Using Visual Strategies to Enhance Understanding

I worked with a teenager named Blanca. She never spoke but she effectively used PECS to request her favorite things. At times, Blanca would become extremely agitated and begin to slap her head with her hand. If you stood too close to her when she was agitated, she would try to slap you. We wondered whether she simply didn't want to do what we asked or whether she didn't always understand what was said to her. We arranged to give Blanca a set of simple spoken instructions about common items in the classroom. She retrieved only one of ten items and slapped her head following almost every instruction. We then used pictures to instruct her about the same set of items. When we used pictures, she not only retrieved all the items correctly but also did not hit her head during any instruction. Clearly, this pattern was more consistent with a comprehension problem than with a compliance problem.

The previous chapters have emphasized using systems designed to help children and adults improve their ability to communicate with us. That is, they have been concerned with improving *expressive* language skills. In this chapter, we will focus on ways of using visual systems to help these individuals better understand our attempts to communicate—in other words, to improve their *receptive* language skills.

Understanding Instructions

A skill essential to independence is understanding simple instructions, such as requests to get a common item, go to a location, or answer

a direct question. In Chapter 2, we pointed out the importance of understanding things that are said to us as well as the importance of understanding various visual symbols. As in our example with Blanca, we also must remember that some individuals respond better to visual cues than to auditory cues. (A more complete description of this type of situation is presented in a study by Peterson, Bondy, Vincent, and Finnegan, 1996.)

There are many visual cues in our surroundings that help us function more effectively. They include:

- **1. Personal**—day timers, calendars, clocks, Post-Its, notes to ourselves, shopping lists, Smart phones.
- **2. Public**—road signs (including words, arrows, sign-post shapes and colors), restroom symbols, emergency signs, lines painted on the road, advertisements on public transportation, route numbers on busses or trains.

From this list, you can see that there are many visual symbols that everyone must learn in order to function effectively in our society. We believe it is important to teach children and adults who do not speak to understand these types of visual symbols as well. Traditionally, this type of lesson has been taught using a strategy called "matching-to-sample."

Many different materials and objects can be used during a matching lesson, but one important goal is for the child to select an item when we show her a representation of that item. For example, when I hold up a picture of a ball and the child gets a real ball, and when I show a picture of a cup and the child gets a real cup, then we conclude that she child understands what the pictures mean. Many teachers have simplified this type of lesson by having the child point to the corresponding item. In this case, we might have various objects on a tabletop and then show the child a series of pictures. When the child reliably touches the items that correspond to the pictures, then we say she has learned this task.

In addition to showing students pictures and expecting them to point to the corresponding items, we can also reverse the direction of this lesson. That is, we can hold up various objects and teach the child to point to the corresponding pictures. There is a fascinating field within behavior analysis (called *stimulus equivalence*) that has shown that learning this lesson in one direction (i.e., object to picture) actually eventually helps the child demonstrate the skill in the other direction (i.e., picture to object) even without explicit training.

Our question about such matching lessons is: can they be viewed as communicative? Such lessons are led by the teacher (the teacher holds up the initial object and the child points to the corresponding picture) and the response by the child is directed to the picture, not necessarily toward the teacher. This is why we suggest that such lessons should be part of a total educational package, but should not be viewed as a prerequisite to beginning lessons involving functional communication. In fact, when you introduce PECS to a child before you try to teach her picture-to-object lessons, such lessons may never be necessary. In other words, the child may learn picture-to-object correspondence in the course of learning to communicate with PECS.

Teaching Instruction Following

Throughout this book, our emphasis has been on teaching communication in a manner that is functional to the child—through lessons that involve objects and activities that are important and immediately a part of the child's everyday life. We need to continue this emphasis when teaching children to understand language.

Recall that one reason we learn to understand other people is that they often have information that is important to us. If we arrange a child's "listening" lessons so that she learns the importance of understanding what we are trying to communicate, we can enhance the effectiveness of the lesson. For example, you could try to teach your child to go to the couch, chair, or door on command. If she went where you requested, you might praise her. However, if your praise is not a reaction that your child likes and anticipates, she likely won't respond to many of these directions in the future once she realizes that she gets very little out of the task.

To make the direction-following lesson functional, hide something that is important to your child (some candy, a toy, etc.) on or near a particular item. For example, if your child used PECS to indicate she wanted candy, respond by communicating (in a simple manner) that the candy is on the couch. When your child gets to the couch, she finds the candy and is thus rewarded for having followed your direction.

A related approach is to have your child experience a pleasant, natural consequence when she goes to the couch, chair, or door when instructed. For example, the natural consequence of going to a door is getting to go outside, and the consequence of going to a couch to sit is getting to watch TV, etc. When using this strategy, it is important to tie the natural consequence into following the instruction.

Teaching a Child to Understand Pictures

When we begin to teach a child to understand the picture or symbol we will use within this instruction-following routine, it is important to make sure that the child understands the picture by itself. That is, while there may be times when we want to combine speech with visual cues, if a child responded to the combination, then we would not know for certain whether she reacted to the spoken words alone, the picture alone, or needed the combination of both for understanding. Given the need in our society to respond to visual cues in isolation from auditory cues, this lesson is important for all students. Thus, we suggest teaching the instructional use of visual cues without accompanying speech.

To start this type of lesson, we first make sure that the object to be used within the instruction-following lesson is very familiar to the child. The item should be one that the child either enjoys (like a ball) or one that she knows what to do with (e.g., put plates on the table before a meal). For example, let's assume we will use a picture of a bowl just before breakfast to signal to the child to get her bowl so we can serve breakfast. This picture would be a good choice for the child only if she has experienced that when bowls are on the table in the morning, cereal is about to be served! To begin the lesson, we would show the child a picture of the bowl and then quietly guide her to where the bowls are kept. The first few times we did this lesson, we would walk the child completely through the routine so there are no mistakes. Over time, we would start the lesson in the same manner, but then begin to let the child complete small portions of the end of the sequence. We would gradually reduce our help so that we would only need to show the child the picture and she would get the bowl and put it on the table and await her cereal.

At other times of the day, we would go through this same teaching strategy with other important materials (e.g., a ball to take to gym, a crayon to take to the art area, a book to join morning-circle, etc.). In this manner, we would try to build a set of pictures and/or visual symbols that the child associates with using materials in an understandable manner. We might also want to teach the child to respond to pictures

or other visual cues that can be associated with specific areas (e.g., the art table) or activities (e.g., morning circle). To teach the child to understand spoken instructions, we could pair them either with the effective pictures or the functional items themselves.

Types of Symbols to Use

We've noted the importance of teaching all children to understand not only our spoken words, but also to understand various visual signals. What symbols should we select? If your child is using PECS, a good idea is to use the same type of symbols she is accustomed to within PECS. However, to avoid confusion, it may be helpful to use pictures your child understands but that are much larger than the ones used within the communication book (i.e., 4-inch squares instead of 2-inch squares). That is, your child exchanges 2-inch square pictures to request items but is given 4-inch square pictures by parents and teachers as part of an instructional interaction.

If your child is not using PECS, you may want to use any symbol that the child can understand—that is, photographs, product logos, miniature or full-sized items, three-dimensional representations, and similar symbols.

Instruction Following vs. Compliance Training

Finally, we should consider whether our goal is to teach instruction following, where the focus is on understanding the instruction, or compliance training, where the focus is on doing what we say (whether it fits the situation or not). For example, if we want to teach Mary to understand the instruction, "Go to the door," then we would be certain that something related to "doors" happens when she gets to the door (e.g., she gets to go outside). In similar fashion, instructions about the sink, refrigerator, a ball, etc. would all be connected with appropriate activities. On the other hand, if our point is to teach Mary to do what we say for the sake of compliance, then we could say, "Go to the door" and praise her when she gets there (but not have her go outside).

While there are times when compliance for its own sake will be important, it is not necessary to begin all instruction-following lessons with compliance as the focus. Furthermore, many young children with autism will not respond well to the social praise used in teaching

compliance. In fact, some may learn to comply in order to avoid the physical prompts used when they do not do as they are asked.

Schedule Following

Most adults, especially those living hectic lives, use some sort of calendar system to keep track of important appointments and errands. We do this even if we have very good verbal skills. That is, even though I could probably make myself memorize all of the things I am supposed to do, I have learned that I act much more responsibly when I use various visual cues to help me remember what I am expected to accomplish. Furthermore, I intend to keep on using a schedule—that is, I don't think I'll be so much smarter next year that I won't need to rely upon such visual cues.

One of our teaching values is to teach children things that we have found to be important in our own lives. That is, if it's good for us, it's most likely good for the kids. Therefore, since we use a calendar system to help remind us about what is going to happen in our lives, we believe it is a good idea to teach children to use a similar system. Some children with autism may have fewer tantrums and other outbursts once they better understand the expectations for their time at school or at home.

Steps in Teaching Schedule Following

Teaching children and adults to follow a schedule is similar to teaching them to follow visual instructions. In fact, we prefer to start teaching children to follow a schedule after they have learned to respond to individual pictures. A schedule is a sequence of pictures or other symbols. What is important here is to teach your child to use the sequence of symbols rather than depending on a teacher or parent to tell her what to do. So, one simple rule is to avoid saying, "Go check your schedule." If you're willing to say that to your child, you may as well tell her what to do! Instead, teach your child to respond to natural cues in the environment, including:

- 1. The completion of a task (signaled by running out of materials or using all materials);
- 2. Sounds that signal the end of activities, either environmental (e.g., a bell, chime, alarms, etc.) or from people (e.g., the teacher says, "Music is over!");

- 3. Visual signals (e.g., classroom lights flickering, the teacher raising her hand, etc.);
- 4. Entering the classroom (such as at the start of the day or after lunch, gym, recess, etc.).

You can teach your child to respond to these cues using physical prompts that are faded as quickly as possible. For example, after your child puts her lunch in her cubby at the start of the day, a teacher/aide might physically prompt her to go to her schedule on the wall. Over time, the amount of help provided your child to go from the cubby to the schedule would be reduced. These teaching strategies are similar to what we described earlier—avoid additional verbal prompts, provide physical assistance preferably from behind your child, and provide positive outcomes that are as natural as possible.

We arrange the pictures and symbols on the schedule in a vertical sequence (in part because we start schedules with very young children, including those who may have difficulty with right-left discrimination). Another option is to include one activity per page in a separate booklet. See Activity Schedules for Children with Autism: Teaching Independent Behavior, 2nd edition (McClannahan and Krantz, 2010) for more details.

See the photo below for an example of an in-class schedule.



Understanding Changes in Routines and Expected Outcomes

Twelve-year-old Zena was terrific at using her daily picture schedule. She came into class each morning and immediately checked to see what her first activity was and whom she would be working with. However, her teacher found that there was one major problem. If something did not go EXACTLY as scheduled, Zena would get very upset and usually would not proceed with her schedule. While the teacher was happy that Zena had gained some independence, she was not pleased that Zena could not tolerate any change at all. It is one thing to try to perfectly control everything in the life of a three-year-old, but it is impossible to do so with a teenager. The teacher realized that no one had taught Zena to tolerate the changes that occur in all our lives.

Here we see an example of how learning one lesson—following a picture schedule—can sometimes create new behavior management concerns—intolerance for changes in the schedule. Therefore, it is important to teach such tolerance as part of the overall strategy for all students rather than waiting to see which students develop similar problems. There are several ways that such lessons can be arranged.

The changes that children with autism encounter tend to range from things they like (e.g., going outside to play, working with my favorite teacher, etc.) to things that are not as much fun (e.g., staying indoors because it is raining, working with a substitute teacher who doesn't know me, etc.).

One simple strategy for teaching a child to tolerate changes is to systematically introduce changes that are initially "good" surprises. For example, in schedules we design, we include a symbol that stands for "surprise"—this is often just a large question mark or the word "surprise" on a uniquely colored and shaped background. When the children first reach this point in their schedules, the teachers arrange for the "surprise" activity to involve lots of rewarding activities and treats. The "surprise" may be placed at any point in the schedule. At first, it often replaces work time or other less fun activities.

Over time, some of the "surprises" included in the children's schedules are activities that are less exciting. For example, surprises might include working with Ms. Jane instead of Ms. Marcia, or sitting in the back of the room for reading instead of in the front. Of course, we must make sure that such changes are not extremely difficult—at this level, they should only be mildly bothersome. Finally, the surprises tend to be work-related changes. For example, the surprise might be that computer time is coming before math time when it's usually the other way around.

We make sure that the students are richly rewarded for participating in these surprise activities. We want them to learn that the surprise picture might mean they have to do something that is immediately fun (e.g., party instead of work), or that the surprise activity will end in something wonderful just because they followed the schedule. It is important to maintain some "surprises" as highly interesting and motivating so that the children cannot predict which type of surprise comes next.

Once this mixture of "surprises" is part of the routine, when true surprises arise, the teacher can now simply put the "surprise" symbol on the schedule and assume that the children will be able to handle the change. Thus, our overall strategy is: "Since we all know that unexpected changes are part of life, why allow life to arrange for the lesson when teachers and parents can teach this lesson much more effectively?"

Understanding "Wait"

Mario was 19 years old and had for the past couple of years successfully worked at a job in the community. He seemed to enjoy his work, but what he enjoyed even more was going to get a hamburger at the end of each workday. Years earlier, Mario had displayed periodic episodes of extreme aggression but he had not attacked anyone for over a year. Mario's teacher routinely took him and another student on public transportation to their worksite as well as to their favorite hamburger location.

One winter's day, Mario's teacher was walking with both students when the other student sneezed. The teacher assessed the situation and auickly surmised that she would need to return to class and clean the student's coat. She knew there was still plenty of time to get on the bus.

The teacher signaled to both students that they needed to return to the classroom. She thought she had conveyed that the young men would need to wait for a moment before returning to their activity. The next thing she knew, however, Mario had head-butted her, nearly breaking

a rib. He then started pounding her while she lay on the sidewalk. Why had he suddenly attacked her? Essentially, although she thought she had communicated for him to "wait," he thought she had communicated, "no, we are not going to get your favorite hamburger."

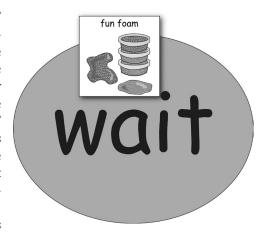
The long-term solution lay in developing a plan to teach Mario how to wait as well as to tolerate changes in expected routines. This type of training took over six months but at the end of this period, the teacher was able to request that Mario wait for an anticipated treat without any negative reaction.

Learning to wait can be a difficult lesson for many children. From one perspective, we can see that learning to wait is related to a child's self-control or the ability to calmly handle delayed gratification. However, we can also view learning to wait as a communication issue, since children need to understand what we mean when we say, "Wait!" For example, once a child has learned to request her favorite snack, eventually she will ask for the snack at a time when you do not have the snack with you. You are likely to say, "Wait! I'll go get it!" In such situations, it is important for the child to understand that "wait" is different than "no." When we say, "wait" to a child, we have essentially made a promise, as in "I know what you want and you will get it, but you will get it somewhat later than you expected." How can we teach this complex lesson to children who have significant communication limitations?

The key to teaching someone to wait for their expected reward is for the teacher to completely control access to the reward and the length of the waiting period. The need to control the duration of waiting from the beginning of training is the reason why it is difficult to teach this lesson in natural settings, such as at a fast food restaurant. In such places, we do not know how long anyone will need to wait for the food. It also is helpful if we know precisely what a child would like to receive after waiting for a short time. Therefore, this "wait" lesson is best started after a child has learned to reliably ask for the things she likes. Furthermore, we will use a visual cue to be associated with "wait" to make it more likely that the child will understand our message.

For example, if a child requests a cookie (over which we have complete control) with PECS, we can take her picture (or sentence strip) and immediately give her a visual symbol for "wait" (and, if we like, say, "You need to wait"). Because a symbol that is naturally associated with "wait" is difficult to represent, we make a large, brightly colored sign

with the word "WAIT" boldly printed (see picture below). Whether the child actually reads the printed word or merely associates this unique symbol with "waiting" is not important at this point in training. While the child holds the wait card (undoubtedly wondering what is going on!) the teacher silently counts



to five seconds and then immediately says, "Nice waiting" while giving the child whatever was requested and taking back the wait card. Over the next set of trials, the teacher gradually increases the length of time for the child to wait. Generally, such increases should be done in small enough increments that the child hardly notices the change from trial to trial.

Of course, no matter how gradually you increase the waiting time, at some point your child is likely to protest! When this happens, it is important to prevent her from succeeding in obtaining what she wants through actions associated with protesting (e.g., crying, screaming, grabbing, etc.). Do not give her the desired item but wait for the protest to end. The next time, decrease the length of time your child needs to wait and then gradually lengthen the wait period over subsequent opportunities.

As with other objectives, it is important to incorporate general guidelines associated with the age of your child. For example, asking any child under five years old to wait for more than five minutes can be expected to elicit a tantrum regardless of her disability!

Another important part of this training strategy is to recognize some of your own adult preferences and to incorporate these into the training. For example, if you were in a situation in which you knew you'd have to wait for a substantial period of time (e.g., you have a doctor's appointment at 3:00 but you know for sure that you will not be seen at 3:00), you'd make sure you had something to do while waiting, that is, assuming you hate to wait and do nothing. You'd bring a book or something else to do, and if you forgot to bring something to read, there is always a magazine available—after all, the area where we wait is called "the waiting room!"

Therefore, as your lesson on waiting proceeds with your child, you should make certain that she too has something to do while waiting for what she really wants. Some of the options that you should have available and encourage use of include: playing with a simple toy, looking at a picture magazine, listening to music, etc. Remember, what your child is waiting for should be more important than what she is doing while waiting. The "waiting activity" should be interesting enough to occupy her attention but not so good that she doesn't want the item she is waiting for. For example, while waiting to draw on her iPad, she may doodle with a single crayon on a piece of paper.

Understanding Transitions

When Jaime arrived at school, she often was upset upon stepping off the bus, even before staff had a chance to say anything to her. On such days, she frequently cried while walking to class. Once Jaime was in the class, she generally calmed down after twenty or so minutes. Then the teacher would announce it was time for gym. Jaime would fall down and cry once more, and do so all the way to the gym. After twenty or so minutes in gym, she'd usually calm down. Shortly after that, the teacher would announce that it was time to go back to class. Once again, Jaime would start crying. During most of the transitions from one activity to another, she would cry and act out.

On the theory that perhaps Jaime didn't understand what she was being told, the teacher began showing her pictures of the next activity. That is, while in class, the teacher showed Jaime a picture of the gym and while in gym, the teacher showed her a picture of the class she would be returning to. This was mildly helpful, but Jaime continued to cry during most transitions.

Why did Jaime continue to have problems with transitions even after the teacher added a visual cue to her communications? Quite frankly, this step is often all that is needed to help children with autism make successful transitions. That is, as we have noted, some children do not understand our spoken words and the addition of visual cues helps them comprehend our message. However, Jaime seemed to need something more.

In addition to how we communicate, we must pay attention to what we communicate. In Jaime's case, the teacher chose to communicate about the activity change and the location of the activity, perhaps because this is the type of information we adults would include in our daily schedule system. However, we believe that many children with autism are focused on their reinforcers rather than their activities. If this interpretation is correct, then when we communicate to a child that she needs to change activities (by telling her about the next activity), the child remains focused on her immediate reinforcer. For example, notice that prior to each transition, Jaime was reasonably calm. She was likely engaged in some enjoyable action when the announcement came to change activities. If she were playing with crayons when she was told that it was time to go to gym, what Jaime understood was that it was time to give up the crayons. In similar fashion, when she had calmed down in gym to finally begin playing with a ball, she heard that it was time to go back to class. To Jaime, this message said, "It's time to give up the ball."

Whenever we have to give up a current reinforcer, we all act badly! Therefore, when we have a child such as Jaime who is focused on her reinforcers, then we should consider communicating about what she finds important. For example, while she is in the classroom, rather than communicating about the loss of the crayons, it would be more effective to communicate about the next reinforcer—in this case, about the ball that she enjoys in the gym. So, instead of announcing a change in activity, the teacher should approach Jaime and signal the availability of the ball, via pictures or the actual object if necessary. Such objects can be called "transitional objects." When she becomes focused on getting the ball, it can be calmly pointed out that we play with the ball in the gym. Thus, rather than highlighting what she has to give up, this strategy emphasizes what she can get next.

While Jaime is in the gym and playing with the ball, the teacher should approach her and communicate about the next reinforcer obtainable in the class—the crayons, snack time, music, etc. She will more readily give up the ball if she understands what she will gain by the change.

In situations where there may not be a natural reward related to an activity, it will be important to arrange for something positive to happen for the child once the activity is completed. This is the same principle that keeps many of us working at our jobs. That is, while

we may enjoy some aspects of our jobs, we do other aspects because we know we are going to get paid. This same strategy is important to use with children who are learning lessons (see the next section for more details).

This strategy of preparing children for transitions by letting them know about reinforcers available works equally well at home. For example, we worked with one mother who liked to take her son for a walk after dinner. However, at some point, she would want to turn around and go home. When she would say, "Let's go home," her son would have a tantrum. Lengthening the walk would only postpone the inevitable screaming. When we advised the mother to communicate about her son's reinforcers rather than her scheduled activity, she decided to change her routine. Now when she goes for their walk, she has her son select a video (by taking the empty video cover) and she takes the cover on the walk. When she is ready to return, she simply takes out the video box. Her son knows that the VCR is at home and now leads the way back cheerfully!

Understanding and Using Visual Reinforcement Systems Or: Let's Make a Deal!

We all knew that Blanca loved to eat popcorn. Her teachers often used popcorn as a motivator to get Blanca to attend to and complete her work. However, the teachers noticed that Blanca often seemed unsure of when she could simply ask for or take some popcorn and when she had to earn some popcorn. The teachers also became concerned about how to communicate to Blanca just how much work she needed to do before having some popcorn. We asked her teachers how they knew how much work they needed to do before they got their paychecks, when they would get they pay, etc. They looked at us as if we were daft and said, "It's in our written contract!" We looked at them and simply said, "So?"

Blanca's teachers wanted her to understand that if she successfully completed her lesson she would earn the popcorn that she liked. A great deal of communication is involved in this kind of arrangement the teacher must know what the child likes, the child must know what the teacher expects, the child also must know how much work will result in how big a reward. Our point to her teachers was that when

they make a "deal" with their boss, they insist on visual representation of that deal—a written contract. As we've noted earlier, one of our guiding principles is that "if it's good for us, it's good for the kids." Can we introduce "Let's make a deal" in an effective manner that will help Blanca and other children with autism become better students?

We can make a reasonable comparison between the teacher/ student relationship and the worker/boss relationship. First, let's remember that in our culture, students attend schools because they must. We have truancy laws to assure their attendance. When they show up at school, what is expected of them? Well, the most fundamental thing that teachers want of their students is for the students to learn.

What does it mean to learn? In its simplest sense, to learn means to change behavior. As teachers, we only know if our students learned a lesson if those students can do something differently after the lesson than they did before the lesson. Students can demonstrate their learning by saying something new—a new word, sentence, or idea, or by doing something differently—answering a question on a multiple choice test, tying their shoes, opening a container, etc.

So, when children come to school, they meet powerful adults who expect them to do something—to learn for the teacher. And who selects what will be learned? It is the teacher, with input from parents and the school system, who sets the curriculum. In what other relationships does a powerful person tell the less powerful individual what to do? One is in the parent-child relationship. Another is the worker-boss relationship, in which the boss wants the worker to do something—the job—for the boss.

How do we design an effective deal? We start by recognizing that our employer wants us to do something—the job. We only agree to do the job if we know what we will get in exchange for working. There are several important factors in arranging our "deal" with our boss. First, we would not accept the job if the boss said, "OK, I want you to do this job for a year and then I'll let you know what you will be paid." We would only accept the position if we knew our salary before we started to work. Notice also that we, not the boss, pick the type of reward for work (not how much—it's never enough!). We also want to know when we will get paid—weekly, monthly, etc.

Another critical aspect of our contract with our employer is specifying our benefits. One of the most important benefits is vacation time—my ability to tell my boss when I need some time off. Here,

too, in typical contracts, we tell our employer when we will use our vacation days. Finally, as noted earlier, we insist that all aspects of our deal with our boss be put in writing—essentially providing a visual representation of our deal.

Teaching Children to Make a Deal

How can we design a system that will convey all of the same types of information that are in a typical contract between a worker and her employer to students who have limited communication skills?

Determine What the Child Wants to Work For. First, it is important to remember that we select our own rewards, and so too should the children. They can do so with PECS or other means. We can have them indicate their choices simply by offering them potentially rewarding items and observing what they reach for, or we can ask the child what she would like to work for, if she has the communication skills to reply.

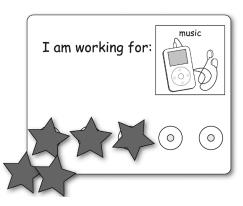
Work First, Then Reward. We then teach the child about how we use "Let's make a deal." Once she has requested a reward, we indicate, often with gestures, for her to do something that is very simple something that we know she can already do. For example, when your child gives you a picture of a cookie as a request, you might point and gesture to a toy on the floor, prompting her to give it to you. When she gives you the toy, you would immediately give her the cookie while saying, "Nice work!"

Gradually, as your child becomes more skilled at using PECS to make requests, you would begin to require small tasks to be completed prior to giving her what she requests. This interaction is your deal. Of course, you would not react to every request your child makes by starting a "deal!" In kind, it's important (and kind-hearted) to be certain to occasionally give your child things she likes simply out of love—no one should have to earn everything!

Introduce Reward Cards and Tokens. As the deals begin to require more work, there comes a point when your child may wonder what she is doing all this work for! At that point, you would put her picture icon on a separate card that states, "I am working for..." (or some similar phrase).

On this card is a single circle (usually containing a Velcro dot). Now, when your child completes the task you indicated, you immedi-

ately give her a token and show her how to place the token on the circle. This token is essentially the same as money that we are paid for doing our job. Since there is only one circle on the card, and it is filled with a token, the job is complete. Now you teach your child to "spend" her



token; that is, she gives the token to you and you immediately give her what she originally requested.

Just as every employer fundamentally wants "more work, same pay," teachers and parents also want students to do more work with less feedback over time—in other words, to become more independent. Therefore, when a child seems to understand the value of the single token, place a second circle on the work card. Now the child can only cash in the tokens when both circles are filled with tokens. Then, sticking with the tradition of requiring more work, gradually add a third, fourth, and eventually fifth circle to the work card. At any point during the deal, the work card contains information about: what the child can earn (i.e., the picture she used to make her request), how long the job lasts (e.g., it's a five-circle job), and how close she is to the next payday (depending on how many more circles need to be filled with tokens). It is important to start the system with just one circle—not the five that we hope to get to.

Taking a Break. We also may want to place a "break" symbol on the work-card to remind the child that she can request a "vacation" at any time. Teaching the use of a break-card is similar to how we teach Phase I in PECS. First, one person would place a demand on the child—for example, telling her repeatedly to stand and then sit. Before the child erupts in frustration, a second person (typically standing behind the child) helps the child hand the break-card to the adult placing the demand. This is the child's request for a break, which in this case means, "Please stop nagging me! I need a break!" Over time, the assistance is reduced until the child can independently request a break in similar demanding situations.

Once the child has asked for a break, we typically guide her to a quiet area, set a timer, and allow her to remain demand-free as long as

Designing a Contract

The guestions below should help guide you through designing comprehensive deals:

Questions Complete Contracts Must Answer

- Who picks the type of reward?
- Who goes first? Remember to first determine the reward, before placing the demand.
- Can we renegotiate the deal?

The following elements must be visually signaled to the student:

- What am I working for? (Either the item itself or, when possible, a picture or other symbol that represents the item, such as a picture from a reward menu or the child's PECS book.)
- How much work is needed to get the reward? (The number of open circles on a token-card, the number of puzzle pieces a card is cut into, etc.)
- How often do I get paid? (Cash-in times—when the child gets to spend the tokens earned—can be noted on the child's schedule.)
- When is my next payday? (The child can tell by noting how many open circles are left on the token-card before completing this specific deal.)
- When can I take a break? (The "break" cards may even be placed on the reinforcer card.)
- What are the rules about my breaks?
 - ☐ How many do I get? (This is set by the number of breakcards made available.)
 - ☐ How long do they last? (Set a countdown timer—the child can set it too.)
 - □ What can I do while I'm on break? (What magazines or other low-reward items are available in the break-area?)

If possible, visually depict the type of work to be done (e.g., math lesson, putting toys away, setting the table, going to gym, etc.) she stays in the break-area and for as long as we have set the time limit for the break. After the break, she should go back to the earlier task after all, asking for a break is not the same as announcing, "I quit!"

It is important to determine in advance how often the child can request a break. One strategy is to think about your own vacations and the rules you and your boss agree to follow. Just as with our own vacations, there are rules about how long the break will last, how many can be requested within some period of time, and what we can do on break. Unlike a vacation—where we usually try to go someplace very rewarding—a break from work (or school work) is simply a request to get away from the demanding situation for a short while. Thus, while we would suggest having a break-area (certainly not the time-out area, if one is used!), we also suggest having only boring or mildly interesting things to do in that area. After all, we want to convince the child that it is more rewarding to complete the work than to sit in the break area!

As children mature, the deals stretch out and begin to resemble the typical adult work situation. We usually work for a couple of hours and then find some time to grab a snack, chew some gum, get a drink, etc. As students enter the workforce, they too will need to work for a couple of hours at a time before getting to the things they really like. Visual contracts such as described here help children with autism know what they are working for, how long they will have to work, and how soon the next reward time will come. While the system stretches over time, we never would totally eliminate it, just as we do not eliminate our contract with our boss even after years of employment.

Closing Remarks

Teaching children to be effective communicators is one of the most important and rewarding goals for professionals and parents alike. Everyone would like for our children to learn to speak in a comprehensive manner. However, as we have stressed throughout this book, children and adults who do not speak can still be excellent communicators. What these individuals need from us is patience to figure out what they want, skill to set up an effective training program, and flexibility to make thoughtful adjustments best suited to that person.

We hope that this book will spark your interest in following up on many of the resource materials noted at the end of each chapter.

The intent of this book is to provide you with assistance in making the first steps down a critical pathway. Our hope is that you will walk down that path hand in hand with the person you love or work with and let go of that hand when the time comes for independence. We hope you will find the many ways that our children can respond with expressions of their love for your efforts and dedication.

References & Resources

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