3 Important Communication Goals in and around the Home

Shelby's parents are reading in the family room. Shelby comes in and walks up to the bookcase. She reaches for a book on the top shelf and when she can't quite reach it, she drags a chair over to the shelves, climbs on the chair, and gets the book. Her parents certainly know what she wants.

Did Shelby communicate?

Josh is playing in the sandbox while his father is sitting on a nearby park bench. Josh leaves the sandbox, walks over to his father, looks at his father's eyes while he pulls him to the seesaw, sits his father on one end, and runs to sit on the other end. His father immediately pushes him up and down and Josh laughs out loud.

Did Josh communicate?

Hunter is playing in the family room in front of a big window. Suddenly the trash truck pulls up in front of his house. It is very big and very noisy. Hunter, who is about 15 months old, stops, gasps, and looks at his mother. As she turns to him, he looks back at the truck, points to it, and looks back at Mom. He continues looking back and forth between his mother and the truck until she, too, sees the truck and reacts: "Wow! That's a loud truck!" Hunter has not yet developed any whole words to say, but his mother certainly understands that he wants her to react.

Did Hunter communicate?

What Is Communication?

Let's consider the first scenario. Shelby directed her behavior to the shelf, chair, and then the book. Actions that are directed to the environment and that lead to rewarding outcomes are not communicative! Even though her parents were sitting nearby, Shelby did not interact with them in any way, so we conclude that she did not communicate. In fact, her behavior would have been exactly the same had they not been in the room. Shelby's parents, by watching her, could have *interpreted* that she wanted the book, but that interpretation does not mean that Shelby communicated with them. Their presence had no impact upon her actions.

In each of the next two scenarios, the children did something directed to their parents, who responded in some way. Josh's dad pushed him on the seesaw, while Hunter's mom reacted to the truck he was pointing out. Even though these children did not say words, everyone recognizes that they did communicate with their parents.

So, communication involves at least two people. One person (we will call this person "the *speaker,"* even when no speech is involved) directs a behavior of some sort to another person (we will call this person "the *listener,*" even when speech is not involved). The listener then reacts to the speaker in a manner that is rewarding to the speaker. In the last scenario above, Hunter looks at his mother and then back to the truck. He does this again and again until his mother notices the truck and makes some comment about it. He definitely communicated! The message he delivered did not involve spoken words; he gasped and directed his mother's eyes to the truck by looking from her to the truck. Likewise, while Josh did not say anything, his actions involving his father lead his father to begin playing with him on the seesaw!

Understanding the basics of communication will help parents better cope with situations in which communication has broken down. The root of many behavior management problems lies in either the lack of communication or miscommunication. While it is beyond the scope of this book to review many effective strategies to teach functional communication, it will be helpful to review some of the fundamental issues associated with communication.

Why Children Communicate

Before we make plans to teach communication in the home and community, it is helpful to look at the conditions that might affect a child's communication. Sometimes children are chatty and simply want to spend time interacting with others. Sometimes children need or want a specific item from someone. Some children are great at starting interactions and other children tend to wait for someone else to start a conversation. Therefore, we need to look at *why* children communicate, and under *what* circumstances, or when children communicate.

In 1957, B.F. Skinner published a highly influential book, *Verbal Behavior,* in which he offered an analysis of language from a behavior analytic perspective. His book has led to many studies that have supported many of his interpretations as well as to the development of particular intervention strategies. For example, the PECS (Picture Exchange Communication System) protocol was developed based upon the principles laid out by Skinner. In his book, Skinner proposed a number of terms to help clarify specific types of communicative acts, and we encourage readers to learn more about his ideas. Within this chapter we will use colloquial terms but attempt to highlight the function connected with different types of language use.

Let's look at the situation in which Josh directed his actions toward his father until his father pushed him on the seesaw. The outcome—playing on the seesaw—was specifically what Josh wanted. We call this type of communication a *request* (in Skinner's analysis, this is a "mand"). The *direct* outcome for Josh was something material or concrete that he wanted.

There is another type of outcome or reward for communication. Think about Hunter and the interaction with his mother. Hunter noticed the big truck and got his mother to notice it too. He didn't expect or want his mother to get the truck for him. He wanted his mother's attention and for her to see what he saw. He wanted something social from his mother—her attention, her praise, her apparent enjoyment of her conversation with him. He did not get anything material from his communication, such as playing on the seesaw as Josh received. Instead, he *commented* to his mother, who provided him with a *social* reaction (a "tact" in Skinner's terminology).

We can divide the main purposes (or functions) of communication into requests and comments. When we want to teach communication, our first job will be to consider what purpose a communicative act will serve for the child. Furthermore, what we know about the child may influence our lesson goals. For example, we know that social rewards for very young children with autism and related disabilities tend not to be very effective. Therefore, it may be difficult to start communication lessons with very young children with autism by targeting communication skills that primarily serve a commenting function, such as simply naming common objects. It is likely to be more useful to the child to begin teaching him how to *request* their most important reinforcers.

When Children Communicate

In addition to looking at the "why" or the consequences of communicating, we also must look at the conditions that exist prior to communication. These conditions, known as *antecedents,* will affect how we plan our communication lessons. For example, Will, Julie, and Mike can say the word "swing." Today when Will's dad takes him to the neighborhood park, as soon as Will sees the swing, he grabs his dad's arm, says, "Swing!" and pulls Dad toward the swings. When Julie and her dad arrive at the park, Julie stands at the edge of the playground. Her dad waits for Julie to let him know what she wants to do first, but Julie doesn't say anything. Dad asks, "What do you want to do?" and Julie then says, "Swing." When Mike arrives with his mom, she too waits to see if he will tell her what he wants to do. When he doesn't, she says, "What do you want to do?" When Mike still doesn't respond, she says, "Can you say 'Swing'?" Mikes says "Swing." Soon all three children are happily being pushed on the swing.

Although all three children said "swing," and all three children got to go on the swing, each child actually did something different. Will saw the swing and *initiated* a request for the swing. Julia did not initiate, but she *responded* to her dad's question about what she wanted to do. Mike did not initiate or respond to his mom's direct questions, but he did *imitate* her by saying, "swing." Thus, although each child said "swing," one child initiated, one child responded to a prompt or cue, and one child imitated a model—three distinct behaviors.

It would be fantastic if children could automatically interchange these behaviors with each other. That is, if we teach one form, the child can immediately use the other two. Unfortunately, our knowledge of typical language development and the general principles of learning have taught us that such is not the case. Each of these types of communication skills initially develops independently. At some point in their development (usually when their communication repertoire grows to a reasonable size) children eventually can generalize (or transfer) new vocabulary across each type of communication skill. However, when we begin to teach children with communication deficits, we will have to teach each of these communication skills independently. So, we must decide which skill to teach first. We recommend teaching initiation first, as this enables children to be independent communicators.

Children as "Listeners"

We said that communication involves two people, a speaker and a listener. So far we have discussed teaching children to be the speaker. In addition to learning to use communication, children also must learn to understand communication directed to them. Children learn to be the speaker because of the social or tangible outcomes associated with interacting with someone else. Children learn to be the listener for the same two outcomes. Some directions that we give our children involve natural outcomes that they enjoy. For example, if Dad says, "Go get your ball," the outcome for his daughter doing what he said is getting to play ball with Dad.

Sometimes we give directions because they help *us* in some way. Mom may be thirsty and say to her son, "Please bring me a Coke." Mom can only get her drink if her son understands what she said. But what does her son get out of the interaction? Hopefully, Mom will politely thank him for getting her drink. Remember that not all children with disabilities find polite praise highly motivating. For these children, teaching them to follow directions that are personally useful is more likely to be successful than teaching them to follow directions that primarily benefit other people.

There will also be times when you will need to give instructions to your child for his own safety or "just because I said so!" In essence,

these types of demands should result in compliance. As children get older, they may find themselves in such situations more frequently, such as when they need to listen to what the boss tells them at work simply because she is the boss. In our perspective, compliance is something that we build in over time and is rarely the first type of instructional situation we want to design. That is, we suggest working on:

1. instructions that initially lead to natural and powerful rewards that directly benefit the child, and then on
2. instructions for which the social rewards are clear, and, hopefully, effective as well.
3. Finally, we will need to work on instructions for which immediate reinforcement may be lacking.

For example, if your child has never listened to what you say, you would obviously not start teaching him to listen on a busy street corner and try to get your child to obey when you say, "stop!" Instead, you would develop good listening skills in safe situations before carefully applying them in potentially more dangerous settings.

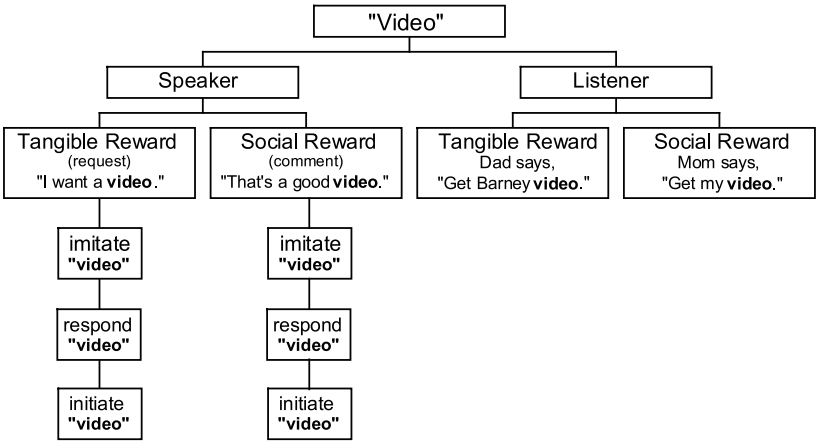
Summary of the Reasons Children Communicate

Think of all the "whys" and "whens" associated with the word "video." In the role of the speaker, your son might imitate the word, answer a question (e.g., "What do you want? or "What's that?") with the word, or initiate with the word. In all three conditions he could either get a video (requesting) or he might receive some social praise (commenting). In the role of the listener, he might follow a direction involving the word "video" that results in getting to watch a video or a warm "thank you!" from you. Look at the flowchart on the next page and you'll note *eight different* skills associated with communicating the word, "video!"

Are There Many Ways to Communicate?

Are there times when we speak but do not communicate? Remember, communicative acts must be directed toward another person. Does your daughter ever sing a song or recite dialogue from a video when she is alone? Do you ever sing in the shower or while driving alone?

Flowchart 3-1 | Communication Associations with Single Words



Such talking and singing would not meet our definition of communication because the speaker or singer is not directing his or her words or song to a "listener" or communicative partner. In fact, many of us quit singing when we are joined by another person!

Some children with autism and related disabilities repeat words, phrases, jingles from TV or the radio, or entire dialogs from movies without understanding what they are saying. They are not constructing the sentences from words they know how to use but, rather, are repeating the sounds for reasons not related to communication. Therefore, when we assess a child's ability to communicate, we must go beyond a simple description of what words the child can say.

Is speaking the only way we communicate? Of course not! We also use gestures or "body language." Some people use sign language with others who understand sign language. Sometimes we write notes to ourselves or to others. You might jot down a "to do" list for yourself or leave your kids a note to read. Sometimes we use or respond to pictures. For example, you might save a picture of a particular object you've been wanting and show it to your partner a few weeks before your birthday!

Each of these examples involves a different type of communication modality—using our hands and other parts of our body, using print or pictures, etc. Each type of communication—including speech—has its advantages and disadvantages. Competent communication is possible through several different types of modalities. Even when we can

speak, we often combine several modalities when communicating. Some of us use expansive hand and arm movements and exaggerated facial expressions to emphasize certain points.

If your child does not yet speak or doesn't speak in a manner others understand, he might be using some form of *augmentative or alternative communication (AAC)*. He could use an electronic device with a synthesized or recorded voice. He might use pictures within the Picture Exchange Communication System (PECS). He might use sign language or type and print messages for others to read. If a professional such as a teacher or speech-language pathologist has recommended that your child use some form of AAC, this doesn't mean that the teacher or SLP are "giving up" on speech. What it means is that the goal is to provide your child with a means to effectively communicate right now, while speech production and development are being addressed. Will these alternative modalities "inhibit" speech development? We know from many years of research that the answer is "NO!!" Use of AAC systems will not inhibit or prevent the development of speech. In fact, many researchers report that these systems actually enhance speech development (Glennen, 1997; Mirenda, 2002). To learn more about these visual modes of communication, a good introduction is *A Picture's Worth: PECS and Other Visual*

Communication Strategies in Autism, by Andy Bondy and Lori Frost (Woodbine House, 2002).

Modalities for "Listening"

Just as there are several modalities our children can use to communicate with us, there also are different modalities we may use that they will need to understand. For example, you may be on the other side of the playground from your child and he may be unlikely to hear what you are saying. In this case, you might wave your arms to gesture for him to come over to you. Will he understand what your arm motions mean? Similarly, there will be times when you point to critical things or places in your home or community and you will want your child to be able to understand your gestures.

There are many types of visual signals in our society. Some of these involve printed words. That is one reason we put so much emphasis in school on teaching children to read. But even if a child cannot read, he still will benefit from understanding different visual cues in the environment. For example, while some bathrooms in your community are labeled with the words "men" or "women," think of how many different pictures/drawings are on the doors! We once counted over 25 different ways of indicating gender for bathrooms within a 10-mile radius of a school in Delaware. Many of us understand a stop sign by its shape and color long before we can see the word printed in the middle. Therefore, it is important to teach children to respond to visual cues because they are so common out in your neighborhood.

Setting Goals for Critical Communication

To meet our goal for children to grow up to live and work as independently as possible, they must learn certain communication skills. These skills are critical because, if your child cannot calmly and effectively engage in each skill, then he or she will most likely try other means to obtain the same outcome. Typically, we are not thrilled with these other "means"—crying, fussing, shouting, hitting, etc. We have identified nine such skills, some of which are skills to be used as a speaker and some to be used as a listener. See Table 3-1.

Table 3-1 | Speaker and Listener Skills

Speaker Skills	Listener Skills
1. Asking for reinforcers 2. Asking for "help" 3. Asking for a "break" 4. Answering "no" to "Do you want this?" 5. Answering "yes" to "Do you want this?"	6. Responding to "Wait/No" 7. Responding to transitional cues (going from one activity to another) 8. Following functioning directions (obeying oral or visual instructions) 9. Following a schedule

Assessing Critical Communication Skills

It will be helpful for you to assess each of these critical skills for your child. We suggest that you complete a checklist involving all of these skills no matter what other measures have been done to assess your child's language skills. That is, knowing that your child has a language age-equivalent of a nine-year-old will not necessarily tell you whether he can accomplish each skill independently. At the end of this chapter is a checklist regarding the nine critical skills that you can complete for your child.

For each skill, it will be helpful to think about how your child currently handles a particular situation. For example, when your child sees a toy or something else he wants, what does he do? Is his response appropriate or problematic? If a two-year-old pointed to a book on a shelf that he wanted to look at, that might be considered appropriate for his skill and age level. On the other hand, if he stood and stomped his feet and screamed until someone gave him the book, that would be something you would want to work on.

After you've gone through all nine skills, look at each of the problem areas and rate how difficult each problem is. That is, prioritize the severity of the problems to help determine which ones you'll want to work on first. For example, if your child requests help by handing you items that do not work, but you'd like him to say the word "help," that would not be as important as working on his screaming when he can't get toys that are out of reach.

Critical Communication Skills: Problems and Potential Solutions

When you are analyzing routines and activities that are problematic for your child, as will be discussed in Chapter 7, be sure to consider what role expressive or receptive communication plays in the problem. For children with autism spectrum disorders, lack of appropriate communication skills are often among the biggest impediments to smooth family functioning. When your child is having difficulties with a family activity or routine, ask yourself whether a problem with one or more of these specific communication skills is contributing to the problem.

After you have used the critical communication skills checklist to pinpoint what areas of communication are posing the biggest problem for your child and family, the next step is to figure out what your child can learn to do instead of what he is doing now. The following sections therefore give many examples of potential problems with communication that children with autism have, together with some potential solutions. Once you have identified a skill you would like your child to learn in place of a current problematic communicative behavior, add it to the list of teaching goals you developed while reading Chapter 1. You also will want to review your priorities, in terms of which skills should get the most attention at first. In the next two chapters you will learn strategies to begin teaching these skills to your child.

Requesting Reinforcers

Asking for a desired item is perhaps the most fundamental communication skill. Requesting allows us to get access to items and activities that are essential for day-to-day living or that allow us to enjoy ourselves and our interactions with others. Refer back to Chapter 2 for guidance on choosing and using reinforcers that your child will be motivated to obtain.

Problem: *Three-year-old Derek wants to watch his favorite video, but his dad has put it on the top shelf above the television where Derek can't reach it. He tries to climb on top of the television but can't quite make it. He begins whimpering and*

jumping up and down. When Mom comes into the room, not knowing that Dad put the video out of reach, she cannot figure out what he wants.

Potential Solution: Teach Derek to use his PECS system to ask for the video.

Problem: *Eight-year-old Sam wants some juice and the juice carton is empty. He goes to his mother and says, "Sam, say you want some juice."*

Potential Solution: Teach Sam to say, "I want some juice."

Problem: *Twelve-year-old Curt likes Marsha, who is new to the class. He walks over and says, "Hi, can I kiss you?"*

***Potential Solution*:** Teach Curt to say, "Hi, I'm Curt. Can we talk for a minute?"

Problem: *Fourteen-year-old Darlene is about to do some homework. She looks at her sister who is on the computer and says, "Get off now!"*

***Potential Solution*:** Teach Darlene to say to her sister, "I have homework to do. Can I use the computer soon?"

Requesting Assistance

Asking for help is universally important because everyone at some time will be in a situation where the solution to a problem must come from someone else.

Problem: *Joey is playing with his favorite electronic train set. He has learned to set the track up on his own; connect the train engine, cars, and caboose; and put the train on the track and start the train. Today when the train rounds the first corner, it falls off the track. Joey tries several times to restart the train but doesn't notice that the track is not properly connected at the first corner. After several attempts to get the train going, each time ending with a derailed train, Joey screams and throws the train across the room.*

Potential solution: Teach Joey to bring the train to his sister and gesture for help.

Problem: *Amanda is working on her math homework at the kitchen table along with her brother. She carefully adds the numbers for each problem, reciting the problem aloud as she works. ("Seven plus eight equals fifteen.") When her pencil lead breaks, she grabs her brother's pencil.*

Potential solution: Teach Amanda to point to her brother's pencil and say, "Can I use that for now?"

In teaching your child to request help, you will want to identify many activities and times in your child's day when it will be natural for him to ask for help. Table 3-2 lists some common opportunities for teaching children about asking for assistance.

Table 3-2 | "Help" Opportunities

1. Blow bubbles
2. Blow up balloon
3. Put coins in vending machine
4. Cut food
5. Cut paper
6. Insert CD/DVD/ music tape/video
7. Open curtains
8. Open bottle
9. Open doors
10. Open food packets
11. Open milk or juice carton
12. Pour from pitcher/carton
13. Put on shoe/socks
14. Snap clothes/coat
15. Take cap off marker
16. Tie jacket strings/shoelaces
17. Turn on/off lights
18. Turn on/off water
19. Reach towel to dry hands
20. Turn on/off music player/television
21. Unwrap plastic utensils/straw
22. Unzip backpack/coat/pencil pouch
23. Zip backpack/coat/pencil pouch
24. Wind up toy
25. Install batteries

Requesting a Break

We all have been in situations where the demand is too high or fatigue has set in due to the length of the task at hand. In these cases, we ask for a break—some time to recuperate. We periodically need to avoid or escape from certain events and have learned to do so in a number of socially acceptable ways. While parents may be able to "read" when their child needs a break, children also need a calm way to ask for a break on their own. As with learning to ask for help, the key will be for the child to be able to ask for a break before he has a tantrum.

Problem: *Maria's aunt, uncle, and cousins are visiting from out of town. The entire family has congregated in the family room and Maria is sitting in her dad's lap. As all the family members talk at once, trying to catch each other up on their lives, Maria tries to slide out of Dad's lap. When he holds on tight, boosting her back up into his lap, she cries loudly, arches her body backwards, and hits her head into Dad's head.*

Potential solution: Teach Maria to use a break card when she is overwhelmed by a situation. In the future, Maria can hand her father a card that says, "Break" and walk to the break-area.

Problem: *Reggie's parents are having a party and want Reggie to meet their guests. Reggie has learned to greet people by saying, "Hi, nice to meet you." Several guests arrive at once and as Reggie's father and mother introduce him to each guest, he greets them appropriately. As the tenth and eleventh guests arrive, Reggie is reluctant to go to them with his parents, but when his dad firmly guides him, he approaches the new guests and greets them. As the next several guests arrive at the door, Reggie begins to breathe heavily. He greets the first, and then tries to back away. When his dad nudges him forward, Reggie shouts, "Hi, nice to meet you," and pulls away from his father. When Reggie's mother says, "Reggie, say hello to Mr. and Mrs. Wells," Reggie yells, "Hi to meet you!" and runs from the room.*

Potential solution: Teach Reggie to say, "I need to find a quiet place for a moment" when he feels like yelling.

Rejecting

Rejecting offers from other people allows us to participate in interactions with communicative partners who are determining what, specifically, we might want. When we cannot politely or calmly reject something that we don't like, trouble usually ensues.

> ***Problem*:** *Jacqui, nineteen, is having dinner at her grandparents' house with her parents. She has learned to sit with her family at mealtime, but meals at her house involve Mom or Dad handing her a plate of her favorite foods. Tonight Jacqui's grandmother tries to pass Jacqui the bowl of broccoli. Jacqui won't take it from her and when her grandmother tries to spoon some broccoli onto Jacqui's plate, Jacqui forcefully pushes the bowl away, knocking over her water glass.*
>
> ***Potential solution:*** Teach Jacqui to shake her head "no" when offered foods she does not like.

> ***Problem:*** *Jamie wants to watch a video. Her sister tries to help and puts in the Barney video because it is nearby. Jamie screams "Sesame Street! Sesame Street! Sesame Street!"*
>
> ***Potential solution:*** Jamie learns to say, "No thanks" and give her sister a picture of the video she wants to watch.

Accepting

We all can remember times when we've played "Twenty Questions" with our children in order to figure out what they want. If we are holding out a preferred item and asking, "Do you want this?" most often our children will simply take it. We won't always be able to hold an item ("Do you want to go to the swimming pool?"), so our children need to be able to indicate "yes!"

> ***Problem:*** *Eight-year-old Sierra is in the kitchen with her older brother, Sam. Sam is trying to help his sister get a snack and is pulling one food after another out of the snack cupboard, asking, "Is this what you want?" He thinks it is the blue corn chips she wants, but he hasn't been able to reach them yet. So, without showing them to her he asks, "Do you want the blue*

corn chips?" Sierra doesn't answer. Finally, he reaches them in the back of the cupboard and when he holds them out to Sierra, she takes them from him.

Potential solution: When Sam asks, "Is this what you want?" Sierra nods her head.

Problem: *Fourteen-year-old Alexis is helping her mother make cookies. When it is time to stir the dough, her mother asks, "Do you want the big spoon?" Alexis answers, "Big spoon."*

Potential solution: When asked whether she wants something, Alexis learns to say, "Yes!"

Responding to "Wait" or "No"

What are we trying to communicate to someone when we say, "Wait?" The message is actually complex: "I know what you want and you are going to get it but after some more time." Our children must understand that they are not being denied access to the item—they are eventually going to get it. Because learning to wait is such a crucial skill for everyone, we will provide some more details on the issues that need to be addressed. For a more complete description of effective strategies to promote waiting, please refer to *A Picture's Worth*.

There are three key elements to teaching someone to wait:

First, you must be able to fully control access to whatever it is that person is waiting for. That is, if you can't provide it when you want to, then the lesson will be very difficult to learn. Therefore, start with something you know your child wants but you can give it to him at any time.

Second, you must control how long your child should wait. Start with a time interval that is so short—one or two seconds!—that it virtually guarantees that there will be no failure. Then, begin to gradually increase the time interval. If you add too much time and run into a problem, simply readjust your next interval to something shorter. You may want to highlight that it is time to practice waiting with a visual cue, such as a large, brightly colored card that has 'wait' written on it.

Third, as the wait intervals become one minute or longer, you will want to help your child select something easy to do while waiting. The point is, do not expect someone to simply wait while doing

nothing—that remains very hard for all of us! Instead, pick some easy activities such as looking at a picture book or listening to music (as long as he is not waiting to listen to music).

Here are some more common situations that all families face and suggested solutions:

Problem: *Mom is on the telephone trying to schedule an appointment. Mark comes up to her and begins tugging on her, trying to get her to move with him. Mom resists and whispers to Mark, "Just a minute. I'm almost done." Mark falls to the floor and begins screaming.*

Potential solution: Mom teaches Mark to use a Wait card. For example, Mom hands Mark a card that says, "Wait" and Mark calmly stands next to her for one minute. Mom then pays attention to Mark. (Note: Even if Mark can't yet read, he can learn to associate this visually unique card with waiting.)

Problem: *Sue's family is planning an outing to a favorite restaurant for dinner. During the early afternoon, Sue begins asking her parents when they're leaving and they answer, "Not for several hours," "Later," or "at 6:00." Sue does not know how to tell time and continues to ask every 15 or 20 minutes, which begins to annoy her parents. By the time the family finally leaves for the restaurant, everyone is frustrated.*

Potential solution: Her parents place a picture of the restaurant on Sue's picture schedule, which she quietly checks several times during the afternoon.

Problem: *Marshall has finished his homework and a bowl of ice cream that he had earned. He asks his dad if he can have another bowl of ice cream. His father says, "No, one is enough." Marshall ignores his dad and heads for the freezer for more ice cream. His father blocks his path and they start to yell and shout at each other.*

***Potential solution*:** Marshall's parents teach him "the no game." They tell Marshall that sometimes they will say "no" to him, but if he responds calmly they will provide other types of rewards—special time with them when he

can pick which game to play. They give Marshall an index card with five open circles and tell him that he will earn a token for each time he calmly responds when they say, "no." When all five circles are filled, he can pick a game to play. At first, Marshall's parents arrange to say "no" at times when it does not seem highly important to Marshall. For instance, he is about to sit on one chair at the dinner table and they say, "No, please sit on that chair." When he follows through, he earns a token. After several weeks of this type of practice, Marshall asks once again for more ice cream. When his father says, "no," he calmly walks out of the kitchen and his father praises him while giving him a token.

Following Directions

Responding to directions is viewed as a critical communication skill because of the potential risks associated with failing to understand a message. For example, when Mom shouts to her son, "Don't walk in front of the swings!" failure to respond could result in injury. As we discussed earlier, we need to first teach our children to respond to directions that will produce meaningful and desired outcomes from our children's points of view.

Problem: *Mom and Dad report that Angela sometimes looks toward them when they call her name. If she's engaged in a favorite activity, however, she doesn't respond when they say, "Come here." She seems to understand directions some of the time but not always. For example, yesterday when Dad told her to put her shoes away, she didn't do so. But this morning as Dad was getting on his coat so they could go to the park, he told her to get her shoes, and she ran right to them.*

Potential solution: Angela's parents can teach her to listen for her name paired with "come here" by rewarding her with favorite items (e.g., toys, snacks, etc.) for coming over.

Following a Schedule

We adults keep track of all the important things we need to do today, this week, or this month by using some type of written calendar

system. Children also like to know what is expected of them and when activities will occur. Therefore, we should teach them how to use systems that contain information about their future schedule of activities.

Schedules can come in many shapes and forms. If your child can read, then using words may be helpful, but virtually all children with autism can understand and use pictures or other three-dimensional items to keep track of their schedules. When you use pictures within a schedule, it is a good idea to first teach your child what the pictures mean (i.e., what to do when he sees a picture) and only then teach him how to use the schedule itself. We like to teach one lesson at a time and avoid mixing them together. The pictures you use should refer to important objects, activities, or areas of your home or neighborhood. Your child should be able to respond to the picture without someone telling him what the picture means—otherwise, why use the pictures? For example, when shown a picture of a spoon, your child should know that he should get the spoon and go to the area or start the activity shown without someone saying, "Right! Get the spoon!"

We tend to arrange the pictures in a top-down fashion to show the sequence of events as shown in Figure 1 on the next page, but you can also use notebooks that show a single activity for each page or use some other systematic presentation style. Figure 1 is an example of a vertical schedule that includes different approaches to offering choices to students. Figure 2 is an example of a pocket schedule that a child can take with him into the community or use at home.

For more details on how to teach the use of schedule, you can read either *A Picture's Worth: PECS and Other Visual Communication Strategies in Autism* by Andy Bondy and Lori Frost (Woodbine House, 2002) or *Activity Schedules for Children with Autism* by Lynn E. McClannahan and Patricia Krantz (Woodbine House, 1999). The first book also describes how to introduce important elements such as choice and surprise into these systems.

> ***Problem:*** *On weekdays, Mom and Dad maintain a very predictable routine in the household. David seems content to follow along with the family activities. On weekends, though, when the schedule is more unpredictable or loosely structured, David has frequent tantrums. On days when any kind of "surprise" occurs (an anticipated trip to the park is cancelled when it storms), David is inconsolable.*

Figure 1: Vertical Schedule with Choices

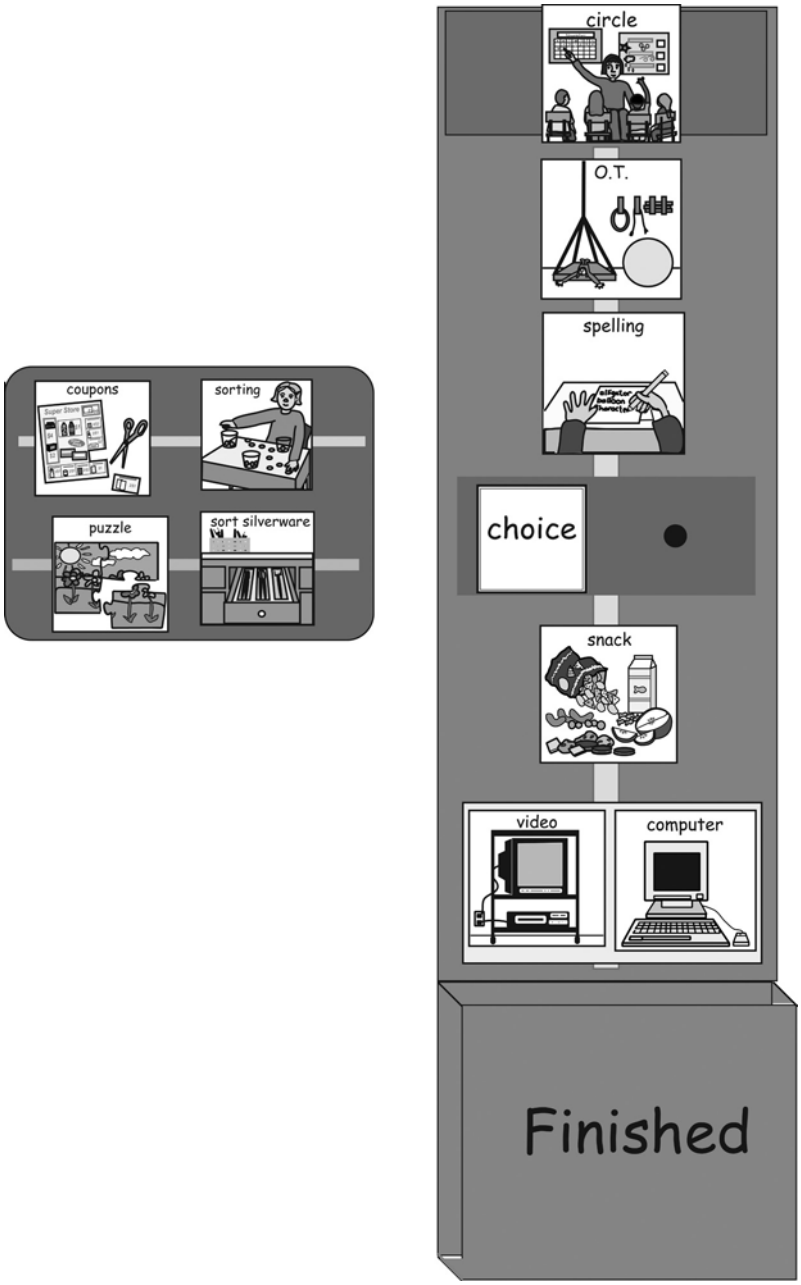


Figure 2: Pocket Schedule

Potential solution: David's parents introduce a "surprise" card on his schedule during weekdays. Initially, they make sure the surprise is something that David enjoys, such as time on the computer. Later, these good surprises are intermixed with surprise activities that David feels neutral about. Finally, his parents intersperse some surprises concerning things that David does not enjoy. Then his parents begin to use a visual schedule for weekends as well.

Dealing with Transitions

Everyone must deal with transitions—between locations, activities, and from person to person. Use of a schedule can help a child understand what is going to happen at different times of the day. However, some children respond to transitions as if their lives were being turned upside down! While you may think that improving information about the upcoming event will reduce the magnitude of the ensuing tantrum, in our experience providing more information (even visually based) is not always sufficient.

Some transitions involve changes from activities that are highly rewarding to those that are less rewarding—and no one looks forward to leaving pleasant activities. Some children become upset even when they are asked to change from a less rewarding activity to one that is more rewarding! We think this may be because the transition involves leaving something behind as well as changing to a new activity. For children with autism spectrum disorders, having information about the next *reward* may be more important than having information about the next *activity.* When the next activity is not inherently rewarding, then adding a separate reinforcer may be necessary.

Problem: *MaryJane has just finished her breakfast and is coloring on a piece of paper in the kitchen. Her mother tells her*

that it is time to play in the family room. MaryJane throws the crayons on the floor, and screams while her mother physically guides her to the family room. Within a few minutes, she is calm once more and contentedly playing with her toys. Then, her mother tells her that it is time to water the plants—something that MaryJane usually enjoys. She screams and throws the toys around while her mother coaxes her to get the watering can. This pattern cycles many times each day.

Potential solution: MaryJane's mother lets MaryJane know what her reward will be for making a transition before asking her to change activities. For example, while MaryJane is coloring, her mother brings her one of her favorite toys from the family room. She shows the toy to her daughter, who immediately reaches for it. Then she says, "Let's play with the toys in the family room . . . but first we need to put away the crayons." MaryJane puts away the crayons and runs to play with the toy. Later, while MaryJane is still playing with the toy, her mother shows her a picture of the watering can. While she is looking at the picture, her mother says, "Let's go water the plants . . . but first we need to clean up the toys." Throughout the day, MaryJane's mother shows her the next available reward before indicating that she needs to stop what she is currently doing.

Review

This section of the Pyramid Approach has dealt with communication skills. It is extremely important to teach children to use functional communication skills at home and in the community. We've noted several key communication skills and strategies to promote them. When these critical skills are weak or missing, we often see severe behavior problems in their place. Since all families are unique and not all families go into the same community settings, it is crucial that you assess your child's abilities to communicate in the many different settings where your child is expected to participate and then map out a plan to help improve each of the critical skills described in this chapter. Remember that communication is something that you should work on during all activities—we don't suggest having a special time

to practice communication. Instead, look for opportunities to work on these skills throughout the day and across all environments. The next chapter will help you learn to build lessons involving functional activities or communication skills into your daily routine.

CRITICAL FUNCTIONAL COMMUNICATION SKILLS CHECKLIST©

Name:		Date:	

Skill	**Example**	**Appropriate?**
1. Request reinforcers		
edibles		
toys		
activities		
2. Request help/assistance		
3. Request break		
4. Reject		
5. Affirm/Accept		
6. Respond to "Wait"		
7. Transition between activities		
8. Respond to directions		
Visual Directions		
Orient to name being signaled		
"Come here"		

"Stop"		
"Sit down"		
"Give it to me"		
"Go get…" (familiar item)		
"Go to…" (familiar location)		
"Put it back/down"		
"Let's go/ Come with me."		
Oral Directions		
Orient to name being shown		
"Come here"		
"Stop"		
"Sit down"		
"Give it to me"		
"Go get…" (familiar item)		
"Go to…" (familiar location)		
"Put it back/down"		
"Let's go/ Come with me."		
9. Follow visual schedule		