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Training and Information Network
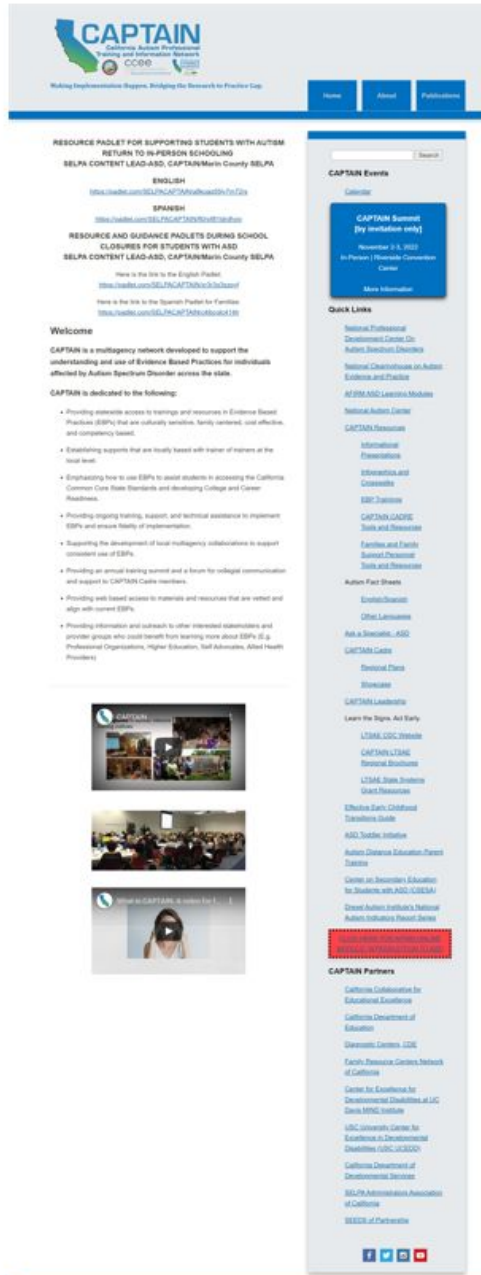
www.captain.ca.gov

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@CAPTAIN EBPs- Education

CAPTAIN_EBPS

Links to Publications

Links to Autism Resources

CAPTAIN Social Media Links

Pre-Test

Before we get started....

Evidence-Based Practice Training Module:

Visual Supports

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

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Visual Supports- *defined*

- Any tool presented visually that supports an individual as he or she moves through the day.
- Might include written words, objects within the environment, arrangement of the environment or visual boundaries, schedules, maps, labels, organization systems, timelines, and scripts

Visual Supports- *examples*

- Pictures
- Written words
- Objects
- Arrangement of the environme
- Visual boundaries
- Schedules
- Maps
- Labels
- Organization systems
- Timelines
- Scripts

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Evidence

Visual Supports meet criteria to be considered Evidence-Based for:

- <u>Age Groups</u>: Early childhood to young adult

- <u>Domains</u>: Academic, Behavior, Communication, Social, Play, Adaptive, Motor & MORE!

Outcome Areas		Age Ranges					
		0-2 Toddlers	3-5 Preschoolers	6-11 Elementary School	12-14 Middle School	15-18 High School	19-22 Young Adults
Communication	Communication		✓	✓	✓		
	Social		✓	✓	✓	✓	✓
	Joint attention		✓	✓			
	Play		✓	✓	✓		✓
Cognitive	Cognitive		✓	✓			
	School readiness		✓	✓	✓		✓
	Academic/ Pre-academic		✓	✓	✓	✓	✓
Adaptive	Adaptive/ self-help		✓	✓	✓	✓	✓
	Challenging/ Interfering behavior		✓	✓	✓		
	Vocational			✓	✓	✓	✓
	Motor	✓		✓			
Mental	Mental health						
	Self-determination						

(NCAEP EBP Report, 2020)

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Goals that can be addressed using VS

VS can be used to:

- Increase independence
- Support Transitions
- Clearly present expectations
- Increase understanding of a situation, task, or environment
- Provide predictability/structure

When used correctly, VS can:

- Reduce challenging behavior associated with transitions/lack of understanding
- Reduce reliance on caregiver for prompting/reinforcement
- Reduce distractions that interfere with completing a transition or activity

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Settings

Used effectively in:
- Home settings
- Classroom settings
- Adult Learning Environments
- Workplace
- Community

EVERYWHERE!

Before Getting Started:

Have you…?

- Identified the target behavior or skill
- 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 skills is mastered?

If Not:

- Work with program behaviorist to address the above items -OR-
- Refer to the Afirm Modules to learn how to select the appropriate EBP https://afirm.fpg.unc.edu/selecting-ebp

Three main categories:

Visual Boundaries

Cues

Schedules

Activity: Match Column A to Column B

Column A

1. Increase understanding of where an item belongs

2. Decrease distractions

3. Increase ability to make choices

4. Decrease transition time

Column B

A. Schedule

B. Visual boundary

C. Labels

D. Choice Boards

Visual/Physical Boundaries and Structure

- Visual/Physical Boundaries and Structure are a specific type of visual support that uses furniture arrangement, labeling, and color coding to make the use of a particular space more obvious

Who Needs Physical/Visual Structure?

- Is there a safety concern?
- Does the individual have difficulty staying in one place?
- Does the individual know what s/he is to be working on in an area?
- Does the individual ever leave a location because of frustration?
- Does the individual ever have difficulty with entering others' work space and or making use of others' work or personal items?

If yes to any of these, consider using Physical/Visual Structure…

Boundaries

Type	Example	What is it?	Skills/Behaviors Addressed
Room Arrangement		Arranging the environment in a systematic way	• Increase on task behavior
Visual Boundaries		Includes covering materials unnecessary for perform the skill, Marking the ground/area, etc.	• Increase on task behavior

Room Arrangement

Visual Boundary

https://youtu.be/KaOEQJGig9c?t=43

Prepare Visual Boundaries

Creating or redefining boundaries can:

- Provide a person with additional information about where a particular area in the house/program begins or ends
- Clarify what activities occur in a specific area or setting, or
- Provide more information about where a person should be during a specific activity/time of day.

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Creating Visual Boundaries

- Try to use natural boundaries, objects, and furniture to clearly designate the boundary area.

- If furniture is unavailable to define an area, consider using tape on the floor or wall.

- Sections of carpet or rugs the size of the defined area are also helpful.

- Labels can also define a specific space. For example, you can create a label for a reading area or snack area.

https://www.youtube.com/watch?v=IDxOOKKpDVU

Partitions Can Be Used to Reduce Distraction/ Create a Visual Boundary

HOME
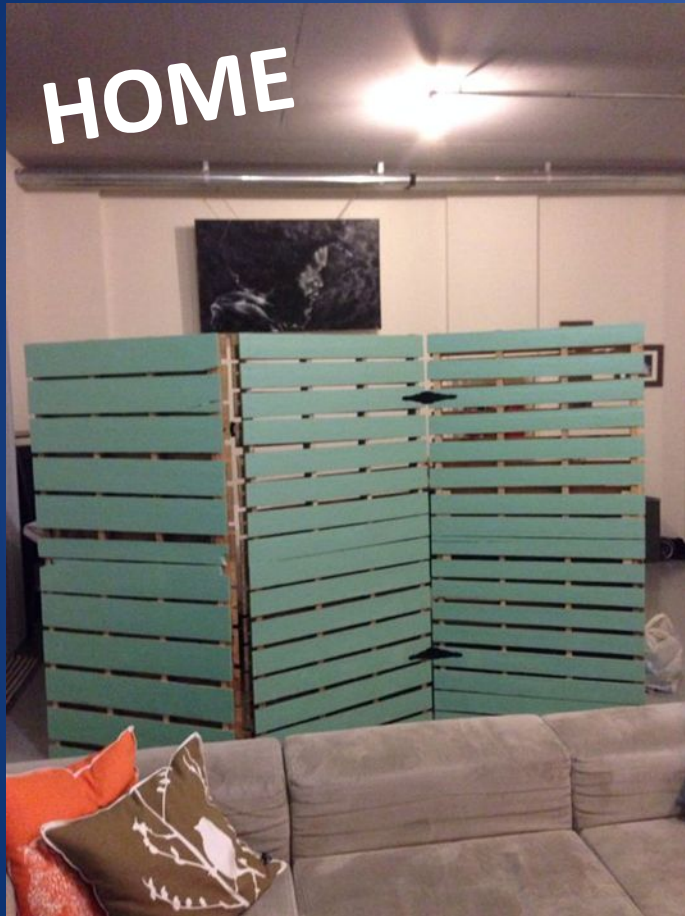
WORK

Independent Work Area
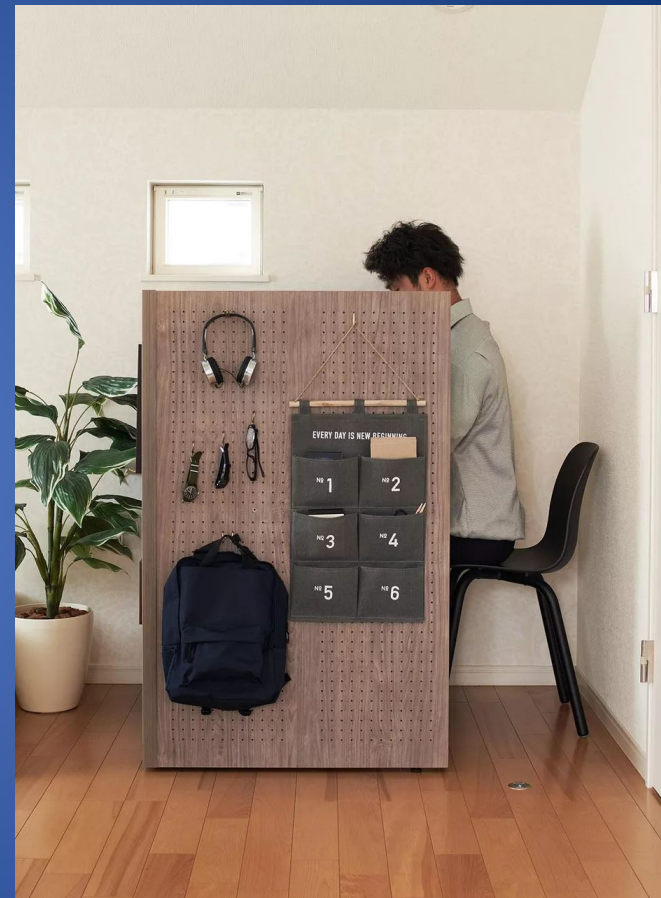
Group Work Areas
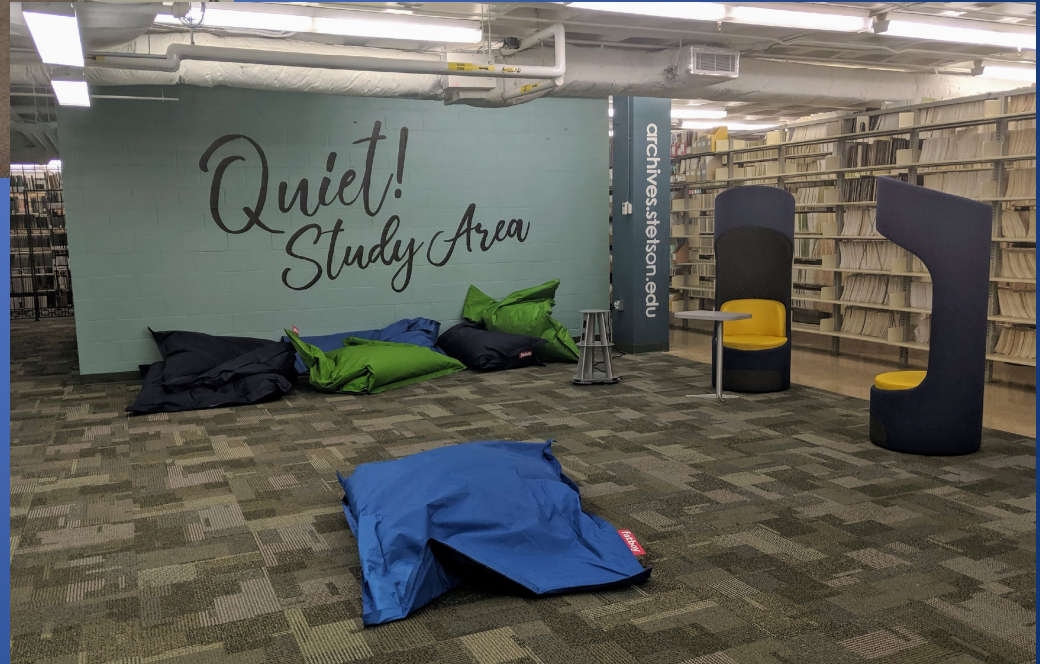
Teaching Visual Boundaries

First, introduce the person to the established boundary.

⬇

Do this even if the person is not new to the setting.

⬇

Walk together into the boundary area. Show the important boundaries and tasks completed in that area.

Next, use modeling to teach the person to stay within the boundary.

⬇

Video Modeling may be helpful with this.

⬇

Use reinforcement when a person stays within a boundary. "Michael, good job eating at the table!"

⬇

When the person does not stay within the boundary, provide a calm and specific correction. "Michael, we only eat at the table.

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Note about Visual Boundaries

- Teaching people to recognize boundaries will take time to incorporate into their routine. Don't give up!
- Visual boundaries need to be consistently used in order to be meaningful.

Visual Cues

- Visual cues provide a pictorial representation of what expected in a given environment or situation in order to promote specific responses, behaviors, or understanding.

- The three primary types of visual cues include visual instructions, choice boards and labels.
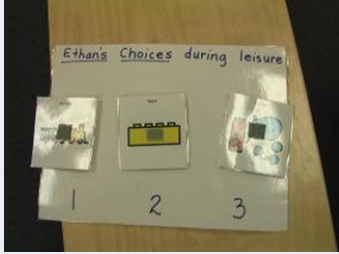
Who Needs Visual Cues?

- Does the activity, event, or concept cause anxiety or frustration for the individual?

- Is a great deal of support required for the individual to be successful with the activity, event, or concept?

- Is the activity, event, or concept difficult for the individual to understand when only verbal information is provided?

If yes to any of these questions, it is likely that the individual would benefit from a visual cue

Visual Cues

Type	Example	What is it?	Skills/Behaviors Addressed
Visual Instruction	Let's Make Stuffing 1. Empty box into bowl. 2. Pour 1 2/3 cup hot water. 3. Put in 1/4 cup margarine. 4. Mix. 5. Put in microwave for 5 minutes. 6. Stir with fork and eat! theautismhelper.com	Visual way to organize an activity	• Increase success of task completion
Choice Boards	Image credit: NPDC	Visual representation of choices that person can select	• Increase independence
Labels		Visual representation to show where an item belongs	• Increase understanding of expectations

Visual Step By Step Instructions

1. Card In

2. Enter PIN

3. Fast Cash

4. Take Money

5. Finished Button

6. Card Out

Visual Cues Help Identify Expected Behaviors
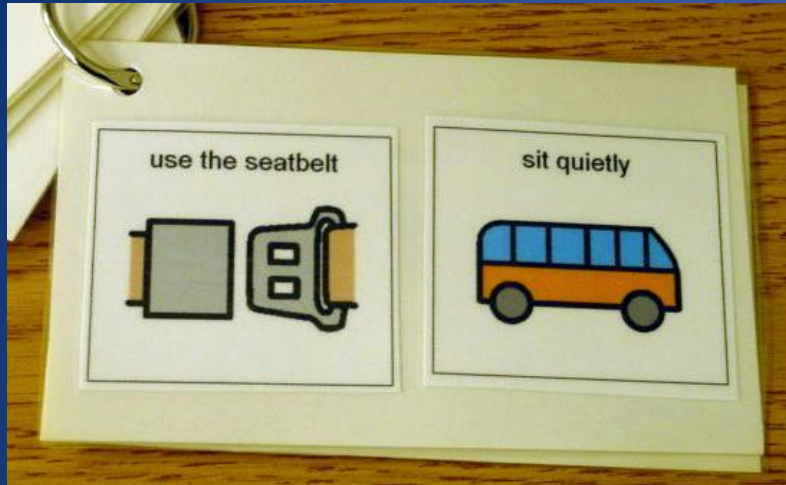
Visual Cues for Waiting in Line

Choice Boards

Check-In Time
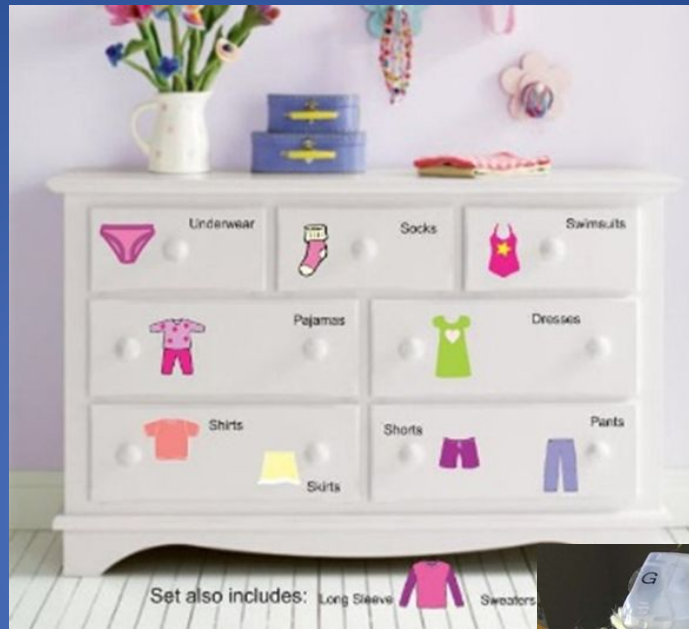
Which one is not an example of a visual support?

A. Boundaries

B. Cues

C. Schedules

D. Social Narratives

TAKE A MOMENT TO REFLECT

Do I currently use visuals to depict available choices for food items or free time activities or is there a way I can enhance my visuals to ensure they are accessible for all?

Labels

Prepare Visual Cues

Assess the skills of the person by considering two elements:

the information needed to be presented visually

the form of representation

Prepare Visual Cues: Information to Present

- Based on the identified target behavior/skill, baseline data and established goal, you will have a good idea of what information should be presented visually for the individual.

- For example, baseline data indicates that the individual is visibly anxious when he/she does not know how to complete a task. If this is the case, then visual instructions would be helpful for the person.

Let's Make Stuffing

1. Empty box into bowl.

2. Pour 1 2/3 cup hot water.

3. Put in 1/4 cup margarine.

4. Mix.

5. Put in microwave for 5 minutes.

6. Stir with fork and eat!

theautismhelper.com

wash hands

turn on   soap   wash hands   turn off   dry hands

Prepare Visual Cues: Form of Representation

- Next consider the form of representation for the visual cue.

- Forms of representation include objects, photographs, drawing or picture symbols, words, phrases or sentences, or a combination of formats.

- The level of representation should meet the individual needs of the person with Autism as determined.

Activity: Match Form to Visual

Form of Representation

- Object
- Picture
- Drawing/symbol
- Words/Phrases
- Combination

A

B

C

D

TOILET

E
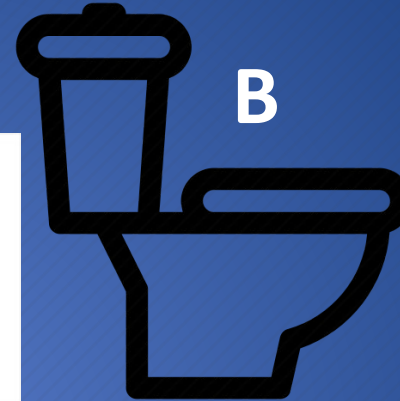
Teaching Visual Cues

- Start by showing the person the developed visual cue.
- Staff/caregivers should stand behind the person when prompting how to use the visual cue in order to make sure the person is looking at the visual information and not the staff.
- Use concise, relevant words and terms while teaching the visual cue.
- If the person needs additional help, assist the person in participating in the activity.

Professionals Using Visual Cues

Board Certified Behavior Analyst (BCBA), Amy McCreary discusses using an "Available/ Not Available" Visual Cue board to communicate to residents which food items are accessible

Visual Schedules

- Visual Schedules are a specific type of visual support that uses pictures, photographs or words to communicate a series of activities or the steps of a specific activity. The three main types of schedules are individual, group and First/Then boards.
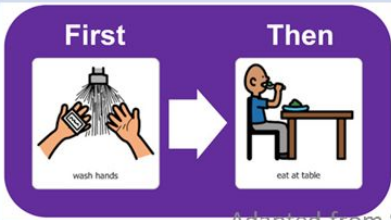
Who Needs Visual Schedules?

- Does the activity, event, or concept cause anxiety or frustration for the individual?

- Is a great deal of support required for the individual to complete multi-step tasks/activities?

- Is the activity, event, or concept difficult for the individual to understand when only verbal information is provided?

- Does the individual struggle with retention/recall of upcoming tasks, activities, appointments etc.?

If yes to any of these questions, it is likely that the individual would benefit from a visual schedule

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Visual Schedules

Type	Example	What is it?	Skills/Behaviors Addressed
Individual Schedule		Schedule of the person's day	• Increase understanding of expectations. • Support for transitions between activities.
Daily House/Program Schedule		Posted in a central location and available for all participants	• Increase understanding of expectations. • Support for transitions between activities.
First/Then		Sequence of two events to help a person understand what comes next	• Increase understanding of expectations. • Support for transitions between activities.

Adapted from Sam, A., & AFIRM Team

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Visual Schedules Should:

- Be easily understood by the individual(s) intended for
- Indicate what activities will occur and in what order
- Be arranged left to right or top to bottom
- Have a way to indicate that each activity is finished

Preparing Visual Schedules

If the person needs a visual schedule, consider the five core components of the schedule:

1. form of representation,
2. length and presentation format,
3. method of manipulating schedule,
4. location of the schedule, and
5. method of initiating schedule use.

Visual Schedule: Length and Presentation

Consider appropriate length for the person:

- One item, signifying upcoming transitions;
- 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;
- Technology based schedule (There are apps for everything!)

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Length Considerations:

Some people find it helpful to see all the events for an entire day, while others find this overwhelming and stressful.

Visual Schedule: Method of Manipulating

Options include:

- Person carries an object that will be used in the upcoming activity,
- Person carries an object or visual cue that represents an upcoming area and then matches the object or visual cue to a pocket, basket, or envelope in the represented location,
- Person turns over the visual schedule cue or places the cue in a "finished" location when activity is completed, or
- Person marks off the visual cue on schedule as completed.
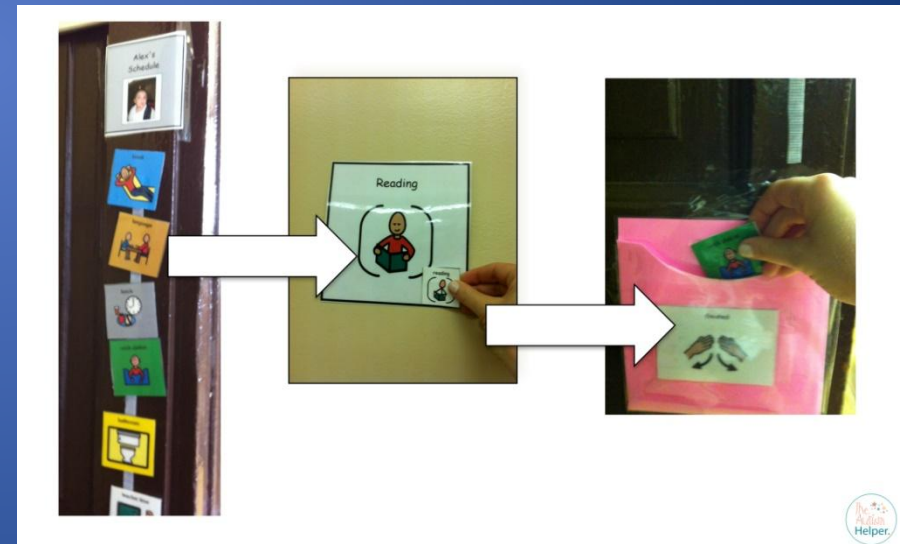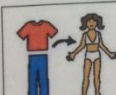
Visual Schedule: Where does it go?

Locations for schedules include:

- Schedule information brought to the person,
- A stationary schedule in a central location (on a wall, shelf, desk)
- A portable schedule that a person can carry across locations (e.g. clipboard, notebook, handheld device)
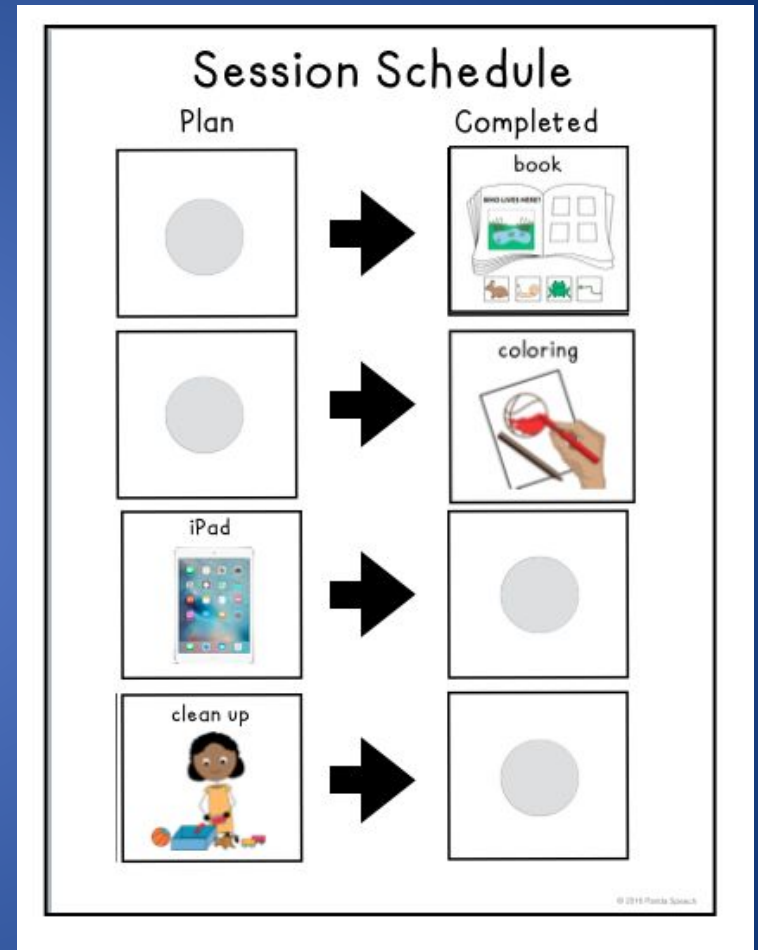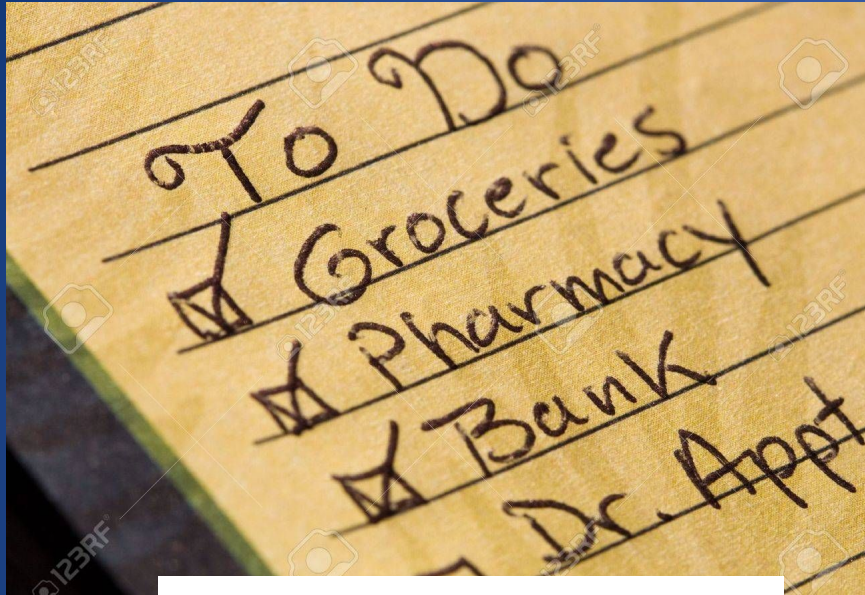
Using an Individual Schedule

- Shows/States specific order of tasks/activities
- <u>Actively</u> used by caregivers/staff during both task/step initiation and at completion of each task/step ("Check your schedule")
- Individual signifies completion of each task/step (check off, cross out, put icon in "Done" section)

Individual Schedules

Professionals Using Visual Schedules

BCBA Erin Sterling discusses using a visual schedule with an adult to increase independence as well as reduce problem behavior

Change Happens!

Staff can explicitly teach about "*change*" by planning changes before an unexpected change occurs. For example, you can teach this process by placing a "CHANGE" card on top of a scheduled activity and placing a new schedule card on the schedule.

More about "Change"

When beginning to teach this process it is helpful to remove a non-preferred item from the schedule and replace it with a preferred activity.

Next, change from a neutral activity to another neutral activity.

Finally, remove a preferred activity and replace it with a non-preferred activity.

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How to Use A Visual Schedule with CHANGE

https://youtu.be/Jr56IhhZ4Os?t=3

A Visual Work System Answers
Four Questions Visually
For The Individual

1. What Work?

2. How Much Work?

3. When Is It Finished?

4. What Happens Next?

Types of Work Systems

- Left to Right - Finished Box: This is the simplest level system

- Matching: This requires the individual to match color, shape, letter or number from a work list to a work box

- Written System: This could include specific written directions or a checklist

Left to Right Work System

"To Do" Work starts on the Left

Finished work is placed in finished bin on right

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Matching System:
Materials on left

Icon matched to appropriate bin, work completed, bin returned to shelf

Work System for Snack Set Up

Using a Group Schedule

- Stationary in the environment (home, day program etc.)
- States specific order of activities
- <u>Actively</u> used by staff to indicate completion and transition to new activities
- A consistent signal should be used to indicate change in activities or change to schedule

Whole House/Program Schedule

First - Then
A Visual Schedule System

- Basic visual system
- Identifies the order of activities
- May be used in a variety of settings at several levels
- Great tool for helping with transitions
- Great to show a preferred activity is following a non-preferred activity
- A timer can be attached to the system if needed

First → Then

wash hands → eat at table
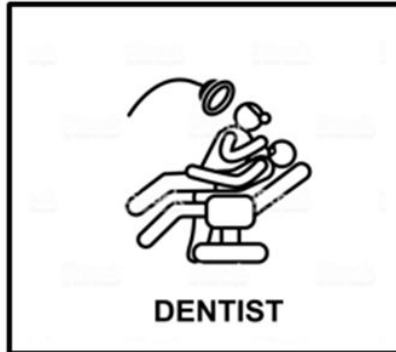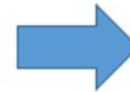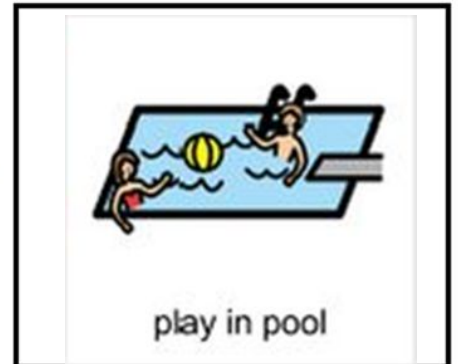
FIRST → THEN

DENTIST → play in pool

First-Then-Then Board

Activity: Match VS to Situation

- Tom needs support to transition between activities

- Jorge is late to program on a daily basis. He is easily distracted by other people's toiletries and requires frequent redirection.

- Lonnie is able to do each step of his toileting routine, but is dependent on verbal prompts to move through the sequence.

A. Visual Instruction

B. First/Then Schedule

C. Visual Boundaries

Which Visual Support to Use?

The VS Pre-assessment Checklist can help inform your decision

Visual Supports

AFIRM
Autism Focused Intervention Resources & Modules

VS Pre-Assessment Checklist

Learner's Name: Noah_____   **Date:** 4/14/16 ___

Observer: Mr. Adams_____

Directions: Complete the checklists below to determine what category of visual supports to use.

Visual Boundaries

Questions	Yes	No
Is there a safety concern?		X
Does the learner have difficulty staying in one place?		X
Does the learner with ASD know what s/he is to be working on in an area?		X
Does the learner with ASD ever leave a location because of frustration?		X
Does the learner with ASD ever have difficulty with entering others' work space and/or making use of others' work or personal materials?		X

If you answer yes to any of these questions, **visual boundaries** might be helpful to use with the learner with ASD.

Visual Cues
Describe the activity/event/concept: Completing a math assignment

Questions	Yes	No
Does the activity, event, or concept cause frustration for the learner with ASD?	X	
Does the activity, event, or concept cause anxiety for the learner with ASD?		X
Is adult support required for the learner with ASD to be successful with the activity, event, or concept?	X	
Is the activity, event, or concept difficult for the learner with ASD to understand when only verbal information is provided?	X	

If you answer yes to any of these questions, **visual cues** might be helpful to use with the learner with ASD.

Visual Schedules

Questions	Yes	No
Does the learner with ASD struggle moving from one area to the next?	X	
Does the learner with ASD forget what s/he is asked to do next?	X	
Does the learner with ASD exhibit disruptive/inappropriate behavior when transitioning?		X

If you answer yes to any of these questions, **visual schedules** might be helpful to use with the learner with ASD.

Anecdotal Notes: Noah has a difficulty time transitioning from lunch to math class. He arrives la at math class often. In math class, he becomes frustrated when presented with a math problem during independent work. Mr. Adams has to help him complete the assignment.

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

	Observation	1	2	3	4
	Date				
	Observer's Initials				

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:					
☐ 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)					
3.2 Determine next steps based on learner progress					

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.

AFIRM Autism Focused Intervention Resources and Modules

Visual Supports   National Professional Development Center on ASD   2015   1

Use the Implementation Checklists to Insure Fidelity Across Implementors/Staff

Use VS Consistently and Across Settings

Be consistent with the use of visual supports.

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

This includes being consistent across settings.

Collect data on use of VS

- Data should be collected on the person's use of the visual support to determine progress.
  - For visual cues and schedules, be sure to include the level of independence during the use.
  - Also, track the various forms/lengths of visual schedules and visual cues that the learner uses.

- For example, a learner who was using objects at the beginning of the year might be able to use a two sequence picture schedule by mid-year.

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Collect Data on Target Behaviors related to use of VS

- Collect data on the person's target behaviors related to the use of the visual support.

- This may include time on-task (or off-task), the amount of work completed, the use of appropriate behaviors, and how much support (e.g. prompts or reminders) the person needs.

- This information will be helpful in determining the effectiveness of the visual support as it relates to the target behavior and goal.

Visual Supports Monitoring Activity

- https://afirm.fpg.unc.edu/visual-supports/lesson-4-monitor-vs/monitoring-activity

Determine Next Steps Based on Progress

- Work with members of the person's support team to determine if sufficient progress is being made based upon the data collected.

- If the person is showing progress, then continue to use visual supports. New types of visual supports could be used to address new target skills or behaviors for the learner.

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Check-In Time

What data should be collected when using visual supports?

A. Level of independence

B. Amount of work completed

C. Time on-task

D. All of the above

Thin Prompts When Criterion Met

- Initially, the person might require prompts to use the visual support correctly. By thinning prompts quickly, you will teach the person to not rely on prompts but rather use the visual supports independently.

- Remember, the purpose of visual supports is to increase independence.

Multiple Choice: When should you reduce or fade prompts

A. Jorge makes it to day program on time for 2 weeks in a row. He has not gotten into the toiletry baskets of any of his peers in those two weeks.

B. Tom wanders away during transitions and does not attend to the first/then board.

C. Lonnie is able to do 4/5 steps in his toileting routine independently.

D. A and C

Not showing progress?

- 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 person?
  - Are visual boundaries clear? Are additional boundaries needed?
  - Is the form of representation (e.g. object, photographs, words) appropriate for the person?
  - Is the length of the visual support appropriate for the person?
  - Do staff/caregivers need to provide more support for the person in using the visual support?

Self Study
Using the Autism Focused Intervention Resources and Modules (AFIRM)

Ready-Made Visual Supports

- A collection of pre-made downloadable and printable visual supports are available through the following link:

https://drive.google.com/drive/folders/1O0-5Vn1HzrutTC_tR64bYWy-uBrgJ0aI?usp=sharing

Post-Test

What have you learned....