

# STAR Information Series: Visual Supports

## Using Visual Supports to Help People with Autism Learn

Things that can be seen are often easier to process and understand. They also are more permanent. Visual supports help a person with autism learn. Many people with autism require visual structure to perform optimally. Visuals can help a person:

- Adapt to change
- Anticipate and predict
- Organize
- Become more independent
- Remember
- Understand abstraction
- Initiate communication
- Rehearse
- Have more time to process
- Make choices
- Become more flexible

Visuals can come in a variety of forms. These may include the way rooms are arranged, materials are arranged and stored, and the general movement flow within a building or room. Visuals may be written, pictured, or three dimensional in various formats such as calendars, books, boards, signs, checklists, and timers. Demonstrations, body movements, and gestures are types of visual supports. Visuals may include electronic equipment such as computers, VCR's, or hand-held picture devices. Visual supports can be planned and organized ahead of time or created on the spur of the moment.

## Some examples of how visuals might work at home

What you want child to do	What you might say	Visual you might use
Stay seated at meals	"Sit down, please"	A picture with 3-4 removable pieces to show completion or visual timer.
Eat cereal	"Do you want Cheerios or Rice Chex?"	Put a box of each in front of the child and say, "Take one"
Stay away from certain places	"Stop, No, Out-of-bounds, Don't open, touch"	Post a sign like a circle with a line through it on the place and reinforce not touching. Provide shelves or acrylic boxes for child's things and redirect to these..
Go to bed	"Time to go to bed," or name the order of the bedtime routine	Picture the bedtime routine and remove each picture or make a flip book of each step. Lay out objects in sequence.
Get into or out of the car	"Time to get out come in the house" or "Time to get in the car seat and then listen to music"	Pictures of the sequence of what is going to happen when he gets out of the car or what he can have when he gets into the car seat, even choices. Show consequence of Do this...then do that.

Wait	“Wait right here.” Wait for Mom.”	Provide place to wait, something to hold or do while waiting, specific space to move while waiting, or visual timer
Stay in boundaries	“Don’t go out of the yard’, Don’t open the door or go outside” “Stay in the family room.”	Put wide tape on the floor across doorways or around an area. Outside chalk marks on grass can be used. Practice by walking the area and stopping, then rewarding.

## Some typical types of Visuals Supports

### Temporal Supports - having to do with time, sequence, completion, waiting

There are many types of visual schedules that can be used to help children with autism know and remember the sequence of events. Some schedules describe the activities of the whole day, while others may focus more specifically on part of the day or give details of what is going to happen within that part of the day. Sometimes activities are shown using concrete objects, while others may use pictures or words. Some schedules remained fixed in one place while others may be carried around to help with transitions. Some schedules may be designed to indicate that the activity has been completed or is over by turning the card over, putting the card in an envelope on the back or in an “all done” box, or by crossing the activity off. When there is a change in a known schedule the child needs to be part of rearranging the schedule, putting new activities in place, or eliminating that activity. She needs to see the change ahead of time whenever possible and rehearse with the visual support.

Knowing when something has been completed or when it is time to transition to something else is easiest to understand for a child with autism if there is something concrete to see. Passage of time is abstract. If there are a certain number of things to do like walk around a track three times, or take two bites, or kick four balls it is fairly easy to represent the number with something like wrist bands that are removed, four balls to kick rather than one to kick four times, and stickers for each bite taken. A clock face can be removed in segments to reveal a stop sign and that becomes the signal that something has ended. Put materials in a sequence to complete and when they are all gone the job is done. This works well for tasks like getting dressed or setting the table.

Waiting is another skill often requiring temporal supports for the child to succeed. Waiting involves many different concepts like waiting in line, waiting in an office, waiting to cross the street, waiting for a turn, waiting at the table, waiting to talk, or just waiting because someone told you to wait. Providing some activity to do that is only used for waiting like a sensory toy or a book to look at is providing visual support. Having a place to wait or a place to pace is sometimes needed. It’s important to provide concrete objects that allow a child to wait and reinforce him for waiting.

### **Procedural Supports- having to do with helping follow set rules, routines, concepts, and expectations**

These supports help a person learn to be more independent. Calendars whether they are pictured, appointment books, or lists/pictures on a computer help a child to understand what is required. Routines that are part of daily life and need to be learned and remembered in a set sequence can be pictured or written out or objects laid out in a certain order. These routines might include showering, brushing teeth, going through the cafeteria line, or any other set routines. Providing specific places for the objects in the routine help increase independence.

Understanding possession can be assisted with visual supports. Objects can be labeled with names or symbols. Bedroom doors can be labeled to understand where boundaries are and what behavior is required to enter a room that is not your room. Individual possessed items can all be placed in certain places. Names can also be used to designate who is responsible for certain jobs that week or where certain people are going to be.

It's easiest to teach private places and private behaviors by using visual routines and rules that are presented in a visual way. Practice the behavior and both label it and rehearse it in a pictured routine. Some of the rules to learn might be "close the bathroom door" or "only be naked in your bedroom or bathroom."

### **Spatial Supports – having to do with location of self and objects in relation to others and the environment**

These supports help a person navigate environments more successfully and help keep the environment organized. The location of materials and understanding what places one can access are part of spatial supports. Therefore having places to hang clothes, to put clothes that are dirty, to place toys, and to keep books and videos in order is important and helpful. Ways to ask for these materials and to know exactly where to place materials can be organized through written words, pictures, or by seeing the materials themselves.

Use of maps, sequenced pictures in various formats such as flip books or boards help with location of self in space. Knowing the route or change of a route when going in the car can also help decrease anxiety. Let the person with autism understand that you are going to stop at the store before going home or that you are changing the route to grandma's house because you have to go by the bank. Having a format to show that you are going to do X, then Y is extremely helpful in conveying sequenced activities and even in letting a child know what he must do before something else occurs.

Learning where she is to be in relation to others can be conveyed through visual supports too. A shape on the floor can show where to stand while waiting. One can use numbers or colors to represent the place to stand in line. Learning how to walk beside someone, when to stop, or where to sit can be shown and rehearsed in various forms using visuals.

### **Assertion Supports - having to do with exerting more appropriate control**

Being able to express desires and choices and exert more self-control is what every child learns growing up. For children with autism this is often difficult because of their

problems with communication and social interactions. Making choices and expressing wants and needs can be aided through visual means such as picture boards, seeing the objects, written words, or electronic devices. However, the child must learn in a systematic way how to make concrete choices that will then lead to being able to order from a pictured menu or go through a cafeteria line making choices from what is seen. It helps to know that at this time these are the options available. People with autism can also help with their schedules and motivators by choosing what to put on free time cards or reinforcement choices. They also can have some input into who they do activities with by choosing from pictures. Once a person can make choices, negotiation is possible but visual supports make it so much clearer to everyone what is going on.

Children can be taught more self control through practiced relaxation routines that are pictured or written for them and accessible at all times. They can learn that there is a space to go to calm down or materials to use to help calm down and they can learn to ask for them as part of their communication system.

### Summary

It is important to include planned and individualized visual supports in the teaching of everyone with autism. All people use these supports, but most are able to figure them out for themselves. People with autism need creative approaches in the use of visual supports to help them in all areas. Visual sequences and visual information often allows them to rehearse fears, frustrations, and new situations without actually being there. Seeing a video of a new school building along with a map and a visit is likely to help the person with autism have a much smoother start to a school year. Concrete, specific information that can be conveyed in a visual format should be used whenever possible and feasible. Parents often have to advocate for visual supports and may need to demonstrate ways they are useful.

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STAR is an intervention program developed specifically for children and adolescents with autism spectrum disorders (ASDs) and their families. STAR is a program within the Weisskopf Child Evaluation Center (WCEC), a division of the University of Louisville School of Medicine Department of Pediatrics.

