3

How Your Early Efforts Can Help Your Child Engage with Others and Boost Your Child's Learning

Terell, age 2, was recently diagnosed with ASD. His parents, Patricia and James, are meeting with the doctor who conducted the evaluation, and they mention that one of the most frustrating things for them is Terell's difficulty communicating. They find it very hard to know what he wants or needs and are always guessing why he is upset. Is he hungry or tired? Uncomfortable or in pain? If only he could just point to what he wants, instead of erupting in a tantrum that seems to come out of the blue! When his mother tries to talk with Terell, he seems to ignore her and often pulls away. Patricia and James are feeling helpless and frustrated.

No doubt you're having experiences something like these. In this case, the information in this book should give you some very useful tools to help your child with ASD communicate and learn, and in turn to lessen your (and your child's!) frustration. That's because it's based on decades of research and clinical practice with young children with ASD—experiences that have informed us about how and why good early intervention works. Your use of our techniques will be enhanced when you know what's behind the strategies, so this chapter is intended as a foundation for the rest of the book.

How Young Children Learn

In most cases the communication difficulties associated with autism begin very early, long before speech develops. Sometimes a child will begin to communicate, but then loses those skills in the second or third year of life. Young children with ASD are often unaware that messages can be sent between people, from one mind to another, through thin air, by using our eyes, body movements, and speech sounds. The child with autism sees these movements and hears the speech sounds, but doesn't know there is meaning behind them—a message to be read.

If you think back, you might have seen the beginnings of your child's autism when your child was still a baby. For some children, the differences in behavior are easy to notice; for other children, the differences are subtle and easily missed. Still other children with ASD don't seem to have any difficulties during their first year of infancy, but develop autism symptoms later. Studies by one of us authors (G. D.) examined parents' home videotapes of babies who later developed autism.¹ These videotapes showed Dawson and her colleague Osterling that by 8-12 months of age, these babies as a group spent less time looking at other people, responded less when their parents tried to get their attention (by calling their names), and did not use the early gestures (like pointing) that babies typically use before words develop and that help them progress into speech. Thus the way these babies experienced their environments was very different from that of most babies; they spent less time focused on other people and had much less experience with communication. This is important, because during the infanttoddler years a baby's brain is changing rapidly, soaking up information and being shaped by that information. Babies' brains are not fully programmed by

"I knew at 9 months of age something was going on with my daughter. I could leave her in her bouncer for hours, and she would just zone out and watch TV. What baby does that? She was perfectly content having no interaction with me. She would flip through books, watch TV, and had a completely flat affect. I knew at that moment my daughter was either deaf or autistic." their genes. The brain is developing quickly, and every experience a baby has affects his brain's wiring and builds more circuits that can carry more information, more efficiently. As scientists put it, there is a great deal of *brain plasticity* early in life.

Language learning especially depends on brain plasticity. We are all amazed by the ability of very young children to learn languages—whatever languages are around them—and speak them like natives. In contrast, many of us

have tried to learn a new language as adults and found it virtually impossible to sound like native speakers. This is one of the best examples of the special capacity for learning in the first 5 years of life. For young children with autism,

¹Osterling, J., and Dawson, G. Early recognition of children with autism: A study of first birthday home videotapes. *Journal of Autism and Developmental Disorders*, 24, 247–257, 1994. See also Palomo, R., et al. Autism and family home movies: A comprehensive review. *Journal of Developmental and Behavioral Pediatrics*, 25(2, Suppl.), S59–S68, 2006.

beginning intervention as soon as we possibly can allows us to capitalize on the tremendous plasticity and learning ability during the infant and toddler years. The more progress made in the preschool years, the fewer disabilities children with autism have later.

Research shows that early intervention increases children's play skills, their cognitive abilities (IQ), their speech and language, and their desire for social interaction. It increases By beginning intervention as soon as possible, we are able to capitalize on the tremendous plasticity of the infant period and minimize the disabilities that often characterize ASD.

their social abilities and decreases their ASD symptoms and their behavior problems. It helps them learn faster and participate better in all aspects of life—at home, at school, and in the community. Some studies have found that even the diagnosis changes for some children as a result of early intervention: Children who receive intervention may show lessening symptoms of autism. This allows many children to go on to a typical preschool, kindergarten, or first grade; develop greater conversational and play skills; and develop more complex peer relationships. Positive changes don't just happen for a few children who get early intervention. *All* children who receive early intervention benefit, though the changes are faster and greater for some than for others.

How Does Early Intervention Work?

Studies on infant learning have helped us understand why early intervention is so effective. Here are some facts about how babies and toddlers learn.

In the past 30 years, scientists have learned that even very young infants are highly engaged in learning and know much more than we believed. Young infants are like little scientists: They develop ideas of how the world around them works, and they test these ideas through their body actions and their senses. They take in information from all their experiences, and they use this information to improve their ideas about how the world works. For example, scientists have learned that infants have a rudimentary knowledge of physics, number, and other physical properties, and use this knowledge to experiment on the world around them. At birth, infants actually have the capacity to hear and produce all of the different speech sounds that make up all of the spoken languages in the world-a capacity that is lost over time for those languages a child is not exposed to (this explains why we have an accent when we learn new languages as adults). Right from birth, infants can recognize familiar voices and faces. They come into the world prepared to interact with things and people, and to discover and learn from the world around them. Because of the active nature of infant learning, it is important to consider the following:

- What opportunities for learning are available in the various daily activities of your young child with ASD?
- What kinds of activities does your child actively attend to and find rewarding?
- Does your child have the basic skills for learning from others, such as paying attention to others, imitating them, playing with them, and watching what they do?
- Does your child exhibit any problem behaviors that interfere with learning from others, such as frequent tantrums or overly repetitive behaviors?

The typical infant learns during every waking moment of the day. When she wakes up, she begins babbling and playing with her hands, or toes, or toys in the crib. She examines how they work, what happens when she throws the toys out of the crib, and how her parents respond when she coos or when the toys make a loud crashing sound on the floor. When she hears the crashing sound, she may call out, imitating the loudness of the sound. She remembers that the last time she made a loud sound, a parent arrived. Chances are that she notices the sound of Mom or Dad opening the bedroom door. She turns quickly toward that sound and focuses intently on her parents' facial expressions and words as they approach her. She's been awake for only 5 minutes, and she has already learned something about cause and effect, gravity, emotions, and words!

Now let's compare this child to a young child with ASD. She wakes up and also begins to play in the crib, but her play is different. She may ignore the toys and instead be fascinated with the way the light is shining through the crack in the curtains. She may tilt her head back and forth to experiment with the light, noticing how it changes with her head movement, watching her hand and fingers move in the light. She may spend a long time rocking her head back and forth, watching the light. She is quiet, not making many sounds. When her parents come to get her up, she does not look to see their expressions or turn to their voices. The light patterns still hold her attention. She too is learning, but instead of learning about toys, speech sounds, faces, and people, she is learning about patterns of light and movement. She has missed important opportunities for learning how to communicate, socialize, and play, because she didn't call for her parents or watch them come in and because the light was more interesting to her than the toys. Her long attention to the light and to the movements of her fingers and head has interfered with her attention to other learning opportunities available to her. Some of the key differences between most young children and those with autism are shown in the box on the facing page.

A central goal of early intervention is to help young children with ASD pay attention to key social learning opportunities like speech, faces, and gestures, and to "boost," or make more salient, their attention to people—their actions, sounds, words, and faces—so that the children can more readily make sense of the information that is essential for typical language and social development.

	Most young children	Many young children with ASD
Opportunities for learning	Engage in a wide range of learning opportunities by actively exploring both the social and nonsocial environments.	Tend to be less focused on the social environment, and more focused on the nonsocial environment; this limits social learning opportunities.
Rewarding activities attended to	Are naturally interested in other people, including their facial expressions, movements, gestures, and words. Find social activities very rewarding. Seem more interested in people than objects.	Are naturally interested in objects and explore them in unusual ways, such as smelling and looking at an object at an angle. Seem more interested in objects than people.
Basic skills of learning	Readily imitate what others do; understand that others respond to their movements, gestures, and sounds; use many ways to explore objects.	Don't readily imitate and understand that their behavior affects the behavior of others; tend to play with objects in limited ways.
Interfering behavior	Engage in some repetitive play, but easily shift attention to other activities.	Engage in repetitive play for long periods of time, and have difficulty or become upset when others try to direct them to other activities.

Some Learning Differences between Typical Children and Many Young Children with Autism

Developmental psychologists use the term *scaffolding* to describe the way parents aid their children's learning by drawing their children's attention to the most important learning opportunities in the environment. When parents scaffold their children's attention in learning opportunities, parents increase or decrease stimulation as needed, provide appropriate toys, repeat and exaggerate certain actions, slow and simplify their speech, and so on, so that the children can learn more readily. When you, as a parent of a young child with ASD, use early intervention strategies to scaffold your child's attention, you will use the same scaffolding strategies that other parents use, but you will build a stronger scaffold for

your child—one that is tuned to your child's individual learning characteristics (his favorite activities, experiences, and sensitivities), as well as the learning challenges that are seen in most young children with ASD.

When you begin using specific early intervention techniques with your child, like those described later in this book, you will learn techniques for doing these things:

- 1. Drawing his attention to the people in his environment
- 2. Making social play more enjoyable and rewarding
- 3. Teaching him the basic skills of learning:
 - Attending to others' faces, voices, and actions
 - Imitating others
 - Using his voice and body to communicate
 - Sharing emotions, needs, and interests with others
 - Understanding that others' communications have meaning for him
 - Playing with toys in typical ways
 - Learning to use and understand speech
 - Reducing any behaviors that interfere with learning

With these special intervention techniques, you will be able to open up a world of learning opportunities for your child during the period when your child's brain is still developing very quickly, and this will maximize the impact of early intervention.

The Unique Learning Challenges Associated with ASD

Many studies have shown us the unique ways in which children with ASD interact with the world, and have thus helped us better understand some of the learning challenges associated with ASD. These challenges are what early intervention is designed to target. These are some of the common challenges to learning associated with ASD:

Attention	Rather than naturally paying attention to people, including their faces, gestures, and voices, children with ASD tend to pay a greater amount of attention to objects and other types of nonsocial information (lights, patterns, etc.).
Social motivation	Rather than frequently seeking out others for interac- tion and being motivated to share experiences with others, children with ASD may prefer to spend time alone, or to play near but not with others.

Use of gesture	When attempting to communicate, children with ASD often don't use gestures to share their experiences with others, such as pointing and showing things to others. They tend not to understand or respond to other people's communicative gestures, either.
Imitation and turn taking	Instead of readily imitating the sounds and actions of others, children with ASD don't often imitate others and don't often engage in back-and-forth toy play. It doesn't seem particularly enjoyable to them.
Toy play	Rather than exploring lots of objects and using them in creative ways, children with autism can often be overly focused on a small set of objects and repeat the same action over and over. They may become distressed when this pattern of play is disrupted by others. They tend to play alone with toys, rather than with others.
Babble	Rather than making lots of sounds and paying atten- tion to other people's sounds, young children with ASD may be unusually quiet. They may make only a small number of sounds. Their sounds may not sound much like speech, and they tend not to use their sounds to send messages to others.
Arousal and sensory sensitivities	In contrast to other children, children with ASD may seem easily overstimulated or may seem underrespon- sive to various sensations. They may have unusual sen-

Why does a child with autism have these unique challenges? It has to do with how autism affects brain development. There are areas of the brain that are specialized for aspects of social learning, such as eye contact and emotional responses. When these areas are functioning properly, a child is naturally drawn to social experiences and easily learns language and social interactions. Research has shown that these key areas of the brain specialized for language and social interaction are underfunctioning in young children with autism. There also seem to be fewer connections than is usually the case between certain regions of the brain—such as between the sensory areas that are specialized for sound, vision, and touch, and the thinking areas that are specialized for comprehending and making sense of the sounds, sights, and touches we experience. This suggests that a child with autism experiences the people and objects in the environment

sitivities to touch, sound, or light.

but has difficulty making sense of those experiences, especially those related to social learning and communication.

Where do these differences in brain function come from? Science has shown that these differences in autism as a whole appear to be caused by a combination of genetic and environmental factors that influence very early brain development. The evidence for a genetic influence is based partly on studies of identical versus fraternal twins. Identical twins share all of their genetic makeup, whereas fraternal twins (and nontwin siblings) share half of their genetic makeup. If one identical twin has autism, the chance that the second twin also has autism is about 70%. In contrast, for fraternal twins, the chance is only 35%. So, clearly, genetic risk factors are influencing the cause of ASD. However, given that only 70% of identical twins (who share 100% of their genes) both have autism, other factors must also be playing a role. Research on environmental risk factors is still in its early stages, but studies thus far point to factors that influence fetal development during the prenatal period and around the time of birth. Such factors include older parental age at conception, maternal infections (especially flu) during pregnancy, birth complications (such as respiratory distress), and premature and/or underweight birth. These factors, by themselves, do not cause autism; they are related to higher risk of many kinds of developmental problems. However, autism may be more likely if there is already some genetic risk. For more information about the causes and other research on autism, we encourage you to visit the Autism Speaks Official Blog (http://autismspeaks.org/blog) and click on "Science."

Fortunately, as mentioned earlier in this chapter, the brain has great plasticity early in life. A great deal of brain development is still in the future for a young child, so by providing specialized experiences that stimulate social and communication development (like those described in this book) and using other kinds of early intervention, it seems possible to steer your child's brain development back onto a more typical path.

Young children with ASD are highly capable of learning. They form social attachments to their family members, and they respond well to teaching strategies that take into account their unique learning styles. Young children with ASD can overcome many of their challenges and become socially engaged, motivated, and creative learners. The remaining chapters in this book will show you how to help this happen for your child.

Pavent-Delivered Intervention For Young Children with ASD: What Is the Evidence?

Over the past 20 years or so, many, many studies have shown the benefits of early intervention for young children with ASD when the intervention is delivered by trained therapists. For example, in 2011, the federal agency that evaluates the

evidence base for treatments (the Agency for Healthcare Research and Quality) published a systematic review of early intensive intervention for ASD.² It included 34 clinical trials of early intervention in its review. The agency concluded that the evidence shows that early intensive behavioral intervention results in improved

cognitive and language outcomes. One finding from many of these studies is that children had better outcomes if their parents learned to use strategies at home with the children that were similar to those their therapists were using in early intervention.

This makes perfect sense. Parents know their children better than anyone else; they are strongly motivated to help their children; and they spend more hours with their children than anyone else. Parents who scaffold their children's learning by using specific teaching strategies, in addition to the hours their children are receiving other interventions, are adding many more learning experiences for their children and the state of the state o Studies have shown that parent-mediated therapies can increase children's nonverbal and verbal abilities and play skills, and can improve parent– child relationships.

children every single day. This should help their children learn more!

Lately, research has begun to look more deeply into the effects of parentdelivered intervention. Various studies show that parent-delivered interventions can increase children's communication and play skills, and can increase the amount of success and fun that both parents and children have interacting with each other. When parents learn to use intervention techniques at home, young children with ASD are more likely to remember and use the skills they have been taught by teachers or therapists. Furthermore, parents who use intervention strategies report feeling happier, less stressed, and more optimistic and empowered.

"Empowerment is key. I remember while working as a service coordinator before I was a mother of a child with ASD, we were going to fade an ABA in-home program for a 7-year-old boy who was making minimal progress over the years. His parents were panicking. They kept saying over and over, 'We don't know what we are doing—you are the experts, not us!' It is vital to teach these skills to the parents, as they will be parents for life and will need to be comfortable and proficient in teaching in a way that the child learns best. Parents cannot become dependent on therapists, just like children can't. We need to strive for teaching and independence at all levels."

²Warren, Z., et al. A systematic review of early intensive intervention for autism spectrum disorders. *Pediatrics*, *127*, e1303–e1311, 2011.

A recent study conducted by two of us with a coworker³ looked at how parents learned the intervention techniques included in this book and how their children benefited from them. The study involved eight families of 1- and 2-yearolds with ASD who had just been diagnosed. The families volunteered for a parent intervention program of 12 weekly sessions lasting 1 hour each. Parents learned to use a number of teaching techniques that focused on building their children's attention, communication, social interactions, and play. The parents learned to do these things:

- 1. Create fun and satisfying exchanges between their children and themselves
- 2. Help their children's language develop by emphasizing the social power of the early sounds that children make
- 3. Increase their children's nonverbal communication and imitation skills
- 4. Build up their children's interest in a wide range of toys, and skills in social toy play

Parents learned to use these intervention techniques during their typical playtimes at home and during their typical caregiving routines. Parents did not create hours of special teaching time. These were working parents who already spent as much time as they had taking care of their children and playing with them. They learned to use their existing time with their child in a more focused way.

Were parents able to learn the intervention techniques? Yes! The study actually found that even before they were "The thing that I liked most about this approach is that it felt so natural, like high-quality play that all parents would want to do with their child. Once I learned the basics, it felt easy to incorporate them throughout everything. This provided many, many opportunities for learning, while also giving us new ideas for creative ways to have fun together. Instead of being overwhelming and draining, it was fun and easy. I could see my son respond, which was motivating and encouraging."

taught the techniques, parents naturally used many of these techniques between 40% and 60% of the time during their typical play activities with their children. However, after only a few hours of coaching and a few weeks of using the techniques at home, most of the parents were using the techniques over 90% of the time.

The study then examined how parents' use of the techniques affected the

³Vismara, L. A., et al. Can one hour per week of therapy lead to lasting changes in young children with autism? *Autism*, *13*, 93–115, 2009.

children. Before parents began to learn the techniques, the children in the study were using almost no word-like sounds. However, once the parents started to use the intervention techniques regularly at home, most of the children began to try to say words to communicate, not just to imitate or echo. The same thing was found for children's imitation. It increased steadily once parents started to use the intervention techniques at home.

Furthermore, parents were just as skilled as therapists in helping their children learn to use words and imitate. This shows that parents who learn to use intervention skills can be as effective as trained therapists in teaching their children critical new learning skills and scaffolding their children's use of their new skills.

There are several different parent-delivered intervention programs available to the public, and several of these are currently being studied in ongoing research. Some examples include Hanen More than Words; the Early Start Denver Model; Pivotal Response Training; Responsive Teaching; and Social Communication, Emotional Regulation, and Transactional Support (SCERTS).

In this book, we describe a set of easy-to-use strategies that parents and other caregivers can use throughout their regular daily activities with their children to help their children engage, communicate, and learn. You can use these strategies during playtime, bathing, mealtimes-really any time you are with your child. This ensures that, like typical children, your child with autism is learning every minute of the day, not only while participating in an intervention program. The strategies we offer in this book are based on the Early Start Denver Model.⁴ They focus on helping children become actively engaged in learning and communicating by building up their core social learning abilities: imitation, sharing attention, initiating communication with gestures, using their voices and bodies to talk, and learning to play with other people in varied ways with toys. The strategies we offer in this book are ones that help parents and other caregivers (and therapists as well!) develop these skills by being play partners with their children during child-preferred play activities and during typical caregiving routines. Parents and their children develop joyful, back-and-forth play during these activities and routines. The strategies we will teach you will help you find fun play activities that both you and your child enjoy. We will teach you how to scaffold your child's attention and learning during play and caregiving activities by following your child's interests and helping your child experience more learning opportunities. In the remaining chapters of this book, we go through these intervention techniques, one by one, for you.

However, before we end this chapter, let's review some of the key points that we have covered here:

⁴Rogers, S. J., and Dawson, G. *Early Start Denver Model for young children with autism*. New York: Guilford Press, 2010.

- The brain is very plastic during early development and is shaped by learning experiences. As learning occurs, connections between brain cells are formed.
- Infants actively explore the world, develop ideas about how the world works, and test to see if their ideas are correct.
- Typical infants are learning during almost every waking moment and spend most of their time interacting with people. Children with autism tend to spend less time focusing on people and more time focusing on objects than other children do. This limits their opportunities for social learning and communication.
- Parents can help their child with ASD learn by drawing their child's attention to important learning opportunities by exaggerating their actions and speech and providing appropriate toys, which is called *scaffolding*. This helps provide many learning opportunities.
- Early intervention with young children with autism can improve learning, play, communication, and social abilities. It can also help with problem behaviors, such as tantrums and aggression.
- Studies have shown that children with autism are emotionally attached to their parents and other members of their families but may demonstrate this in different ways than typical children.
- Children with autism have trouble talking and have difficulty using gestures and facial expressions to communicate their needs and wishes to their parents. They usually need to be taught how to use gestures such as pointing.
- Children with ASD don't readily imitate others, but they can be taught to imitate, which opens the door to learning about others.
- Although children with autism are drawn to objects, they may not be adept at playing with toys in varied and appropriate ways. They may be very good at operating their toys, but their play with toys tends to be overly repetitive. Intervention helps them learn to play with lots of toys in functional, social, and creative ways.
- Parents can learn to use intervention strategies with their children; in fact, they are able to master the techniques as well as trained therapists.
- Children whose parents use intervention strategies at home tend to retain the skills they learned. When parents use intervention strategies at home, this reinforces their children's learning in other intervention programs, so children are able to remember the skills they have learned and use them in many different settings.
- Parent-delivered interventions can help parents feel happier, less stressed, and more optimistic. When parents learn to use intervention strategies with their children, they have a more positive outlook, feel empowered, and are less likely to be depressed.
- Parent-delivered interventions don't require special equipment and hours

of special "teaching" time spent working with a child. The materials required for carrying out interventions at home are simple toys and other play materials. The strategies are carried out during everyday activities, such as bath time, meals, and indoor and outdoor play.

• Most parent-delivered interventions stress the importance of positive emotions and a happy relationship between parents and children for promoting learning. Studies have shown that the parent-child social relationship is the foundation for learning and communicating.

Part II

Everyday Strategies to Help Your Child Engage, Communicate, and Learn

4

Step into the Spotlight

Capturing Your Child's Attention

Chapter goal: To teach you how to increase your child's attention to you, so that your child's opportunities to learn from you will increase. Learning requires paying attention to people.

Why Your Child's Attention to Others Is So Important

There are many things that young children cannot do yet, but one thing they do very well is pay attention to their environment and learn from what they see. Babies see fairly well very soon after birth, and they learn a lot about the world, people, and objects around them by watching objects and people in action. They are also surprisingly good at seeing patterns in the actions of people and objects around them. They learn to expect people to move and act in typical ways and are surprised and intrigued by unexpected events. In fact, they pay more attention to the unexpected than to the routine and predictable so that they can figure out new things.

Watching and listening to people are very important learning activities for young children—perhaps the *most* important learning activities, because they learn so much from interacting with other people. Most babies and toddlers prefer watching people and interacting with them over any other activity. Their brains are wired in such a way that looking at and interacting with other people are the most pleasurable activities of all (assuming that they are not hungry, fatigued, or uncomfortable).

What's Happening in Autism?

However, young children with autism spectrum disorders (ASD) do not show as strong an interest in watching and interacting with people as other children

EVERYDAY STRATEGIES

do. Why would that be? There are two different possible explanations that you may read about. One suggests that children with autism have more difficulty than others understanding complex and unpredictable sights and sounds. Social interactions are certainly complex and sometimes unpredictable: They require a young child to make sense of facial expressions, speech, sounds, and gestures. Objects, on the other hand, are more predictable and generally less complex than people. When a young child acts on an object, it tends to respond in a reliable and predictable way. The child can make the object repeat the same action over and over. People act spontaneously and more variably than objects; they do not respond the same way every time. People who are trying to engage a young child can sometimes be very stimulating. They may speak very quickly and with a lot of emotion, creating a lot of sounds for the child to process at once. People may also move and gesture during interactions, talking with their hands and changing their facial expressions quickly to fit the mode and tone of the conversation. All of this information may be at times too stimulating for the child, whose response in such instances may be to fuss or to withdraw. This used to be a very popular way of understanding autism, but research suggests that this view is not the most accurate way to understand young children's decreased attention to others.

The other line of thinking suggests that young children with autism are less tuned in to others from the start. This line of reasoning begins with the finding from scientists that children typically come into the world built to favor watching and interacting with people over anything else. As with any other trait, some children have less of this built-in "attraction" than others. In autism, this innate preference for people seems to be lessened. Because people are not so interesting, the physical world may compete more strongly for their attention than it would in a child who has a very strong built-in attraction for people. Notice that the end result of both of these theories is that children with autism find interacting with objects somewhat more interesting, and interacting with people somewhat less interesting, than most children do.

Why Is It a Problem?

When young children don't pay much attention to the people caring for them, they miss out on very important learning opportunities. Children need to attend to everything that other people do—their physical movements, body language, facial expressions, and words—in order to learn. What very young children learn about communication, emotions, language, and social interaction comes from having lots of individual experiences with watching, imitating, and interacting with people. If they're not spending much time tuned in to their parents or others—that is, if they're not spending a lot of time focused on others' faces, voices, and actions—their learning may be slowed, especially their learning about social communication and play. To increase their rate of learning, their attention to other people has to increase. Attention throws a spotlight on others that lights "As a parent, this was the single most motivating part of the [Early Start Denver Model] approach. It makes sense that a child can make better progress if taught to pay more attention to others as early as possible, giving more chances to learn things through those observations. Additionally, it's encouraging to work with a child who is looking at you and paying attention. Of all of the things that I learned, the techniques in this area were the ones that I used the most and found the most helpful."

them up and highlights their actions, speech, and emotions, which are so critical for social learning. *In short, more attention to others equals more opportunities to learn from them.*

What You Can Do to Increase Your Child's Attention to People

How can you as a caregiver step into your child's attentional spotlight? There are five specific steps you can carry out to increase your child's attention to you:

- **Step 1.** Identify what is in the spotlight of your child's attention.
- Step 2. Step onto the "stage"; take your position.
- **Step 3.** Eliminate the competition.
- Step 4. Identify your child's social comfort zone.
- **Step 5.** Join in by following your child's lead.

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.

Step 1. Identify What Is in the Spotlight of Your Child's Attention

Most young children with ASD are interested in objects and toys, and spend much of their time manipulating and playing with them. If this is true for your child, then it will probably be easy for you to find interesting materials for play. Young children are often very motivated to obtain objects, to handle favorite objects, to create interesting effects with objects, and to get help with objects they enjoy. Most also enjoy lively physical games their parents create—roughhousing, moving in time to music, running, bouncing, and swinging. By including materials that relate to your child's interests and preferences (whether it be a favorite toy such as trains, a favorite cartoon character, or a preferred activity such as tickling), you can create learning situations in which your child is likely to attend to you and interact with you, thus learning from you. In addition, building social interactions into your child's interest in specific objects will allow you to increase your child's social skills. Social interactions will become linked with favorite activities and become more rewarding for your child.

Rationale. Highly appealing materials and play activities motivate children to interact with their parents. A motivated child is a happy child, attentive to his parents and ready to learn. Strong motivation supports active learners rather than passive observers, and active learners show initiative and spontaneity—two important characteristics to nurture in young children with autism. A motivated child also wants to continue an activity, which gives you as the parent the chance to embed many learning opportunities into the activity. The longer the activity goes on, the more learning opportunities you can create. This is why you want to know what objects and activities your child really enjoys—so you can create learning opportunities for your child. The following activity will give you tools for identifying your child's preferred activities and materials. The questions will help you focus your own attention on your child's attentional spotlight.

Activity: Figure Out What Your Child Likes

Spend time over the next few days really observing your child during the following six types of activities:

- 1. Toy or other object play
- 2. Social play
- 3. Meals
- 4. Caregiving (bathing/changing/dressing/bedtime)
- 5. Book activities
- 6. Household chores

Here are some ideas for learning about what your child is interested in and paying attention to:

• In each of the six types of activities just listed, notice what your child is interested in and pays attention to. For each one, make a list of the objects, materials, toys, or physical games that your child seems to seek out and enjoy. (We have provided a form for you to keep your list right in this book, if you want to. It's on page 89.) If your child does not naturally seek out objects or physical games, set out a few materials or toys, and encourage your child to manipulate or play with them to see what your child might like.

- Next, answer these questions from your observations of your child when he is engaging in the activities listed above. For each of the six activities:
 - What objects or activities does my child search for?
 - What objects does my child like to watch, grasp, or hold?
 - What activities does my child come to me or another family member for help with or to do?
 - What makes my child smile and laugh?
 - What calms my child when upset or cheers my child when cranky?
- If your child does not have much interest in traditional play objects, then focus on your child's response to other daily activities. There are very few young children who do not approach anything or anyone or who do not act on any objects without being guided. It happens, but it's very rare. When your child moves independently, what is she moving toward or away from? When your child touches or holds anything, or watches anything, what is it? When you physically play with your child—tickle, cuddle, squeeze, spin around, whatever games you play—what are your child's reactions? What does she seem to enjoy?
- Sometimes children's favorite objects are rather unusual for their age or are used in a repetitive, limited manner.

For instance, 26-month-old Pablo spends his day with the TV remote in his hand. He keeps the TV on and switches channels as he stands in front of the TV or lies on the couch. Most of his awake time is spent in front of the TV, and efforts to turn it off or to take the remote away from him lead to big tantrums.

"One mistake I made was trying to get more and more interesting toys, hoping my son would learn to play with them if I found something that caught his attention. It was much easier and more effective to take whatever he was using as a toy and create a game around that. We developed games as simple as 'Tickle the body part with a duster' that were great fun and much more effective than imploring my son to meet his goals by obediently pointing to a body part on command. Some of my son's favorite games included 'Spin!' (being held while we went in circles), bouncing in and out of the crib, and running cars around. All of these built simply on everyday activities and then let us add more and more learning opportunities."

EVERYDAY STRATEGIES

Three-year-old Matthias likes to lie on the back of the couch and watch out the window, for hours at a time. He shows very little interest in toys, people, or any activities going on in his household, even though there are toys and interesting activities around, thanks to his 4-year-old sister and the family pets.

• Even if your child's interests are unusual, they are interests, and you can add them to your list. There are a few young children who are not very interested in any objects or activities. For these children, we will teach you how to create more social games (also called *sensory social routines*) or other types of face-to-face routines, and, later, how to build your child's interest in playing with toys. We describe strategies for creating those types of activities with your child in Chapter 5.

Summary of Step 1

If you have followed along and carried out the preceding activities, you will have learned quite a lot about your child's interests, preferences, and the objects and activities that capture your child's attention. See if you agree with most of the statements in the following checklist. If so, you are now armed with important knowledge about your child's attention—knowledge you will use for **Step 2**. If not, start experimenting to find out what your child likes in each of these categories.

Activity Checklist: What Does My Child Like to Do?

- I know a number of toys or objects that my child likes to play with.
- I know several social games (games without toys, like tickling or roughhousing) that make my child smile.
- _____ I know some outdoor activities my child likes (playing on swings, walking, etc.).
- _____ I know some objects and activities that help make my child happier when he or she is in a bad mood.
- _____ I know some songs or sounds that my child likes to listen to.
- I know some activities or toys I can use while I am involved in meals or caregiving activities (meals, bathing/dressing/changing/bedtime) that can make my child smile or laugh.
- _____ I know what my child likes to do with books.

What about Pablo? As described above, Pablo's only interest in objects was holding the remote control. Pablo's mother initially offered a wide selection of toys to see whether he would trade the remote control for another item she offered, but he didn't seem to care about the other objects. Instead, Mom started thinking about what effects or actions she might use to capture his attention herself. She had seen Pablo smile briefly when tickled by his older sister, so she tried that first. To her surprise, Pablo laughed. She didn't worry at this point about taking the remote control out of his hands; instead, she held up her hands and wiggled her fingers each time she said the word "tickle." Pablo didn't pull away, but in fact leaned in toward his mother in anticipation of the next tickle. As Pablo relaxed into the game, he loosened his grip on the remote control and his mother was able to gently take it out of his hand while continuing to tickle him. Once out of his reach, she placed it behind her so it would remain out of sight and not distract him from the game.

Pablo's mother also found other ways to tickle him, such as blowing raspberries on his neck and belly. She showed him how to pull up his shirt before tickling him on his belly, and she made sure to respond right away each time Pablo did this. When Pablo tired, she offered other objects he might want to hold and showed him how they operate, such as banging the wooden spoon on the table or pushing the buttons on a toy phone. With the remote control out of sight, Pablo was more open to exploring new things. He still tended to repeat the same action with the object, but now Mom knew she could get him away from the remote control and engage him in activities more appropriate for learning.

What about Matthias? Matthias was the child who had very little interest in objects. He preferred to lie on the back of the couch and look out the window most of the time. His dad could not figure out how to interest him in his toys, and after each attempt Matthias returned to the couch. So Matthias's dad tried a different approach to interact with Matthias. The next time Matthias walked toward the couch, his dad lifted him up and dropped him onto the couch. He repeated this game a few times—helping Matthias climb off the couch, lifting out his arms to pick Matthias up, and dropping him onto the couch. Now Matthias started to understand the game, and, after falling, he walked over to Dad to be picked up and dropped again.

In trying to figure out what Matthias enjoyed, his dad realized that Matthias enjoyed more than just the couch, and smiled and came back for more when he was tossed into the air. So Dad experimented a little with some other "movement" games. He found that Matthias loved being flipped up onto his shoulder and "airplaned" around the room, loved being bounced actively on the big exercise ball; loved having his dad flip him onto the bed and push on his chest with a pillow; and loved being dried roughly after his bath with a big towel and a lot of action. During these kinds of activities, Matthias was much more likely to laugh, smile, look at Dad, and pull on Dad to repeat the game.

Matthias's dad discovered that he could also bring a stuffed animal into these physical games on the bed and use the stuffed bear to tickle and push. Matthias would reach out to the bear for more play—the first interest he had shown in his stuffed animals. Matthias enjoyed it when Dad sang, "Head, shoulders, knees, and toes," as he dried those body parts with a towel. And he enjoyed it when Dad stood in front of him, instead of behind, to swing him at the park, swinging him strongly and then catching him in his arms. Matthias would laugh, wiggle, and look at Dad expectantly for the next push. Dad's detective work and experimenting have helped him identify many activities that Matthias enjoys.

Step 2. Step onto the Stage; Take Your Position

Rationale. Social communication occurs especially through eyes, faces, and bodies. We want children to look at us; to make repeated eye contact; and to have clear views of our faces, expressions, gaze patterns, and mouths as we talk. In general, having children sit down when we play with them helps us get in their spotlight or focus of attention. Sitting down helps focus your child's attention, because the chair provides support and keeps your child from moving away easily. Sitting in front of your child to read a book or play with a toy may seem like an odd way to position yourself, but holding a child in your lap to read won't allow you to engage in face-to-face interaction and limits social exchange. Once

you get used to reading books and playing in front of your child, it will become a habit, and you won't have to think about it any more. If you use a bean bag chair or any chair that has arms and provides support, your child will be more likely to stay focused on the interactive activity.

"Think of yourself as a preschool teacher, not Grandma. You need to get the child's attention, not cuddle during this time."

👗 Activity: Find Positions That Put You in the Spotlight

When you are playing with or caring for your child, start to position yourself in such a way that your child has a very clear view of your face and eyes. As much as possible, try to be close up, on the same level, and face to face with your child during both play and caregiving activities. We can't overemphasize the **importance of positioning** to increase your child's attention to people and learning opportunities.

Here are some ideas for positioning yourself and your child so that learning occurs more easily:

• Positions in which your child is lying down on his back and you are seated while leaning over him are wonderful for social games, finger plays, and little songs and routines. Diaper-changing time, whether on the changing table or on the floor, is a great time to be positioned face to face and to talk to your child and sing some little songs or finger games as part of the diaper change.

- Sitting on the floor with your legs out in front of you, with your child on her back on top of your legs or between them, is also a great position for tummy tickles or creepy fingers and for playing social games like "This Little Piggy," peekaboo, pattycake, "Round and Round the Garden," and "Where Is Thumbkin?"
- Physical play routines on your bed or a couch provide excellent face-toface positioning, both when the child is lying down and when the child is standing.
- Seat your child on your lap, facing you, or on a small chair, bean bag chair, high chair, or corner of a living room chair or couch while you are sitting on the floor in front of him. This is a terrific face-to-face position for songs, finger plays, toy play, and reading books, as well as for dressing routines (shirts, pants, socks, and shoes). Keeping a face-to-face position is easier when you use some supports—a bean bag chair or pillow for your child to lean on or sit against; a couch, chair, or your knees for your child to lean against; a small table or chair for sitting or standing play. Social games and even book activities can be carried out face to face, with the book held in front of your child, your hands pointing to pictures, and your eyes and face in front of and close to your child's face, ready to make eye contact, facial expressions, key words, and sound effects.
- When seating your child, make sure her back and feet are well supported, so your child is comfortable and can attend to you rather than in an uncomfortable position. Her back should be against the back of the chair, her feet flat on the floor. Think about right angles. In a chair that fits your child, your child's hips, knees, and ankles should all be at approximately 90 degrees. Feet should not be dangling in the air. For toddlers, a little stepstool is often a perfect height, and if you push it against the wall, there is also back support. Children (and adults, too, as you know from experience!) are more comfortable when a chair fits them well, and they will stay in it longer.



- Bean bag chairs are very helpful. We recommend them for all families. They allow you to seat your child in front of you with good support. Children also like to lie in them, and you can play many social games in that position.
- Some young children want to move so much that they do not want to sit for very long. However, standing can also be a good face-to-face position, and for this a coffee table or child table is a great asset. Many youngsters

like to stand at a table and play with toys, and it is easy for you to go to the other side of the table and be there, face to face, to join in. It will help if the table is heavy, so it will not slide when your child leans on it, and it should be low enough that your child can lean against it at the waist and have arms free to handle objects and reach to you. Your position can be across from your child or at the corner, where the two of you can face each other across the corner of the table. Avoid playing with your child side by side; it's too hard for your child to see your face that way.

L Activity: Take Advantage of Mealtimes

Mealtimes in a high chair or toddler seat provide easy opportunities for a face-toface position at the kitchen table, especially if they are set up as social times. It's tempting to have young children feed themselves while parents finish preparing food, rather than having a social meal. However, for children with autism, each mealtime and snack time at the table presents a rich opportunity to work on social attention and interaction.

Here are some ideas for increasing your child's attention to you during meals:

- Instead of giving your child the finger food on his tray, pull the high chair right up to one end of the dinner table and orient your chair so it is facing the high chair tray, so you can easily face your child and have a meal or snack with him. Place your child's food on the table, and provide a little on a plate for your child and a little on your plate for you. Have fun talking about the food.
- When your child has finished the small portion you gave her, offer more, but don't hand it to her until your child has signaled in some way that she wants it. It can be any subtle behavior—a brief look to you, a reach toward the food, a point, or a sound or word—but wait for your child to do something, and then treat that behavior as an attempt to communicate with you. Once you hear or see it, quickly hand over the food while saying something like this: "More? Sure, you can have more."
- Offer your child a bite, and then encourage your child to give you a bite by leaning toward your child with your mouth open.
- Place your child's cup on the table out of reach but within sight, hold it up in front of your child, and ask if he wants it before handing it to him. Put just a little in the cup, so he will quickly finish and need more. Then, when your child has finished it and wants more, offer another pour, but wait for that communication before you provide it.

• As the meal is ending, sing a little song or two with finger plays before you finish; help your child make a gesture that goes with the song by moving her hands through the motion. Songs are great language builders. Sitting face to face like this at the table is a great position for gaining social attention, and managing the food for the child brings your child's "beam of attention" to you.

Summary of Step 2

If you have followed along and carried out the preceding activities, you will have found a number of ways to step into the spotlight of your child's attention. See if you agree with most of the statements in the following checklist. If so, you are now armed with important skills for stepping into your child's attentional focus. You will use this knowledge for **Step 3**. If you have not quite mastered using these skills, start experimenting with each of these, one at a time, during play with your child until you have found some ways to accomplish them.

Activity Checklist: Am I in the Spotlight duving	Activities
with My Child?	
with to g Child.	

- _____ When we are interacting, my child can easily see my eyes, face, body actions, and movements.
- _____ My child is looking at me sometimes when we engage in activities together.
- _____ I am in front of my child, at the child's level, and face to face (not towering over my child).
- _____ I have figured out ways to rearrange things a little to be face to face with my child during play and caregiving activities.
- _____ My child is in front of me and sitting or standing comfortably sitting on the floor, sitting in a chair that fits, or standing at a table that is a good height for playing.

What about Pablo? After completing the checklist for Step 2, Pablo's mom realized that she spent a lot of energy following after Pablo, rather than creating the right social zones for play. One of her habits was offering Pablo objects when he was walking away from her or not looking at her. She decided that an important step to help Pablo learn was rearranging the play area to make it a better fit for Pablo's size and focus of attention. She pulled the coffee table closer to the couch, so that when Pablo stood at it, his body was more supported by the couch. It was also an easy way to "wrangle" him in without forcing him to sit in a chair—a task that was difficult for Pablo except during mealtimes. Pablo also liked pillows, so she brought in some from the bedroom and propped them against the wall to create a soft, plush seating area without having to buy a bean bag chair.

Finally, Mom thought about other opportunities throughout the day at home where she could create a better spotlight of attention. During dinner, it was difficult for her to remain seated, because her other children always needed things from the fridge or help with cutting their food. During the day at snack time, though, when she and Pablo were alone, staying seated was more manageable. Mom decided that she would seat Pablo facing her while she drank her morning coffee as a way to interact and engage with him.

She also realized that when Pablo became tired, he usually wanted to be held. She decided to hold him in her arms with his face looking up at hers, rather than seated with his back to her and maximize this face-to-face time by singing his favorite songs.

What about Matthias? After completing the Step 2 checklist, Dad thought of more ways to enter Matthias's spotlight of attention. Since Matthias already enjoyed lying on the couch, Dad was able to lean over him and establish face-to-face contact as he started and continued more active games. Dad created other games to do on the couch that required Matthias to sit upright, such as bouncing on the couch, being lifted up for "blastoff" like a rocket ship, and falling forward and into Dad's arms.

As Matthias sought out these games, his tolerance for sitting improved, and Dad introduced books to Matthias and encouraged him to look at books with Dad while seated on the couch. He made sure to add fun sound effects and exaggerated motions to keep Matthias amused. Dad also brought a child-sized table and chair into the family room, and gradually started placing a few books and other toys he thought Matthias might enjoy on the table. The two started transitioning to the table and chair when coming into the family room and before going to the couch. Over a few weeks, Dad was able to increase their time interacting together at the table.

Also, any time Matthias needed help that involved an object (taking something out of a container, opening a snack item), Dad took Matthias over to the family room or kitchen table and had him sit down before helping. Matthias started to learn about other locations in the house besides the couch where fun and enjoyable things could happen.

Step 3. Eliminate the Competition

Rationale. The physical environment can be a powerful pull for your child's attention. Observing your child will tell you what the attentional magnets are in a particular space. Video or computer images, mechanical toys, and moving objects can compete strongly with parents who are trying to capture their children's attention. You may need to control and engineer the environment so that you have less competition for your child's attention.

L Activity: Notice Distractors and Manage Them

As you join your child for a face-to-face play or caregiving activity, observe your child's attention and identify the objects in the environment that take your child's attention away from you. Once you notice one, take steps to minimize it.

Here are some ideas for managing distractors:

- During toy play, put loose toys away on shelves or out of sight, so that toys you are not using are not attracting your child's attention. Toys can go into cabinets with doors, into toy boxes, or even on open shelves covered with a blanket.
- Turn off the TV unless someone is actively watching it. Keeping a TV running is a powerful attention magnet for little children with autism.
- During playtime, try to turn off the computer and TV screens.
- During social play, if the environment is busy and keeps distracting your child, go into another room. A big bed is often a great place for social play.
- During bath time, give your child with autism a bath without others in the room (if it's possible), so you can engage more with him.
- During mealtimes, if several children are having meals at once, see if you can intersperse the food routines for your child with ASD (described earlier) with mealtime chat with your other children and adults at the table. However, don't feel that you need to feed your child alone. The social mix of a family table is a very important experience for your child, as long as she is attending to others as well as to food.

"I found that moving toys into bins was helpful in many ways. Not only did it remove distractions, but it gave me opportunities to teach cleanup skills and to push for more words to ask for specific boxes and toys. Having boxes of different colors can help to teach colors, while having clear boxes can help to provide motivation to request the toys inside. My son was reluctant to ask for things, but would eventually request his favorite cars when he could see them inside of a box (helping us teach more and more complex phrases, although this would also help teach pointing skills)."

What about Other People?

When your child with autism is just beginning to learn how to interact and pay attention to others, having several people try to interact with your child at the same time you are trying to can be distracting. It's wonderful when several family members want to play together, but it's also important to think about your child's attentional spotlight. Children without ASD are highly skilled at switching back and forth between different people and activities, but children with ASD have difficulty attending to even one person, and you are actively working to build that capacity to help your child learn. Social interactions are the most important teaching tools you have, and you need to protect and increase your child's interactions and attention to parents, siblings, and important others. In the beginning, it will be helpful to keep the spotlight on one person at a time. If other people are trying to interact with your child at the same time you are, your child's attention will be diverted from you. When no one commands the spotlight, no learning can occur. So try to encourage everyone to interact one at a time with your child and not to interrupt your child's attention and interaction with another person in the group. Later, as your child's ability to pay attention to others improves, you should check to see if he can switch attention from one person to another and interact with both. This is an important skill too; it's how families interact as a group.

However, for now, here are some ideas to manage multiple interactions:

- Help family members understand the idea of your child's attentional spotlight and the importance of your child's focusing her attention on a person for increasing learning opportunities.
- Ask others to wait for a turn rather than interrupting the child's interaction with you. (This is just good manners, like waiting for a pause or an invitation to join in rather than interrupting a conversation between two people.)
- The same idea can be applied to other children who want to join in, as long as they are old enough to learn the idea of not interrupting others.
- "Turn about is fair play": when another person is engaging your child, be sure not to interrupt or vie for your child's attention. If you interrupt others and try to show them "how to do it," you risk discouraging them from interacting with your child. All the people who are in a position to interact with your child will find their own way to do it or will ask for help when they want it.

Summary of Step 3

If you have followed along and carried out the preceding activities, you will have found a number of ways to eliminate distractors and increase your child's attention to you and your shared activities. See if you agree with most of the statements in the following checklist. If so, you are now armed with important skills for increasing and supporting your child's attentional focus on you—knowledge you will use for **Step 4**. If not, start experimenting during play and caregiving activities until you have found some methods that work for you.

Activity Checklist: Have I Identified and Minimized Distractors?

- _____ During play and caregiving activities, my child is frequently attending to me and to our shared activity.
- _____ I have noticed what distracts my child and found ways to put away, cover, or hide the distractors in one or more rooms.
- _____ I have had success at moving my child and myself to a different location to avoid the distractors.
- _____ When I am interacting with my child for play or caregiving, the television and computer are turned off.
- _____ When others want to join in, I have helped them with the idea of waiting and taking turns, rather than interrupting and diverting my child's focus.

What about Pablo? For Pablo's parents, the remote and the TV were the distractors. As much as they tried to interest him in his toys or physical activities, his attention to the TV prevented them from stepping into the spotlight of his attention. However, they noticed that during bath time he enjoyed squeezing his bath toys and making them squirt water. He also liked it when his parents put shampoo bubbles on his hands and belly. They added a couple of bath toys that wound up and swam, and he loved these and handed them back to his parents to rewind when they wound down. They tried blowing bubbles toward him when he was in the bath, and he loved this too, batting excitedly at the bubbles and looking right at them with a big smile, waiting for more.

His parents also found that Pablo enjoyed being seated on the counter to be dried off after his bath, and they began to "rough him up" with the towel, play peekaboo with it, and play games like "This Little Piggy" with his toys as they dried them off. His mother turned him around toward the mirror, and as he watched, she put her face next to his and made silly faces and noises in the mirror. He enjoyed this, patting at the mirror and then at her face.

All of these observations made Pablo's parents realize that he did enjoy playing

EVERYDAY STRATEGIES

games with toys and people, so they decided to take more control of the TV and remote. They made a point of having the TV off during meals, during bath time, and early in the morning. They also began to dress him and change him on the bed in the room he shared with his brother (instead of in front of the TV), first thing in the morning and in the evening before his bath, and they used these times for play on the bed. In addition, his dad sat with him at the table at breakfast, and his mother sat beside him at dinner. They took more control of his food and drink, giving him little bits so he needed to request them more frequently. They also spent social time interacting during meals—having him help pass things, having him give them little bits, and having him help wipe the high chair tray before he was finished.

Having the TV off during these activities cut down the amount of time Pablo was focused on it and increased his attention to them. However, Pablo still spent hours in front of the TV. Finally, after a few weeks, his parents took a huge step. One night, after he was asleep, they put the remote high up in a cabinet. They took more control of the TV, turning it on for 1 hour in the morning, 1 hour before dinner, and 1 hour in the evening before Pablo's bath. They set a kitchen timer at these times. When the timer went off, they plugged in and turned on the TV and reset the timer for 1 hour. When the timer rang again, they turned the TV off and unplugged it.

The first morning, Pablo searched and searched for the remote. He was very upset when he couldn't find it. His mother turned the TV on after breakfast for an hour, while she got dressed and ready for the day, and when the timer went off, she was ready with the stroller and his coat. She turned the TV off and put his coat on him immediately, and they headed off to the park. Pablo cried when the TV went off, but he was distracted by the trip to the park, which also provided some good playtime on the swings. When they got home, his mother changed him on the bed, then put him in his seat at the table for a snack, and she sat down for a cup of coffee. She provided some toys at the table while he was eating—a puzzle, a book—and she managed to hold his attention with these for more time than she expected. He fussed for the TV, but she just ignored the fuss, and after the snack they went into his room for some roughhousing on the bed and then some toy play on the rug.

This was the new routine of the household, and in a few days Pablo stopped

"My son never had great affection for television, but when he was 3 years old I found it useful in certain ways. I had big picture books showing objects, people, facial expressions, and other things that we used often to practice pointing. It seemed a natural complement to watch carefully chosen television segments and talk about what emotions the characters were showing, with comments like 'Is she happy?' and 'Which one is sad? and, later, 'Why is she sad?' The reward for being engaged and talking was getting to watch a favorite show!" searching for the remote and began to show much more interest in playing with his parents—with toys, at the table, and in the bath. Mom and Dad had worked very hard to figure out how to eliminate the competition from the remote and the TV, but soon realized that they couldn't actually compete directly with these powerful draws; they had to remove the competition altogether. They also had to put up with the fussing and crying that they knew would occur in the first few days, but by substituting other activities their son enjoyed, and getting him out of the living room, they got through the roughest part. And, day by day, Pablo adjusted to the new routine.

Step 4. Identify Your Child's Social Comfort Zone

Rationale. All people, including children, have different reactions to the physical closeness of other people. Some people need more social distance than others. Others love to be close. To attract your child's attention to your face and body, it's important to determine your child's comfort level with physical closeness.

Activity: Learn Your Child's Signals about How Close Is Comfortable

You are going to carry out a little experiment here: learning from your child where he is most comfortable watching and enjoying your company. That space is your child's social comfort zone. Wherever your child seems comfortable looking at you establishes the right distance for learning for your child. It may well be that after a while, when you and your child have developed a number of familiar, enjoyable social routines, your child will be comfortable with your coming in closer. But it's not really so important how close or far out you are; what's important is increasing your child's attention to you and being close enough that you can still touch the materials and your child.

Here are some ideas for learning and responding to your child's signals about how close is comfortable:

- During the face-to-face activities you are using from Step 2, pay attention to how close you are to your child and how she reacts to your closeness. Most parents playing with a young child find themselves within arm's length of their child's face, able to touch their child's face with their hands. This is a natural place to be when talking to a young child and sharing play and emotions. Most young children with ASD can handle this level of closeness comfortably, though your child may need a little time to get used to a closer distance if it is different from the typical way you interact with your child.
- If your child shows marked head turns and looks away from you (this is called *gaze aversion*), back up and observe how your child responds!

Backing up goes against most people's instincts; the natural tendency is to get closer or to touch the child's face or do something to draw attention. However, some children need more distance to enjoy face-to-face interaction. If you see your child look away as you come in closer, then back up to where you were before the child looked away. See if you can resume your interactions without eliciting gaze avoidance. If not, back up a little more and try again.

• Some children are more changeable than others and may change their reactions very quickly during an activity. They may appear to enjoy your closeness during an interaction one minute and then suddenly shift to a less positive mood, even if the activity and your involvement remained the same. If your child's mood changes rapidly from happy to unhappy, or the opposite, or the child takes a little longer to "warm up" to an activity, you may want to move around a little. Think about what actions or effects your child may enjoy most about the activity, and show these to your child from a slightly greater distance.

Summary of Step 4

If you have followed along and carried out the preceding activities, you will have found the boundaries of your child's social comfort zone in several different activities, and will have used this to help your child attend to you and your shared activity. See if you agree with most of the statements in the following checklist. If so, you are now armed with important skills for adjusting your position to maximize your child's comfort and attention for **Step 5**. If not, please return to the start of the section, review it, and try again. Seek some advice from another person who knows your child very well.

Activity Checklist: Am I in My Child's Optimal Social Comfort Zone? _ My child is not actively looking away from me or leaning back. _ My child is looking up at me and my actions sometimes. ____ I am in front of my child and close enough to touch my child and the objects between us. My child seems comfortable-playing with objects, smiling at times or focused on play, calm, interested, or happy/excited.

What about Matthias? When we first met Matthias, his main interest was lying on the couch to stare out the window. Dad developed several physical, active games to

interact with Matthias, but it still required a lot of effort from Dad to keep the interaction ongoing. Matthias smiled and laughed when he was thrown onto the couch or "airplaned" around the room, but he did not always persist or actively seek out Dad to continue the game. Dad felt that he could at times take it or leave it. So how could Dad elicit more excitement from Matthias?

To figure out this next step, Dad started to experiment with the social comfort zone to see how slight changes in his own positioning might affect Matthias. Dad started by observing differences in how Matthias responded when Dad's face was up close versus farther away while he was bouncing Matthias on the couch or circling him around the room. When up close, Matthias at times pushed Dad's face away, but when Dad placed Matthias down and leaned or sat back from him, Matthias tended to follow Dad with his gaze. Matthias's attention to Dad was most apparent when Dad took a few steps back from the couch to sit on the floor. Matthias got off the couch and ran over for Dad to lift him up in the air. Dad continued experimenting with the physical distance between himself and Matthias, and realized that for physical games, having more distance worked better. It seemed to ignite more effort in Matthias to seek out Dad and continue the game. This was the same for playing an airplane game or swinging him around the room. When Dad stopped to place Matthias on the ground and took a few steps back, Matthias was more likely to look at or lift his arms up in response to Dad's open arms than when Dad crouched down right in front of Matthias's face and asked him. The same was true when Matthias was tired of an activity. Dad saw that a little extra space helped him interpret when Matthias was truly finished with a game, because he did not pursue Dad but instead looked elsewhere in the room. Dad was then able to confirm that Matthias was "all done" with an activity and follow his eye gaze to the next play idea. Dad felt more successful in understanding his son's attempts at communication and in building more interactive games for participation.

Step 5. Join In by Following Your Child's Lead

It is very common for parents to interact with their child by creating a new activity and offering it when the child is already attending to something else. The child with autism might be engaged in opening and closing a door or rolling a car back and forth, and when Mom or Dad interrupts to propose an unrelated activity, the child might ignore the parent or even become angry and upset. This can make the parent feel like a failure, or at least feel frustrated by the child's lack of attention or interest in the new activity. Instead of trying to direct your child's attention to something, in this step you will practice *following* your child's attentional focus.

Rationale. Following children's attention as a way of teaching them may seem "unnatural" or "backwards." We are very used to teaching by instructing and directing our children. However, many studies have taught us that children, especially

young children in the language-learning years, learn language more easily if parents and others follow their children's attention and talk about what the children are already attending to. Redirecting their attention breaks their concentration and runs the risk of losing it altogether. The following activities use the four main techniques that we employ in ESDM to follow children's attention. These are major teaching skills that you will use again and again as you follow these chapters along, so practice them until they come easily and naturally to you.

The watchword for Step 5 is this: "Where you lead, I will follow." Instead of trying to change your child's activity or focus of attention, try to *follow* your child's attention into her current activity and *join* your child in it. You can use the objects, toys, or activities your child is focused on to build an interaction.

Activity: Use Active Listening

A great place to begin is with *active listening*. You may know that phrase from other contexts, and if so, you know that it means listening, really listening, to what the other person is saying and working hard to understand the person's intended meaning. With other adults, we try to understand by listening and by asking questions for clarification, by restating what we have heard, and by giving supportive comments. When we are active listeners of a young child at play, we position ourselves in front of the child so it's easy to share gaze, watch what the child is doing to understand his goals, narrate his actions, make admiring comments, and add sound effects or drama (drum rolls, cheers). We might help the child—picking up a toy that has been dropped, pushing something closer that the child wants. We also might imitate the child's actions with another object.

This kind of active listening and commenting can occur in many situations with your child. It creates a situation in which both of you are sharing attention to the same thing, and sharing attention is a powerful tool for child learning. It makes language meaningful, and it puts you into the child's attentional spotlight—on center stage, engaging and responding to your child's play (without interrupting or changing your child's focus). Active listening can also help to *maintain* your child's attention to the activity, so you can add more learning opportunities. It communicates to your toddler: "I'm here, I'm interested in you, I see what you are doing, and I'm doing it too." As you join and follow your child and become more active—with comments, approval, sound effects, and mirroring actions—your child will attend more to you.

L Activity: Narrate

Joining your child begins when you share your interest in her activity by watching, smiling, nodding, and gesturing (*active listening*). It's easy to proceed from actively and approvingly watching your child's actions to *being your child's narrator*. As you watch actively, add simple single words or short phrases to describe what your child is doing. (The reason for using simple language is to help your child begin to hear individual words and associate them with objects and activities. If your language is too complex, then your child may not understand which word or phrase describes the object you're holding or the action you're demonstrating.) For example, if the child is picking up a toy train on the floor, you might say, "It's a train!" As the child rolls it, you might say, "Chugachugachug!" and help the child roll it. If the child pokes at the wheel, you might say, "That's

) Helpful Tip

If narrating doesn't come naturally to you, pretend you are a sportscaster calling the play-by-play while observing your child in play. Comment about the objects and actions you and your child are using as you play. Use short phrases! Have fun! the wheel!" The chart at the very end of this chapter provides ideas for narrating other kinds of activities.

Describing your child's play without interrupting or changing your child's focus can help to maintain your child's attention to you and the activity while you provide opportunities for learning language. *Remember to position yourself in front* of your child in such a way that your child can have a very clear view of your face. It helps your child to be more aware of your attention and your speech.

L Activity: Offer Help

Another way to increase your child's attention and engagement as you watch and narrate is to offer help. Hand your child toys during play or changing and bathing times after your child indicates an interest, rather than simply placing them within the child's reach. Name them as you give them. Hand over bits of food one by one, rather than putting all the food on the high chair tray during meals, while you are seated in front of your child and narrating what's happening. When your child reaches for an item slightly out of reach, say, "You want banana? Here's the banana," and hand it to your child. Or you can divide something into several pieces (like breaking a cookie into bits or handing over one block at a time). Using more pieces means more learning opportunities for your child to communicate with you and take in the words you say and the actions you do. Assist your child when he is struggling to reach a goal (like trying to stack a block), and make sure that your help is obvious to your child. Being the deliverer of desired objects and needed help makes you a part of the activity and helps your child attend to you and your language. Have the desired object ready, waiting and in plain sight, and deliver the object dramatically to be sure your child attends to you as you join in.

"My child never needs help!" Some children are so determinedly independent that they never seem to need help. If you have a child like this, you will have to engineer some situations in which your child needs your help. You can create a situation in which your child needs your help by sometimes putting a favorite toy or food item in a clear plastic baggie or a jar with a lid, so that your child can see and touch the bag or jar but cannot open it. Then you can offer help by extending your hand and asking if your child needs help, opening the bag or jar, and giving the child the desired object. When your child recognizes the object in the bag or jar, he may indicate interest in getting it and may look from the bag or jar to you and back, or make a sound while looking at it, or pat it with his hands, or hand it to you. Even if you're unsure whether your child wants the item inside the bag or jar, you can open it and give him the object. As you repeat this game over time with a few different materials, a game may develop.

You can also offer enticing toys with special effects that the child needs your help to produce, such as winding up a toy that spins.

Activity: Imitate Your Child's Actions

Another way of increasing attention to you and creating interactions is to *imitate* or *mirror* your child. While facing your child, play with the same toy or object, taking turns—or use a second identical toy or object to imitate her actions, so you don't have to take the toy away from your child. For example, if your child begins to roll a car back and forth, you might use a second car to roll back and forth, imitating the speed with which your child is rolling the car. Imitation can also extend to noises or verbalizations your child might produce. Helpful Tip Refer back to your list of actions, sounds, and movements your child performed when you observed the child's play. Either take turns with your child's toy, or use a second, similar toy to create these actions. Remember to narrate or give a label to the objects and actions you're using, keeping the language as simple and short as possible. If your child does not imitate you back, go down your list and try another action.

Helpful Tip

Some children may become upset when you first join them and handle their materials in play. They are used to playing in a certain way, and they may resist the change that comes when another person joins in. If your child reacts negatively to your attempts to join in, don't worry! Your child just needs to get used to your involvement. Reestablish facing your child within your child's social comfort zone, and use only the techniques of active listening and narrating for a few days. Stay with these techniques until your child seems quite comfortable. Then begin the next technique of helping. Stay with helping for a few activities, and then begin to imitate occasionally. Positioning yourself in front of your child and imitating her will almost certainly attract your child's attention. If your child is trying to put a block in a box, hand blocks over one by one (helping), and also put some in yourself (imitating). If your child is banging a spoon on the high chair tray, get another spoon and bang in rhythm in front of your child, while saying, "Bang, bang, bang" (narrating). You are very likely to see your child's attention come your way. This strategy of imitating your child's play helps to *shift* her attention and builds awareness of you as a social partner. By joining your child's ongoing activity and narrating as you go, you are turning a solo into a duet.

Final Activity: Mix It Up—Combine Listening, Narrating, Helping, and Imitating

We have just discussed four techniques for following your child's interests and activities: active listening, narrating, helping, and imitating. These four techniques typically occur together when people play with very young children. Even though you have been focusing on one or another of the techniques as you were practicing them, you have probably found that you often used more than one at a time. Now that you've practiced each of these during your play and caregiving activities, take some time to practice following your child in many of your activities during the day. Do this with as many of the six types of activities listed earlier under Step 1 (page 66)—toy or other object play, social play, meals, caregiving (dressing/changing/bathing/bedtime), book activities, and household chores—as you can over the next few days.

You will probably have to make a conscious decision to practice during an activity (though this will become more and more automatic for you as you practice and see the results). You will get an activity going or join your child in an already-begun activity, and once you are positioned well, consciously begin to *follow* your child. Spend about 5 minutes in the activity, and at the end, take a few minutes to think about when you listened and narrated, when you helped, and when you imitated. Try to take some notes, perhaps by using the form on the next page. We have put an example in the form to show you one way that might be helpful. The example comes from 18-month-old Landon, playing ball with his mom on the living room floor. The form shows the ways his mother followed his interest in the ball and joined him in ball play without redirecting him. Read it through, and then imagine your child's favorite toy or object play routine. Think about how you could use narration, helping, and imitating with your child in that routine. Then think through a caregiving routine, like bath time. How could you use these strategies during bath time?

Summary of Step 5

If you have followed along and carried out the preceding activities, you will have found a number of ways to follow your child's interest into an activity and join

Combining the Four Techniques in an Activity					
Example	Listening	Narrating		Imitating (you may want two objects, one for each of you)	
Toy or other object play Playing ball	Looks at ball Drops ball Pícks up and throws ball Watches whíle I roll it to hím Lífts hís arms up as I offer ball Drops arms down Catches ball I throw to lap Drops ball accidentally Ball goes behind hím He gestures for me to throw ball to hím	"Ball" "Bounce" "Throw" "Roll" "Up" "Down" "Good catch" "Whoops" "Oh, no" "Here it comes"	Gives the out-of- reach ball to Landon Roll to Landon to start game Roll it back to Landon Throw it into Landon's arms Hold Landon's hand to help him kick ball Hold ball so Landon can kick Fetch the ball from under the chair and give it to Landon	Landon's action with ball: rolling, kicking, or throwing Sounds or squeals Landon makes Gestures Landon makes	
Toy or other object play					
Social play					
Meals					
Caregiving (bathing/ changing/ dressing/ bedtime)					
Book activities					
Household chores					

From An Early Start for Your Child with Autism. Copyright 2012 by The Guilford Press.

him or her without redirecting your child to a different activity. After you have carried out one of these practice activities, look at the following checklist and see if you agree with most of the statements. If so, you are now armed with important skills for increasing and supporting your child's attentional focus on you– knowledge you will use for the rest of the chapters in this book. If not, go back through the chapter again, following along and trying each new activity multiple times with your child over the next week or so. Take your time to master these skills. There is no rush! You and your child will both enjoy your interactions a lot more when you can incorporate these skills easily into your play.

Activity Checklist: Am I Following My Child's Lead?

- _____ I followed along with my child's interest for a few minutes and did not try to redirect it to other activities.
- _____ I was face to face with my child, and my child was well positioned to notice me.
- _____ I watched my child's actions and narrated what my child was doing or looking at for a little while before I touched his or her toys.
- _____ I joined in by imitating what my child was doing, including making sounds.
- _____ I helped my child by making it easier for my child to reach his or her goals, by repeating the activity, and/or by handing over objects he or she wanted.
- _____ My child looked at me from time to time.

Here is an example of "mixing them up."

Two-year-old Dominique and her father, James, are playing on the floor with toys. They have a bag of blocks in front of them, and as James watches (active listening), Dominique reaches into the bag and pulls out a block in each hand. "Oh, you like those blocks," he says (narrating), and James hands her another one (helping) and says, "Here you go," as he holds out his other hand. Then he says, "Here, Dommy, can Daddy have a block?" She takes the offered block and releases one to his hand. He has two and puts them down in front of her (helping), stacking them up and adding a few more to the stack. She looks at the stack, and he begins to add sound effects (whistles) and make a bigger "display" of stacking the blocks, hamming it up and making it a fun spectacle. As she watches him, smiling at his sound effects, he offers her another block (helping), and she puts one of hers on the stack and takes the offered one. He immediately puts one on the stack (imitating). James and Dominique each add blocks to the structure (imitating) while he narrates, "Another one, and another one, and another one," until they crash. He says, "Crash!" in a big voice (narrating), and they share looks, smiles, and laughter. Dominique begins to build the tower again, and he follows along, narrating, helping, and imitating, while the game is repeated.

In this example, James uses active listening, narrating, helping, and imitating to follow Dominique's interest in blocks. He does not try to change the activity or direct her to something else. He stays with blocks and follows her interests and reactions as he tries one thing and then another to see how she will respond. He is a great playmate! They create a fun game, and he has her full attention as he sits across from her, helping her create fun routines with the blocks. Her attention lasts a long time, and they have lots of back-and-forth interactions with the blocks, each one a learning opportunity for her. She has not stacked blocks before—look at how fast she learns this from him!

Chapter Summary

We have been discussing ways to increase your child's attention to you and foster face-to-face interaction. *Watching* your child to see what he is paying attention to will tell you where the spotlight of his attention is falling, so you can join your child on the stage, inside that spotlight. *Carefully positioning yourself,* so that you and your child are facing each other without too much distance between you, gives your child a very clear opportunity to look at your eyes, face, and expressions and to learn about all the social information that comes from faces. Although at first this may seem awkward, you will find that it becomes easier and easier with practice. This kind of face-to-face interaction is great for play, but it will also help you provide many more learning opportunities for your child during daily activities. Remember the six main activities described for Step 5 (toy play, social play, meals, caregiving, book activities, and household chores), and try to use these techniques in each of them.

We have also described some ways to increase your child's attention to you during activities. The most important of these are the "**big four**." The first two of these are (**1**) active listening while interacting with your child, by watching what she does and commenting on it; and (**2**) narrating her activities in short phrases and single words, while joining in and following rather than trying to redirect or interrupt your child's activities. We have added the activities of (**3**) helping and (**4**) imitating as other important ways of joining your child and increasing your child's attention to you. We know that it is more natural for some parents than for others to chat and interact with their young children face to face during caregiving and play routines. For young children with autism, increasing the amount of time they have people inside their spotlight of attention is absolutely crucial to their progress. You will be joining your child in things that your child already loves to do, and joining a happy child is a fun activity for most parents. Have fun practicing these steps!

Games, Activities, and Objects That My Child Enjoys				
Activity	Objects	Physical games/ social interactions	Sensory play	
Toy or other object				
Social play				
Meals				
Caregiving (bathing/dressing/ changing/bedtime)				
Book activities				
Household chores				

From An Early Start for Your Child with Autism. Copyright 2012 by The Guilford Press.



Refrigerator List

Goal: To increase your child's attention to you.

Steps:

✓ Identify your child's attentional spotlight.

- ✓ Find your position in that spotlight, face to face with your child.
- ✓ Eliminate the competition for your child's attention.
- ✓ Find your child's social comfort zone and stay inside it.
- ✓ Follow your child's lead: Use active listening, narrating, helping, and imitating.

From An Early Start for Your Child with Autism. Copyright 2012 by The Guilford Press.

5

Find the Smile!

Having Fun with Sensory Social Routines

Chapter goal: To help you increase your child's smiles and laughter during face-to-face social games, songs, and social exchanges. The more fun your child is having, the longer your child is attending and interacting with you, and the more learning opportunities you can provide.

This chapter assumes that you feel comfortable and successful with the skills from Chapter 4. If you have started spending more time interacting with your child during play and daily routines, and have been rewarded with more eye contact, more gesturing, and even some smiles from your child—and if you've been checking your Refrigerator List and also reviewing the Activity Checklists to help you remember the strategies—you are ready to add to what you've learned. In this chapter and each chapter that follows, you will add a new set of ideas and strategies to the previously learned skills that you will continue to practice.

Helpful Tip

If you don't feel very secure yet with Chapter 4's skills, spend some more time practicing them before using this chapter. Try using the Activity Checklists right after a playtime and after a child care activity. Give yourself a pat on the back for those skills that went well, and then practice the ones you were less comfortable with a little more in the next few days. *We are providing you with the same tools that we use ourselves.* When we provide therapy to children with ASD, we use checklists after sessions, score ourselves, and zero in on those skills or behaviors that didn't go as well as we wanted, so the next time we can enhance the learning opportunities embedded in our interactions with children.

Why Having Fun Together Is So Important

This chapter focuses on increasing the *fun quotient (FQ)* of the activities you and your child do together. Fun is an important part of helping your child learn for numerous reasons, especially these six:

- 1. *More fun = faster learning*. People of all ages want to continue activities they're enjoying. This seems so simple—but fun keeps both you and your child at an activity, and for your child more practice leads to faster learning.
- 2. *More fun = more learning opportunities*. The longer the two of you interact, the more learning opportunities you will provide for your child.
- 3. Adding fun to a learning activity aids the learning and memory process. Pleasurable activities result in much faster and durable learning than carrying out activities that do not have any emotional meaning.
- 4. Your child's cues that tell you she wants you to continue a fun activity are the basis for your child's learning to communicate. Looking and anticipating, smiling, reaching, or bouncing with excitement can all be developed into clear gestures, words, and eventually sentences! This is one of your most powerful communication-teaching opportunities as a caregiver.
- 5. A favorite activity is its own reward! Repeating an enjoyed activity after your child communicates wanting more provides a strong reward for your child's communication. The power of teaching through play is built on this natural reward system.
- 6. Being a very frequent source of fun and pleasure increases your child's attention to you at all times. As your child learns what kinds of fun activities the two of you can do together, your child will be looking for more and more opportunities to do them with you, which means more engagement, more communication, and more learning opportunities.

What's Happening in Autism?

Children with autism do not seem to experience as much natural reward in social interactions as other children. Based on research conducted by one of us authors (G. D.),¹ we think that one of the basic biological differences underlying autism is this decreased internal reward from social interactions and engagement. The good news, though, is that this biological system is moldable and responsive to experience. Through enjoyable play experiences, you can increase your child's experience of pleasure in social interactions and his internal motivation to seek

¹Dawson, G., et al. Brief report. Recognition memory and stimulus-reward associations: Indirect support for the role of ventromedial prefrontal dysfunction in autism. *Journal of Autism and Developmental Disorders*, 3(31) 337–341, 2001.

out and enjoy social engagement. This paves the way for more interaction and more learning opportunities.

Why Is It a Problem?

Not finding social interaction as rewarding as most other children means that children with autism are not seeking out as many opportunities to interact with others as other children do, and that's a problem, because humans learn so much from these interactions. We learn communication, language, object use, imitation, play, friendship, pretending, emotional intimacy—all aspects of mental and emotional life—not so much from school or other organized educational activities, but in the ebb and flow of daily family life. We think that this reduction in learning opportunities day in and day out, which results from fewer interactions, adds to the social-communicative delays in autism. Let's consider this example of a little boy with autism:

I (S. J. R.) met 17-month-old André at his home, with his new baby sister, 4-year-old brother, and parents all together. The parents had just recently recognized his ASD and had received a diagnosis that week. As I entered the house, all of the family members were in the main room except André, who was alone in his parents' darkened room, holding three figures from Toy Story. His parents told me that when he could, he spent his time either there or in a closet, and they had to keep all the doors closed to keep him in the main room. He held the figures in his hands, then dropped them together onto the carpet and circled around them, watching them, then picked them up and held them together in his hands, and then dropped and circled again. He noticed me but didn't really look at me, and his handsome little face was quite serious. This went on until his father led him by the hand out of the bedroom.

I asked his parents to show me André's play routines. His father carried out a lively roughhouse game involving flipping André onto his shoulder, "airplaning" him around the house, and then somersaulting him down to the floor. André smiled delightedly during this game, and when it was over, he lay on the floor, smiling and looking at his father with his big brown eyes. Dad scooped him up again, and the game was repeated. His mother also had play routines that André enjoyed. She sang "Itsy-Bitsy Spider" to him as he lay on the floor, using some hand motions and creeping her fingers up his chest when the spider went "up the water spout." He smiled happily, looked directly at her, and waited eagerly for her to repeat it when she finished.

So here was the fun quotient (FQ): The parents had some great tools to work with. They instinctively knew the power of these games. André did not try to leave to play with his figures. He stayed with these games until his parents and I began to talk and the parents stopped initiating the games. Then he took his figures and returned to the bedroom. André's parents and I talked about how to increase the number of fun social games they played with André each day.

EVERYDAY STRATEGIES

When I walked into the house 1 week later, I was amazed at the difference. The figures were up on a shelf and out of the way. André was on the floor with his father, completing a puzzle when I arrived. His parents reported that they had tried to engage him frequently during the day, and the more they tried, the more he responded. As I watched each of them take turns playing with him, I saw André playing happily with his parents, using his eyes, hands, **and voice** to continue games when his parents paused. What's more, when they stopped playing for a minute to talk, André directly approached one of them to start another game. He initiated social interactions again and again. His face was lively, and he was highly motivated to interact throughout the hour.

A few weeks later, André had a whole repertoire of songs and social games. He was reaching and communicating with voice and eyes. He could imitate the motions in some of his mother's songs, and when I came to the door and knocked, he was right there, opening the door with his mother, smiling and looking right at me. I asked his mother about his play with the figures. She told me that he was no longer interested in them. She hadn't seen them for a while, and he no longer spent any time in the bedroom or closet; he was now underfoot and wanting to be engaged with them constantly.

This chapter is all about this kind of social play between two people—a kind of social play that promotes touch and gaze, fun and excitement, for both you and your child! We refer to these early games that are designed to be fun, engaging, and pleasurable for your child as *sensory social routines—sensory* because they often involve stimulating sensory experiences; *social* because the primary focus of these games is the social experience of another person, not playing with objects or teaching cognitive or other self-help skills (although sometimes this happens as a by-product of the games); and *routines* because these games become familiar and ritualized for the child—a feature that makes them easier for your child to learn, so the child can quickly come to initiate and request these games.

What You Can Do to Increase the Fun Quotient

Three straightforward steps can help you find the smile to boost your child's learning during sensory social routines you do together:

- **Step 1.** Find the rhythm of sensory social routines.
- Step 2. Build a repertoire and refine the routines.
- Step 3. Optimize your child's energy level for learning.

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.

Step 1. Find the Rhythm of Sensory Social Routines

Sensory social routines are activities in which you and your child are happily engaged face to face in highly social activity. These activities are marked by *reciprocity*. That is, you and your child are taking turns and communicating with words, gestures, or facial expressions to keep the "game" going. Neither of you is "directing" the other (though you often need to start the game). Each partner leads, and each partner follows. You can see your child's leads when you pause or end one round of the game; your child will do something to continue it. That is your child's turn, or lead. Finally, sensory social routines typically do not involve manipulating objects (though there are exceptions). It is not object play. It is people play. In sensory social routines, each play partner's attention is intensely focused on the other, and they cue each other back and forth. There is a clear rhythm to this—a kind of balanced exchange in which both partners are engaged, in a back-and-forth manner. You start, you pause, your child cues, you continue, you pause, your child continues, and so on.

Rationale. Sensory social routines teach your child that other people's bodies and faces "talk"—that they are important sources of communication, and that people can send and receive emotions face to face. In sensory social games, you will share smiles, make silly faces, add sound effects and expressions to all kinds of games, and draw your child's attention to your face. Creating fun routines will motivate your child to communicate that he wants to continue the activity, which will form the basis for expressing other meanings, like "Don't do that again" or "I'm not sure about this." These routines can also help regulate your child's emotions, energy, and arousal levels, so that your child is as alert and attentive as possible to you and ready to learn from you.

Activity: Pick a Sensory-Rich Activity and Find the Smile!

First, pick an activity—a physical activity like tickling, bouncing, flying through the air, or swinging; playing "This Little Piggy," or using finger plays or songs; playing face-to-face games like peekaboo or pattycake—any games that capture your child's interest and attention and bring forth big smiles. Try to find an activity that doesn't incorporate a toy or other object. At the end of this step, there is a list of sensory social games that may give you some ideas.

Here are some ideas for finding the smile:

• Do something inviting to get your child's attention focused on you. Approach your child at a time when she's not engaged in anything. Join her on the floor or couch if she is sitting, or if she is walking around or standing somewhere, join her, greet her, and touch her, maybe pick her "At first, I had a great deal of trouble trying to think of good activities to use as sensory social routines. I liked the idea of making the social interaction its own reward, but felt lost at actually developing one that worked. Just trying those I'd seen wasn't enough; my son didn't always seem interested in the game that I thought looked like so much fun! So I used ideas about following my child's lead [Chapter 4] to come up with ideas. We developed spinning games, bouncing games, tickle games, and all sorts of others just through expanding on any little activity that happened to seem fun. Going in and out of a crib seems like a mundane activity, but I happened to put my son down with a bounce once, and he loved it. A game was born; I'd bounce him on the way in and fly him through the air on the way out, while he learned more and more words to request what he wanted. At first, it seemed very intimidating to come up with these routines, but it became easy and natural after only a few tries."

up and give her a squeeze or two, spin her around, or do something else that will be fun.

- While you have your child's attention, and the two of you are face to face and close, begin a brief game with your child. Repeat it two or three times quickly if it's short, like spinning, and then pause and wait, looking expectantly at your child and positioning your body to play the game again. If the game you picked is long, like a song or finger play, start with the first line and finger movements. Do that a little bit once or twice. Then stop, look expectantly, and see if your child seems to want you to continue.
- Pause right before the *big event*. The big event is the most dramatic moment of the game. If you are playing chase, the big event is the moment you are positioned and ready for the chase. If you are playing tickle, it is the moment that the fingers are ready to descend. If you are playing peekaboo with a blanket, it is the moment before you pull the blanket off your head or your child's. Pause right before the big event and look expectantly at your child. Get your child's attention, then GO! After the big event, be sure to pause, smile, and laugh to accentuate the fun of the big event.
- At the end of the big event, stop, look at your child excitedly, place your hands and body as if you are about to do it again, and *wait*. Wait for some action or sound from your child that invites you to begin again. Any small indication—a wiggle, a brief look, a quiet sound—will do. Wait for a signal from your child that tells you your child wants the game continued. (Your child's expectant looking or waiting is also a cue for you to continue.)

Once your child signals, finish the game and then pause again, waiting for another signal. Keep it going until either your energy or your child's

attention starts to lag. Waiting for your child's cues brings your child into the game and **balances the interactions**. Now it is a twoperson game, with two active participants, rather than an actor and an observer.

• Once either you or your child is starting to lose interest, say, "All done with [airplane, or whatever game you played]." Give your child a hug and be finished. Helpful Tip Don't discount expectant looks and waiting from your child as signals that your child wants the game to be repeated. As long as your child's attention is on you, even subtle nonverbal communication is communication.

• What should you say during the routines? Songs are easy—just sing the songs, with motions! If you don't know any motions, try making some up. For games like swing, tickle, and chase, invent a simple narration that goes along, like "I'm gonna get you" for chase; "Where's [name]?" and then "Boo!" for peekaboo; "One, two, three swing!" for a spin-around. Use the same words day after day. These little chants will help your child learn the game and learn language. Often children's first words are spoken in games like this.

Nancy begins a sensory social routine with 2-year-old Devon, who is sprawled on a bean bag chair in front of her. She begins to sing "Itsy-Bitsy Spider" and combines a gesture that fits each phrase. When Nancy sings, "The itsy-bitsy spider crawled up the water spout," she creeps her fingers up along Devon's chest. She pauses, and he looks intently at her. For the next phrase, "Down came the rain and washed the spider out," she brings her hands down his chest repeatedly, brushing against his chest with her fingers. She pauses, and he smiles expectantly with great eye contact. Then she raises her hands to her face and frames her face as she sings, "Out came the sun and [moving her hands like water down through the air] dried off all the rain." Finally, she positions her hands to creep her fingers up his chest for the last phrase, "And the itsybitsy spider—" She waits in position (her pause), and he looks at her, smiles, and reaches for her hands—at which point she finishes "crawled up the spout again" (fingers up his chest).

This is a lovely sensory social routine that many parents instinctively use to engage their young children—and most children seem to love it. Devon smiles, gives great eye contact, and reaches toward his mother in those pauses, taking his turns on cue. And why wouldn't he? It's a kind of mutually enjoyable conversation—each partner taking a turn and pausing for the other: a balanced interaction; both of them on the same "topic"; each clearly enjoying the other and showing it with smiles, actions, eye contact, and happy voices and movements. The feelings are genuine and positive between them, and they are speaking the same emotional language: "It's fun to play together."

Helpful Tip Repetition is key here. The more familiar a game is, the more it becomes a "routine," the more the child can participate as a full partner (as Devon did when he communicates that he knows what is coming after his mother's pauses), and the more the child learns.

• When you introduce a new sensory social routine, your child may look dubious. Present the activity in brief segments, by starting and stopping the activity several times, so that your child learns the routine and what to expect. Children do not always show immediate pleasure in a new routine. It may appear that they are not even interested in the game. It is all right to persist in the three quick repetitions of a new game even if your child does not seem to like it very much, as a way to introduce the game. However, if your child is wary, be gentler on the next repetition—softer and slower—so your child can get to know what is coming and does not start to avoid the routine. Over several repetitions, the game may become more and more interesting. However, if your child is clearly uncomfortable (backing away, still, serious face, avoiding contact, or protesting), stop the routine and shift to a familiar, happy one.

If there are no routines your child enjoys, you will need to start to build them up. Here are some ideas:

- Bath time: Use bubbles in the tub to place on your child's arm; then rinse away by pouring water; repeat; dry your child with extra little tummy rubs; pour water from a cup over your child's hands while in the tub.
- Changing or dressing: Try a little peekaboo with a diaper or pieces of clothing. Try a few toe tickles or "This Little Piggy" before putting on socks, or after taking them off, or while washing feet in the tub.
- Try massaging a little lotion on your child's hands and arms. Does that feel good to your child?
- Try squeezing your child gently in a bean bag chair, bouncing your child on your bed, or putting a pillow over your child's tummy as you play on your bed.

Some Sensory Social Games to Consider²

Games and Songs without Objects	Silly Faces and Noises	
Pattycake (with hands and also with feet)	Pop your cheek with your finger Make a raspberry noise with your	
Peekaboo	lips	
"The Noble Duke of York"	Kissy face and kissy noises	
"Where Is Thumbkin?"	Fish face	
"This Little Piggy"	Blow raspberries on your child's	
"Round and Round the Garden"	feet, hands, or belly	
Chase/"I'm gonna get you!"	Hide your face in peekaboo	
Swinging through your legs	Yodel	
Airplane	Whistle	
"So Big"	Stick your tongue out and wiggle it	
Creepy fingers	Pull on your ear: "Honk, honk"	
"Itsy-Bitsy Spider"	Tongue machine: Pull on your ear	
"Open, Shut Them"	and stick out your tongue, then	
"London Bridge"	push on your nose and pull in your tongue–make sound effect	
"Twinkle, Twinkle, Little Star"		
"Ring-around-the-Rosy"	for each	
"The Wheels on the Bus"		
"If You're Happy and You Know It"		
"Way Up in the Sky"		

Summary of Step 1

Dancing to music

If you have followed along and carried out the prescribing activities, you will probably have an idea of what kinds of sensory social routines your child prefers, and you can build on those in the days ahead. Some children enjoy more physical or roughhouse games—being chased and caught, somersaulted in the air, swung around, or spun. Others may favor games involving touch: "Round and Round the Garden," creepy fingers, tickle, having their bellies soaped up in the bathtub or having raspberries blown on their bellies, or foot games like "This Little Piggy." Then there are the songs and finger plays your child likes to hear you sing and do, or silly faces and noises that your child enjoys watching you make.

²For more ideas and descriptions of games, see *www.parents.com/baby/development/intellectual/ classic-games-to-play-with-your-baby*.

You have probably also experienced the rhythm of these activities—the back-andforth nature of the starts, pauses, cues, and continuations that make the games reciprocal. Over time, build up your child's repertoire of sensory social routines from 5 to 10, to 20.

See if you agree with most of the statements in the following checklist. If so, you have learned how to create sensory social games with your child and are ready for some additional techniques involving these games. If not, continue to try different routines; your child might need more exposures to them to learn the pattern and what to expect.

Activity Checklist: Have I Found the Rhythm of Sensory Social Routines? I know a number of sensory social routines that bring a smile and

- excitement to my child's face.
- _____ I have figured out how to position myself face to face while doing these routines.
- _____ When I start a favorite routine, my child often makes eye contact and smiles at me.
- _____ When I pause for a few seconds before the big event in a favorite routine, my child waits for me to continue.
- _____ When I pause, my child actively communicates his or her desire for me to continue—by looking at me, vocalizing, reaching, or some other behavior.
- _____ I have built up my child's interest in several new routines by practicing them with him or her several days in a row.

Step 2. Build a Repertoire and Refine the Routines

Once you've identified at least a few sensory social routines that your child enjoys and that allow you to find the smile, you're ready to add to this skill.

Rationale. These are repetitive activities, and once your child has learned them, they can lose their excitement. Early signs that a child is losing interest during a sensory social routine include lessened responding in between your pauses, looking away during your turns, and changing her body language (from active to passive or from passive to overactive). To make sure you don't completely lose the benefits of sensory social routines, be alert for the need to add to your repertoire, promote your child's participation as a full partner, vary the routine

enough to keep it interesting, pick the best times and settings, and add objects judiciously if that seems likely to help.

Activity: Get Creative in Building and Varying Your Sensory Social Repertoire

Here are some ideas:

- Keep your turn short, so your child has more opportunities to respond. Ideally, your child will have an opportunity to respond every 5–10 seconds. If you do too much, the interaction is not balanced. Your child isn't a full partner and will become bored, or at least won't communicate enough to get the full benefit of the activity.
- **Caution!** Avoid the situation in which you are making your child happy by simply entertaining your child, and your child is happily but passively observing and enjoying watching you do all of the work! Rather, you and your child should be in a balanced, back-and-forth communication throughout, via movements, gestures, eye contact, sounds, words, or other actions. The goal is for your child to actively attend and communicate with you in some way, even if only through gaze, to initiate, respond to, or continue the sensory social routine. You will need to start, pause, and wait often, to give your child a chance for her communicative turn. Be patient during your pauses, and wait for a response from your child.
- As soon as your child has shown enjoyment, participation, and recognition of one familiar routine, go ahead and add another. Simple songs that involve simple hand movements are especially important to develop, for many reasons: the repeated language, which makes it easy for the child to predict; the shared social meaning that the games have for both of you; and the gestures that eventually build your child's ability to imitate gestures. A good goal is to build up your child's repertoire to 10–20 different sensory social routines that he enjoys and can play with various people.
- Try to find a variety of times during the day to build in sensory social routines. Put them in all six activity types. Besides bath time and dressing, mentioned above, diaper changing is a great time for playing belly games, toe games, pattycake, peekaboo, and creepy fingers. Try to work a sensory social routine into regular diaper changes or potty times. Mealtimes can also provide a great setting for making silly faces and noises, with food and drinks as props, if you can make time to sit with your child at the table during a meal or snack. If it's feasible for you, try sitting with your child at the table, getting as close to a face-to-face orientation as you can by

EVERYDAY STRATEGIES

positioning your child's chair and your chair. Give you and your child the same food, and each of you have a drink. When your child takes a bite or a drink, imitate your child and add sound effects: drinking sounds, eating sounds, "Mmm-good," "DEElicious!" See if your child starts to enjoy your big displays. If you see signs of enjoyment, do it again. Ham it up! Offer your child a bite of your food. Try to get your child to feed you a bite. Make fun noises and other reactions when your child does. Some children think it is very funny when a parent picks up a child's bottle and pantomimes drinking from it—as long as the child gets it back quickly! Be sure to repeat all these routines several times, so your child begins to see the pattern in them and knows what to expect. Exaggerating your reactions, your sounds, your silliness—this is often the "attention draw" that children with autism (and those without autism too!) need to attend to you and the game, learn the patterns, and find the humor.

• Once it starts to feel repetitive to you, add some variation! Surprise your child by adding a new verse, new sound effects, new steps to the routine, or maybe some props or another person. Variation will keep the game going longer—and that means more learning opportunities for your child.

Alexis and her dad are playing "Ring-around-the-Rosy" on the floor. She initially likes the fall-down part and does a few rounds with Dad, falling down first (her communication), then laughing and looking when he falls down too (sharing the fun), then standing up again and reaching for his hands (her communication to begin again). However, after a few rounds, she stops falling down on her own and stops reaching. Dad thinks she is getting bored, so, rather than stopping the game, he says, "Let's get your sister!" Eight-year-old Tessa rolls her eyes, but Dad takes Alexis to Tessa (who is on the couch reading), takes her hand, and pulls her into the circle. He helps Alexis take Tessa's hand, and the three of them play a couple more rounds. This is very exciting to Alexis, who watches Tessa intently as they both fall down, and takes Tessa's hand to restart. Tessa says, "Get Daddy," and motions to her father. Alexis looks at him and reaches her other hand for Dad, and the three of them repeat the game.

This variation—adding another person—is enough to increase Alexis's interest and motivation for the game, and it results in a number of new learning opportunities. Dad could also add a big stuffed animal as a "person" in the game, or he could put a small object (like a stuffed animal or pillow) on the floor between them to circle around. These types of little variations can add interest for your child, and also for you, as you try to think of variations that will work!

• Know when it really is time to end the game. If your child's responses

diminish, and you cannot revive them through variations, it is time to be "all done" and to offer a different choice of activities. If you are bored, it's time to change. If your child's responses increase and get disorganized and overactive, it's time to calm things down. Slow down the game, lower your voice, or decrease the intensity. If that does not help your child calm down during the game, then end the game, say you are finished, and help your child transition into some quieter play with toys.

👗 Activity: Know When to Use Objects in Sensory Social Routines

Sensory social routines often involve activities without any objects at all. In songs, finger plays, social games, and physical games, your ability to position yourself and your child for face-to-face interaction is crucial for capturing your child's attention to your face and to your directed communications.

But you can also incorporate certain kinds of objects into sensory social routines. The object has to support the goals of a sensory social routine-to draw

Helpful Tip Try to choose objects that your child does not know how to use alone. This way, you can keep hold of the object, because your child needs your help to start and continue the game. your child's full attention to your face and body—so that there will be smiles and expressions of pleasure, and the child will communicate repeatedly for the routine to continue. If you carry out a sensory social routine with an object, the object has to be a special kind of object that will support your child's attention to you, instead of pulling it away from you and toward the object. For this reason, one rule of using objects in sensory social routines is that only you can

handle them. The child does not get to handle and operate them (because this pulls your child's attention away from you).

Objects like bubbles, balloons (*never let the child have control of the balloon; it's a choking hazard!*), pinwheels, noisemakers, tops, flutes, and pompoms can be woven into powerful sensory social routines. Other examples include wind-up toys, party blowers, Slinkies, rocket launchers, spray bottles with water in them, lotion, and scarves.

Here are some ideas for using objects in sensory social routines:

• When you use an object in a sensory social routine, you will *not* take turns with your child in operating the object. You are the sole operator. You will begin the routine by doing something with the object to make a big effect. Watch your child: You want to see smiles, pleasure, and an approach to

you or to the object. If your child freezes, looks worried, backs up, or moves away, stop and wait. Try to repeat the action, but *very gently, and aim it away from your child's face and body* the second time. Watch for your child's reaction. If you continue to see worry, freezing, or moving away, put the object away and do something else.

- If your child smiles, approaches, and looks interested or excited, operate the object again, and then *pause*. Wait for your child to communicate in some way that she wants you to do it again. When you get the communication (which might be a look, smile, gesture, approach, sounds, or words), say, "More? You want more bubbles?" or something like that, and then operate the object again. Keep this going several times if your child maintains interest. This is also turn taking: communicative turn taking. You do something, your child communicates, and you answer.
- Ideally, your child will come right up to you, touch the toy, look for the repetition, touch your face or hands, or otherwise be very excited. If your child doesn't, offer the toy and entice him to come closer. This is a close-in activity that should be a great source of fun and pleasure for both of you! It is also a powerful communication frame for your child, and in subsequent chapters we will give you many ideas for helping your child learn more ways to communicate his desires in sensory social routines.
- What should you say? Just as before, develop a simple narration that goes along with the activity. A few words and sound effects are important to add. For a bubble routine, a typical narration might be something like this: "Want more bubbles? Want me to blow? Blow! [then blow]. Get the bubbles. Pop, pop. See the bubble? Get it—pop," spoken as your child does the various actions. Use a similar narration each time you play a specific game. Emphasize the names of things, the actions you are making, sound effects, and little chants like "One, two, three" or "Ready, set, go." Add sound effects, gestures, facial expressions, and anything else that makes

) Helpful Tip

We can't stress enough how important it is for you to maintain control of the object. If the child requests it, treat the request as a request for you to activate the object, rather than hand it over. Don't get into a struggle over it. It's better to end a sensory social game by putting it away or with your child holding the object than to have a big upset over control. There is always another opportunity to repeat this in the next few hours or days. the routine fun and playful for you and for your child. Be dramatic; ham it up! Use your child's reactions to tell you what creates energy, fun, and excitement for your child without becoming overstimulating—a point we will return to soon.

Bouncing your child by his hips

Games and Songs with Objects

Blowing bubbles

8	8/ 1		
Balloons–blow one, count "One,	on a little trampoline or the bed		
two, three," and let it go flying around the room (again,	Bouncing and rolling belly down on a big exercise ball		
though, be careful, because children can choke on balloons)	Swinging the child through your legs		
Pinwheels—blow to make them turn Pompoms—shake, put on your	Rocking the child on a rocking horse (from the front, to stay face to face)		
head, throw, and so on	Rocking chair–rock fast, rock		
Clothes to put on each other:	slow		
beads, glasses, hats, bracelets,	Spinning in a swing		
or watches Lotion—put a small amount of lotion on your child's body, rubbing, and massaging Filmy scarves—throw, hide under, prance around with Blankets or mats—roll your child up in one like a hot dog Peekaboo with props Squeeze and wiggle games with a bean bag chair	 Splash games with water in the bath Bubbling with straws in the bath Noisemakers—party favor blowers flutes, tambourines, and the lik Slinkies Pushing your child on a swing from the front and catching her to stop and wait 		
bean bag chair			

Activity: Alternate between Sensory Social Routines and Object Play

Because sensory social routines draw you and your child close together socially and emotionally, they are wonderful parts of all interactions. When you are playing with your child, see what it's like to alternate between object-focused play and sensory social routines. The object-focused play builds your child's skills in thinking, imitation, hand and body coordination, and complex play skills. The sensory social routines build social skills, communication skills, emotional connectedness, and imitation. Alternating between joint activity with objects and sensory social routines ensures:

- Greater enthusiasm, motivation, and energy for learning
- More learning across developmental areas
- Reciprocal turn taking and responding inside typical routines and activities
- More social attunement and engagement

Keep in mind, too, that when it is time for a sensory social game to end, you will probably be wise to move to an object play activity. This will give both of you a little break from the intensity of well-done sensory social routines! Some children will resist ending a sensory social routine; this is good, because it means that they really enjoyed it! However, if you feel it is time to end (you are exhausted, or it feels too repetitive) and your child resists, you can help the transition go more smoothly by introducing an object or another enticing activity (like a snack), diverting your child's attention toward the new object or activity, and then leaving the sensory social routine.

Sensory social routines draw children with autism back into the social world and the pleasure of social exchanges. They are a very important part of our social-communicative approach to early intervention for ASD, and they are used in one form or another by many different treatment approaches.

Summary of Step 2

If you have followed along and carried out the activities described above, you will have built up not only several different types of sensory social games, but also your skill in observing and assessing how and when to use a sensory social routine. You will also know when you need to vary a routine, end it, or transition to an object-focused routine. See if you agree with most of the statements in the following checklist. If so, you're ready to go to the next step. If not, reread this section, try some different routines, and consult with someone who knows your child well if you are having problems trying to come up with some new ideas.

Activity Checklist: Have I Built Up a Bigger Repertoive and Refined the Routines?

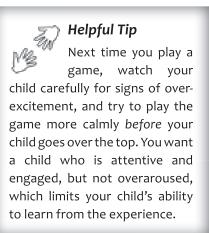
- _____ My child and I have built up a repertoire of 10 or so fun sensory social routines, including songs and finger plays.
- I have worked out one or more sensory social routines for most caregiving and play activities of our day.

- _____ My child is active in the games, not just a passive observer or recipient. He or she cues me, one way or another, to continue during pauses in many of our games.
- _____ I have learned how to vary routines, or elaborate them by adding steps, to keep the routines from getting too repetitive.
- _____ I can narrate and produce simple scripts for these games fairly easily.
- I have learned the signs that my child is losing interest and it's time to end the game before my child leaves, fusses, or shuts down.
- ____ I have learned to carry out some sensory social routines with objects.
- I have experimented with going back and forth between toy/object play and sensory social routines with my child.

Step 3. Optimize Your Child's Energy Level for Learning

The last step in this chapter involves helping your child find her best energy or arousal level for learning from you in these fun activities.

Rationale. Children who are overaroused or underaroused are not in an ideal state for learning. Optimal learning occurs when a child is alert, attentive, and engaged—not when he is passive, spaced out, or tired, or when he is overexcited,



agitated, or overly aroused and out of control. It's important to be able to judge when your child is getting too aroused or is not aroused enough, and to take steps within your sensory social routines to optimize your child's arousal level for learning.

Activity: Learn to Dial Down the Activity When Your Child Is Getting Highly Aroused

You probably have experienced your child, or other children, getting "revved up" when their parents play with them in a very vigorous way. It's fun to see children become excited and energized by play. But at a certain point they get so wound up that they aren't listening, aren't responding to others, and instead are "over the top." They are overaroused. They have temporarily lost their ability to control

themselves and their own behavior. They may start running around, yelling or screaming, and perhaps getting destructive or aggressive. This is a point when parent-child play or play between brothers and sisters can quickly evolve into a conflict situation, with children being corrected and parents being upset.

Here are some ideas for heading off overarousal:

- Make the play gentler the minute you see your child getting overly aroused. You don't need to stop; just get softer, slower, quieter, and less stimulating. You should see your child become less excited quickly.
- You can use sensory social routines to help your child adjust her arousal or excitement levels in many situations. Children who are upset and overaroused for other reasons often calm down in response to gentle sensory social routines. Children who are very upset because they are angry, frightened, or frustrated may be helped by gentle sensory routines involving rocking, hugging or squeezing, or having gentle pressure on their heads and backs. These may be accompanied by your soft and soothing voice singing a calming song, or saying a little chant like "You're okay, you're okay, you'll feel better, you're okay."

L Activity: Find Ways to Energize an Underaroused Child

Children who seem sluggish, bored, uninterested in things, unresponsive or underresponsive to your initiations or to events going on around them can't learn any better than children who are overaroused. They tend to sit or lie around rather than move around as actively as most young children, who seldom sit still for very long. Their facial expressions look neutral; it's hard to tell what emotion they are feeling, either in face or in body. They may seem tired. They may do one thing for long periods of time without changing position—watching their hands, staring out the window.

Here are some ideas to "perk up" or activate an underaroused child by using lively sensory social routines:

- Move the child quickly by bouncing, jiggling, spinning, or using fast-paced actions and songs.
- Use stronger touches, more volume, a bigger voice, more emotion.
- Use physical actions involving rapid or rather jerky movements: fast bounces on your lap or on a ball, lively jumps on a mini-trampoline.
- Use sensory social objects that create big sounds or visual events.

• Use touch to "rev up" an underaroused child: rubbing or squeezing limbs; using lotion; giving foot massages on bare feet; rolling up in a mat; squeezing in a bean bag chair; blowing bubbles on hands, feet, or belly. Be careful with tickles: They are very arousing, but can also quickly become noxious. If the child comes back for more or pulls your hands for more, continue once more, but if not, end.

Summary of Step 3

We have been discussing concepts related to your child's level of arousal or excitement during sensory social routines. You may have observed your child getting too excited at times and either crying, getting really overactive, or becoming disorganized in some routines. You have likely tried to experiment with those overexciting routines by slowing them down, calming them down, or ending them sooner, to prevent the overexcitement. Or your child may be a low-key child with a mellow, laid-back disposition, who doesn't get excited about much or show many emotional changes. We hope that you observed your low-key child get more excited in sensory social games—more smiles, more animation, more social behavior, more attention to you, more liveliness, more emotion.

See if you agree with most of the statements in the following checklist. If so, you are ready to move on to the next chapter. If you have not thought much about these concepts with your child yet, spend a little more time observing, playing, and thinking about this. When you see either one of these states (overaroused or underaroused), try to use a sensory social routine that you have developed to help optimize your child's state—to slow down and reorganize an overly aroused child, or to rev up and energize an underaroused child. Doing both of these as needed will optimize the child's ability to attend and learn from you.

Activity Checklist: Have I Optimized My Child's Energy and Avovsal for Learning?

- _____ I have become much more aware of my child's arousal levels across different activities.
- _____ I can see when my child is overaroused, underaroused, or in an optimal state for learning and interaction.
- I have learned how to use some of our sensory social routines to help my child become calmer and better organized when he or she is overaroused.
- I have learned how to manage our routines to keep my child from becoming overaroused and disorganized during our social play.
- _____ I have learned how to use some of our sensory social routines to

help my low-key child become more energized and motivated to participate.

I know what it means for my child to be in an optimal state for participating, and I know how to use sensory social routines to help create and sustain that state in my child for several minutes or longer.

Chapter Summary

Sensory social routines help you help your child in several ways—increasing the FQ, or fun quotient—of your child's interactions with you; getting your child engaged for longer periods of time in social exchanges; increasing your child's communications for activities; and optimizing your child's energy levels (arousal levels) for learning and engaging. As these routines become familiar to both of you, putting in pauses so your child can communicate somehow that you should continue allows the two of you to take turns and be active partners in the games. It also fosters your child's intentional communications with you. It sends your child the message that communicating is powerful—it controls other people's actions. It gets your child what he or she wants. Sensory social routines provide you with a wonderful tool for helping your child find this optimal emotional state for learning—energized, engaged, and in tune with you. You can use these routines any time you see your child in an overaroused or underaroused state. When alternated with object play, they help your child stay connected with you. They are not only fun for you and fun for your child, but powerful tools for supporting communication, for sharing emotions, and for fostering social growth.



Refrigerator List

Goal: To use sensory social routines to increase your child's smiles and laughter during face-to-face games and songs.

Steps:

- ✓ Find the smile!
- ✓ Stay in the spotlight, face to face, with your child.
- ✓ Create fun routines from songs, physical games (roughhousing), and touch.
- ✓ Accompany them with lively faces, voices, and sounds.
- ✓ Narrate as you go.
- ✓ Use stimulating objects to create sensory social routines.
- \checkmark Vary the routines when they get repetitive.
- ✓ Pause often and wait for your child to cue you to continue.
- ✓ Use sensory social routines to optimize your child's arousal level for learning.

From An Early Start for Your Child with Autism. Copyright 2012 by The Guilford Press.