys, and they learn to share, take turns, and cooperate with others during toy play. In pretend play with others, they practice social routines from daily life in their play with dolls, toy dishes, doctor bags, and toy animals. They act out what they have seen people do in real life and what they have experienced in their own lives. And, of course, when a partner is involved, playtime becomes language-learning time.

What's Happening in Autism?

Though all young children enjoy repetitive play (banging a spoon on the high chair, splashing water during bath time, playing with a pull toy), most young children vary their play routines. They do many different activities in a play hour, and they play with an object in several different ways. Young children with ASD usually enjoy toy play as well, and play with a range of objects. They often enjoy puzzles, blocks, cars, swings, and slides, like their peers, and play with them similarly. But their play may differ from that of their peers in these ways:

- They tend to **repeat an act or motion** more frequently than their agemates.
- They **spend an unusually long time with their favorite toys**, doing the same thing over and over. They don't seem to become bored nearly as quickly as other children do.
- Their play may be much simpler than that of their age-mates. They may get much pleasure out of playing with simple toys, in simple ways, using skills they learned months or years ago, instead of using play to practice new skills.
- They may play with unusual objects or in unusual ways. They may prefer to carry their cars around, one in each hand, or to line them up rather than drive them. They may enjoy playing with objects like strings, shoes, or other materials and ignore their more typical toys.
- They demonstrate less interest and skill with pretend play than their age-mates do. Pretending with dishes, dolls or stuffed animals, doctor's kits, dress-up materials, and similar toys does not seem to interest them, and they may not appear to understand this kind of play.
- They seem more content to play alone with their toys, and for longer periods, than their age-mates do. They do not seem as motivated to include parents, siblings, or others in their play as their age-mates are.

Why Is It a Problem?

Of course, when children are playing alone, they don't have as many opportunities to learn language as they do when they are playing with parents, grandparents, and older siblings. But the differences in how they play limit their learning opportunities in two other ways as well:

- 1. Repetitive, simple play with few objects robs play of novelty, significantly reducing new learning opportunities.
- 2. Playing alone significantly limits children's opportunities to learn not

only new language from their partners, but also new play concepts and the social skills and scripts that usually accompany object play. Since children with autism have difficulty imitating others, they actually need more time playing with others, not less, to get the same benefit from social play as typically developing kids do.

The play that you've been encouraging with your child as you've read Chapters 4–10 of this book has been aimed at building specific other skills: language skills, social and cognitive skills, and communication. In this chapter, which is centered on constructive play, and the next one, which addresses pretend or symbolic play, we focus on play in its own right. Young children with autism will learn more through their play when they can learn to play with lots of different materials and lots of different people, in lots of different ways, in a social and reciprocal fashion. Increase your child's enjoyment in play, and you'll increase the breadth of learning opportunities that your child gains from play.

What You Can Do to Increase Variety, Flexibility, and Learning Opportunities in Parent–Child Toy Play

Caution! Teaching new and more varied ways to play requires using objects to imitate actions. If your child is not doing this very frequently yet, spend a little more time with the activities in Chapter 8 before focusing on the strategies described in this chapter. Imitating others' actions with objects is a building block for developing more mature and varied play.

Building Play Skills from Imitation

Good news! You already know how to teach your child to expand his play! That's because teaching play skills is just like teaching imitation with objects. You will use imitation as your main tool for teaching play skills, and you will teach play by using the same four-part joint activity framework that you have been using to build other skills:

- 1. You will **set up** object play opportunities that follow your child's interests. You will provide attractive materials and interesting activities that motivate your child to play with you, and you and your child will begin to play, following your child's interest into the materials.
- 2. You will develop a play routine, which involves joining in toy play with your child, taking turns, and establishing a main **theme**.
- 3. You will use **variation**, in which you show your child how to play in new ways and hand over materials to your child and help her imitate you and practice the new ways to play.
- 4. For the closing/transition, you will finish the activity when your child's

interest starts to wane; the two of you will then put the materials away and make a transition to another activity.

Deciding What Kinds of Play to Teach

How do you decide what play skills to teach your child? You already know more about the answer to this question than you might think. You know what toys your child has, what toys your child likes, and how your child plays with those toys. What you may need are some ideas for new play skills to teach.

You can expand your child's toy play skills in two main ways: (1) by increasing the number of toys your child knows how to play with and (2) by helping your child increase the complexity of his or her play. Let's start with the topic of increasing the number of toys your child knows how to play with. First, you will need to select toys (and household objects that support play, like nesting measuring cups, pan lids that bang, rolling pins and dough) that "fit" your child's current skills. All children have a wide range of play skills in their repertoire, and your child likely does too. Some of his skills may involve very simple play, play skills he has been carrying out for a long time (like shaking, banging, dropping, watching things move, and mouthing). Others are more mature play skills and involve handling objects in some type of cause-and-effect play, like putting blocks

Helpful Tip

We'll say it again—electronic toys seem to stimulate repetitive and isolated play for young children with autism. So while you are working on expanding play, we suggest you put them away, and also turn off the TV and movies. Focus on simple constructive toys, household objects, and pretend play toys. in a shape sorter, putting pieces in a puzzle, or driving small cars around on the floor. (Save the pretend play toys for the next chapter. In this chapter you will be focusing on toys that are interesting because of their cause-and-effect qualities.)

Start by making a list of all the toys your child has that seem to fit your child's more mature play skills. Once you have done that, circle the toys that your child currently knows how to play with without any physical prompts from you.

These circled toys are your *maintenance* toys, the familiar toys that your child knows and likely enjoys. You will want to be sure to use some of these every day for play. Put an M for maintenance beside those. Now look at the remainder of the list; there are probably a lot of toys that your child has but does not play with. Circle the five that seem like toys your child could learn easily and would enjoy; these are likely very good choices for the toys you want to teach. Put a G beside those five—those are your *goal* toys. Gather them up, organize their pieces, put them in an easy-to-reach spot where you can pull them down for daily play. These are the five toys that you will focus on first. The next section will help you develop

a teaching strategy. Once your child has learned those five, go back through this process, marking those with an M as well, because your child has now learned them, and choosing five more as goal toys. It is safe to assume that your child could learn to play with one or two new toys every week in a simple way if you play with them daily and help her learn them. In this way, week by week, you will be increasing your child's repertoire of toy play skills.

Playing with Cause-and-Effect Action Toys

Now that you have identified a number of goal toys or household objects to teach that involve cause-and-effect actions, you will begin by helping your child learn how to use each of these objects according to its *main theme*, the most typical way that other children would use it. You will use the joint activity framework to be sure your child learns both the main theme of each object and one or more variations. You have already begun this work by helping your child learn to imitate actions on objects (see Chapter 8). Here we are focusing on using the same techniques to build up your child's skill set with toys.

Helping Your Child Learn the Main Theme of a Number of Toys or Objects

Most young children's toys have at least one main theme. For books, it is looking at the pictures and words. For shape sorters and puzzles, it is matching the shapes and putting things in. For pegs, it is putting them in the holes. For blocks, it is stacking and building with them. You want to be sure that your child learns how to do the main action that goes with each object. If your child does not know how to play with one or more of his toys, start with that one main object and its main theme. You need only one action to create a theme for the play. If you're not sure what that is, observe your child's actions with the objects or think about the intended function of the object. Is it meant to roll, stack, bounce, push, pull, go in-out, or go up-down? Pick a name for the action, and take turns doing it with your child.

Here is the sequence:

- Bring out the toy. Get into a good face-to-face position with your child, either on the floor or standing or sitting at a little table or the coffee table.
- Put the toy between the two of you. Take one or two pieces, and show your child how it works by doing it—quickly, and with fun sound effects or simple words.
- Is your child interested? Is he looking at the toy, reaching for a piece,

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sitting down, or watching your actions? If so, then hand your child a piece and see if he copies what you did. If he does, give him a cheer and do a piece yourself, followed by handing your child another piece. He is playing with the toy appropriately! If he doesn't imitate what you did, help him do it, by physically guiding him through the action. You may have to repeat the action, exaggerating the effect and/or slowing down the motion, so your child can observe and process the steps. Or you might have to start the action and then let your child finish it. If this does not work, then again physically help your child complete the action. Give a cheer and hand over another piece, helping your child again.

- Is your child still interested? Terrific! Take a quick turn yourself, and give your child another piece. See if she starts to do it correctly. If so, wait for her to finish, give a cheer, and give another piece if she is still interested. If not, give enough help so that she is successful.
- Try to give your child three to five opportunities to carry out the single action involved in the activity, or more opportunities if he seems interested (staying seated, reaching, watching). Take turns, hand the pieces over, and help your child as needed. Have fun, label, cheer, and enjoy your child's efforts to learn.
- Bring this goal toy out for some playtime daily if you can while your child is learning it. It will probably be more fun for your child with repeated experiences.
- Remember to bring out several maintenance toys each day as welldifferent ones from day to day—so your child continues to practice and enjoy those familiar toys.
- Once your child is using a piece of the goal toy correctly, you can start expanding on his play by encouraging him to put in more than once piece. Set up the toy as you did before, but instead of handing the pieces over one

) Helpful Tip

Many typical toys for young children have many pieces. If your child does not yet know how to carry out the main theme of the toy on her own with one piece, start with just one or two pieces, *not all the pieces*, so your child does not get distracted by the number of pieces. Similarly, having just one toy in front of her to play with may help your child focus on the skills being taught (the toy will be in your child's "spotlight of attention") and avoid becoming confused or distracted by having too many play materials available at once. at a time, put two or three pieces down on the floor or table. Pick up one and do it yourself and then wait for your child to get the other. When your child can pick up two pieces, one at a time, and complete the action with both, you can put more pieces out. Remember to take some turns, label the objects, label the actions, show your pleasure at your child's efforts, and shift toys as your child's interest wanes.

In the Appendix at the end of this book is a list of toys to pick from that work well for teaching varied play with young children of various ages.

Here are some ideas for goal toys involving various types of toys that your child might not be playing with yet:

- Books
- Art materials
- Ball play
- Puzzles, shape sorters, color sorters, pegboards
- Building toys and nesting toys
- Stringing and lacing

"I found First Words, My Little Animal Book, My Big Train Book, First 100 Words, First 100 Machines, and especially My Little Word Book from the [Roger] Priddy book series to be invaluable. My Little Word Book was one of the very most useful, and I can't recommend it highly enough."

• Musical toys (especially rhythm instruments, xylophones, and keyboards)

)Helpful Tips for Choosing Books

- Look for minimal words and pictures on a page.
- Look for simple stories that are repetitive and/or that rhyme.
- Board books (with mirrors, sturdy flaps, etc.), are a great way to involve your child.
- Look for common children's interests (baby faces, emotions, animals, actions, children's routines, etc.).
- As your child embarks on new adventures, such as potty training, washing hands, and so forth, it is helpful to incorporate books discussing these topics into your daily routine.
- And most important . . . follow your child's lead! Involve the child in the bookchoosing process whenever possible. A great way to allow your child to choose books and to supplement your book collection is to visit your local library.

- Outdoor play–sand, water
- Bath play
- Pretend play sets like a farm set or dollhouse (see Chapter 12)

Helpful Tip

The lists of toys and children's books in the Appendix at the end of the book are great sources of suggestions if relatives ask for gift ideas for your child.

Teaching Your Child a Variation on the Main Theme; Variations Add Complexity

Flexible play is very important for learning. You see flexibility when you see your child do more than one thing with a toy. So once your child learns to play with her toys in the main way for which the toy was intended (the main theme), you should introduce a variation. Blocks can be stacked, but also lined up as a road to drive with cars or trains. Connecting blocks (e.g., Legos or Tinkertoys) can be assembled and turned into a helicopter, ice cream cone, or rollers. Children can color with markers, but also with crayons, chalk, and with paintbrushes, and they can make marks, lines, and dots or can trace and color shapes.

Another way to add variation and complexity is to increase the number of actions your child is doing with each toy, both the goal toys and the maintenance toys. There are three ways to add complexity to a toy: (1) adding more pieces, (2) adding more actions, and (3) adding more "phases," or stages, to the play. Building play complexity encourages your child's thinking, memory, organization, and planning. It also holds your child's attention on a toy for longer and longer periods, so building complexity is building your child's thinking ability!

Adding more pieces is an easy way to build complexity, and it was mentioned in the steps above. Children begin with a new cause-and-effect toy by learning how one piece goes in or out or around. However, when your child works with multiple pieces, the whole play becomes more complex. If the toy is a puzzle or a small pegboard or the like, adding all the pieces introduces the idea of "completion": all of the pieces being placed, not just one. The goal has become much more complex, and your child has to maintain the goal of "completing" until all the pieces are placed. Build up the number of pieces as slowly as you need to to help your child sustain attention and motivation to "finish." The number of pieces remaining will define the "finish point" for a while. After your child learns the toy, the number of holes to be filled, if visible, also defines the finish point.

In addition to adding more pieces, you can start to think about adding more actions. What actions are involved in a five-hole pegboard? If you lay out the board, place one peg first, and then hand your child a peg, your child has one action to complete: put in. If you hand your child the five pieces one at a time, and she puts each in, then she has completed five actions, all involving putting in. If the five pieces are lying on the table and your child takes each in turn and places it, she has completed 10 actions, each involving a two-action sequence—pick up and put in. If after completing the pegboard you encourage your child to take each one out and put it on the table, you have added another 10 actions: 5 take outs and 5 put downs. So, as you are teaching the toys, you can build complexity by adding related actions to the play and encouraging your child to develop simple sequences of actions involving each toy, which builds independence in play as well as planning and sustained attention. For each toy you and your child play with, whether goal or maintenance toys, think about how to add these simple action sequences so your child is carrying out more related actions with each piece and each toy.

The final way to build complexity is to add more phases, or stages, to the toy play. Your setup and closing/transition routines are two such phases. In setup, selecting a toy from a shelf, carrying it to the floor or a table, opening it up, and getting the pieces out is a whole set of actions in itself for your child to learn. Picking up, carrying, placing on a table, and laying the pieces out for play is another series, or sequence, of related actions involved in preparing to play. These may involve 10 different actions for your child to carry out before the play even begins, adding more complexity to the play, mental stimulation for your child, language learning opportunities, and sustained attention toward the goal of the toy play.

Your closing/transition phase is similar. When you and your child decide you are done with a certain toy, and your child helps put the pieces back into the container, closes it, stands up, picks up the materials, and puts them away, your child has completed another series of actions and has benefited from the thinking, planning, attending, and communication that accompany it.

Each of your variations in play is also a phase, or stage, that allows for additional complexity. For example, let's say you are using play dough together, and the first theme after the setup is rolling the dough into snakes and then joining the ends to make O's. This involves multiple repeated actions for your child: (1) squeezing a lump of dough in her hand, (2) putting it on the table, (3) flattening her hand and rolling the dough back and forth until the dough is now a "snake," and then (4) using both hands to grasp the ends and pinch them together—four actions for every snake. For the variation, you demonstrate cutting the snakes into little pieces with a child's scissors (it helps your child learn to cut). Now your child has to take the first three actions to make a snake and then (4) pick up the scissors, (5) pick up a snake, (6) cut the snake, and (7) cut the snake again. These seven actions occur in an action sequence for each of the snakes.

So, if your child has had a setup phase, a closing/transition phase, the theme, and a variation phase, he may well have completed 100 actions, with your help, in this 15-minute activity—a very complex chain of actions with multiple goals, plans, language and communication opportunities, and sustained attention. This is where you are headed, over much time and practice with your child, into complex toy play that your child understands, carries out independently, and

enjoys. See how well this prepares your child for both independent play and play in preschool with other children.

In this section we have been discussing how to teach your child to play with an increasing number of typical toddler-preschooler cause-and-effect toys, with increasing play complexity. For these kinds of toys, the theme of the play is in the *cause-and-effect actions* that the object presents, and the variations stay with that cause-and-effect theme. However, there is another type of play that children do with objects, which involves learning the conventional social use of objects—such as using a play phone, stove, cash register, and so on. This is often called *functional play* or *conventional play*. It's discussed in connection with pretend play in Chapter 12.

What You Can Do to Help Your Child Play Independently

Besides playing with others, your child needs to be able to play alone constructively with toys once or twice a day so that you can do something else—laundry, cooking, making beds, taking a shower, answering email, talking to a friend, and so on. Although most children will readily watch a video independently, constructive independent play does *not* mean watching videos repeatedly. Independent play that is appropriate and varied allows your child to continue to learn during these periods and to play as others do. To do that, your child needs to come up with appropriate play on his own, without imitating you. A reasonable goal is 10–15 minutes of independent play.

A good time to start to target this is once your child can easily and frequently imitate the actions you are modeling, has built up a number of play routines with different toys, and can sequence a number of actions with each toy, including setup and closing/transition with your support. To work on spontaneous and independent play, you will change strategies. Your new strategy will be to support your child to choose a toy, set it up, and begin to play without your taking any role as a model. How can you foster this? Here are five steps:

- Step 1. Organize for independence.
- Step 2. Ease out of the play partner role.
- Step 3. Decrease support for the setup and closing/transition phases.
- Step 4. Change toys frequently.
- **Step 5.** Move farther away from your child.

Step 1. Organize for Independence

How you organize your child's toys can make a big difference in your child's independent play.

Here are some ideas:

- Limit the number of toys that are accessible. Too many choices leads to disorganized play and makes it harder for your child to focus on one toy at a time. Store extra toys in a closet or on a high shelf somewhere. Having six toys available to choose from is plenty.
- Organize the toys on a low shelf that your child can reach; try to get them off the floor. Don't stack toys; separate them so your child can easily pick one and put it back.
- Put out a few different cause-and-effect toys that your child likes and that have a number of different actions, all of which your child can carry out alone. Here are some examples: a puzzle, a shape sorter, beads for stringing, plastic bricks for building, and pegs and a pegboard. Avoid using electronic toys when you are beginning to teach independent play.
- Place the pieces in containers, bins, or baskets so your child can easily select a toy and put it away. Put multiple pieces in baggies; use clear shoeboxes to contain all the parts. Your child should be able to get the toy from shelf to floor alone in one trip. If the pieces fall out, or he has to make several trips, chances are that he will lose focus toward his goal. Watch what happens when your child tries to choose a toy and set it up for play; if it is hard for him, consider how you can make it easier. Does it need to be easier to reach? Fewer parts? Less difficult to make work properly?
- Make sure your child can open and close the containers independently.
- Be sure there is a little table and chair for your child nearby, or a rug or blanket or mat on the floor a little distance away (4–6 feet is a good distance from play area to toys). This is the setup for independent play.
- Do not have the TV on, and do not have food available. These are big distractions. Try to situate the play area so that other people do not need to walk through it as they do their activities at home.

If you need some ideas for activities, look at what other children your child's age are playing with. Objects that involve multiple steps are the right kinds of toys for expanding children's constructive play skills. Good choices include some of the ones listed in the Appendix at the end of this book, including board books with large pictures, blocks, multishape block sets, nesting toys, cups, simple shape sorters, Legos/Duplos, Magna Doodle, pegboards with multicolor pegs, and puzzles. If you need more ideas, check out websites for parents. Begin by reading the ideas for children your child's age. If those ideas seem too mature for your child, drop back an age level until you find something that fits with your knowledge about what your child can do and enjoys doing. When your child knows how to play as other children do, and with the same materials, your child has the skills needed to join other children in play and to learn from them by imitating

them—and the other children can learn from your child as well, because you will have developed your child's play skills over many toys and many actions.

Step 2. Ease Out of the Play Partner Role

Your new strategy will be to support your child to choose a toy, set it up, and begin to play without your taking any role as a model or partner.

Here are some ideas:

- Try this when you and your child are playing with a favorite toy that your child can use easily. Once she starts playing, scoot back a little and turn your body a little to the side, so that you are not so available. Watch quietly and see what your child does. Does your child continue to play with the object for a few minutes without your help? If so, your child has succeeded in playing spontaneously! Hold back a little longer, and then comment approvingly about what your child has done ("Yes, ball in the bucket!" or "You shook it! Shake, shake, shake!"). This attention and narration should provide reinforcement for your child's independent behavior.
- If your child does not continue to play independently when you stop taking turns, no problem. You can build up this skill. Start again as you did before. If your child does not continue to play after you pull back, then prompt your child to continue, taking a turn if you need to. In your child's next turn, be more active as an observer: Narrate, show interest, smile, and nod approval, but don't take a turn until your child stops playing. Try to keep your child playing for a few minutes, giving as few prompts as your child needs to play in an appropriate and varied way. Then support your child through the closing and a transition to a new toy.
- Pay attention to how many times you need to help your child continue playing for 3–5 minutes of play. Over time, you want to see this number shrink as your child gets used to playing without your turn-taking support.
- As your child's interest wanes, encourage your child to clean up the toy and take it to the shelf himself. Help him if he needs it, but help from the side or from behind. If your child does not put the box on the shelf, prompt him to do so and then to choose another toy. Congratulations! Your child has just shown you some appropriate, motivated independent play!

Step 3. Decrease Support for the Setup and Closing/Transition Phases

Once your child can play out the theme and variation phases with a toy nicely and independently, and can sustain this for a few minutes, she needs to learn to carry out the setup and closing/transition steps independently to sustain independent play.

Here are some suggestions for all four steps:

- Setup: Have your child come over to look at the boxes, and physically choose one by picking it up. Support your child as needed, from behind, to carry the toy to the play space. See where your child is headed (table or floor), and then support your child as needed to put the box on the table or floor, sit down, get out all the pieces, and lay them out in front of him. Sit with your child, but not right in front and not too close. Beside is a good place for now, but eventually you will want to be behind your child.
- **Theme:** Wait for your child to begin and watch your child build the theme, narrating occasionally.
- Variation: Encourage a variation through language, prompts, and gestures. Try to go through these types of prompts before taking a direct turn:
 - Say or verbalize an action for your child to do: "Can the car drive fast?"
 - → Offer, show, give, or point to what the child might do: "Look [point], the car can drive there," or "Can the car crash into the block [hand block]?"
 - ➔ Model or gesture as you need to so your child adds a variation, but don't then take turns. Continue to observe and comment.
- Closing/transition: As vour child's interest wanes, encourage her to put the materials back in the box to clean up. Then have your child stand up, pick up the box, take it over and put it where it was, and pick another box. Notice that the closing leads into a transition to a new setup. By prompting as needed from behind or beside your child, rather than in front, you are teaching your child how to carry out this transition on her own. This is the key to independent play-your child's ability to sustain play across multiple toys.

"I didn't think there was any hope my son would learn to neatly take out toys, play with them, and put them away until he was much older. As a result, I didn't push him to do these things without help (I would always encourage him to put toys away). As soon as he started preschool, he was able to do all of the steps without encouragement. It made me realize I had held him back by underestimating what he could do."

Step 4. Change Toys Frequently

Change one or two of the toy choices every day or two, but don't change them all. Do make sure to rotate all the toys, even your child's absolute favorites, so your child develops a wider and wider range of toys he plays with independently. When your child gets a new toy, join your child in turn-taking play until your child knows how to do all the steps. Then it can also become a choice for independent play.

Step 5. Move Farther Away from Your Child

Here are some suggestions:

- Gradually move farther away once your child starts with a toy, and make yourself less readily available (read a magazine page or two, put something away, move something to another room). Do not provide more support than your child needs; actually, try to provide a little less. It is okay for your child to struggle a little once the routine is very well established, so she can solve problems that arise in independent play. Helping your child learn to make transitions between toys independently is the key here, and soon it may be the only time you need to support your child in this.
- Remember that the goal here is child independence. Don't expect your child to play as creatively alone as he does with you, though he may. The goal here is playing alone constructively, not practicing every skill you have taught.
- After your child is playing well independently, choosing several different toys, and managing the transitions well alone, you can add an electronic toy to the set of choices if you want, to see what happens. If your child starts to choose it preferentially and "gets stuck," put it away again. This is true for any toy that your child uses in a highly repetitive fashion and cannot move away from. Repetitive play doesn't give your child many learning opportunities. That is why you are rotating choices frequently: to prevent repetitive play, to increase your child's play repertoire and flexibility, and to prevent boredom.

Summary of Steps 1–5

If you have followed along and carried out the preceding activities, you are establishing joint activity routines and teaching your child to play with toys flexibly and independently. See if you agree with most of the statements in the following checklist. If so, you are now armed with important skills for expanding your child's play-knowledge you will use in the next chapter. If not, start experimenting during play and caregiving routines until you have found some methods that work for each statement.

Activity Checklist: Am I Teaching My Child to Play Flexibly and Independently?

- I am teaching new actions with toys by first encouraging my child to imitate an action he or she already knows, and then introducing new actions with the toys.
- _____ If my child doesn't imitate the new actions I am modeling, I prompt my child to carry out the action and then fade my prompts over time.
- _____ I use the joint activity framework (setup, theme, variation, and closing/transition) to teach conventional actions with objects.
- I am encouraging independent play by organizing the play setting, slowly easing out of the partner role, and decreasing support for setup and closing/transition from one activity to another.
- ____ I remember to rotate toys over time to sustain my child's interest in the toys.
- _____ My child is able to play more independently as I step out of the play.

Questions You May Have

What about siblings? Your child with ASD will probably learn independent play more quickly if you can focus on teaching this when siblings aren't demanding your attention—such as when siblings are napping or off on their own activities. If you can't, however, you can teach both children to carry out the independent play routine, coaching the sibling with language while you prompt your child with ASD from a closer position. This will also provide opportunities to teach each child to respect the other child's materials—to wait until the other has finished if they both want the same toy.

What if my child does not add new actions to the play? First, make sure your child is interested in the play. Is he reaching for the materials, taking turns doing things with the materials, and watching your actions? Your child needs to be interested in the materials and enjoying the activity to learn how to do new actions. Second, be sure to model new actions when your child is watching; otherwise, he won't see the new skills you're trying to teach. Third, resist physically teaching your child to do things. Instead, model the action several times with your toy, add fun effects to increase motivation, and encourage your child with

words and gestures. If you have to help physically, be sure to use it as the last resort, and continue to practice the new action so your child can strengthen his skills.

Chapter Summary

In this chapter we have focused on expanding your child's play abilities with a wide range of objects, using a wide range of actions. There are two main purposes for focusing so much on toy play: (1) to build your child's thinking, language, and social skills, and (2) to prepare your child well for participating in typical early childhood settings. Building your child's play skills with a typical range of toys found in any early childhood setting is crucial for both these purposes. In doing so, you are also building your child's curiosity, awareness of others, and sense of competence.

We have also focused on building children's independent play skills. The ability to play alone constructively for periods of time is an important skill for every child. Preschools expect that children will have independent play skills. We have provided steps for building up both your child's independence in play and your child's range of play skills. Constructive play is only one type of play that we want to encourage in young children with ASD. The other type is pretend play, also referred to as symbolic play. The next chapter will focus on this.



Refrigerator List

Goal: To increase constructive, varied, independent toy play

Steps:

- ✓ Teach your child to play with his toys! Go from easy to harder slowly.
- ✓ Model first, then prompt if needed. Fade prompts fast!
- ✓ Use the four-step joint activity framework (setup, theme, variation, and closing/transition) to teach your child more play skills.
- ✓ Encourage independent play by organizing well, sitting behind, and easing out.
- \checkmark Rotate toys to prevent boredom.

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