

This overview
brief will
support your
use of the
evidencebased practice:
Visual Support.

For more information visit: www.afirm.fpg.unc.edu

Visual Support (VS) ---EBP Brief Packet---

Components of the EBP Brief Packet...

This evidence-based practice overview on Visual Support (VS) includes the following components:

- 1. Overview: A quick summary of salient features of the practice, including what it is, who it can be used with, what skills it has been used with, and settings for instruction.
- 2. Evidence-base: The VS Evidence-base details the NPDC criteria for inclusion as an evidence-based practice and the specific studies that meet the criteria for this practice.
- 3. Step-by-Step Guide: Use the VS Step-by-Step Practice Guide as an outline for how to plan for, use, and monitor VS. Each step includes a brief description as a helpful reminder while learning the process.
- 4. Implementation Checklist: Use the VS Implementation Checklist to determine if the practice is being implemented as intended.
- 5. Data Collection Sheets: Use the data collection sheets as a method to collect and analyze data to determine if progress is being made for a learner with ASD.
- 6. Tip Sheet for Professionals: Use the VS Tip Sheet for Professionals as a supplemental resource to help provide basic information about the practice to professionals working with the learner with ASD.
- 7. **Parent Guide**: Use the *VS Parent Guide* to help parents or family members understand basic information about the practice being used with their child.
- 8. Additional Resources: Use the Additional Resources to learn more about the practice.
- 9. CEC Standards: A list of CEC Standards that apply specifically to VS.
- 10. **Module References**: A list of numerical *References* utilized for the VS module.

Suggested citation:

Sam, A., & AFIRM Team. (2015). *Visual supports*. Chapel Hill, NC: National Professional Development Center on Autism Spectrum Disorder, FPG Child Development Center, University of North Carolina. Retrieved from http://afirm.fpg.unc.edu/visual-supports

What is Visual Support?

Visual supports are concrete cues that are paired with, or used in place of, a verbal cue to provide the learner with information about a routine, activity, behavioral expectation, or skill demonstration.⁴ Visual supports might include: *pictures, written words, objects, arrangement of the environment, visual boundaries, schedules, maps, labels, organization systems, timelines,* and *scripts.*

Individual types of visual supports might not have been shown to be as effective for learners with ASD.⁴ For example, graphic organizers do not have as strong of evidence-base as individual visual schedules.

The various types of visual supports can be divided into three categories: visual boundaries, visual cues, and visual schedules. The table provides an overview of the three categories, samples of the types of visual supports associated with each category, a definition of the type, and how the visual support might be used to address a skill or behavior.

Evidence-base

Based upon the recent review, visual supports meets the evidence-based practice criteria set by NPDC with 18 single case design studies. The practice has been effective for preschoolers (3-5 years) to high school-age learners (15-22) with ASD. Evidence-based practices (EBP) and studies included in the 2014 EBP report detailed how visual supports can be used effectively to address: social, communication, behavior, play, cognitive, school readiness, academic, motor, and adaptive outcomes.

How is VS Being Used?

Visual supports can be used by a variety of professionals, including teachers, special educators, therapists, paraprofessionals, and early interventionists in educational and community-based environments. Parents and family members also can use visual supports in the home.



---Evidence-base for Visual Supports---

Autism Focused Intervention Resources & Modules

The National Professional Development Center on ASD has adopted the following criteria to determine if a practice is evidence-based. The EBP Report provides more information about the review process (Wong et al., 2014).

Efficacy must be established through high quality, peer-reviewed research in scientific journals using:

- randomized or quasi-experimental design studies (two high quality experimental or quasi-experimental group design studies),
- single-subject design studies (three different investigators or research groups must have conducted five high quality single subject design studies), or
- combination of evidence [one high quality randomized or quasi-experimental group design study and three high quality single subject design studies conducted by at least three different investigators or research groups (across the group and single subject design studies)].

--OVERVIEW--

Visual supports are concrete cues used to provide the learner with information about routines, activities, or behavioral expectations. Visual supports meets the evidence-based practice criteria with 18 single case design studies. The practice has been effective for preschoolers (3-5 years) to high school-age learners (15-22 years) with ASD. Studies included in the 2014 EBP report detail how visual supports can be used effectively to address: social, communication, behavior, play, cognitive, school readiness, academic, motor, and adaptive outcomes.

In the table below, the outcomes identified by the evidence base are shown by age of participants.

Early Intervention (0-2)	Preschool (3-5)	Elementary (6-11)	Middle (12-14)	High (15-22)
No studies	Social	Social	Social	Social
	Communication	Communication	Communication	
	Behavior	Behavior	Behavior	
	School-Readiness	School-Readiness	School-Readiness	
	Play	Play	Play	
	Cognitive			
		Motor		
		Adaptive	Adaptive	
		Academic	Academic	_

Early intervention (0-2 years)

No studies

Preschool (3-5 years)

- Betz, A., Higbee, T. S., & Reagon, K. A. (2008). Using joint activity schedules to promote peer engagement in preschoolers with autism. *Journal of Applied Behavior Analysis*, 41(2), 237-241. doi: 10.1901/jaba.2008.41-237
- *Cale, S. I., Carr, E. G., Blakeley-Smith, A., & Owen-DeSchryver, J. S. (2009). Context-based assessment and intervention for problem behavior in children with autism spectrum disorder. *Behavior Modification*, *33*(6), 707-742. doi: 10.1177/0145445509340775
- Krantz, P. J., & McClannahan, L. E. (1998). Social interaction skills for children with autism: A script-fading procedure for beginning readers. *Journal of Applied Behavior Analysis*, 31(2), 191-202. doi: 10.1901/jaba.1998.31-191
- Matson, J. L., Sevin, J. A., Box, M. L., Francis, K. L., & Sevin, B. M. (1993). An evaluation of two methods for increasing self-initiated verbalizations in autistic children. *Journal of Applied Behavior Analysis*, *26*(3), 389-398. doi: 10.1901/jaba.1993.26-389
- Morrison, R. S., Sainato, D. M., Benchaaban, D., & Endo, S. (2002). Increasing play skills of children with autism using activity schedules and correspondence training. *Journal of Early Intervention*, *25*(1), 58-72. doi: 10.1177/105381510202500106
- Murdock, L. C., & Hobbs, J. Q. (2011). Tell me what you did today: A visual cueing strategy for children with ASD. *Focus on Autism and Other Developmental Disabilities*, *26*(3), 162-172. doi: 10.1177/1088357611405191
- *West, E. A. (2008). Effects of verbal cues versus pictorial cues on the transfer of stimulus control for children with autism. *Focus on Autism and Other Developmental Disabilities*, *23*(4), 229-241. doi: 10.1177/1088357608324715

Elementary (6-11 years)

- Angell, M. E., Nicholson, J. K., Watts, E. H., & Blum, C. (2011). Using a multicomponent adapted power card strategy to decrease latency during interactivity transitions for three children with developmental disabilities. *Focus on Autism and Other Developmental Disabilities*, 26(4), 206-217. doi: 10.1177/1088357611421169
- Bock, M. A. (1999). Sorting laundry: Categorization strategy application to an authentic learning activity by children with autism. *Focus on Autism and Other Developmental Disabilities*, *14*(4), 220-230. doi: 10.1177/108835769901400404
- *Blum-Dimaya, A., Reeve, S. A., Reeve, K. F., & Hoch, H. (2010). Teaching children with autism to play a video game using activity schedules and game-embedded simultaneous video modeling. *Education and Treatment of Children*, 33(3), 351-370. doi: 10.1353/etc.0.0103

Elementary (6-11 years continued)

- Bryan, L. C., & Gast, D. L. (2000). Teaching on-task and on-schedule behaviors to high-functioning children with autism via picture activity schedules. *Journal of Autism and Developmental Disorders*, *30*(6), 553-567. doi: 10.1023/A:1005687310346
- *Cale, S. I., Carr, E. G., Blakeley-Smith, A., & Owen-DeSchryver, J. S. (2009). Context-based assessment and intervention for problem behavior in children with autism spectrum disorder. *Behavior modification*, *33*(6), 707-742. doi: 10.1177/0145445509340775
- *Cihak, D. F. (2011). Comparing pictorial and video modeling activity schedules during transitions for students with autism spectrum disorders. *Research in Autism Spectrum Disorders*, *5*(1), 433-441. doi: 10.1016/j.rasd.2010.06.006
- *MacDuff, G. S., Krantz, P. J., & McClannahan, L. E. (1993). Teaching children with autism to use photographic activity schedules: Maintenance and generalization of complex response chains. *Journal of Applied Behavior Analysis*, 26(1), 89-97. doi: 10.1901/jaba.1993.26-89
- Stringfield, S. G., Luscre, D., & Gast, D. L. (2011). Effects of a story map on accelerated reader postreading test scores in students with high-functioning autism. *Focus on Autism and Other Developmental Disabilities*, *26*(4), 218-229. doi: 10.1177/1088357611423543
- Thiemann, K. S., & Goldstein, H. (2004). Effects of peer training and written text cueing on social communication of school-age children with pervasive developmental disorder. *Journal of Speech, Language and Hearing Research*, 47(1), 126. doi:10.1044/1092-4388(2004/012)
- *West, E. A. (2008). Effects of verbal cues versus pictorial cues on the transfer of stimulus control for children with autism. *Focus on Autism and Other Developmental Disabilities*, *23*(4), 229-241. doi: 10.1177/1088357608324715

Middle (12-14 years)

- *Blum-Dimaya, A., Reeve, S. A., Reeve, K. F., & Hoch, H. (2010). Teaching children with autism to play a video game using activity schedules and game-embedded simultaneous video modeling. *Education and Treatment of Children*, 33(3), 351-370. doi: 10.1353/etc.0.0103
- *Cihak, D. F. (2011). Comparing pictorial and video modeling activity schedules during transitions for students with autism spectrum disorders. *Research in Autism Spectrum Disorders*, *5*(1), 433-441. doi: 10.1016/j.rasd.2010.06.006
- *MacDuff, G. S., Krantz, P. J., & McClannahan, L. E. (1993). Teaching children with autism to use photographic activity schedules: Maintenance and generalization of complex response chains. *Journal of Applied Behavior Analysis*, 26(1), 89-97. doi: 10.1901/jaba.1993.26-89

Middle (12-14 years continued)

- O'Reilly, M., Sigafoos, J., Lancioni, G., Edrisinha, C., & Andrews, A. (2005). An examination of the effects of a classroom activity schedule on levels of self-injury and engagement for a child with severe autism. *Journal of Autism and Developmental Disorders*, 35(3), 305-311. doi: 10.1007/s10803-005-3294-1
- Peterson, L., McLaughlin, T. F., Weber, K. P., & Anderson, H. (2008). The effects of model, lead, and test technique with visual prompts paired with a fading procedure to teach "where" to a 13-year-old echolalic boy with autism. *Journal of Developmental and Physical Disabilities*, 20(1), 31-39. doi: 10.1007/s10882-007-9077-1

High (15-22 years)

- Hughes, C., Golas, M., Cosgriff, J., Brigham, N., Edwards, C., & Cashen, K. (2011). Effects of a social skills intervention among high school students with intellectual disabilities and autism and their general education peers.

 *Research and Practice for Persons with Severe Disabilities, 36(1-2), 1-2. doi: 10.2511/rpsd.36.1-2.46
- * Research which included participants in multiple age ranges.



This practice guide outlines how to plan for, use, and monitor the visual supports practice.

Keep in mind that the three categories of visual supports are:

- Visual boundaries
- Visual cues
- Visual schedules

While each category is slightly different, the practice guide is applicable to all. When unique features are tied to a specific category, we will identify them through examples or cautions.



AFIRM

Autism Focused Intervention Resources & Modules

Visual Supports (VS) ---Step-by-Step Guide---

BEFORE YOU START...

Each of the following points is important to address so that you can be sure the selected EBP is likely to address the learning needs of your student.

Have you found out more information about. . .?

- □ Established a goal or outcome that clearly states when the behavior will occur, what the target skill is, and how the team will know when the skill is mastered...
- □ Identifying evidence-based practices...

If the answer to any of these is "no," review the process of how to select an EBP.

Now you are ready to start...

Step 1: VS Planning

The planning step explains how to identify what visual supports might work for learners and how to develop and prepare selected visual supports.

1.1 Identify visual supports needed to acquire or maintain target skills

To identify when visual supports should be used, think about activities and events that occur throughout the day and what behaviors or target skills you might want to address.

The **Visual Support Pre-Assessment Checklist** found in the Resource section will help you determine the category of supports (visual boundaries, visual cues, or visual schedules) that would work best for the learner with ASD.

1.2 Develop/prepare visual support for learner based on individualized assessments

Use assessments to develop and prepare the presentation of the visual support that will be most beneficial to the learner with ASD. This process is slightly different for each category of visual supports.

- Visual Boundaries
 - When creating boundaries, remember boundaries provide information about where a
 particular area in the classroom or at home begins or ends or what activities are
 completed in an area or setting.
 - o To create boundaries, use natural boundaries, objects, furniture, tape on the floor, or rugs to clearly designate the boundary area.
- Visual Cues
 - o Visual cues include graphic organizers, visual instructions, labels, and choice boards.
 - When preparing visual cues consider:
 - The information needed to be presented visually.
 - Form of representation (objects, photographs, drawing or picture symbols, words, phrases, or a combination of formats).
- Visual Schedules
 - To create a visual schedule, consider the five core components of a schedule:
 - Form of representation:
 - functional objects,
 - representational objects,
 - photographs,
 - drawings or picture symbols,
 - words or phrases, or
 - a combination
 - Length of the schedule
 - One item, signifying upcoming transitions;

Step 1: VS Planning (continued)

1.2 Develop/prepare visual support for learner based on individualized assessments (continued)

- Two items, presented left-to-right or top-to-bottom;
- Three to four items, presented left-to-right or top-to-bottom;
- Half-day, presented left-to-right or top-to-bottom;
- Full day, presented left-to-right or top-to-bottom; or
- Technology based schedule.
- Method of manipulating the schedule
 - Learner with ASD carries an object that will be used in the upcoming activity,
 - Learner with ASD carries an object/visual cue that represents an upcoming area and then matches the object/visual cue to a pocket, basket, or envelope in the represented location,
 - Learner with ASD turns over the visual schedule cue or places the cue in a "finished" location when activity is completed, or
 - The learner with ASD marks of the visual cue on schedule as completed.
- Location of the schedule
 - Schedule information brought to the learner,
 - A stationary schedule in a central location (on a wall, shelf, desk), or
 - A portable schedule that a learner with ASD can carry across locations (e.g. clipboard, notebook, handheld device).
- Determine the method to initiate schedule use and transitioning from one activity to the next
 - Staff bring schedule information to the learner with ASD or
 - The learner with ASD moves to the schedule using a visual transition cue.

1.3 Organize all needed materials

Before learners with ASD arrive, make sure visual boundaries are in place and all visual cues and schedules are ready.

Step 2: Using VS

2.1 Teach learner with ASD how to use visual support

The process of teaching how to use a visual support varies based upon the category.

- Visual Boundaries
 - o Introduce the learner with ASD to the established boundary and point out the important boundaries and tasks completed in that area.
 - o Use modeling to teach the learner with ASD to stay within the boundary.
 - o Use reinforcement when learner with ASD stays within a boundary.
 - o Use corrective feedback when learner does not stay within the boundary.

Visual Cues

- o Show the learner with ASD the developed visual cue.
- o Stand behind the learner when prompting the use of the visual cue in order to make sure the learner is looking at the visual information and not the adult.
- o Use concise, relevant words/terms while teaching the visual cue.
- o Assist learner in participating in the activity/event with the visual cue.

Visual Schedule

- o Stand behind the learner with ASD when prompting use of the visual schedule.
- o Place schedule information in learner's hand.
- o Use concise, relevant words/terms (identify location where learner is transitioning).
- o Assist learner with ASD in getting to designated activity/location, and prompt learner to place schedule materials in appropriate location.
- o Ensure learner remains in scheduled location until prompted to use schedule to transition.
- o Repeat steps until learner with ASD is able to complete the sequence independently across activities/locations.

2.2 Fade prompts as quickly as possible when criterion met

By fading prompts quickly, adults will teach learner with ASD not to rely on adult prompts but rather use the visual supports independently.

2.3 Use visual support consistently and across settings

Make sure all adults working with the learner with ASD are consistent with expectations, reinforcement, correction, and follow-through regarding the use of visual supports.

Step 3: Monitoring VS

The following process describes how the use of visual supports can be monitored and how to adjust your plan based on the data.

3.1 Collect data on target behaviors and use of visual supports

Collect data on the learner's use of visual supports. Include information about the level of independence during use, time on-task, amount of work completed, and use of appropriate behaviors. For visual cues and schedules, include the level of independence during the use and the various forms/lengths of visual supports the learner uses.

The **Visual Support Progress Monitoring Form** and the **Visual Support Anecdotal Note** form found in the Resource section can be used to collect information on the learner's use of a visual support.

3.2 Determine next steps based on learner progress

If the learner with ASD is showing progress with visual supports based upon collected data, then continue to use this practice with the learner. Gradually new target skills and behaviors can be introduced to the learner with ASD.

If the target skill or behavior is not increasing, ask yourself the following questions:

- Is the target skill or behavior well defined?
- Is the skill or behavior measurable and observable?
- Is the skill too difficult and needs to be broken down into smaller steps?
- Have we devoted enough time to using this strategy?
- Were visual supports used with fidelity?
- Are the visual supports appropriate for the learner with ASD?
 - o Are visual boundaries clear? Does the learner need additional boundaries?
 - o Is the form of representation (e.g. object, photographs, and/or words) appropriate for the learner?
 - o Is the length of the visual support appropriate for the learner?
 - o Do adults need to provide more support for the learner in using the visual support?
- If these issues have been addressed and the learner with ASD continues not to show progress, consider selecting a different evidence-based practice to use with the learner with ASD.

Visual Supports (VS) ----Implementation Checklist---

Before you start:

Have you...

- □ Identified the behavior?
- Collected baseline data through direct observation?
- Established a goal or outcome that clearly states when the behavior will occur, what the target skill is, and how the team will know when the skill is mastered.

If the answer to any of these is "no", refer to the "Selecting EBPs" section on the website.

Observation	1	2	3	4
Date				
Observer's Initials				1
Step 1: Planning				
1.1 Identify visual supports needed to acquire or maintain target skills				
1.2 Develop/prepare visual support for learner based on individualized assessments				
1.3 Organize all needed materials				
Step 2: Using				
2.1 Teach learner how to use visual support				
- Boundaries:	<u> </u>			
☐ Introduce boundary to learner				
☐ Use modeling to teach learner to stay within boundary				
☐ Use reinforcement to encourage learner to stay within boundary				
☐ Use corrective feedback when learner does not stay within boundary				
- Cues:				
☐ Show learner visual cue				
☐ Stand behind learner when prompting use of visual cue				
☐ Use concise, relevant words/terms while teaching visual cue				
☐ Assist learner in participating in activity/event with visual cue				
- Schedules				
☐ Stand behind learner when prompting use of visual schedule				
☐ Place schedule information in learner's hand				
☐ Use concise, relevant words/terms				
☐ Assist learner in getting to designated activity/location, and prompt				
☐ Ensure learner remains in scheduled location until prompted to use				
☐ Repeat steps until learner is able to complete the sequence				
independently across activities/locations				
2.3 Use visual supports consistently and across settings				
Step 3: Monitoring				
3.1 Collect data on target behaviors and use of visual supports (independence				
during use and progress through forms/types of supports)				1
3.2 Determine next steps based on learner progress				





Autism Focused Intervention Resources & Modules

\	/5	An	eco	ota	ΙN	lotes
1	<i>'</i>	/ NI I		I O L G		IULU

Learner's Name:	

Educators can observe target behaviors as they occur through using anecdotal notes. The Anecdotal Notes form is a tool that assists multiple educators in collecting information about the learner's target behavior, comments, and plans for next steps.

Anecdotal Notes:

Date	Observer Initials	Target Skill/Behavior, Comments, and Plans for Next Steps
_		
Date	Observer Initials	Target Skill/Behavior, Comments, and Plans for Next Steps
Date	Observer	Target Skill/Behavior, Comments, and Plans for Next Steps
Date	Initials	rarget Skiil/ Deriavior, Comments, and Frans for Next Steps



Autism Focused Intervention Resources & Modules

Steps/Tasks:

---Progress Monitoring Form---

1 1 001 000 1 1110 1 110 1 1111					
Learner's Name:	Date/Time:				
Observer(s):					
Target Behavior:					
	For more information visit: www.afirm.fpg.unc.edu				
	Date				

Steps/Tasks	Date					
этерэ гизкэ						
1.						
2.						
3.						
4.						
5.						
6.						
Amount of time learner was on-task or off-task (circle one)						

I = Independent; IS = Independent with visual support; PS = Prompt with visual support; 0 = error or issue

Select Visual Representation and Presentation:

If applicable, check the form of representation and length of presentation of the visual cue or visual schedule.

Form of Representation	Length of Presentation
□ Objects	☐ One item
☐ Photographs	☐ Two items
☐ Drawing or picture symbols	☐ 3-4 items
□ Words	☐ Half-day or 5-7 items
☐ Phrases	☐ Full day or 8+ items
□ Combination:	
Notes:	

Date/Time: ____

AFIRM

---VS Pre-Assessment for Learner---

	Observer(s):				
Autism Focused Intervention Resources & Modules	Directions: Complete the checklists below to determine what category of visual supports to use. Observe target behaviors as they occur through using anecdotal notes.				
Visual Boundaries:					
1. Is there a safety conce	ern?	□ Yes □ No			
2. Does the learner with	ASD have difficulty staying in one place?	□ Yes □ No			
3. Does the learner know	w what s/he is to be working in an area?	□ Yes □ No			
4. Does the learner ever	leave a location because of frustration?	□ Yes □ No			
5. Does the learner with	ASD ever have difficulty with entering others'				
work space and/or ma	aking use of others' work or personal materials?	□ Yes □ No			
If you answer yes to any	If you answer yes to any of these questions, visual boundaries might be helpful to use with				
the learner with ASD.					
Visual Cues:					
	nt/concept:				
1. Does the activity/ever	nt/concept cause frustration for the learner?	□ Yes □ No			
2. Does the activity/ever	nt/concept cause anxiety for the learner?	□ Yes □ No			
3. Is adult support requi	red for the learner with ASD to be successful				
with the activity/even	t/concept?	□ Yes □ No			
4. Is the activity/event/c	oncept difficult for the learner with ASD to				
understand when only	y verbal information is provided?	□ Yes □ No			
If you answer yes to any	of these questions, visual cues might be helpful	to use with the			
learner with ASD.					

Learner's Name: _

V	isı	ادا	l S	ch	6	٦ı	ıl	മ	•

1.	Does the learner struggle with moving from one area to the next?	□ Yes □ No
2.	Does the learner forget what s/he is asked to do next?	□ Yes □ No
3.	Does the learner with ASD exhibit disruptive/inappropriate behavior	
	when transitioning?	☐ Yes ☐ No
lf y	you answer yes to any of these questions, <mark>visual schedules</mark> might be h	elpful to use with
the	e learner with ASD	

Anecdotal Notes:

Date	Observer Initials	Target Skill/Behavior, Comments, and Plans for Next Steps
Date	Observer Initials	Target Skill/Behavior, Comments, and Plans for Next Steps

Autism Focused Intervention Resources & Modules

AFIRM

Visual Supports (VS) ---Tip Sheet for Professionals---

Visuals Supports are...

- an evidence-based practice for children and youth with autism spectrum disorder (ASD) from 3 to 22 years old that is implemented in a variety of ways across multiple settings.
- a group of specific interventions that minimize adult support while increasing the independence of learners with ASD. This practice includes visual boundaries, visual cues (graphic organizers, choice boards, and visual instructions) and visual schedules.

Why Use?

- Learners with ASD struggle with verbal instructions of what to do or what will happen next.
- Visual supports present information in a way that helps learners with ASD focus on key elements.
- Visual supports can increase on-task behavior and foster the independence of learners with ASD.

Outcomes

• The evidence-base for VS supports the use of this practice to address the outcomes below:

Early Intervention (0-2)	Preschool (3-5)	Elementary (6-11)	Middle (12-14)	High (15-22)
No studies	Social	Social	Social	Social
	Communication	Communication	Communication	
	Behavior	Behavior	Behavior	
	School-Readiness	School-Readiness	School-Readiness	
	Play	Play	Play	
	Cognitive			
		Motor		
		Adaptive	Adaptive	
		Academic	Academic	

Visual Supports VS



TIPS:

- Consider target skills or behavior to determine which category of visual supports would best meet the needs of the learner.
- Use a form of representation based upon individual assessments to visually present target skills or behavior.
- Fade adult support to promote the independence of the learner.



---Tip Sheet for Professionals---

Visual Supports (VS)

STEPS FOR IMPLEMENTING

1. Plan

- Identify visual supports needed to acquire or maintain target skills
- Develop/prepare visual support for learner based on individualized assessments
- Organize all needed materials

2. Use

- Teach learner how to use visual support
- Fade prompts as quickly as possible when criterion met
- Use visual supports consistently and across settings

3. Monitor

- Collect data on target behaviors and use of visual supports (independence during use and progress through forms/types of supports)
- Determine next steps based on learner progress

Visual Supports VS

This tip sheet was designed as a supplemental resource to help provide basic information about the practice.





This parent introduction to VS was designed as a supplemental resource to help answer basic questions about this practice.

To find out more about how VS is used with your child, speak with:

For more information visit: www.afirm.fpg.unc.edu

AFIRM

Autism Focused Intervention Resources & Modules

Visual Supports (VS) ---Parent's Guide---

This introduction provides basic information about visual supports.

What is VS?

- VS is an evidence-based practice for children and youth with autism spectrum disorder (ASD) from 3 to 22 years
- Visual supports provide key information in the form of objects, photographs, drawing, or print to help learners with ASD.
- Visual boundaries (visually defining a space where an activity occurs), visual cues (graphic organizers and visual instructions), and visual schedules are types of visual supports.

Why use VS with my child?

- Visual supports provide expectations for the learner, increase on-task behavior, and promote independence.
- Research studies have shown that visual supports have been used effectively with many age groups to achieve outcomes in the following areas: behavioral, cognitive, communication, play, social, academic, adaptive, motor, and school readiness.

What activities can I do at home?

- Develop a schedule for a routine (such as going to bed or getting ready for school) or an activity (such as taking a shower or going to the bathroom) using pictures, words, or an app.
- Take pictures of your child's favorite activities and then place on a board. Your child can select an activity from the choice board.
- Several apps are available to help create visual supports:
 - o Pictello http://www.assistiveware.com/product/pictello
 - iPrompts http://www.handholdadaptive.com/StoryMaker

Visual Supports



Check out these resources to support your use of visual supports (VS).

For more information visit: www.afirm.fpg.unc.edu

---Additional Resources---

Articles:

- Ganz, J. B., Boles, M. B., Goodwyn, F. D, & Flores, M. M. (2014). Efficacy of handheld electronic visual supports to enhance vocabulary in children with ASD. *Focus on Autism and Other Developmental Disabilities, 29,* 3-12. doi: 10.1177/1088357613504991
- Hume, K., Sreckovic, M., Snyder, K., & Carahan, C. R. (2014). Smooth transitions: Helping students with autism spectrum disorder navigate the school day. *Teaching Exceptional Children*, 47, 35-45.
- Shane, H. C., Laubsher, E. H., Schlosser, R. W., Flynn, S., Sorce, J. F., & Abramson, J. (2012). Applying technology to visually support language and communication in individuals with autism spectrum disorders. *Journal of Autism and Developmental Disabilities*, *42*(6), 1228-1235. doi: 10.1007/s10803-011-1304-z

Apps:



First Then Visual Schedule HD by Good Karma Applications, INC (\$14.99)



iPrompts® by Handhold Adaptive, LLC (\$49.99/ Pro-\$99.99)



Pictello by AssistiveWare (\$19.99)

Books:

Cohen, M. J. & Sloan, D. L. (2007). *Visual supports for people with autism: A guide for parents and professionals*. Bethesda, MD: Woodbine House, Inc.

Websites:

- Autism Speaks (n.d.). Visual tools. Retrieved on December 9, 2015, from: https://www.autismspeaks.org/family-services/resource-library/visual-tools
- Center for Autism and Related Disabilities (2015). Visual supports: Helping your child understand and communicate. Retrieved on December 9, 2015, from: http://card.ufl.edu/resources/visual-supports/
- Indiana Resource Center for Autism (2015). Visual supports. Retrieved on December 9, 2015, from: http://www.iidc.indiana.edu/pages/visualsupports





Visual Supports CEC Standards

Autism Focused Intervention Resources & Modules

The CEC Standards that apply to all 27 evidence-based practices can be found on our website at: http://afirm.fpg.unc.edu/learn-afirm

Below are CEC Standards that apply specifically to visual supports (VS) module.

Description			
Initial Preparation Standard 2: Learning Environments			
Design learning environments that encourage active participation in individual and group			
activities			
Modify the learning environment to manage behaviors			
Create an environment that encourages self-advocacy and increased independence			
Design and manage daily routines			
ration Standard 4: Assessment			
Assessments of environmental conditions that promote maximum performance of individuals			
with developmental disabilities/autism spectrum disorders			
Interpret information from formal and informal assessments			
ration Standard 5: Instructional Planning Strategies			
Incorporate and implement instructional and assistive technology into the educational program			
Prepare and organize materials to implement daily lesson plans			
Use strategies to facilitate integration into various settings			
Use strategies that promote successful transitions for individuals with exceptionalities			
Implement instructional programs that promote effective communication skills using verbal and			
augmentative/alternative communication systems for individuals with developmental			
disabilities/autism spectrum disorders			
Consistently use of proactive strategies and positive behavioral supports			
Structure the physical environment to provide optimal learning for individuals with			
developmental disabilities/autism spectrum disorders			
ration Standard 7: Collaboration			
Model techniques and coach others in the use of instructional methods and accommodations			

Visual Supports

Standard	Description		
Advanced Preparation Standard 1: Assessment			
ACSI1 K2	Variety of methods for assessing and evaluating the performance of individuals with		
	exceptionalities.		
Advanced Preparation Standard 3: Programs, Services, and Outcomes			
SEDAS3 K3	Modify the verbal and non-verbal communication and instructional behavior in accord with the		
	needs of individuals with developmental disabilities/autism spectrum disorder		
SEDAS3 S6	Arrange program environments to facilitate spontaneous communication		
SEDAS3 S7	Design and implement instruction that promote effective communication and social skills for		
	individuals with developmental disabilities/autism spectrum disorders		
SEDAS3 S9	Create opportunities and provide supports for individuals to organize and maintain personal		
	materials across environments		

For more information visit:

www.afirm.fpg.unc.edu

---Module References---

- 1. American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders: DSM-5*, American Psychiatric Publishing. doi: org/10.1176/appi.books.9780890425596.
- 2. Mesibov, G. B., Shea, V., & Shopler, E. (2005). *The TEACCH approach to autism spectrum disorders*. New York: Kluwer Academic Plenum Publishers. http://search.lib.unc.edu/search?R=UNCb4678039
- 3. Kaldy, Z., Kraper, C., Carter, A., & Blaser, E. (2011). Toddlers with autism spectrum disorders are more successful at visual search than typically developing toddlers. *Developmental Science, 14*, 980-988. doi: 10.1111/i.1467-7687.2011.01053.x
- 4. Hume, K., Wong, C., Plavnick, J., & Schultz, T. (2014). Use of visual supports with young children with autism spectrum disorders. In J. Tarbox, D. R. Dixon, P. Sturmey & J. L. Matson (Eds.), *Handbook of Early Intervention for Autism Spectrum Disorders* (pp. 375-402) New York, NY: Springer. doi: 10.1007/978-1-4939-0401-3
- 5. Hume, K., Sreckovic, M., Snyder, K., & Carnahan, C. (2014). Smooth transitions: Helping students with autism spectrum disorder navigate the school day. *Teaching Exceptional Children, 47*(1), 35-45. doi:10.1177/0040059914542794
- 6. Duker, P., & Rasing, E. (1989). Effects of redesigning the physical environment on self-stimulation and on-task behavior in three autistic-type developmentally delayed individuals. *Journal of Autism and Developmental Disorders*, 19, 449-459. http://link.springer.com/article/10.1007%2FBF0221294
- 7. Krantz, P. J., & McClannahan, L. E. (1998). Social interaction skills for children with autism: A script-fading procedure for beginning readers. *Journal of Applied Behavior Analysis, 26*, 121-132. doi: 10.1901/jaba.1998.31-191
- 8. Massey, N. G., & Wheeler, J. J. (2000). Acquisition and generalization of activity schedules and their effects on task engagement in a young child with autism in an inclusive pre-school classroom. *Education and Training in Mental Retardation and Developmental Disabilities, 35*(3), 326-35.

Visual Support

- 9. Morrison, R. S., Sainato, D. M., BenChaaban, D., & Endo, S. (2002). Increasing play skills of children with autism using activity schedules and correspondence training. Journal of Early Intervention, 25(1),
 - http://libproxy.lib.unc.edu/login?url=http://search.proquest.com/docview/233252148?accountid=1 4244
- 10. Bryan, L. C., & Gast, D. L. (2000). Teaching on-task and on-schedule behaviors to high-functioning children with autism via picture activity schedules. Journal of Autism and Developmental Disorders, 30(6), 553-67. doi: 10.1023/A:1005687310346
- 11. Dettmer, S., Simpson, R., Myles, B., & Ganz, J. (2000). The use of visual supports to facilitate transitions of students with autism. Focus on Autism and Other Developmental Disabilities, 15, 163-170.
 - http://libproxy.lib.unc.edu/login?url=http://search.proquest.com/docview/205053560?accountid=1 4244
- 12. MacDuff, G., Krantz, P., & McClannahan, L. (1993). Teaching children with autism to initiate peers: Effects of a script-fading procedure for beginning readers. Journal of Applied Behavior Analysis, 26, 121-132. doi: 10.1901/jaba.1993.26-121
- 13. Wong, C., Odom, S. L., Hume, K. Cox, A. W., Fettig, A., Kucharczyk, S., Schultz, T. R. (2014). Evidencebased practices for children, youth, and young adults with Autism Spectrum Disorder. Chapel Hill: The University of North Carolina, Frank Porter Graham Child Development Institute, Autism Evidence-Based Practice Review Group. http://autismpdc.fpg.unc.edu/sites/autismpdc.fpg.unc.edu /files/2014-EBP-Report.pdf
- 14. Smith, S., & Collet-Klingenberg, L. (2009). Implementation checklist for visual boundaries. Madison, WI: The National Professional Development Center on Autism Spectrum Disorders, Waisman Center, University of Wisconsin. 58-72.
- 15. Hume, K., & Smith, S. (2009). Steps for implementation: Visual supports. Chapel Hill, NC: The National Professional Development Center on Autism Spectrum Disorders, Frank Porter Graham Child Development Institute, The University of North Carolina. http://autismpdc.fpg.unc.edu