Using Visual Supports with Infants and Toddlers

Visual supports are a form of adaptation that rely on visual cues to allow infants and toddlers, and older children, to participate in activities and routines. Because infants and toddlers may find it difficult to communicate using words, visual supports can provide them with a system for communication while also teaching them important daily activities and routines. Visual supports provide supplemental information, cues, and directions to children who may communicate with behavior or are unable to read.

This newsletter will take visual supports that have been used successfully in childcare centers and preschools and show how they can be used in the home with younger children. As you will see, visual supports can be inexpensive to make and are applicable to many different daily activities and routines in all different environments!

What are Visual Supports?

Visual supports are graphic cues that can be used to aid communication between parents and children or as an environmental prompt that helps children remember what is expected of them in a certain activity or routine. Visual supports take many different forms and have various uses. They may be used to:

- Prevent challenging behavior & support social competence
- Support communication
- Enhance memory
- Provide a reference for previous directions
- Identify expectations for children within activities and routines
- Serve as a cue for new skills
What are Visual Supports? (Continued)

Because visual supports are useful in so many varied capacities, they may be used with both typically developing children and children with disabilities. As children become more familiar with the roles visual supports play in routines and activities, the supports themselves can become a stand-in for parents or providers assisting the child and will help the child develop self-monitoring behaviors. Eventually young children will stop using these visual supports naturally; parents will not need to worry about children becoming dependent on the support or needing to phase them out of a routine.

A visual support can range from something as simple as an egg timer acting as a signal to a child when their time in one activity will end, to something that requires more work, such as an individualized social story to provide a child with reference to what is happening in their environment. For instance, in the photo on the right a rather simple visual support is used. Teachers in a daycare center found that children were stomping on the lever of the trashcan to make the lid rise and fall. If they did not push hard enough the children would use their hands to lift the lid the rest of the way. After telling the children that they were getting germs on their hands by touching the trashcan, teachers noticed that the children continued to touch the lid. After adding drawings of germs to the lid of the trashcan to remind children of what they had been told before, teachers noticed that children stopped touching the trashcan lid.

Deciding Which Type of Visual Support to Use

Before sitting down to make a visual support for a young child, it is important to consider the child’s needs for supports. That is, how well does the child participate when compared to your expectations? Then decide what your goals are for the child. This will help you focus on the specific things you will need to do to change the situation. Next, consider your options. Would a social story be a better solution to help the child deal with transitions than a first then board?

After selecting which visual support seems right, the next step is to determine what visual cues will be most useful. For most infants and toddlers, either objects or real life photos will be helpful cues. For example, actual objects and items may be used as a means to communicate. For example, when preparing for story time, Malachi’s mother holds up two books, allowing him to choose which he would like to read. When children are responsive to photos, real photographs may be used to communicate. In this instance, Annie’s mother shows her a photo of cereal or eggs so that Annie may choose what she would like to eat for breakfast.
Types of Visual Support

Social Stories

Social stories give children a personalized reference that provides comfort and assists in memory development and self-regulation. These personalized books tell a story of a specific occurrence and help the child understand what is expected of them in that situation without providing a definite script. In addition to providing expectations, social stories may highlight others’ emotions or opinions, provide behavioral choices to the child, and highlight commonly shared values within the culture. Social stories should reassure the child and provide information about challenging activities.

After being used enough, social stories may start to act as scripts to help children organize and interpret daily events. It is important that the stories are worded in a way that emphasizes what is expected — what should happen — rather than what is actually occurring. Social stories may be made for any situation. Jackson’s mother made him a book to help him learn how to use the potty.

Example: Jackson has trouble remembering to use the potty when he needs it. To help teach him the steps to using the potty, Jackson’s home-based teacher created a social story that describes the situation (I am learning how to use the potty!), refers to his mother’s feelings when he uses the potty (Mommy feels proud when I use the potty all by myself), provides him with different ways to behave (I flush the potty when I am done. Then I wash my hands with soap and water), and highlights a commonly shared value (I feel so happy after going potty all by myself!). Jackson’s mother read the social story to him each time she dressed him in his big boy underwear. Over time Jackson began telling his mother when he needed to use the potty and learned how to do it all by himself!

MAKE IT!

When writing the story, use descriptive statements to give details that may be applied to the child’s environment. Take photos of the child participating in the activity to use as a backdrop for your social story and put them beside each statement. Be sure to have faces for each emotion you detail in the story so that the child can identify with others. To make a storybook put each statement and accompanying picture on its own page. Then punch a hole in the top left corner and tie together with ribbon or binder ring. Keep the social story book in a convenient place (in the above example, it could be the bathroom or bedroom).
Visual Schedules

Visual schedules lay out the events of a day or routine one by one for children. They give children a clear sense of the sequence and expectations of the day. Visual schedules may take many forms: specific or general, listing the events horizontally or vertically, removing events as they are complete or moving an arrow to identify the event presently occurring. In the photo on the left, each page in a binder represents a different routine. For the morning routine, first the child wakes up, then brushes teeth, then brushes hair, etc. As activities and routines are completed on the visual schedule, the pictures may be removed and put into a small envelope or other storage container so that the child knows those activities are completed. Remaining pictures show what is coming rather than what has already happened.

Example: Toya had trouble keeping on task and was fussy when transitioning between activities and routines. To teach Toya the order of the day’s events, her father created a visual schedule to hang in her playroom. The schedule began with her morning routine and followed all the way through to her bedtime routine. Toya and her father went over the visual schedule every day so that she could learn to anticipate the activities that were coming and understand the expectations that came with them. Over time Toya’s challenging behavior stopped and her father found it much easier to help her with transitions throughout the day.

When one part of an activity or a routine is challenging for a child, for instance tooth brushing, the visual schedule may be further broken down to detail that specific part. If Toya is having trouble remembering how to brush her teeth, her father might place a detailed visual schedule for tooth brushing next to the bathroom sink for Toya to consult during her bedtime routine.

MAKE IT!

First, determine how specific of a visual schedule is needed. Multiple schedule boards may be made when the child needs things to be very specific. Then, you’ll be able to bring out a different board for each segment of the day (ex. morning, afternoon, night). Decide if you’d like your schedule to be vertical or horizontally oriented, then add Velcro to the board. Put a photo and description of each activity onto a card. Make sure all the cards are the same size so they can be moved if there are any changes to your schedule! Create a pocket at the bottom of the board for the cards if you would like to remove them as they are completed. Put the schedule at your child’s eye level and teach them how to consult and use it.
First Then Boards

First then boards are similar to visual schedules in that they also list a sequence of events. A big difference between the two, though, is that first then boards teach children that in order to get a reward they sometimes need to do a less favorable activity first. As can be seen in the photo on the right, the board shows a picture of an unfavorable task on the “first” side and shows a picture of a favorable task on the “then” side. It is important to keep the words for each activity simple. The activity on the “then” side should always be reinforcing to the child. In this instance the board would be read to the child as “First magnetic numbers, then ball bounce.” For infants and toddlers it is recommended that first then boards contain only 2 activities although they can contain more than one activity on the “first” side for older children. Children can also be involved in the process of choosing their reinforcing activity by presenting them with options for what they would like to do (choice boards—page 7).

Example: Jerome threw a tantrum every time his grandmother tried to put him down for a nap. His grandmother created a first then board to help Jerome understand that after his nap, something he enjoyed would follow. She made multiple cards with photos and names of rewarding activities and used them interchangeably on the “then” side of the board to remind Jerome that after the activity that he found unpleasant, a rewarding activity, such as playing outside or reading a book, would immediately follow. He learned to make the connection and his tantrums during naptime were significantly lessened.

MAKE IT!

Draw a thick, dark line dividing a board into two sides. Label the left side of the board “First” and the right side “Then.” Place Velcro on each side of the line for the activity cards to stick to. Take photos of different reinforcing activities and challenging activities and place them on separate cards. Be sure to label each activity on its corresponding card so that your child learns the names of the activities. If your child has trouble following the first then board try using different activities on the “then” side. It is possible that your child may find some activities more reinforcing than others!
Types of Visual Support (Continued)

Contingency Maps

Contingency maps depict the antecedent-behavior-consequence (ABC) relationship for children’s behavior. They are particularly helpful when children have shown challenging behavior in certain activities or routines. Contingency maps teach children what will happen when he or she engages in that challenging behavior. However, they also show what will happen if the child does not engage in the negative behavior, but instead engages in a positive but functionally equivalent behavior. In the picture, the contingency map is read as “If I take a nap, I get playtime but if I don’t listen, I will not be able to play after nap.” The contingency map clearly outlines the antecedent, behavior, and consequences of the child’s actions. The consequence of the positive behavior should be reinforcing for the child, much like on first then boards. The consequence of the negative behavior should be the absence of the reinforcing behavior that was previously stated.

Example: Carlos refused to sleep at naptime. His mother created a contingency map to help him understand that he would have to listen and nap during naptime in order to play afterwards. She took photos of him sleeping peacefully, throwing a tantrum, playing, and sitting in timeout. Carlos’ mother posted the contingency map next to his bed and reviewed

MAKE IT!

On a large board place Velcro about halfway down on the left side, then 3 more pieces each of Velcro across the top and bottom. Draw arrows connecting the left to the upper and lower Velcro sections, plus signs between the first two pieces of Velcro, and equal signs between the last two pieces of Velcro. Then, make cards detailing what leads up to your child’s challenging behavior, the challenging behavior itself, and the consequence of that behavior. Also make cards that provide your child with positive, but functionally equivalent, behaviors and the rewards you plan on providing for them. If your child exhibits multiple challenging behaviors make cards for each of them.
Types of Visual Support (Continued)

Choice Boards
Choice boards provide children with different options of what they would like to do within activities and routines. In the photo to the right, a child may choose between playing with Mr. Potato Head, using blocks, painting, or dancing. To prevent children from confusing the choice board with a visual schedule it can be helpful to arrange the choices in a shape rather than a line. Choice boards help children focus on appropriate options while giving them the opportunity to communicate what they would like to do, either verbally or by pointing, depending on functional level. Infants and toddlers should be given few options at first to learn the purpose of choice boards and prevent confusion. Simple phrases may be used to prompt the child to make a choice and the choice board can be used across many settings.

Example: David is preverbal and unable to communicate through words which objects he wants to use during playtime and gets frustrated when he is not understood. His father created a choice board to help him communicate which toys he wants to use. He makes sure that the choices are always different so that David will not get bored. After learning to point to the toys he would like to play with and working with his speech therapist, David has started to make sounds while pointing. His choice board has helped with his communication both verbally and physically.

MAKE IT!

On a large board place multiple pieces of Velcro in any shape (i.e., not in a line). Be sure not to give too many options so that your child will not feel overwhelmed. Make cards with photos and labels of different activities that can happen within a routine for your child. For example, if you are making a choice board for snack time put pictures of different foods, like an apple or crackers. Attach the cards onto the board in different places each time you use the choice board with your child.

The choice board can easily be used as a feelings board, too! Make cards with different emotions and faces to have your child tell you how he or she feeling. Then have your child act out the emotions into a mirror.
Types of Visual Support (Continued)

Other Types of Visual Support

**Timer:** You can signal to a child how much time is left in an activity or routine by using a timer with an easy-to-read face. The timer to the right changes from green to yellow when it is almost time to switch from one activity to the next. When it is time for a new activity or routine the timer will turn red. Timers may be used in conjunction with first then boards or visual schedules.

**Stop Signs:** Stop signs are placed on doors to remind children not to run outside or to signal to children that a certain room is off limits. Smaller versions of stop signs may also be used on objects or places that may pose a danger to children, such as a stove or stairway.

**Cues for Toys:** Providing children with visual cues can give direction on what to do with an object within an activity or routine. For instance, on the right, instead of throwing blocks or using them in an inappropriate way, this picture cues a child about what to build with blocks.

**Cue Cards:** Cue cards are an easily transportable visual support for use in a variety of settings. They can serve as a visual schedule if read in a particular order or can be used as choice cards. They can be attached to a keychain, like those pictured, or attached as a necklace, or a zipper pull for easy access.
USING VISUAL SUPPORTS DURING Transitions

Transitions from one activity to the next can be difficult for most children. They involve sometimes unpredictable situations to which children react negatively. Social stories can help explain to children what everyone involved will be doing in the next activity, visual schedules can help lay out upcoming sequences of events, first then boards can ensure that children know what activity will come immediately after, and timers can alert children as to when the transition is coming. But what if none of these visual supports work?

• Suggestion 1: Who What Where When Why How

To prepare a child for a transition, a board can be created with the 6 classic questions, who, what, where, when, why, and how. The cards used should provide specific answers. In the case of getting ready to leave home for a community outing: Who is going with me? Dad is going with me. What am I doing next? Next we are leaving home. Where am I going? We are going to the grocery store. When will I be doing it? We will be going to the grocery store after naptime. Why am I doing it? We are going to the grocery store to buy food. How will I get there? We will take the bus to the grocery store. The who what where when why how strategy can also be used on cue cards to remind the child what is happening while on the go.

• Suggestion 2: Getting myself ready

Using magnets, a photo of the child, and photos of items the child needs to move from one activity to the next, this visual support will help the child mentally and physically prepare before moving on to another activity. The main part of this board is a photo of the child. The smaller items that will be used as cards are things that the child will need to get ready for the next activity. If the child is getting ready to leave the house the cards should be things like shoes, a jacket (depending on the weather), a backpack, or a hat. First, prompt the child to move the shoes onto the larger photo. Then, have the child go get his or her own shoes and put them on. Repeat this process for each item until they have all been gathered by the child. The board makes this an interactive visual support and the child will eventually learn the sequence of getting ready to leave the house without being told!
Tips for Making Visual Supports

- Cover backing boards and cards with contact paper or lamination to increase durability and make any possiblemesses easy to clean up. Visual supports for bathtime can use cards in plastic bags attached to suction cups. Get creative; there is no right or wrong!
- Use Velcro on boards and cards so that they can be applied to different activities. Magnets can be used on a baking sheet or refrigerator, and snaps can be used to work on your child’s fine motor skills as well.
- Extra cards can be stored in empty plastic peanut butter jars or baby wipe containers.
- Make statements in terms of what you want to see in the behavior, not what you already see.
- Use bright colors to appeal to children’s senses. Using rhymes will help children commit things to memory.
- Use felt, crumpled tissue paper, or other materials to create a texture on the cards. Younger children will be drawn to the way different cards feel and may attend to them more than if they were simply paper. Experiment to find what your child likes!
- Include words with all pictures so that all adults using the visual support with your child will use the same words each time.
- If your child is bilingual you can put both languages on the cards—simply use different color ink for each language.
- If your child has a favorite cartoon character try to incorporate them into the pictures you use for your visual supports. This will turn your child’s attention to the visual support itself and help to teach the lesson more quickly.
- If using photos, use pictures of the children themselves doing the activity or routine to make the lessons more tangible.

The Implementation of Visual Supports

When first introducing a visual support to your child stand behind him or her so as not to distract from the visual information being presented. Be sure to use only relevant language and help your child participate in the activity or routine. In the beginning it will be helpful to prompt your child, but those prompts should be lessened as time goes on so that your child comes to rely on the support for information rather than an adult.

In order for visual supports to be useful to your child the supports must be used consistently within an activity or routine for at least one week. This will teach children to associate the support with that activity or routine and eventually stop relying on the support over time. Additionally, visual supports for an activity or routine should be used across different settings so that your child will learn to generalize the lessons being taught. For instance, use a first then board while eating dinner at home, but also use it when eating in a restaurant or at grandma’s house.

While using the visual support it is important to monitor your child’s level of independence in the task. This will tell you if you are using the appropriate visual support for your child’s needs. It will also help you track progress in meeting goals for your child’s development and behavior.
HELPFUL LINKS:

http://tnt.asu.edu/tnt-helpdesk
The Tots-n-Tech helpdesk offers suggestions for how to make AT devices, including visual supports, for a variety of different activities and routines that may be challenging for children. New ideas are constantly being added!

http://www.challengingbehavior.org/index.htm
TACSEI provides parents, providers, and teachers with research-based strategies to improve the functioning of children. You can find free presentations, articles, and ideas that can be immediately applied.

http://csefel.vanderbilt.edu/
CSEFEL provides resources for families, teachers, and trainers in early intervention. Although many of their visual support materials are aimed toward children in childcare, they are easily adaptable to the home.

https://ccids.umaine.edu/resources/visual-supports/
This website offers a visual supports checklist that gives ideas to consider before creating a visual support for your child. There are also many links that give more background on visual supports and tips for making visual supports.

http://www.do2learn.com/
Provides free materials and tips on how to get started using visual supports with your child.

http://autismpdc.fpg.unc.edu/content/visual-supports
An overview of visual supports along with step by step instructions on how to make choice boards, visual schedules, and first then boards.

http://www.mayer-johnson.com/boardmaker-software/
Software with a variety of pictures for the activity cards that can be used with any of the visual supports discussed in this newsletter.

Please feel free to forward this newsletter to any individuals or agencies that may benefit from information on assistive technology.
Questions? Comments? Want to have the newsletter sent directly to your inbox?
Email Livia at livia.fortunato@jefferson.edu