Evidence-based Practices to Support Inclusion for Students with ASD

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What are Evidence -Based Practices?

An **evidence-based practice (EBP)** is any practice that relies on scientific evidence for guidance and decision-making. Practices that are not evidence-based may rely on tradition, intuition, or other unproven methods.

Evidence Based Practice and Abbreviated Definition	Evidence by Developmental Domain and Age (years)																																						
	Social			Comm.			Beh.			Joint Attn.			Play			Cog.			School Ready			Acad.			Motor			Adapt.			Voc.			Mental Health							
	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22
Antecedent Based Intervention (ABI): *Arrangement of events preceding an interfering behavior to prevent or reduce occurrence*																																							
Cognitive Behavioral Intervention (CBI): *Instruction on cognitive processes leading to changes in behavior*																																							
Differential Reinforcement of Alternative, Incompatible, or Other Behavior (DRA/I/O): *Consequences provided for desired behaviors that reduce the occurrence of interfering behaviors*																																							
Discrete Trial Teaching (DTT): *Instructional process of repeated trials, consisting of instruction, response, and consequence*																																							
Exercise (ECE): *Antecedent based physical exertion to reduce interfering behaviors or increase appropriate behaviors*																																							
Extinction (EXT): *Removal of existing reinforcement in order to reduce an interfering behavior*																																							
Functional Behavior Assessment (FBA): *Systematic protocol designed to identify contingencies that maintain an interfering behavior*																																							
Functional Communication Training (FCT): *Replacement of an interfering behavior with communication that accomplishes the same function*																																							
Modeling (MD): *Demonstration of a desired behavior that results in skill acquisition through learner imitation*																																							
Naturalistic Intervention (NI): *Intervention strategies that occur with the learner's typical settings and routines*																																							
Parent-Implemented Intervention (PII): *Parent delivered intervention learned through a structured parent training program*																																							
Peer-Mediated Instruction and Intervention (PMII): *Typically developing peers are taught strategies that increase social learning opportunities in natural environments*																																							
Picture Exchange Communication System (PECS): *Systematic 6 phase protocol teaching the exchange of pictures between communicative partners*																																							

CAPTAINs and AFIRM

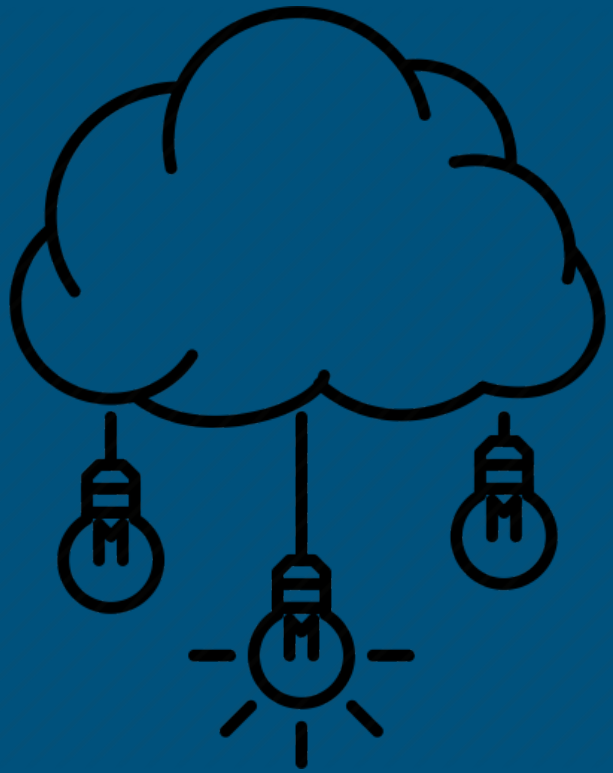
http://captain.ca.gov/

https://afirm.fpg.unc.edu/afirm-modules

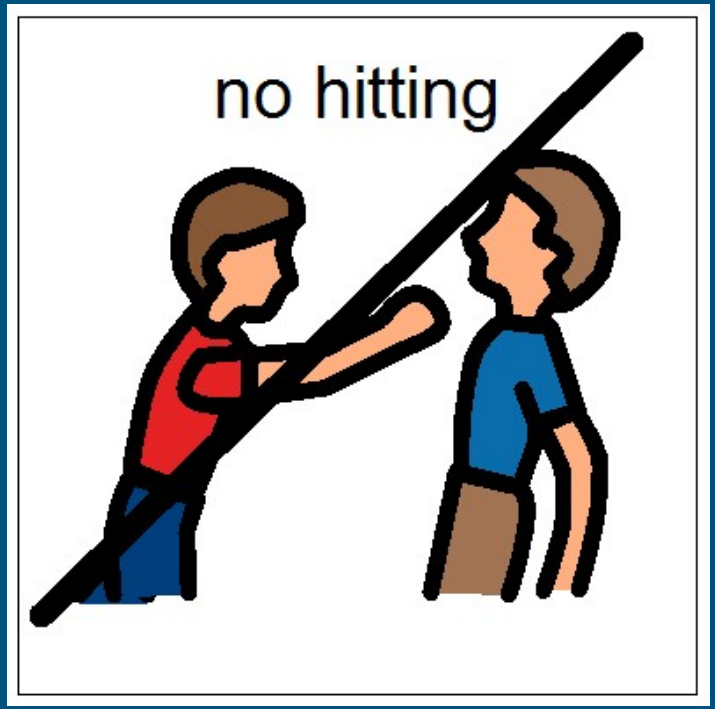
What EBPs will we discuss?

- Reinforcement
- Prompting
- Antecedent-based Interventions
- Task Analysis
- Visual Supports
- Video Modeling

What are the Barriers for Success in Inclusion?



We need to make sure that we are teaching the skills and behaviors that need to be learned AND focusing on the behaviors that need to be unlearned.



Common Education Deficits for Students with ASD

- Self Regulation
- Organization
- Prioritizing
- Attention
- Listening
- Follow Through
- Responsibility
- Comprehension
- On task behaviors
- Understanding Directions
- Understanding Expectations
- Motivation
- Peer Friendships
- Accurate Recall
- Sorting
- Starting a task
- Completing a task
- Developing a plan
- Evaluating Choices and Consequences
- Sequencing
- Taking Perspective

Adapted from Kandis Lighhall's presentation on inclusion

Interfering Behaviors That May Be Observed in Class

- Noncompliance
- Disruptive Behaviors
- Refusal to Comply
- Aggression
- Tantruming
- Incomplete Work
- Not starting an Assignment
- Prompt Dependency
- Rigid or Inflexible responses
- Loud or Excessive Talking

Can’t Do vs. Won’t Do

- Skill Deficit - Can’t- We need to teach
- Motivational Deficit - Won’t- we need to re-evaluate reinforcement inventories and principles of reinforcement.
- What are we reinforcing?
- How are we reinforcing?

How you implement EBPs will vary depending on your assessment of motivational vs. skill deficits

Reinforcement

Should be present in any type of intervention selected to support inclusion.

Reinforcement describes the relationship between learner behavior and a consequence that follows the behavior. The relationship between the learner's use of a skill/behavior and the consequence is only reinforcing if the consequence increases the likelihood the learner performs the skill or behavior.

Principles of Reinforcement

- Appropriate: size of reward is comparable to size of task
- Immediate: reward given immediately after desired behavior
- Consistent: same amount of reward for same amount of expected behavior across all people and environment
- Contingent: reward given for behavior you requested

Self-Check Questions for Reinforcement

- Am I allowing this student to select his own reinforcers?
- Am I giving him a variety of options to choose from when conducting a preference assessment?
- Is this student motivated by the items they are earning?
- Am I making myself reinforcing?

Differential Reinforcement

- The implementation of only reinforcing appropriate responses and applying extinction to all other responses.
- Extinction- the discontinuing the reinforcement of a previously reinforced behavior

- Involves two separate behaviors

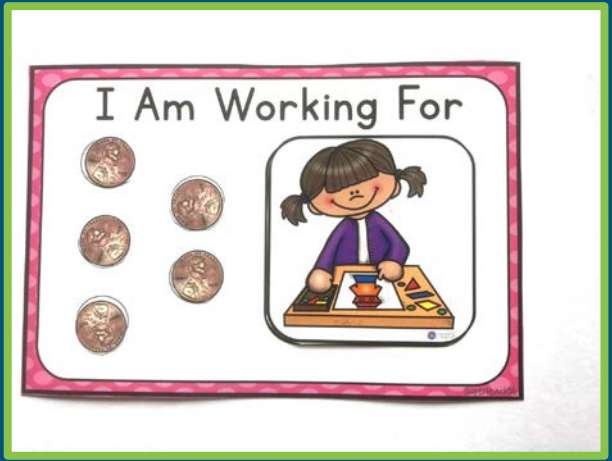
Planned Ignoring

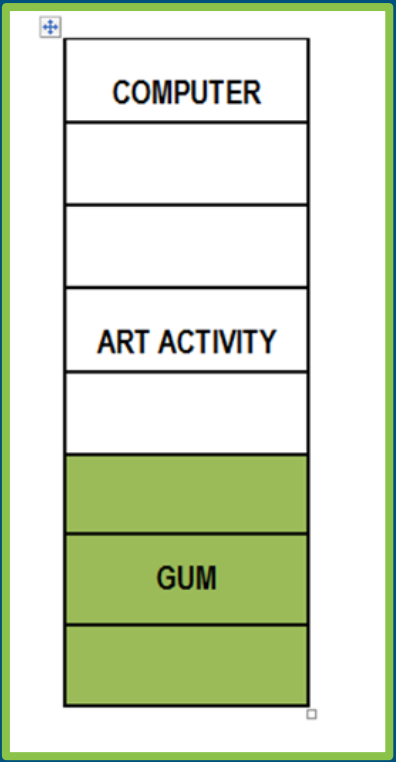
- Does not mean ignore the child.
- Eye contact/Peripheral vision
- Body proximity
- Maintaining safety
- Gestures
- No Names
- Don’t name the behavior

***Any change in our behavior as a result of the learners behavior can be attention. Extinction Burst- behavior will get worse before it gets better

How does Reinforcement Apply to Academics?

- Increased Work Completion
- Helps Clarify Expectations
- Gives Student Feedback on Accuracy and Effort





Antecedent -Based Intervention

- Antecedent-based intervention (ABI) are a collection of practices in which environmental modifications are used to change the conditions in the setting the prompt a learner with ASD to engage in an interfering behavior.
- The goal of ABI is to identify the conditions in the setting that are reinforcing the interfering behaviors and then to modify the environment or activity so that the environmental conditions no longer elicit the interfering behavior.
- ABI strategies often are used in conjunction with other evidence-based practices such as functional communication training (FCT), extinction, and reinforcement.

Common ABI procedures

Common ABI procedures include 1) using highly preferred activities/items to increase interest level, 2) changing the schedule/routine, 3) implementing pre-activity interventions (e.g., providing a warning about the next activity, providing information about schedule changes), 4) offering choices, 5) altering the manner in which instruction is provided, and 6) enriching the environment so that learners with ASD have access to sensory stimuli that serve the same function as the interfering behavior (e.g., clay to play with during class, toys/objects that require motor manipulation).

https://csesa.fpg.unc.edu/resources/antecedent_-based-interventions-abi

ABI examples

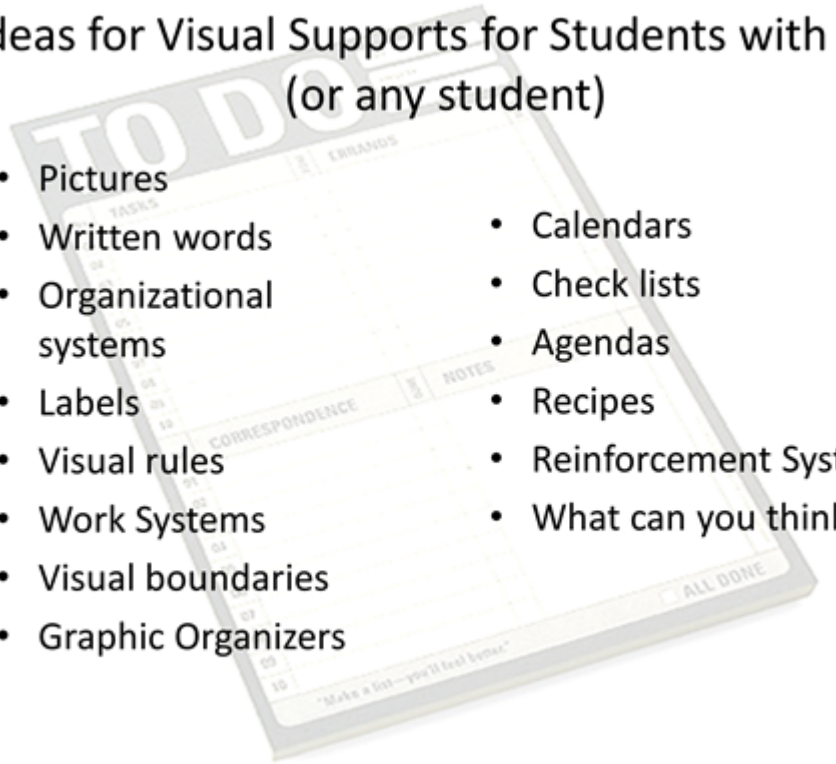
Johnny hates to write (executive functioning skills!!!). He is especially resistant in the morning and after lunch. What is an example of an ABI you could use?

Visual Supports

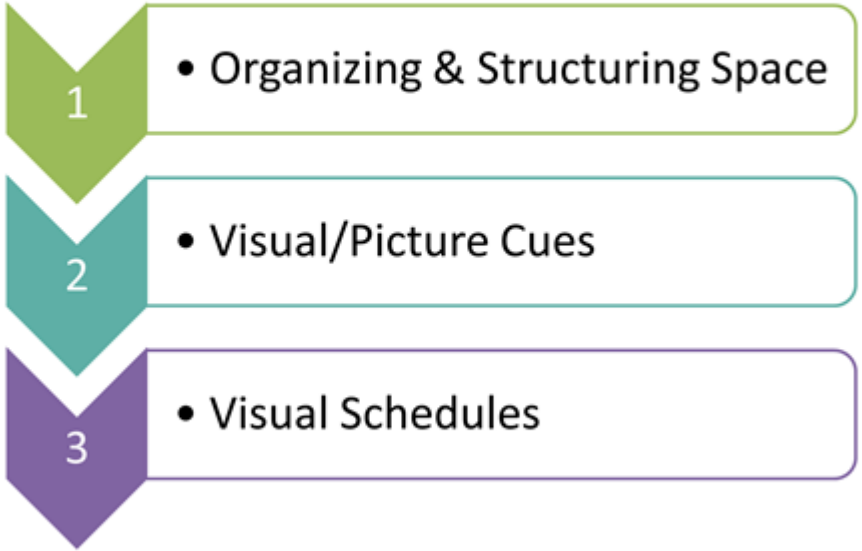
Identify the Visual Supports

Ideas for Visual Supports for Students with ASD (or any student)

- Pictures
- Written words
- Organizational systems
- Labels
- Visual rules
- Work Systems
- Visual boundaries
- Graphic Organizers
- Calendars
- Check lists
- Agendas
- Recipes
- Reinforcement Systems
- What can you think of?



Visual Supports at School



Organizing and Structuring Space

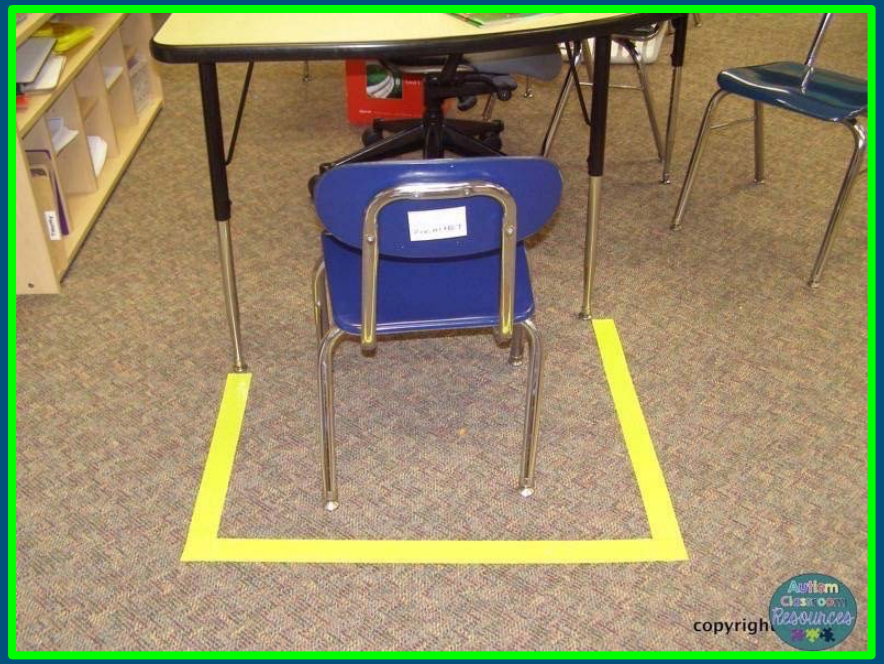
The way an environment is organized and laid out is one of the most important factors for success in the classroom!

Visual/Physical Boundaries and Structure

Define each area with clear visual boundaries

No visual boundaries

Visual boundaries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Autism
Classroom
Resources

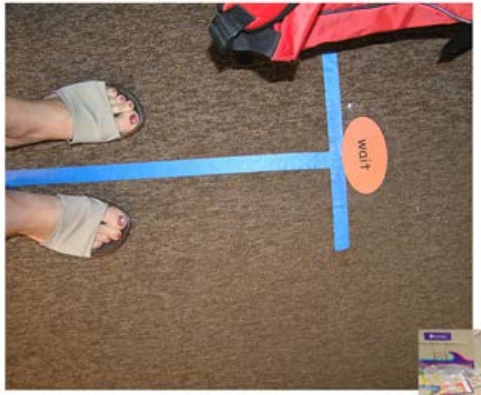
Visual or Picture Cues

- Does the activity, event, or concept cause frustration for the learner?
- Does the activity, event, or concept cause anxiety for the learner?
- Is a great deal of adult support required for the learner to be successful with the activity, event, or concept?
- Is the activity, event, or concept difficult for the learner to understand when only verbal information is provided?

Visual or Picture Cues

- Objects
- Photographs
- Drawing or picture symbol
- Written words
- Phases or sentences
- Combination of above

Rules and Procedures



Visual Structure for Lining Up

A “Visual” Timer

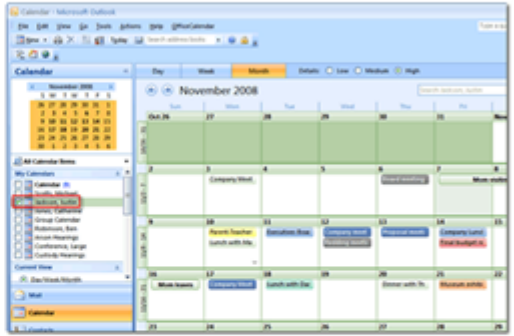
- A visual timer graphically shows you how much time is left.

Provide Both
Visual Instructions and Checklists

☑	Researching State of New York
	Identify Sub-Topics
	Go to library
	Find 2-3 Books w/subtopic info
	Photocopy pages w/subtopic info
	Go Online
	Download 2-3 articles on each topic
	Highlight important info from articles and photocopied chapters
Reviewed By:	

Visual Schedules

- Provide structure and organization to activities
- Used by MOST people to assist with managing time.




Visual Schedule
Craft
GLUE
Next
Bible Story
Now
Walk in Line
Music
Bathroom
Playground
Snack
Play with Toys
Go Home

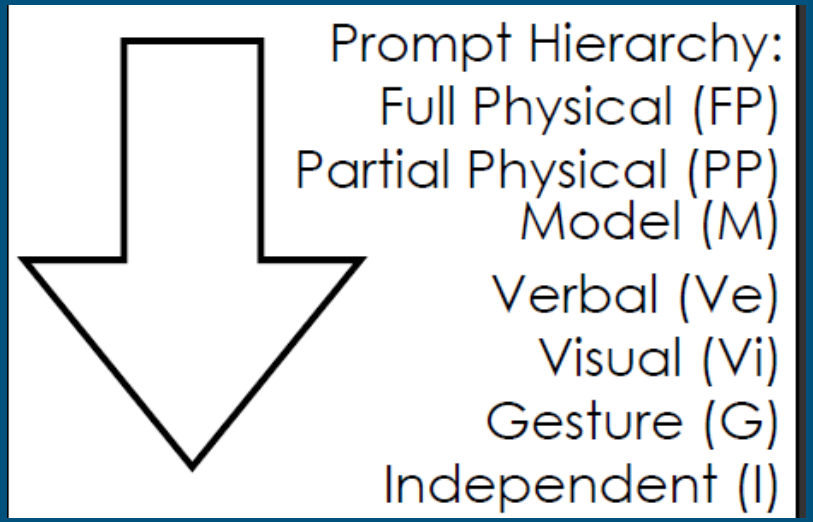

SCHEDULE
Arrival
Centers
Circle
Centers
Recess
Snack
Break
Centers
Lunch
Music
Centers
Goodbye
PE
speech

Activities with visual to use in the classroom

- Lanyards (name tags)
- Walk-it-to-know it

Prompting

- Prompting includes any help given to a learner that assists the learner in using a specific skill or behavior.
- Sometimes referred to as an errorless learning method, prompting reduces incorrect responding as learners acquire new skills.
- Prompting is often combined with other EBPs
- Behavior challenges often increase with issues such as prompt dependency, over prompting and lack of fade plans with prompting procedures.



The Verbal Prompt

Benefits of Prompting

Teaches New Skills

Increase communication, social, academic, adaptive and play skills.

Increase on-task behavior, generalization of skills

If used correctly, increases student independence

How can you fade prompts?

Maria blurts out regularly in class. The teacher continues to model the expected behavior of raises her hand. Maria will often respond by raising her hand after she has seen the teacher give the prompt. How can the teacher fade this prompt to build Maria’s independence to raise her hand before speaking?

Guidelines to prompt fading

- Plan it from the start
- Communication, data, least to most or most to least?
- Be consistent- train, collaborate, communicate
- Take your time
- If errors occur go back to most successful level of prompting

Fading Prompts

- Proximity
- Time Delay
- Least intrusive prompt
- Decreases current prompt (example- hand half raised)

Task Analysis

Student: Liam				Prompt Hierarchy: Full Physical (FP) Partial Physical (PP) Model (M) Verbal (Ve) Visual (Vi) Gesture (G) Independent (I)				
Skill: Washing Laundry Cue:								
Date/Initials								
Get laundry basket								
Take basket to laundry area								
Open the washer								
Put in all the clothes								
Line up the arrows								
Open the detergent								
Put in detergent pod in								
Close the washer								
Hit the power bottom								
Turn the knob to normal								
Press start button								
Teaching Strategy:								

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

Video Modeling

Video modeling is a mode of teaching that uses video recording and display equipment to provide a visual model of the targeted behavior or skill

Basic Video Modeling: Recording someone besides the learner engaging in the target behavior or skill (i.e., models), then the video is viewed by the learner at a later time

Video Self Modeling: Recording the learner displaying the target skill or behavior and reviewing it later

Point-of-View Video Modeling: The target behavior or skill is recorded from the perspective of the learner

Basic Steps for Implementation

1. Target the skill
2. Identify needed equipment
3. Planning (Script and/or Task Analysis)
4. Make the video
5. Plan for using video for instruction
6. Show video
7. Monitor student progress on skill
8. Troubleshoot
9. Fade the video


HOW TO:
WASH YOUR HANDS
POINT OF VIEW VIDEO
MODELING
COR