Evidence Based Practice Training

Prompting

CSESA

The Center on Secondary Education for
Students with Autism Spectrum Disorders

Objectives

- Become aware of 27 EBPs identified for learners with ASD
- Describe key steps to using prompting
  - How to prepare for implementation
  - How to implement
  - How to assess progress
- Identify key pitfalls and ways to avoid them
- Identify ways to learn more about how to implement prompting

What are EBPs?

Focused interventions that:

- Produce specific behavioral and developmental outcomes for a learner

- Have been demonstrated as effective in applied research literature

- Can be successfully implemented in educational settings

(Odom, Colett-Klingenberg, Rogers, & Hatton, 2010)

Evidence – Based Practices (2014)

Antecedent-based interventions

Cognitive behavioral intervention*

Differential reinforcement

Discrete trial training

Exercise

Extinction

Functional behavior assessment

Functional communication training

Modeling

Naturalistic interventions

Parent-implemented intervention

Peer-mediated instruction/intervention

Picture Exchange Communication System™

Pivotal response training

Prompting

Reinforcement

Response interruption/redirection

Scripting

Self-management

Social narratives

Social skills training

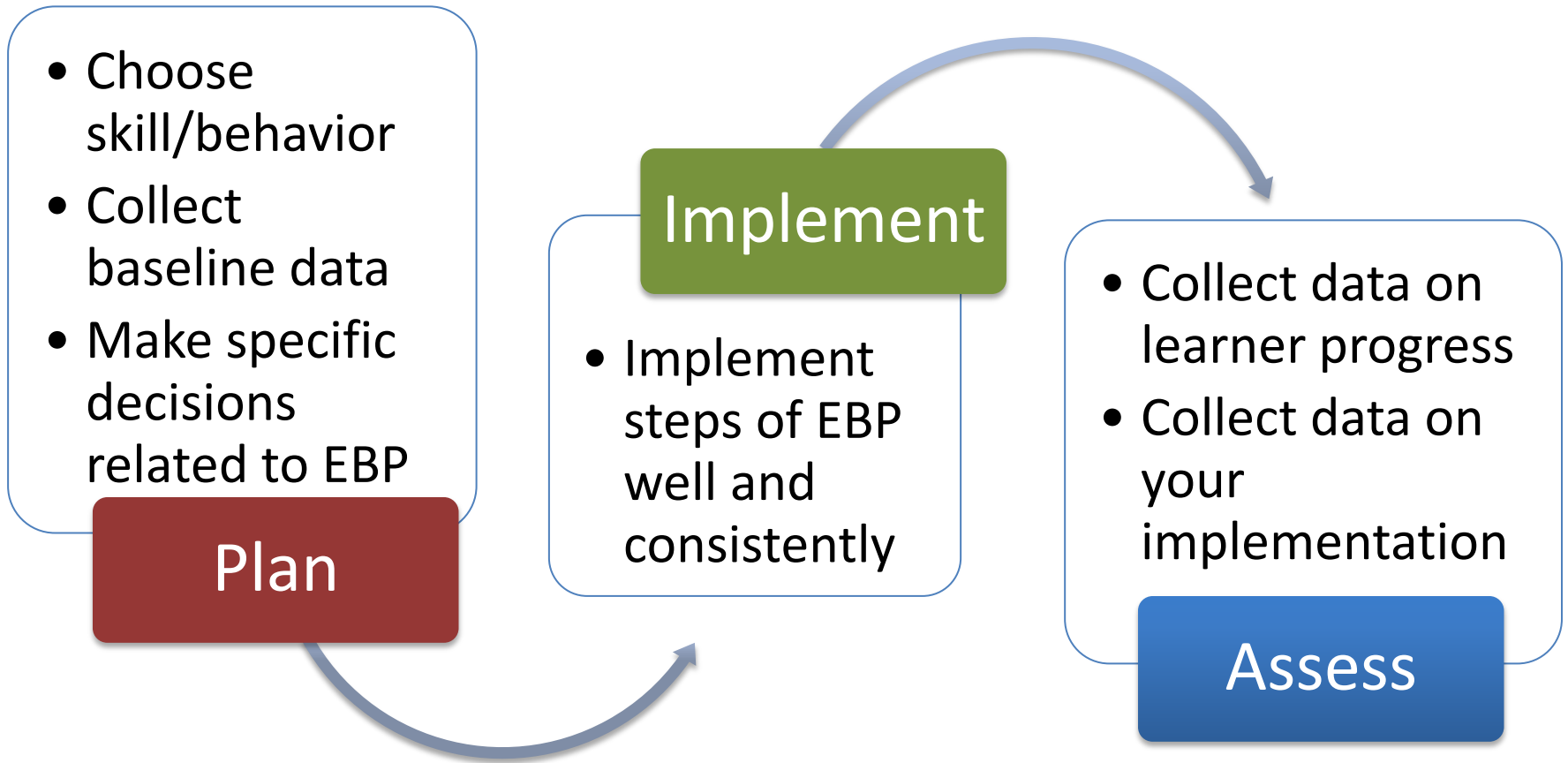Structured play groups

Task analysis

Technology-aided intervention/instruction

Time delay

Video modeling

Visual supports

For All EBPs

Plan
- Choose skill/behavior
- Collect baseline data
- Make specific decisions related to EBP

Implement
- Implement steps of EBP well and consistently

Assess
- Collect data on learner progress
- Collect data on your implementation

Evidence Based Practices:

Prompting

Who uses Prompting?

Prompting can be used by

- Special education teachers
- General education teachers
- Peer tutors
- Prompting can be used during
  - 1:1 activities
  - small group instruction
 - ongoing routines and activities

Common Pitfalls

- Verbal verbal verbal
- Physical physical physical
- No wait time
- Inappropriate prompts
- Not catching errors
- Response to learner not immediate
- Prompts not faded effectively

What is prompting?

- **An evidence-based teaching method that:**
  - Prompting procedures include any help given to learners that assist them in using a specific skill. Capitalizes on observational learning.
  - Often used in conjunction with other evidence-based practices including time delay and reinforcement.
  - Generally given by an adult or peer *before or as a learner attempts to use a skill.*

Definition of Prompting & Prompts

- Prompting Procedures –

  ➢ Any help given to learners to assist them in using a specific skill

- Prompts –

  ➢ Specific forms of assists given before or as the learner attempts to use a skill
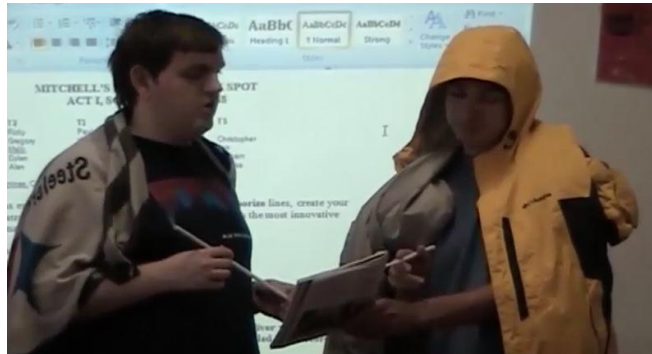
Why use Prompting?

- An efficient and effective way to provide instruction to learners with ASD that maximizes their success and increases their generalized use of target skills
  - errorless learning
    - Procedures designed to reduce incorrect responding as learners acquire new skills

Target Skills Addressed

Prompting can be used to teach a **variety** of skills, including:

- seeking information, pointing to objects,
- remaining in "on-task" behavior, various academic skills, communication,
- social skills, and motor tasks

Types of Prompts

- Physical – hand-over-hand
- Gestural – gesture signal
- Model – show what to do
- Visual – pictorial/written cue
- Verbal – spoken words/signs

- Controlling prompt – one that results in learner doing behavior correctly

Verbal Prompts

Description:

Teacher/practitioner verbally gives a hint, a clue, or a direction.

Example:

When teaching Jill to read the word "agitated," the teacher gave a hint (e.g., "It starts with A") or some other clue (e.g., "It means unhappy.").

Gestural Prompts

Description:

Teacher/practitioner makes some kind of gesture to prompt the learner to use the target skill.

Example:

When teaching Jeff how to solve algebraic equations, the teacher pointed to the box of manipulatives for Jeff.

For another learner, she gestured toward the book drop in the library when teaching the learner library procedures.

Full Model Prompts

Description:

Teacher/practitioner models the target skill for the learner with ASD. Full model prompts can be verbal if the skill being taught is verbal, or they can be motor responses, if the skill being taught involves moving a body part.

Full Model Prompts

Examples:

When teaching Bill to fill out a voting ballot, the teacher wrote her name on her ballot and said, "Write your name here, Bill."

When teaching a Samantha how to multiply, the teacher said, "Count with me, Samantha. 5-10-15."

Partial Model Prompt

Description:

Teacher/practitioner models only part of the target skill for the learner with ASD – either verbal or motor.

Example:

When teaching Joshua how to request assistance during class, the teacher reached her hand in the direction of Joshua's AAC device.

Full Physical Prompts

Description:

Teacher/practitioner leads a learner through the task by providing full physical assistance (e.g., hand-over-hand) to ensure correct use of the target skill.

Example:

When teaching Shelly how to use the computer, the teacher took Shelly's hand and guided her through the process.

Partial Physical Prompt

Description:

Teacher/practitioner provides minimal physical assistance to help the learner use the target skill correctly. Taps, nudges, and light pushes are used.

Example:

When teaching Henry how to determine main idea during reading, the teacher nudged Henry's elbow so that she selected a response.

Visual Prompts

Description:

Pictures of events that provide learners with information about how to use the target skill or behavior.

Example:

Task analysis checklist, transition picture card. The teacher used a transition picture card to warn Holly of upcoming transitions.

Prompting Procedures

- Least-to-most (aka system of least prompts)
  - Sequence from the least amount of help to the most amount of help

- Simultaneous
  - Cue and controlling prompt delivered simultaneously

- Graduated Guidance
  - Gradually removing prompt during teaching

3 Components of Prompting Procedures

- All of these prompting procedures contain three main components:
  - the **antecedent** (i.e., target stimulus *and* cue/task direction) that tells the learner to use the target skill,
  - the **target skill** (i.e., learner response), and
  - the **consequence** (i.e., feedback/reinforcement provided by teachers/practitioners).

Least-to-Most

- Learner may be using target skill, but not consistently

- Learner may be in regression

- For:
  - Discrete skills – single response of short duration
  - Chained skills – series of behaviors put together to form complex skill
  - Response classes - groups of responses with same function
    - Imitating peers
    - Having conversations with peers
    - Initiating social interactions

Least-to-Most: Steps for Preparing for the Intervention

Step 1. Identifying the Target Skill/Behavior

Step 2. Identifying the Target Stimulus

Step 3. Selecting Cues or Task Directions

Step 4. Selecting Reinforcers

Step 5. Identifying Activities and Times for Teaching

Least-to-Most: Steps for Preparing for the Intervention

Step 6. Selecting the Number of Levels in the Hierarchy

Step 7. Selecting the Types of Prompts to Be Used

Step 8. Sequencing Prompts from Least-to-Most Assistance

Step 9. Determining the Length of the Response Interval

Least-to-Most: Steps for Implementing the Intervention

Step 1. Establishing Learner Attention, Delivering the Stimulus, and Providing the Cue

Step 2. Waiting for the Learner to Respond

Step 3. Responding to Learners' Attempts

Step 4. Monitoring Learner Outcomes

Simultaneous Prompting

- Used to teach learners with ASD new skills
- Discrete skills
- Chained skills

Simultaneous Prompting: Steps for Preparing for the Intervention

Step 1. Identifying the Target Skill/Behavior

Step 2. Selecting the Target Stimulus and Cue

Step 3. Selecting a Controlling Prompt

Step 4. Selecting Reinforcers

Step 5. Determining the Response Interval

Step 6. Identifying Activities and Times for Teaching

Simultaneous Prompting: Steps for Implementing the Intervention

Step 1. Establishing Learner Attention, Delivering the Stimulus, and Providing the Cue

Step 2. Implementing the Prompt

Step 3. Monitoring Learner Progress

Graduated Guidance

- Easily embedded within ongoing routines and activities

- Only chained behaviors
    - Putting on coat to go outside
    - Changing car oil
    - Completing an art project

Graduated Guidance: Steps for Preparing for the Intervention

1. *Selecting and Describing the Target Skill/Behavior*
2. *Identifying the Target Stimulus*
3. *Selecting the Cue or Task Direction*
4. *Selecting Reinforcers*
5. *Identifying the Controlling Prompt*
6. *Determining the Length of the Response Interval*
7. *Specifying Prompt Fading Procedures*
8. *Identifying Activities and Times for Teaching*

Graduated Guidance: Steps for Implementing the Intervention

Step 1. Implementing Graduated Guidance

Step 2. Monitoring Learner Progress

Collecting Data – Discrete Skills

Trial	Target stimulus	Level 1	Level 2	Level 3	Level 4
1	Bottle of glue	0	0	-	+
2	Jar	0	-	0	+
3	Box	0	0	-	+
Summary Data		0 correct	0 correct	0 correct	3 correct

Table 1. Example Data Collection Sheet for Discrete Skills
Key: + = correct; - = incorrect; 0 = no response   Adapted from Wolery, Ault, & Doyle (1992)

Collecting Data – Chained Skills

Trial 1 Washing dishes	Level 1 (Independent)	Level 2 (Verbal)	Level 3 (Model)	Level 4 (Physical)
1. Turn on water	0	-	0	+
2. Add soap to running water	0	0	0	+
3. Put dishes in sink	0	-	-	+
4. Wash dishes with sponge	0	0	-	+
Trial 2 Washing dishes	Level 1 (Independent)	Level 2 (Verbal)	Level 3 (Model)	Level 4 (Physical)
1. Turn on water	0	0	-	+
2. Add soap to running water	0	0	-	+
3. Put dishes in sink	0	0	-	+
4. Wash dishes with sponge	-	+	+	+
Summary Data Correct	0 correct	1 correct	1 correct	8 correct
	0%	12.5%	12.5%	100%
Incorrect	1 incorrect	2 incorrect	5 incorrect	0 incorrect
	12.5%	25%	62.5%	0%
No response	7 no response	5 no response	5 no response	0 no response
	87.5%	62.5%	62.5%	0%

Adapted from Wolery, Ault, & Doyle (1992)

Common Problems and Solutions

Problem	Solution
Learner consistently makes errors at the final level in the prompting hierarchy.	The teacher selects a new, more controlling prompt that will ensure that the learner uses the skill correctly.
Learner consistently makes errors at an intermediate level in the prompting hierarchy.	The teacher (a) increases the number of levels in the hierarchy (use an additional prompt), (b) selects a new type of prompt, or (c) examines the difficulty of the task.
Learner consistently waits for a prompt instead of attempting to respond to the independent level after several sessions of instruction.	The teacher differentially reinforces prompted and unprompted correct responses **OR** eliminates reinforcement for prompted correct responses.
Learner consistently fails to respond at any level, including the final level.	The teacher finds a more powerful reinforcer.

CAUTION!

Avoid PROMPT DEPENDENCE!

The Key to Effective Prompting

- Prompts should focus learner's attention on the discriminative stimulus, not distract from it

- Prompts should be as weak as possible

- Unplanned prompts should be avoided

- Prompts should be faded as quickly as possible
  - prompt dependency occurs as result of using prompts when not needed

To Learn More…

Find additional information on Prompting and other Evidence Based Practices within the following resources.

Evidence-based Practice Resources

- EBP literature review http://autismpdc.fpg.unc.edu/sites/autismpdc.fpg.unc.edu/files/2014-EBP-Report.pdf
- EBP Case Studies for High School
- EBP Briefs (http://autismpdc.fpg.unc.edu)
  - Overview
  - Evidence Base
  - Steps for Implementing
  - Implementation Checklist
  - Sample Data Collection Forms (optional)
- Autism Internet Modules (http://www.autisminternetmodules.org)

Example: Step-by-Step Directions

Step 1. Identifying the Target Skill/Behavior
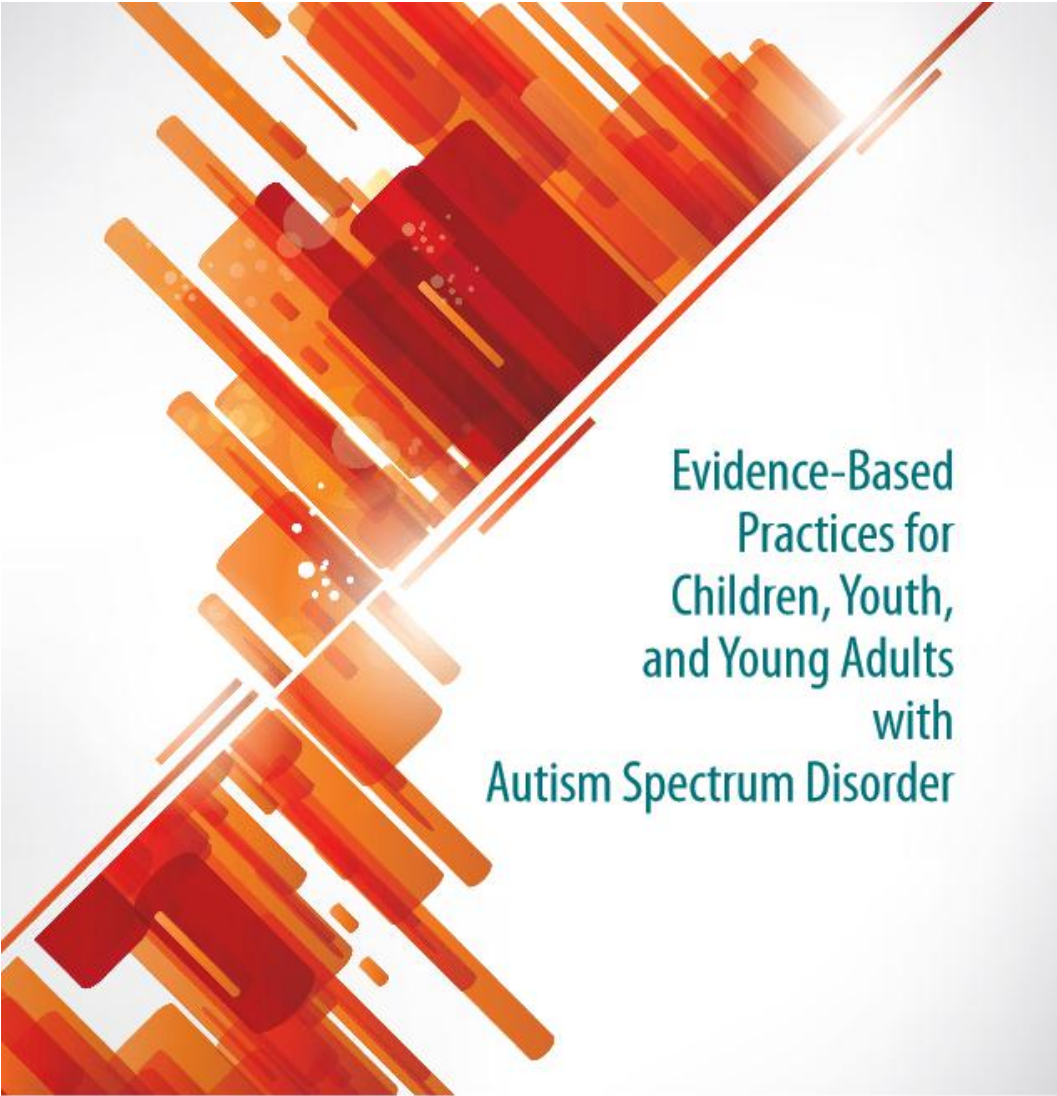
In Step 1, teachers and other practitioners define the target behavior or skill that they want a learner with ASD to acquire.

1. Teacher/practitioners define the target behavior in terms that are observable and measurable.

For example, "Manuel will increase his social skills" is not an observable or measurable definition of a target behavior. On the other hand, the definition, "John will initiate (by speaking, giving a toy, or touching) three interactions with peers" allows teachers/practitioners to observe directly the target behavior and measure the learner's progress.

2. Teachers/practitioners identify the target behavior as being either:

   a. *a discrete task*. A discrete task is one that requires a single response and is of relatively short duration. Examples include pointing to objects, identifying letters, and answering questions.

   b. *a chained task*. Chained tasks are those requiring a number of individual behaviors that are sequenced together to form a more complex skill. Chained tasks require teachers and practitioners to determine (1) the number and sequence of steps in the chain, (2) whether to teach one step at a time, or (3) whether to teach all steps at the same time. Examples of chained tasks include washing hands, getting dressed, putting on coat, cooking, and transitioning from one class to the next. In most cases, teach the chain in the sequence that is usually used by others who are competent at completing the task.

EBP Literature Review

Evidence-Based Practices for Children, Youth, and Young Adults with Autism Spectrum Disorder

Connie Wong, Samuel L. Odom,
Kara Hume, Ann W. Cox, Angel Fettig,
Suzanne Kucharczyk, Matthew E. Brock,
Joshua B. Plavnick, Veronica P. Fleury, and Tia R. Schultz

Autism Evidence-Based Practice Review Group
Frank Porter Graham Child Development Institute
University of North Carolina at Chapel Hill

EBP Case Studies for High School

http://csesa.fpg.unc.edu/resources/evidence-based-practices-case-studies

Example: Implementation Checklist

Skills below can be implemented by a practitioner, parent, or other team member

Planning (Steps 1 – 9)										
	Observation	1	2	3	4	5	6	7	8
	Date								
	Observer's Initials								
Step 1. Identifying the Target Skill/Behavior						Score**				
1. Define the target behavior in terms that are observable and measurable.										
2. Identify the target behavior as being either:										
a. a discrete task or b. a chained task.										

**Scoring Key: 2 = implemented; 1 = partially implemented; 0 = did not implement; NA = not applicable_

Autism Internet Modules

- http://www.autisminternetmodules.org/

Action Plan

What will I do tomorrow:

1.

2.

3.

Questions