Visual Supports and Autism

autism speaks ATN
AUTISM TREATMENT NETWORK

AIRP
Autism Intervention Research Network on Physical Health

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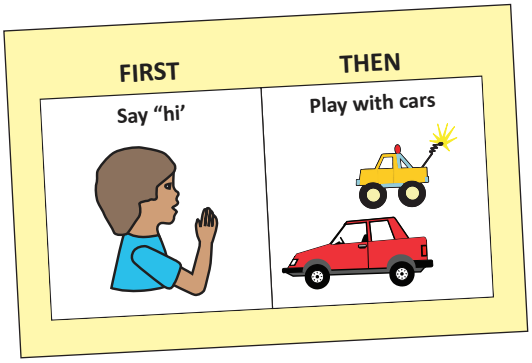
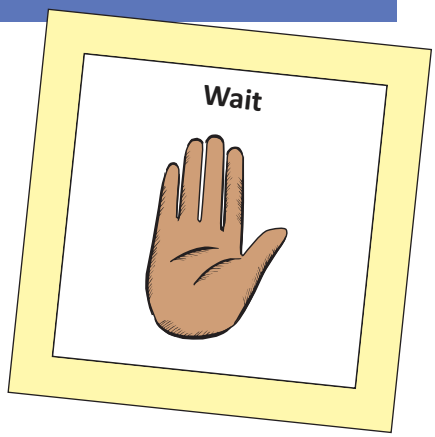
Visual Supports and Autism Spectrum Disorders

Introduction





What are visual supports? A visual support refers to using a picture or other visual item to communicate with a child who has difficulty understanding or using language. Visual supports can be photographs, drawings, objects, written words, or lists. Research has shown that visual supports work well as a way to communicate.

Visual supports are used with children who have autism spectrum disorders (ASD) for two main purposes. They help parents communicate better with their child, and they help their child communicate better with others.

This brochure introduces parents, caregivers, and professionals to visual supports and provides instruction on how to use them effectively. Visual supports can be used with persons of any age, although this brochure refers to children. Also, visual supports can be used by caregivers other than parents.

Why are visual supports important? The main features of ASD are challenges in interacting socially, using language, and having limited interests or repetitive behaviors. Visual supports help in all three areas.

First, children with ASD may not understand social cues as they interact with others in daily activities. They may not grasp social expectations, like how to start a conversation, how to respond when others make social approaches, or how to change behavior based on unspoken social rules. Visual supports can help teach social skills and help children with ASD use them on their own in social situations.

Second, children with ASD often find it difficult to understand and follow spoken instructions. They may not be able to express well what they want or need. Visuals can help parents communicate what they expect. This decreases frustration and may help decrease problem behaviors that result from difficulty communicating. Visuals can promote appropriate, positive ways to communicate.

Finally, some children with ASD are anxious or act out when their routines change or they are in unfamiliar situations. Visuals can help them understand what to expect and will happen next and also reduce anxiety. Visuals can help them pay attention to important details and help them cope with change.

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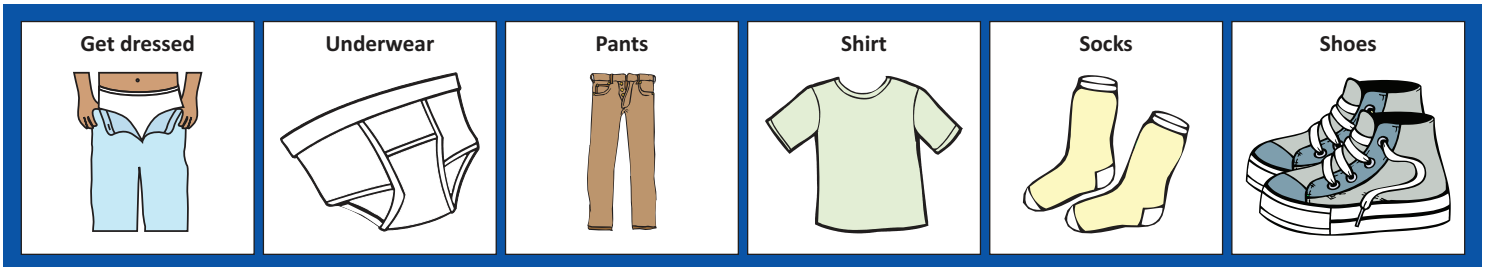
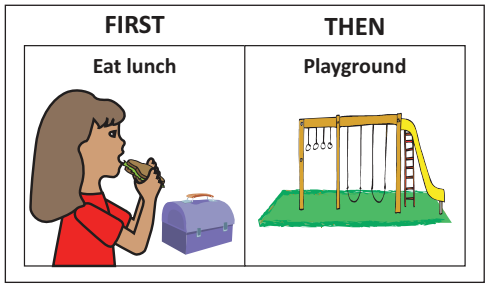


First – Then Board

❏ **What is it?**

A First-Then Board is a visual display of something your child prefers that will happen after completing a task that is less preferred.



❏ **When is it helpful?**

A First-Then Board is helpful in teaching children with ASD to follow directions and learn new skills. A First-Then Board motivates them to do activities that they do not like and clarifies when they can do what they like. A First-Then Board lays the language foundation needed to complete multi-step directions and activities and to use more complex visual systems.

❏ **How do I teach it and use it?**

Decide what task you want your child to complete first (what goes in the "first" box) and the preferred item or activity (what goes in the "then" box) that your child can have immediately after the "first" task is done. This preferred item/activity should be motivating enough to increase the likelihood that your child will follow your direction.

Put the visuals on the board (e.g., photos, drawings, written words) that represent the activity you identified. Present the board to the child with a brief, verbal instruction. Try to use the least amount of words possible. For example, before beginning the "first" task, say, "First, put on shoes, then swing." If needed, refer to the board while your child is doing the task. For example, say "One more shoe, then swing" when your child is almost done.

When the "first" task is completed, refer back to the board. For example, say "All done putting on shoes, now swing!" and immediately provide the preferred, reinforcing item or activity.

In order to teach children with ASD the value of the First-Then Board, you must give them the reinforcing activity or item after they complete the "first" task. Otherwise, your child may not trust the board the next time you use it.

❏ **What if challenging behaviors occur?**

If challenging behaviors occur, continue by physically prompting your child to complete the "first" task. Keep your focus on the task rather than on the challenging behavior. Then it is important to still provide the reinforcing item or activity, since the focus of the board is on completing the "first" task, and not on addressing challenging behaviors.

If you think challenging behaviors may happen, begin by introducing the First-Then Board for a task that your child usually completes willingly and successfully. If challenging behaviors become more difficult to control, it may be appropriate to consider behavioral consultation with a professional to address these behaviors directly.

Visual Schedule

❏ **What is it?**

A visual schedule is a visual representation of what is going to happen throughout the day or within a task or activity.

❏ **When is it helpful?**

A visual schedule is helpful for breaking down a task that has multiple steps to ensure the teaching and compliance of those steps. It is also helpful in decreasing anxiety and rigidity surrounding transitions by communicating when certain activities will occur throughout the day or part of the day.

❏ **How do I teach it and use it?**

After your child understands the concept of sequencing activities through the use of a First-Then Board, you can develop a more complex schedule for a series of activities during the day.

Decide the activities that you will picture in the schedule. Choose activities that really will happen in that particular order. Try to mix in preferred activities with non-preferred ones.

Put on the schedule the visuals (e.g., photos, drawings, written words) that show the activities that you have identified. The schedule can be portable, for example, on a binder or clipboard, or it can be fixed to a permanent place, like a refrigerator or wall. Your child should be able to see the schedule before beginning the first activity on the schedule. It should continue to be visible to your child during the rest of the activities.

When it is time for an activity on the schedule to occur, cue your child with a brief, verbal instruction. For example, say "Check the schedule." This helps your child pay attention as the next activity begins. At first, you may need to physically guide your child to check the schedule (e.g., gently guide by shoulders and prompt your child to point to the next activity on the schedule). You can gradually decrease physical prompts as your child begins to use the schedule more independently.

When a task is completed, cue your child to check the schedule again, using the procedure described above, and transition to the next activity.

Provide praise and/or other positive reinforcement to your child for following the schedule and for transitioning to and completing activities on the schedule. It may be helpful to use a timer that your child can hear to make transition times clear to your child.

Mix variability into the schedule by introducing a symbol that represents an unknown activity (e.g., "oops" or "surprise activity"). Begin to teach this concept by pairing this with a positive activity or surprise. Gradually use this for unexpected changes in the schedule.

❏ **What if challenging behaviors occur?**

If challenging behaviors occur, continue by physically prompting your child to complete the task that is occurring. Keep your focus on the task rather than on the challenging behavior. Then transition to the next activity as communicated by the schedule and still provide the reinforcing item or activities indicated on the schedule, since the focus of the schedule is on completing the tasks, and not on addressing challenging behaviors.

If you think challenging behaviors may happen, begin by introducing the visual schedule during tasks that your child usually completes willingly and successfully. If challenging behaviors become more difficult to control, it may be appropriate to consider behavioral consultation with a professional to address these behaviors directly.

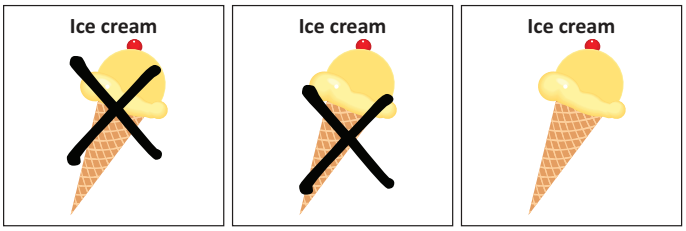
Visually Setting Parameters

❏ **What is it?**

Setting parameters involves using visuals to set clear boundaries around items or activities and to communicate basic expected behaviors, like waiting.

❏ **When is it helpful?**

Visually setting parameters is helpful in communicating limits that are part of an activity and that may seem unclear to your child. Some examples of situations where this might be useful follow. Communicate physical boundaries of an area or activity, for example, use a "stop" sign to mark where to stop in the backyard. Or show how much of an item or activity is available before it is gone. For example, place a "not available" picture on the computer when it is not time to play on the computer. Or place pictures of 3 juice boxes on the refrigerator and remove or cover one each time juice is given. Show the need to wait for something that is delayed but will be available soon, for example, by providing a "wait" card paired with a timer.



❏ **How do I teach it and use it?**

Begin to teach the use of these visuals in situations that have clear, defined, brief parameters. As your child understands these visuals better, gradually increase their use in more long-term activities and with more abstract parameters.

❏ **Examples:**

Physical boundaries: Place the visual on physical boundaries that already are defined (e.g., a door) and refer to it when the rule is followed. For example, when your child stops at the door, point to the stop sign and say, "Stop." Give praise or reinforcement for complying with this parameter. After you have taught the concept, use the same visual during other activities or in other settings where the same boundary is needed but is not as clear, such as a "Stop" sign on the playground.

Limited availability: Decide the number of times or length of time that the item or activity is available. Indicate that through the visual, for example, 3 pictures of a juice box on the refrigerator to indicate that 3 juice boxes are allowed that day. After the item or activity has been used or done, show the change by using the visual, for example, cross out or remove one of the juice box pictures. When the item is no longer available, use the visual to show this. For example, show your child that there are no more pictures of juice on the refrigerator after they have used them all.

Wait: Begin by presenting the symbol for "wait' for a very brief amount of time before your child can have a preferred item or activity. It may help to pair the use of the "wait' symbol with a timer. Have your child trade the "wait" card for the item or activity. For example, when your child asks for a snack, hand your child the "wait" card, set the timer for 10 seconds, and then praise your child's waiting and trade the snack for the "wait" card.

As your child learns to use visuals for setting parameters, gradually increase the length of time or the number of situations in which your child is expected to wait for items or activities.

❏ **What if challenging behaviors occur?**
If you think that challenging behaviors may occur, introduce these parameters during less difficult situations or begin with simple expectations.

If problem behaviors occur, be consistent with the parameters you have set. Focus on praising any aspects of the parameters that are being followed, rather than shifting your focus to the challenging behaviors.

Using visual supports can help you and your child with ASD communicate and manage everyday activities in positive ways.

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Resources for Using Visual Supports:

- ❏ www.do2learn.com
- ❏ card.ufl.edu/content/visual.html
- ❏ www.kidaccess.com/index.html
- ❏ Eckenrode, L., Fennell, P., & Hearsey, K. (2004). *Tasks Galore for the Real World*. Raleigh, NC: Tasks Galore.

Resources on Autism Spectrum Disorders:

❏ **Treatment and Research Institute for Autism Spectrum Disorders** (TRIAD), Vanderbilt Kennedy Center, is dedicated to improving assessment and treatment services for children with autism spectrum disorders and their families, while advancing knowledge and training. For information on TRIAD and Vanderbilt autism services and resources:

Vanderbilt Autism Resource Line
Local (615) 322-7565
Toll free (1-877) ASD-VUMC [273-8862]
Email: autismresources@vanderbilt.edu

TRIAD Outreach and Training
(615) 936-1705
Web: triad.vanderbilt.edu

❏ **Tennessee Disability Pathfinder**, a free information and referral service for all types of disabilities, all ages, provides information on autism resources external to Vanderbilt. Local (615) 322-8529, (1-800) 640-4636. Web: www.familypathfinder.org

❏ Local chapters of the **Autism Society of America** (ASA) (www.autism-society.org) provide information, support, and advocacy for individuals with ASD and their families.

Autism Society of Middle Tennessee
Phone: (615) 385-2077, (866) 508-4987
Email: asmt@tnautism.org
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Autism Society of the Mid South
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Autism Society of East Tennessee
Phone: (865) 247-5082
Email: asaetc@gmail.com

❏ **Autism Speaks** (www.autismspeaks.org/) provides resources and support for individuals with ASD and their families.