

# Evidence-based Practices for Children and Youth with Autism in School Settings

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# Questions Answered In This Presentation

- **What is autism?**
- **How do we measure program quality?**
- **What are the features of an effective school-based model?**
- **How do we chose goals for children and youth with autism?**
- **What are the EBPs for programs for children and youth with autism**
- **How do we select EBPs that support the goals for children and youth with autism?**



# View This Presentation Through a Cultural Lens



- All of these practices developed in the United States
- Adaptations require more than a language translation
- International adaptations
  - Sweden
  - China

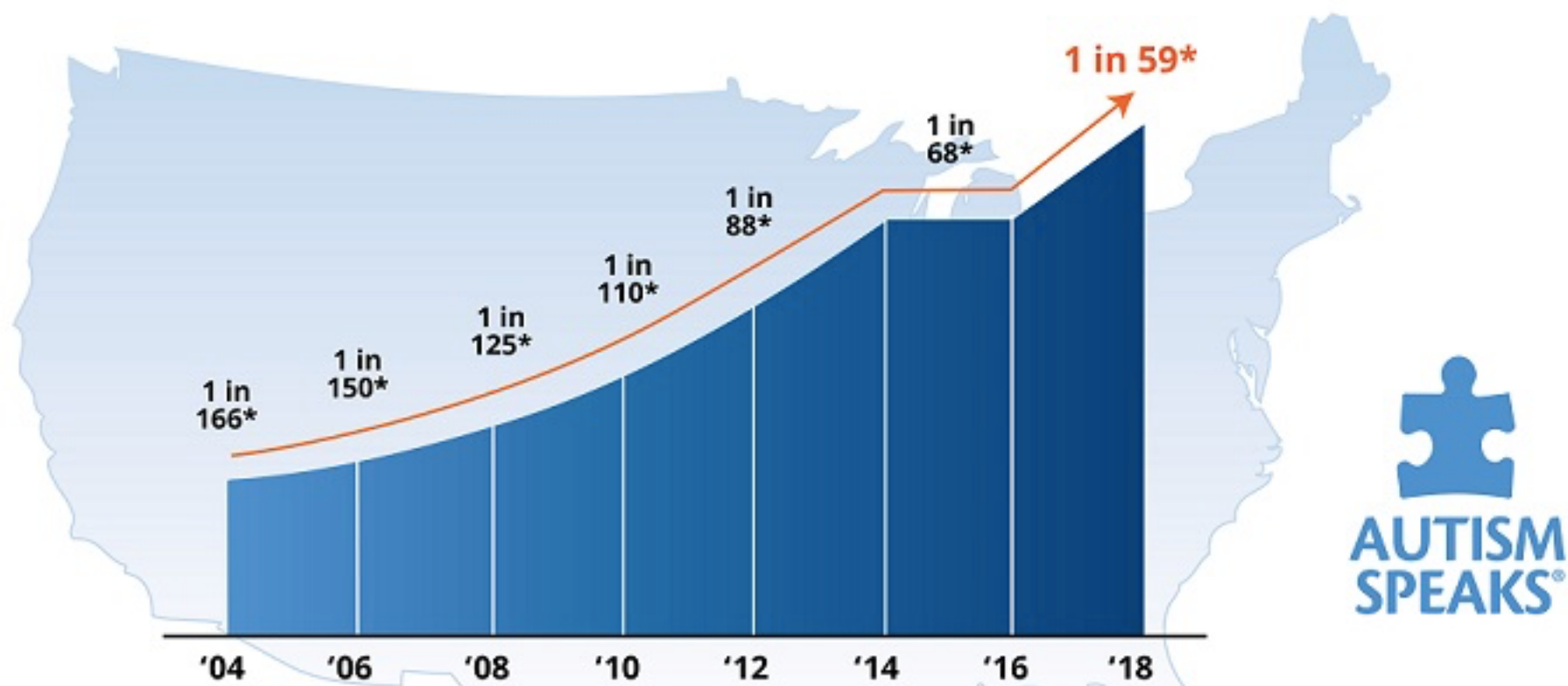
# Using a Common Language: What do we mean by Autism?

- DSM 5 -- Autism Spectrum Disorder and ICD-10—Autistic Disorder
  - Social communication
  - Restrictive and repetitive behavior
  - Onset before three years of age
- Mostly but not all boys (5:1)
- Associated difficulties
  - Social anxiety
  - Depression
  - Seizures





## Estimated Autism Prevalence 2018



\* Centers for Disease Control and Prevention (CDC) prevalence estimates are for 4 years prior to the report date (e.g. 2018 figures are from 2014)



# So What Does ASD Look Like Early On

- [http://www.youtube.com/watch?feature=player\\_embedded&v=QMyJoOlqoQI](http://www.youtube.com/watch?feature=player_embedded&v=QMyJoOlqoQI)

# Red flags of autism in infants



## ***Impairment in Social Interaction***

- Lack of appropriate eye gaze
- Lack of warm, joyful expressions
- Lack of sharing interest or enjoyment
- Lack of response to name

## ***Impairment in Communication***

- Lack of showing gestures
- Lack of coordination of nonverbal communication
- Unusual prosody (little variation in pitch, odd intonation, irregular rhythm, unusual voice quality)

## ***Repetitive Behaviors and Restricted Interests***

- Repetitive movements with objects
- Repetitive movements or posturing of body, arms, hands, fingers

# Preschool Children

- Limited communication
- Toilet training
- Limited symbolic play
- Avoid social interactions, especially with peer
- Stereotypic and repetitive behavior
- Sometimes sleep issues

# School-Age Children

- Social skills
  - Initiating and responding
  - Social routines
- Emotional and Self Organization
  - Awareness of feeling/emotions
  - Strategies for dealing with anxiety
- Communication
  - Critical importance of establishing a communication system
- Personal-adaptive behavior
  - Self care skills

# High School and Adolescence

- More complex organizational and social environment
- Mental health issues
  - Social anxiety
  - Depression
- Puberty and sexuality
- Transition



Since 2007, the National Professional Development Center on Autism Spectrum Disorder (NPDC) has worked to develop free professional resources for teachers, therapists, and technical assistance providers who work with individuals with ASD. Resources include detailed information on how to plan, implement, and monitor specific evidence-based practices.

## NPDC NEWS & UPDATES

Advances for Autism Challenge

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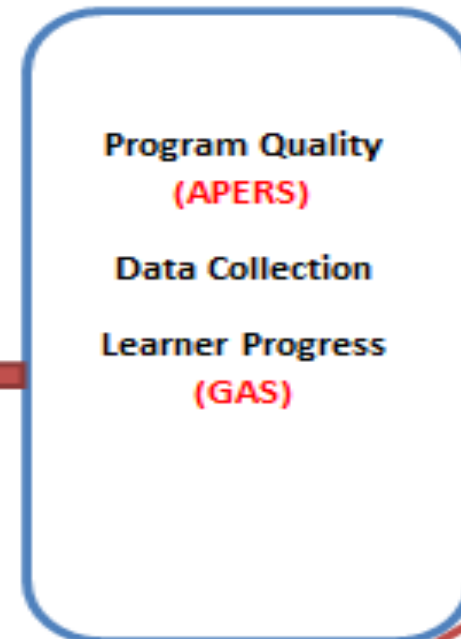
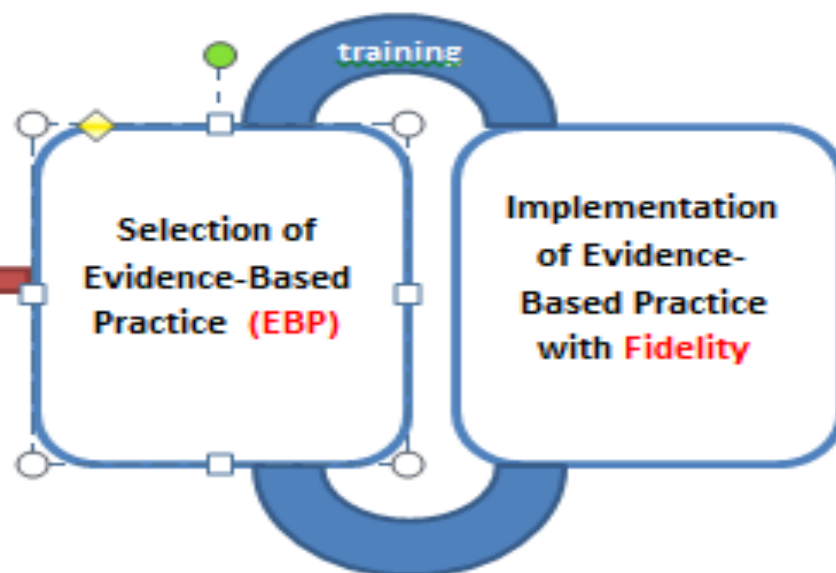
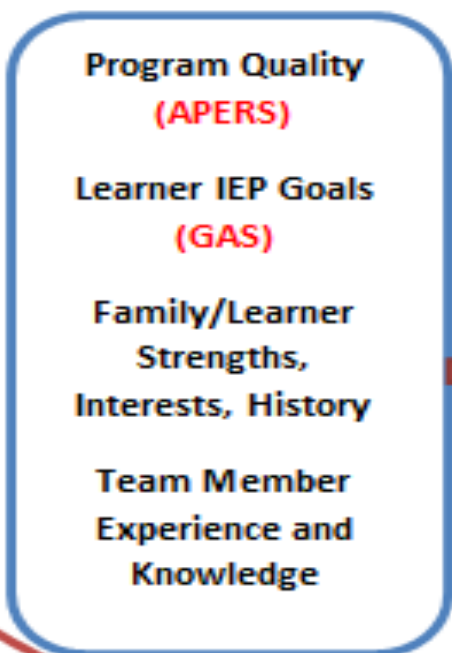
## NCAEP



NCAEP is updating the NPDC systematic review on evidence-based practices from



# NPDC Model



**COACHING**

# Essential Foundational Feature: Forming and A-Team

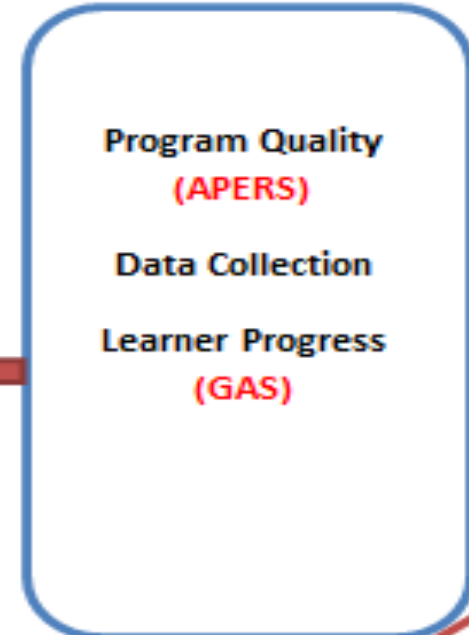
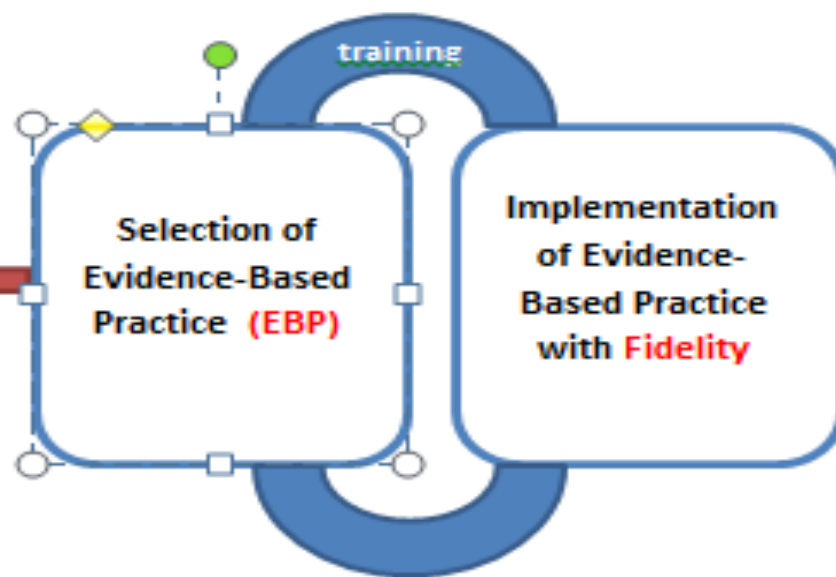
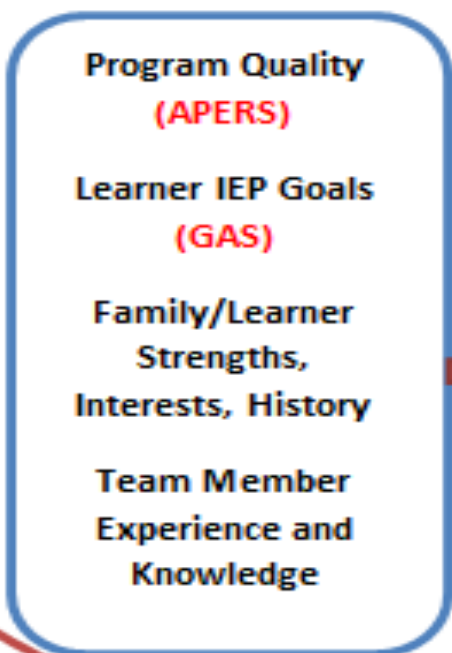
- **Special Education Teacher**
- **General Education Teacher**
- **Speech Pathologist**
- **School Psychologist**
- **Administrator (Principal, Assistant Principal)**



# What Can We Accomplish Through Teamwork

- <https://www.youtube.com/watch?v=K2v895MJWyY>

# NPDC Model



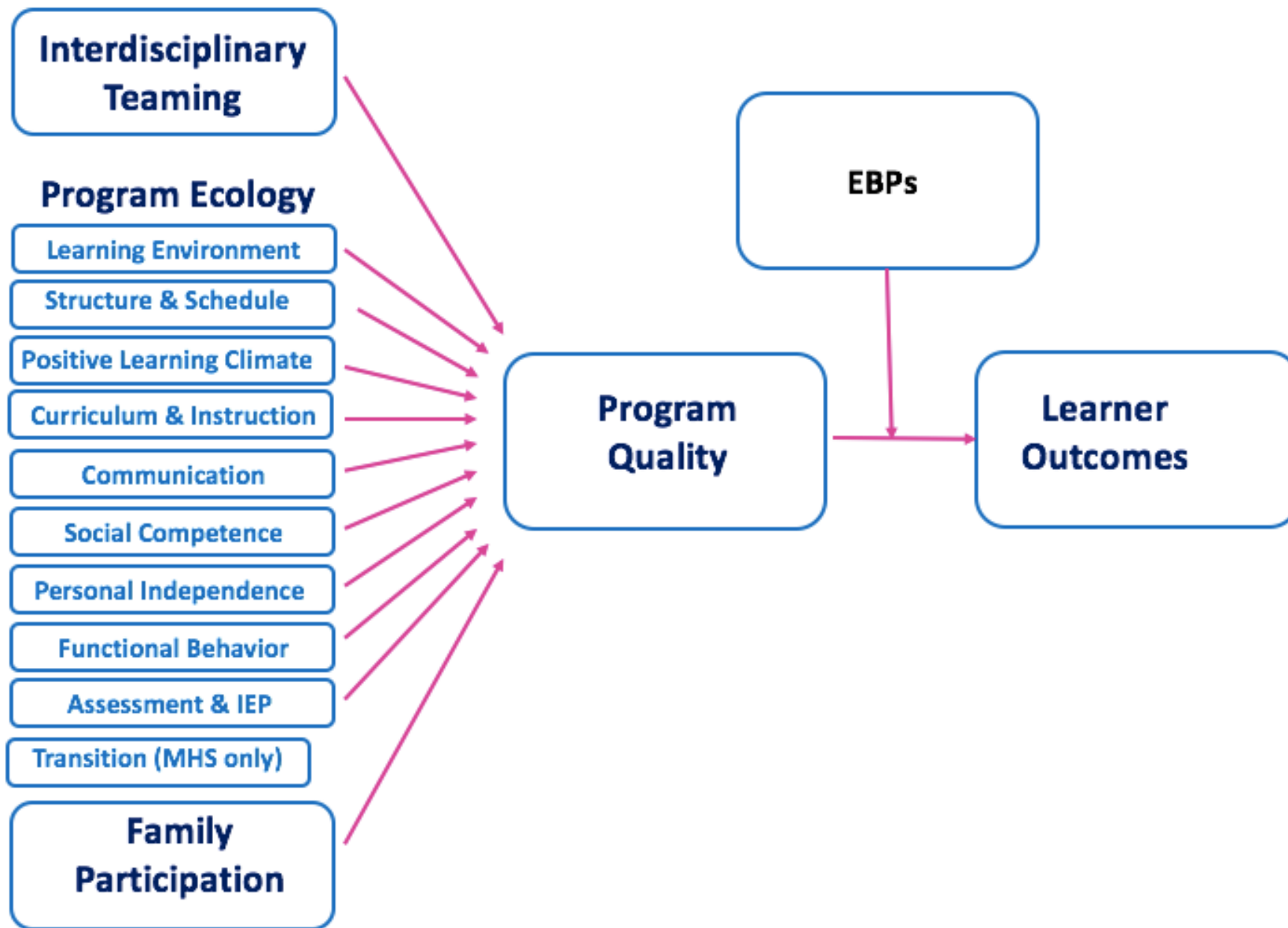
**COACHING**

# Assessment

- **Assessment of the program environment**
- **Assessment of the child**
- **Development of goals from the assessment information**

# Preparing the Context: Building a Foundation of Quality







# Autism Program Environment Rating Scale

APERS

# Autism Program Environment Rating Scale: What is it?

- Two versions: Preschool/Elementary and Middle/High School
- APERS-PE: 59 items across 10 domains/subdomains
- Administered by research staff at two time points: Early fall and late spring.
- Yields information that identifies program strengths and areas in need of improvement; measure of change in program quality

# APERS Data Collection

**Observation** – 6 hours (variety of settings at school)

**Interviews** – approx. 7; parents, teachers/team members, administration

**Record Review**- 3 target students, different program types and ages



# Autism Program Environment Rating Scale

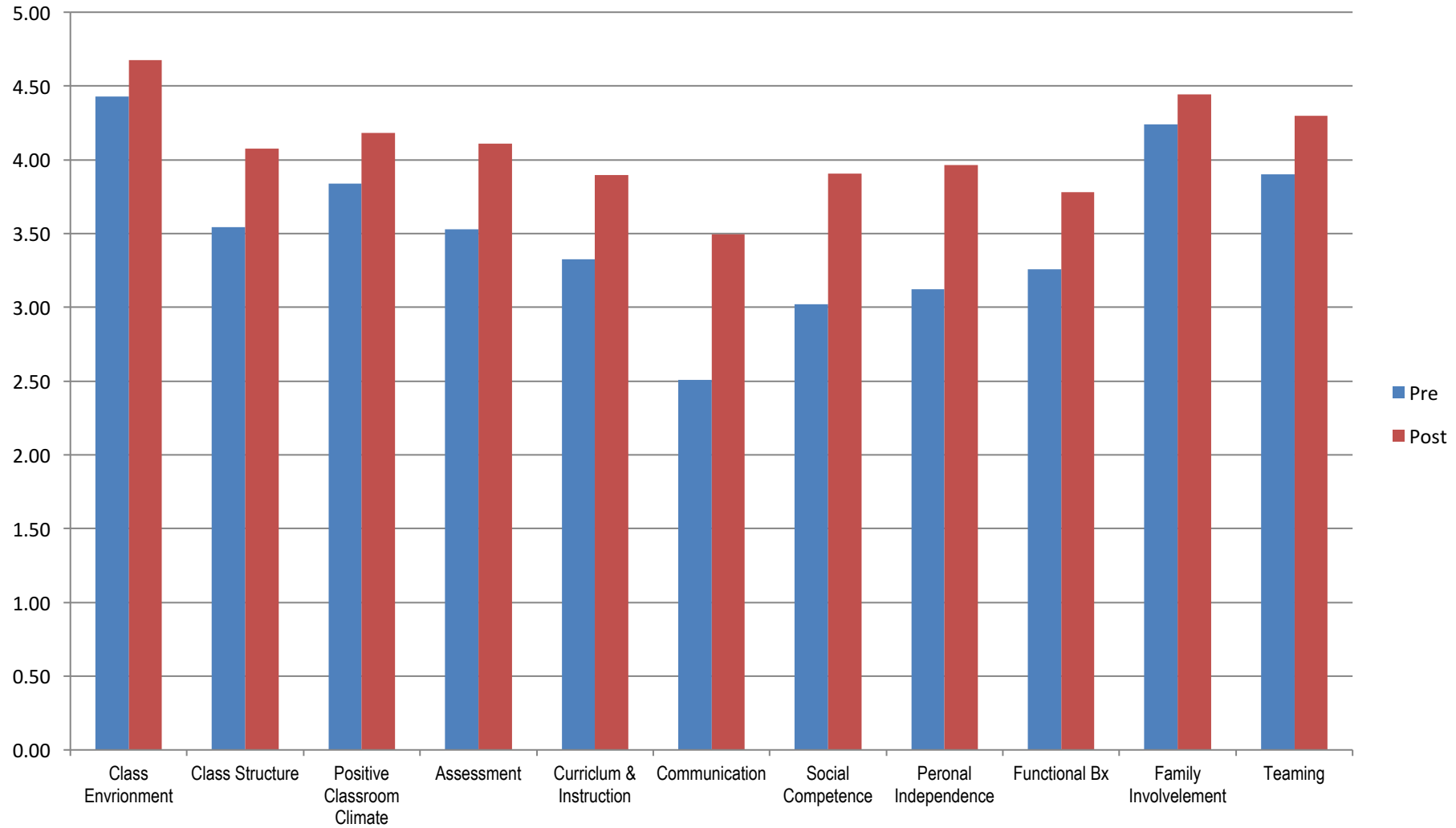


# APERS Sample Item

27*	<ul style="list-style-type: none"><li><input type="checkbox"/> Team members consistently over-prompt students during instruction.</li><li><input type="checkbox"/> Team members consistently under-prompt or use no prompts during instruction.</li><li><input type="checkbox"/> When team members use prompts only one form is used with students (e.g., physical, verbal, gestural).</li></ul>	<ul style="list-style-type: none"><li><input checked="" type="checkbox"/> When needed, key team member uses a clear prompting hierarchy during instruction (e.g., less intensive prompts followed by increased support as needed).</li><li><input type="checkbox"/> When needed, key team member uses a variety of prompts during instruction to meet individual student needs (e.g., physical, verbal, gestural).</li></ul>	<ul style="list-style-type: none"><li><input type="checkbox"/> When needed team members use a clear prompting hierarchy during instruction (e.g., less intensive prompts, graduated guidance, simultaneous instruction).</li><li><input type="checkbox"/> When needed, team members use a variety of prompts to meet individual student needs.</li></ul>
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## Mean APERS Subdomain Scores: Preschool/Elementary Version (n = 22)



# How do we use the results?

- Share the results as a profile of the school program with A team
- Discuss and identify recommendations for improvement
- Help identify resources/training for improvement
- Provide technical assistance and coaching to team and teachers



## To Use In Your Program: APERS Self-Assessment

- Self-assessment design to give formative feedback to improve your program
- Read over items completely before rating
- Complete self-assessment as a team
- Come to consensus on items where there is disagreement
- Use self-assessment to develop an action plan

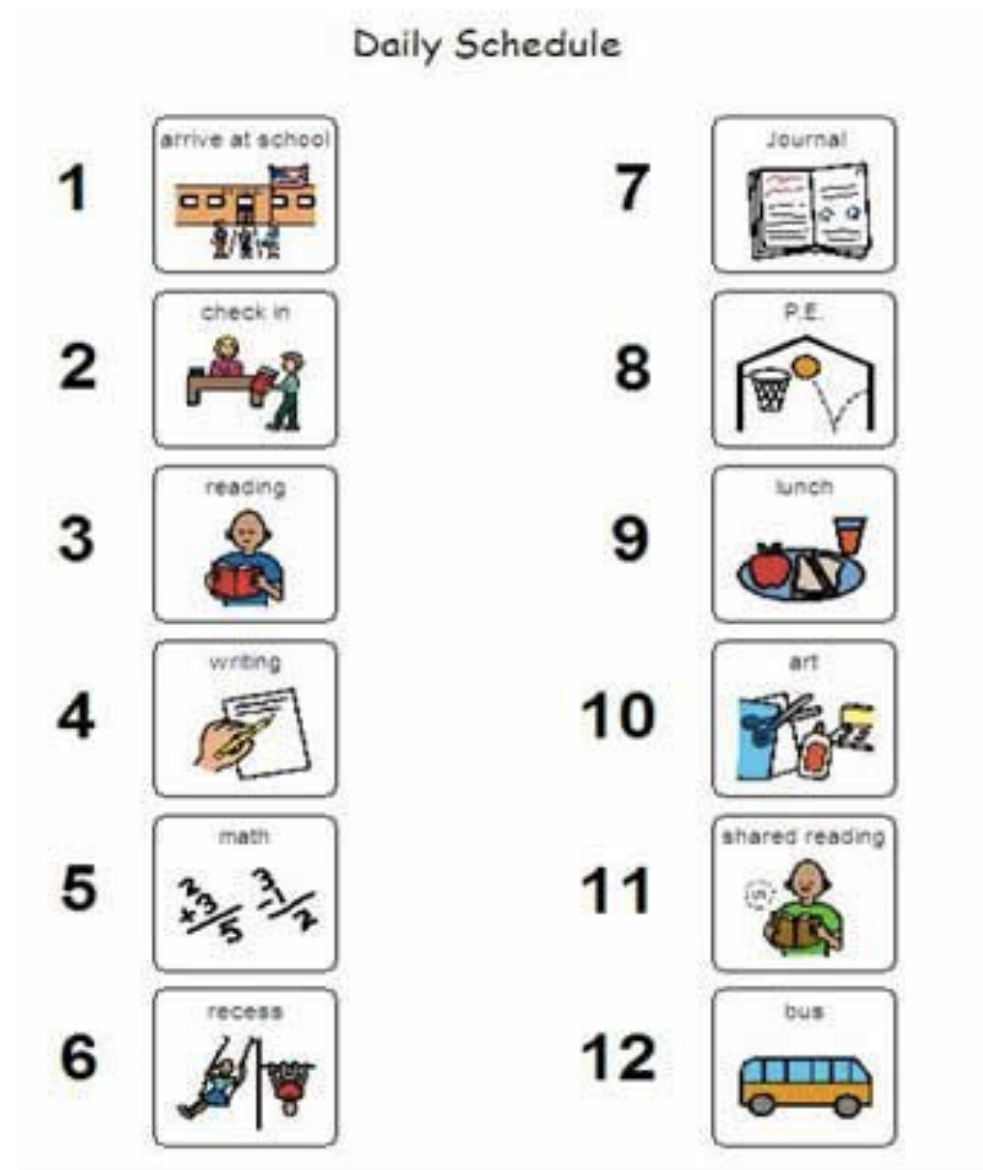
# Elements of a High Quality Classroom: Learning Environment

- **Distribution of team members across the classroom/setting**
- **Students access personal space and materials**
- **Physical structure or boundaries**



# Elements of a High Quality Classroom: Learning Environment

- **Written or visual schedules**
- **Students prepared for**
  - **Transitions**
  - **Changes in routines**
  - **Unstructured periods of time (e.g., what to do while waiting in lunch line)**





# ACTIVITY

# SCHEDULE

## Monday

9:00 - 9:30  
Hello, Sunscreen, Bathroom, Change



9:30 - 10:30  
Surf, Swim, Change Board, Change

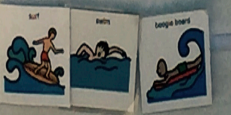


## Tuesday

10:30 - 10:45  
Shak, Sunscreen, Bathroom

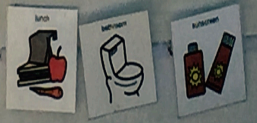


10:45 - 12:00  
Surf, Swim, Change Board, Change



## Wednesday

12:00 - 12:30  
Lunch, Bathroom, Sunscreen



## Thursday

12:30 - 1:30  
Surf, Swim, Change Board, Change



1:30 - 2:00  
Bathroom, Get dressed, Goodbye



# Elements of a High Quality Classroom: Positive Learning Climate

- Engage students in positive, respectful, and warm interactions
- Consistently acknowledges students' efforts in an individualized way





# Elements of a High Quality Classroom: Assessment

- **Family members actively involved in child assessment**
- **Data-based instruction drives instructional planning.**
- **Comprehensive assessments for transition**



# Elements of a High Quality Classroom: Curriculum and Instruction

- **Instruction directly targets IEP goals.**
- **Instruction capitalizes on students' strengths and interests.**
- **Activities an appropriate length**
- **Students are positioned to maximize focus on task or person**





# Elements of a High Quality Classroom: Communication

- **Opportunities to communicate with multiple partners**
- **Instructional strategies promote student communication development**
- **Communication systems serve multiple functions (e.g., commenting,) and/or forms (e.g., gesture, verbal)**



# Elements of a High Quality Classroom: Social Competence

- **Activities encourage social interaction with peers and adults**
- **Peer social networks are part of the school's core curriculum**
- **Multiple neurotypical peers serve as peer buddies**



# Elements of a High Quality Classroom: Independence

- **Multiple strategies promote students' personal independence (e.g., picture schedules)**
- **Self-management skills (e.g., recognize their behavior by labeling it, evaluate how they performed, keeping track of assignments)**






# Elements of a High Quality Classroom: Functional Behavior

- **Functional Behavior Assessment**
- **Team members develop and consistently implement a comprehensive intervention plan**

**Which function is it?**

**Johnny is biting Miguel, what is the function of the behavior?**



# Elements of a High Quality Classroom: Family Involvement

- **Regular communication with family members**
- **Provide information that is important and individualized for families**

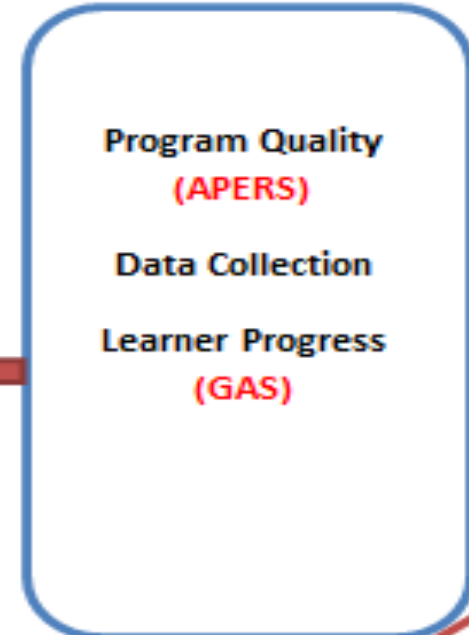
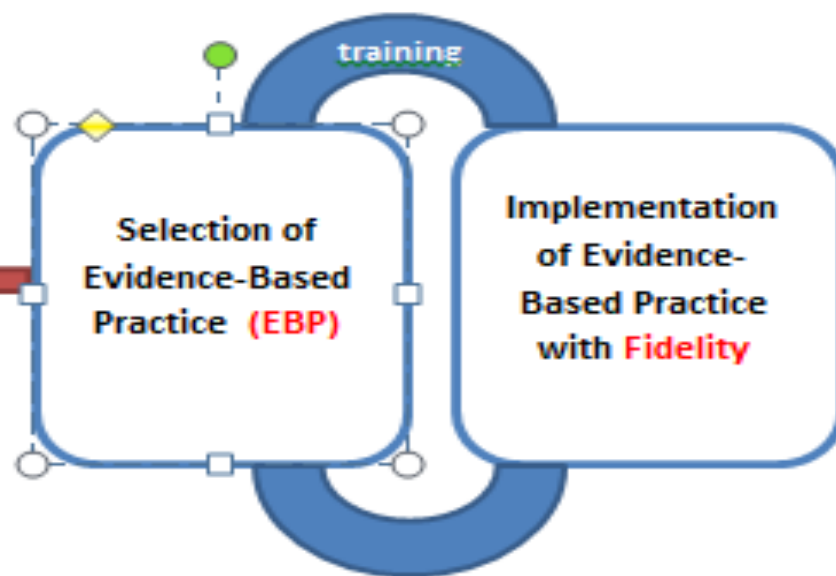
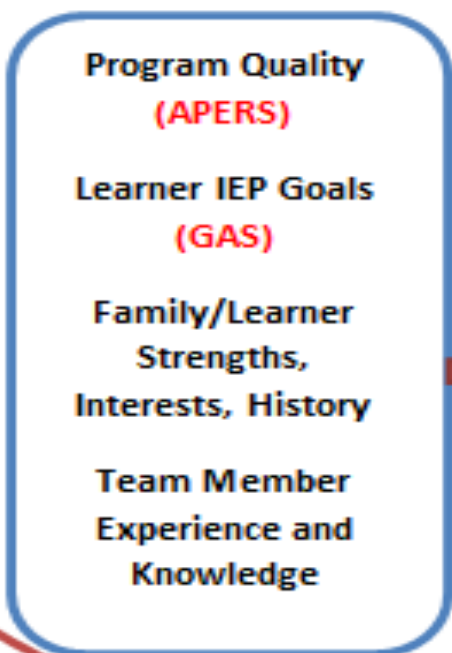


# Elements of a High Quality Classroom: Teaming

- **Regular team meetings**
- **Organization for making decisions**
- **A key team member (e.g., special education teacher, SLP) assigned as leaders**



# NPDC Model

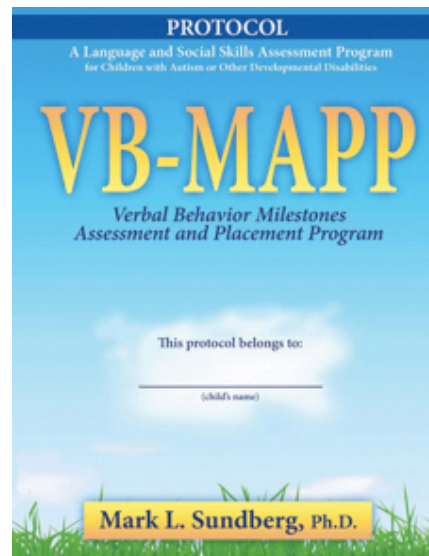
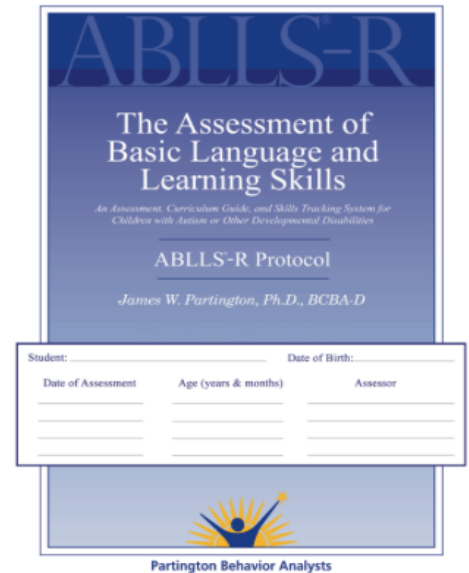
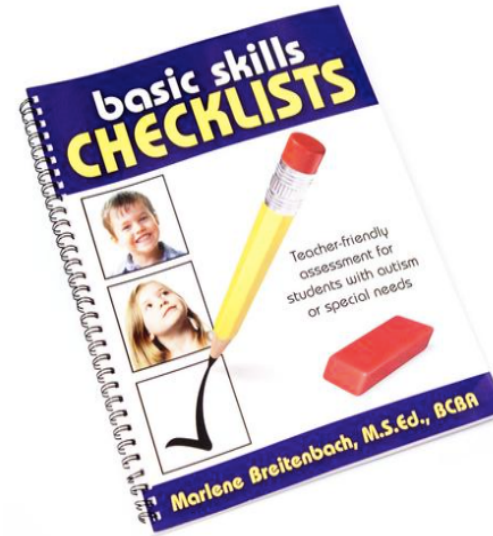


**COACHING**



# Assessing the Child/Youth for Developmental Goals

- Criterion referenced measure that provides information on skills



## Brigance Diagnostic Comprehensive Inventory of Basic Skills

- Primarily used to:
  - Assess elementary and middle school students
    - Prekindergarten to grade nine
  - Assess basic academic skills
- Measurement is:
  - Criterion-referenced
    - Focus on the content rather than comparison to others
- Assessment of 203 skill sequences in:
  - Readiness
  - Speech
  - Listening
  - Reading
  - Spelling
  - Writing
  - Research and study skills
  - Graphs & Maps
  - Math



# Sources of Information for Developing Goals

- **Assessment information**
- **Family priorities**
- **Students goals if they can participate**
- **Skills needed in the current environment**
- **Skills needed in the next and future environments**
- **Need to have clear outcome**



# Components of a Measurable IEP Goal

<u>Antecedent</u>	<u>Behavior</u>	<u>Criteria</u>
<ul style="list-style-type: none"> <li>➤ Setting</li> <li>➤ With whom</li> <li>➤ Supports provided</li> <li>➤ High v. low structure</li> </ul>	<ul style="list-style-type: none"> <li>➤ Specific</li> <li>➤ Observable</li> <li>➤ Measurable</li> </ul>	<ul style="list-style-type: none"> <li>➤ # of times</li> <li>➤ Amount of time</li> <li>➤ Percent</li> <li>➤ Consistency</li> <li>➤ Data collection method</li> </ul>
<p><b><i>“When this event occurs,</i></b></p>	<p><b><i>the student will do this behavior(s),</i></b></p>	<p><b><i>at this rate or level of proficiency.”</i></b></p>

# EXAMPLE: ANDREW

Which goal is a highly measurable goal?

## EXAMPLE 1:

Andrew will be more social with his peers.

## EXAMPLE 2:

During a peer network activity with visual scripts, Andrew will initiate conversations with at least 2 peers, 4 out of 5 opportunities.



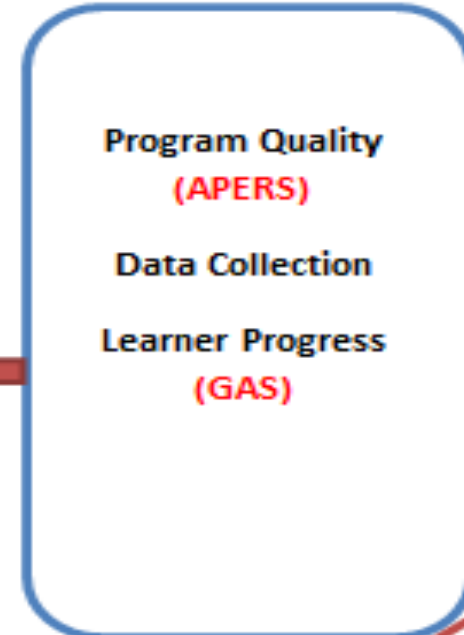
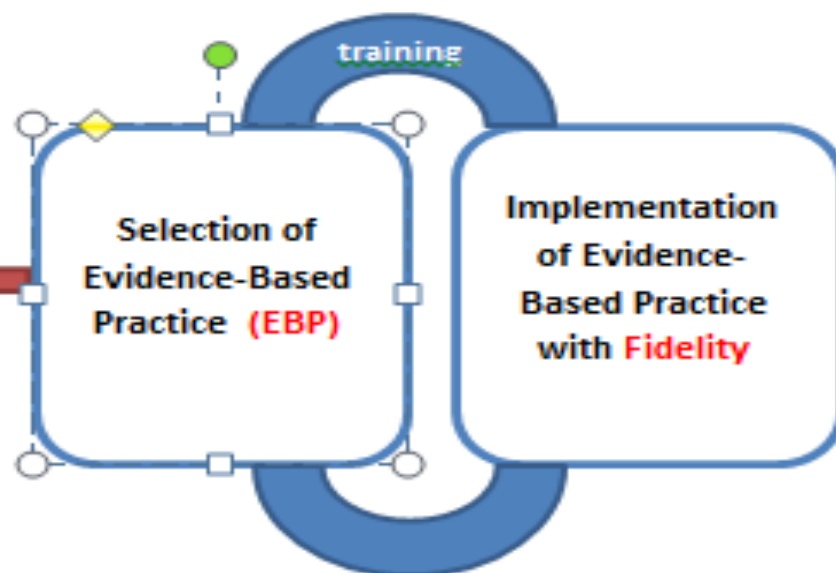
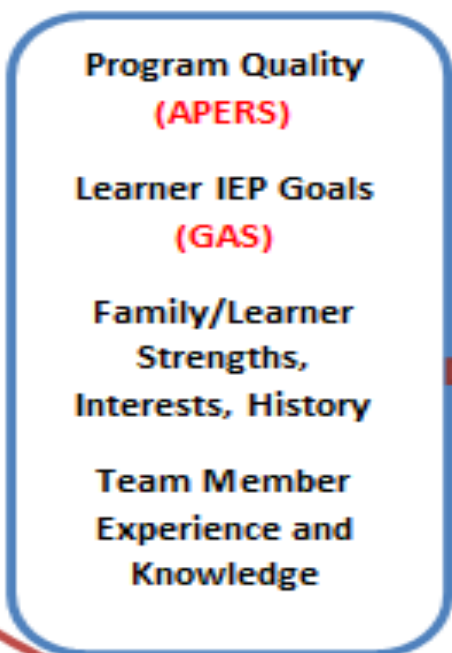
# A Highly Measurable Goal

<b>Antecedent</b>	<b>Behavior</b>	<b>Criteria</b>
During a peer network activity with visual scripts,	Andrew will initiate conversations with at least 2 peers,	4 out of 5 opportunities.

# Example of Observable and Measurable Goals

- At the beginning of class, Chen will turn in his homework when assigned 100% of the time for three days in a row.
- At lunch, Ling-Ling will make four statement to peers, 75%% of the time for one school week.
- During class academic activities, Martin will follow two-step directions from the teacher 80% of the time for three days in a row.

# NPDC Model



**COACHING**

# From Goals to EBP

Selecting and Using

Evidence-based Practices

# What are EBPs?

Focused interventions that:

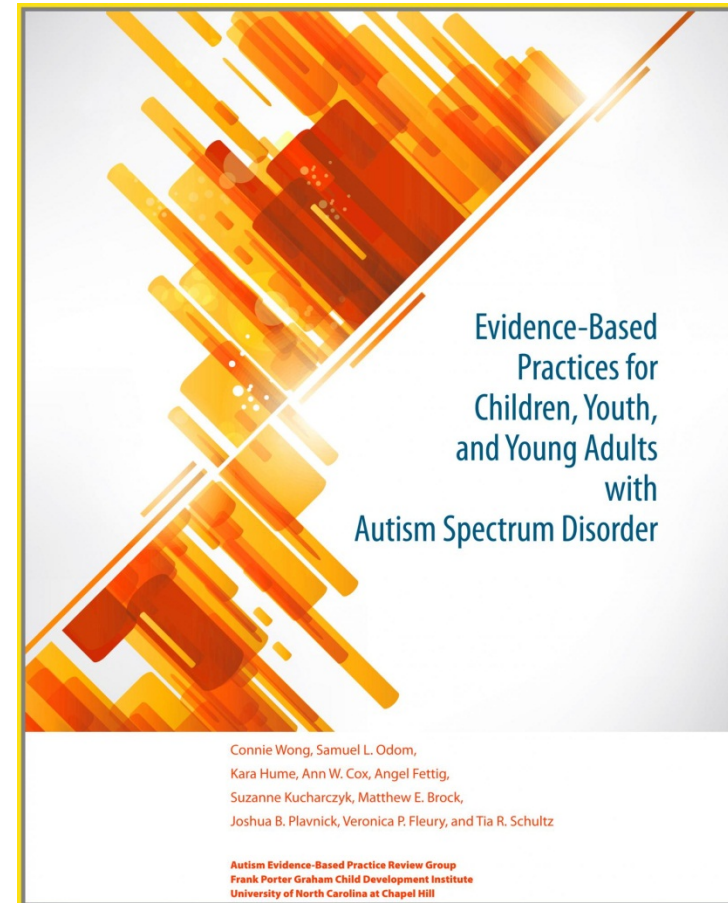
- Produce specific behavioral and developmental outcomes for a child
- Have been demonstrated as effective in applied research literature
- Can be successfully implemented in educational settings

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



# Evidence-Based Practices

- Wong et al. 2014 recently updated Odom et al. (2010) EBP review  
<http://autismpdc.fpg.unc.edu/sites/autismpdc.fpg.unc.edu/files/2014-EBP-Report.pdf>
- Began with pool of 29,105+ articles and reduced to 456
- 27 EBPs identified



# 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**



**NPDC-TESELA**

# Evidence-Based Focused Intervention Practices

## **Fundamental Applied Behavior Analysis Practices**

- Reinforcement
- Prompts
- Time delay
- Modeling
- Task analysis

## **Positive Behavior Intervention and Support**

- Functional assessment
- Antecedent-based intervention
- Extinction
- Response interruption/redirection
- Differential reinforcement of alternative/other behavior
- Functional communication training

# Evidence-Based Focused Intervention Practices

## **Social Communication Interventions**

- Social skills training
- Peer-mediated interventions and instruction
- Social narratives
- Structured play groups
- Picture Exchange Communication System (PECS®)

## **Broad Teaching Strategies**

- Visual supports
- Discrete trial training
- Naturalistic interventions
- Pivotal response training
- Parent implemented interventions
- Scripting
- Exercise

# Evidence-Based Focused Intervention Practices

## **Cognitive Behavior**

- Self management
- Cognitive behavior interventions

## **Technology Oriented**

- Technology-assisted instruction and intervention
- Video modeling

# Instructional Domains

- Social
- Communication
- Behavior
- Joint attention
- Play
- Cognitive
- School readiness
- Academic
- Motor
- Adaptive
- Vocational
- Mental health

# Matrix of Evidence-based Practices by Outcome and Age

EBP - Evidence-based Practice	Social			Communication			Joint Attention			Behavior			School-Readiness			Play			Cognitive			Motor			Adaptive			Vocational			Mental			Academic		
	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 Interventions (ABI)	Yellow	Teal	Pink	Yellow	Teal	Pink				Yellow	Teal	Pink	Yellow	Teal		Yellow	Teal			Teal			Yellow	Teal							Yellow	Teal	Pink			
Cognitive Behavioral Intervention (CBI)																					Teal												Teal			
Differential Reinforcement of Alternative, Incompatible, or Other Behavior (DRA/I/O)	Yellow	Teal			Teal			Teal		Yellow	Teal	Pink	Yellow	Teal			Teal				Teal			Pink									Teal			
Discrete Trial Training (DTT)	Yellow	Teal		Yellow	Teal		Yellow	Teal					Yellow										Yellow	Teal						Yellow	Teal					
Exercise (ECE)										Yellow	Teal		Yellow	Teal							Teal									Yellow	Teal					
Extinction (EXT)		Teal		Yellow	Teal	Pink		Teal		Yellow	Teal	Pink										Yellow	Teal													
Functional Behavior Assessment (FBA)					Teal					Yellow	Teal	Pink	Yellow	Teal															Yellow	Teal						
Functional Communication Training (FCT)	Yellow	Teal		Yellow	Teal	Pink									Yellow	Teal								Pink												
Modeling (MD)	Yellow	Teal	Pink		Teal	Pink	Yellow						Yellow			Teal												Pink		Yellow	Teal					
Naturalistic Intervention (NI)	Yellow	Teal		Yellow	Teal		Yellow			Yellow	Teal				Yellow	Teal							Yellow	Teal						Yellow	Teal					
Parent-implemented Interventions (PII)		Teal			Teal					Yellow	Teal		Yellow	Teal				Yellow					Yellow	Teal					Yellow	Teal						
Peer-mediated Instruction and Intervention (PMII)		Teal	Pink	Yellow	Teal		Yellow	Teal					Yellow	Teal																	Teal	Pink				
Picture Exchange Communication System (PECS)		Teal			Teal			Teal																												
Pivotal Response Training (PRT)	Yellow	Teal		Yellow	Teal					Yellow	Teal		Yellow	Teal																						
Prompting (PP)	Yellow	Teal			Teal		Yellow	Teal		Yellow	Teal	Pink	Yellow	Teal	Pink				Yellow	Teal		Yellow	Teal	Pink			Pink				Teal					
Reinforcement (R+)	Yellow	Teal	Pink		Teal	Pink	Yellow		Pink	Yellow	Teal	Pink	Yellow	Teal	Pink			Teal		Yellow	Teal		Yellow	Teal	Pink		Teal	Pink		Yellow	Teal	Pink				
Response Interruption/Redirection (RIR)	Yellow	Teal		Yellow	Teal				Yellow	Teal	Pink	Yellow	Teal		Yellow	Teal						Yellow	Teal													
Scripting (SC)	Yellow	Teal	Pink	Yellow	Teal	Pink	Yellow	Teal							Yellow	Teal				Yellow	Teal						Teal									
Self-management (SM)		Teal			Teal					Yellow	Teal	Pink	Yellow	Teal	Pink													Pink		Yellow	Teal					
Social Narratives (SN)	Yellow	Teal		Yellow	Teal		Yellow	Teal		Yellow	Teal	Pink	Yellow	Teal		Yellow	Teal					Yellow	Teal						Yellow	Teal						
Social Skills Training (SST)	Yellow	Teal	Pink	Yellow	Teal				Yellow	Teal		Yellow	Teal	Pink		Teal				Teal																
Structured Play Group (SPG)		Teal			Teal					Yellow	Teal		Yellow	Teal																						Teal
Task Analysis (TA)		Teal			Teal			Teal														Teal				Teal									Teal	
Technology-aided Instruction and Intervention (TAII)	Yellow	Teal	Pink	Yellow	Teal	Pink		Teal	Pink	Yellow	Teal	Pink	Yellow	Teal	Pink			Yellow				Yellow	Teal	Pink		Teal	Pink		Teal	Pink		Yellow	Teal	Pink		
Time Delay (TD)	Yellow	Teal		Yellow	Teal	Pink	Yellow	Teal		Yellow	Teal		Yellow	Teal		Yellow	Teal			Yellow	Teal		Yellow	Teal			Yellow	Teal		Yellow	Teal					
Video Modeling (VM)		Teal	Pink	Yellow	Teal		Yellow	Teal		Yellow	Teal		Yellow	Teal	Pink		Teal			Yellow	Teal		Yellow	Teal	Pink		Teal	Pink		Yellow	Teal					
Visual Support (VS)	Yellow	Teal	Pink	Yellow	Teal				Yellow	Teal		Yellow	Teal		Yellow	Teal			Yellow			Teal								Yellow	Teal					



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**Access free AFIRM online modules  
and resources for each of the  
27 evidence-based practices**

identified by the National Professional Development Center  
on Autism Spectrum Disorder (ASD)

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It's free and only takes a few minutes

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development certificate  
for completing each EBP  
module**

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interactive assessments

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**Download resources and  
materials**  
that support your use of EBPs  
with children and youth with  
ASD

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Resources](#)



<https://afirm.fpg.unc.edu>

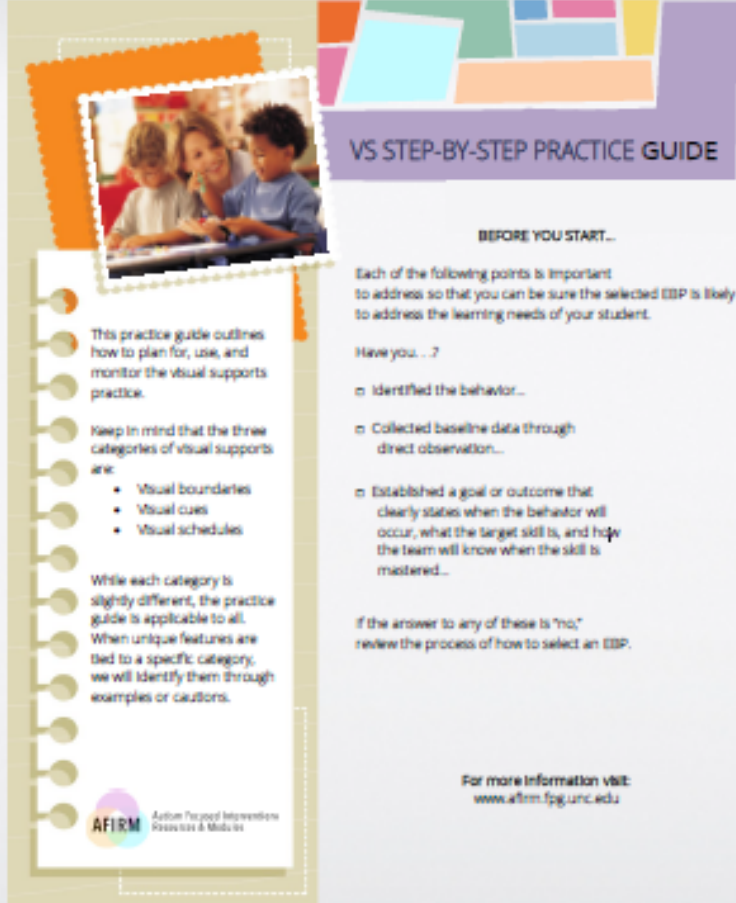
# Evidence-based Practice Resources

- EBP Briefs

(<http://autismpdc.fpg.unc.edu>)

- Overview of Practice
- Evidence-base for Practice
- Steps for Implementation
- Implementation Checklist
- Data Collection Forms (optional)

# Example: Step-by-Step Directions



**VS STEP-BY-STEP PRACTICE 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...?

- 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," review the process of how to select an EBP.

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:

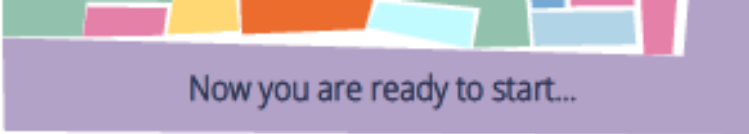
- Visual boundaries
- Visual cues
- Visual schedules

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.

For more information visit: [www.afirm.fpg.unc.edu](http://www.afirm.fpg.unc.edu)

AFIRM Action Focused Interventions Research & Models

Visual Supports National Professional Development Center on ASD 2015 1



**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.
  - To create boundaries, use natural boundaries, objects, furniture, tape on the floor, or rugs to clearly designate the boundary area.
- Visual Cues**
  - 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

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# Example: Implementation Checklist

Visual Supports (VS) ---Implementation Checklist---					
<p><i>Before you start:</i></p> <p><i>Have you...</i></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Identified the behavior</li> <li><input type="checkbox"/> Collected baseline data through direct observation</li> <li><input type="checkbox"/> 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.</li> </ul> <p><i>If the answer to any of these is "no", refer to the "Selecting EBPs" section on the website: <a href="http://afirm.fpg.unc.edu">afirm.fpg.unc.edu</a></i></p>	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:				
<input type="checkbox"/> Introduce boundary to learner					
<input type="checkbox"/> Use modeling to teach learner to stay within boundary					
<input type="checkbox"/> Use reinforcement to encourage learner to stay within boundary					
<input type="checkbox"/> Use corrective feedback when learner does not stay within boundary					
- Cues:					
<input type="checkbox"/> Show learner visual cue					
<input type="checkbox"/> Stand behind learner when prompting use of visual cue					
<input type="checkbox"/> Use concise, relevant words/terms while teaching visual cue					
<input type="checkbox"/> Assist learner in participating in activity/event with visual cue					
- Schedules					
<input type="checkbox"/> Stand behind learner when prompting use of visual schedule					
<input type="checkbox"/> Place schedule information in learner's hand					
<input type="checkbox"/> Use concise, relevant words/terms					
<input type="checkbox"/> Assist learner in getting to designated activity/location, and prompt learner to place schedule materials in appropriate location					
<input type="checkbox"/> Ensure learner remains in scheduled location until prompted to use schedule to transition					
<input type="checkbox"/> Repeat steps until learner is able to complete the sequence independently across activities/locations					
2.2 Fade prompts as quickly as possible when criterion met					
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					

# Example: Data sheet



Differential Reinforcement  
(DR)

---DR Frequency Data Collection---

Learner's Name: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Observer(s): \_\_\_\_\_

Interfering Behavior(s): \_\_\_\_\_

\_\_\_\_\_

## Frequency Data:

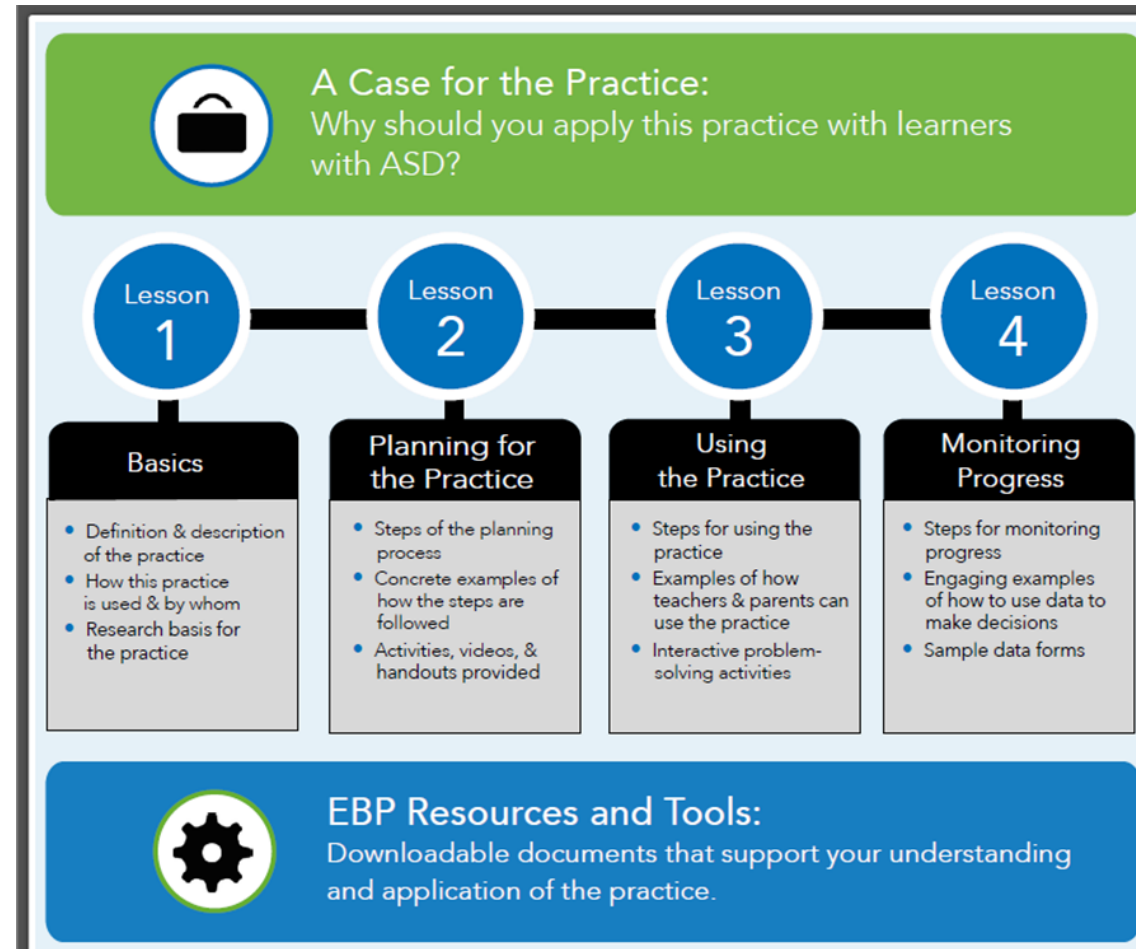
Use frequency recording to collect data on every instance of the target behavior.

<b>Setting:</b>							
<b>Operational Definition of Interfering Behavior:</b>							
Date	Start Time	Stop Time	Total Time	Tally	Total	Rate	Before, During, After (circle one)
							Before During After
							Before During After
							Before During After
							Before During After
							Before During After
							Before During After
							Before During After
							Before During After
							Before During After

**For more information, visit:**  
[www.afirm.fpg.unc.edu](http://www.afirm.fpg.unc.edu)



## Autism Focused Intervention Resources & Modules



# Other Website Resources

- CSESA Resources

<http://cseesa.fpg.unc.edu/resources/learning-resources>

- AIM Modules

[www.autismInternetmodules.org](http://www.autismInternetmodules.org)

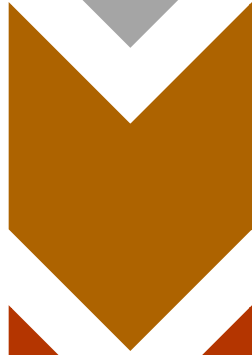


# Process for Choosing and Using the EBP

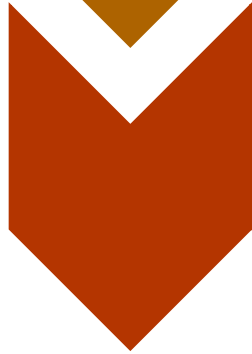
# The EBP Process



- **Select and Plan for EBP**



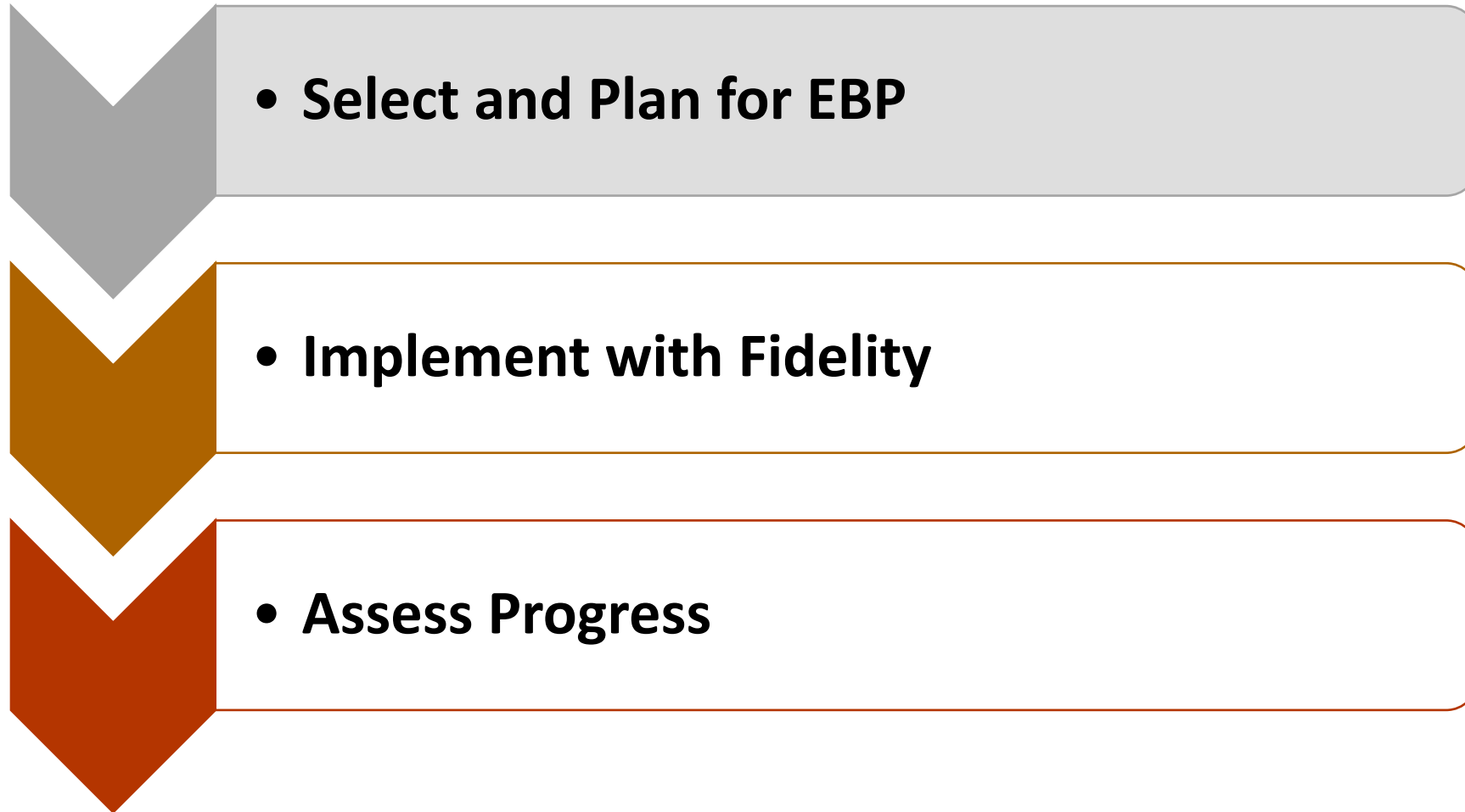
- **Implement with Fidelity**



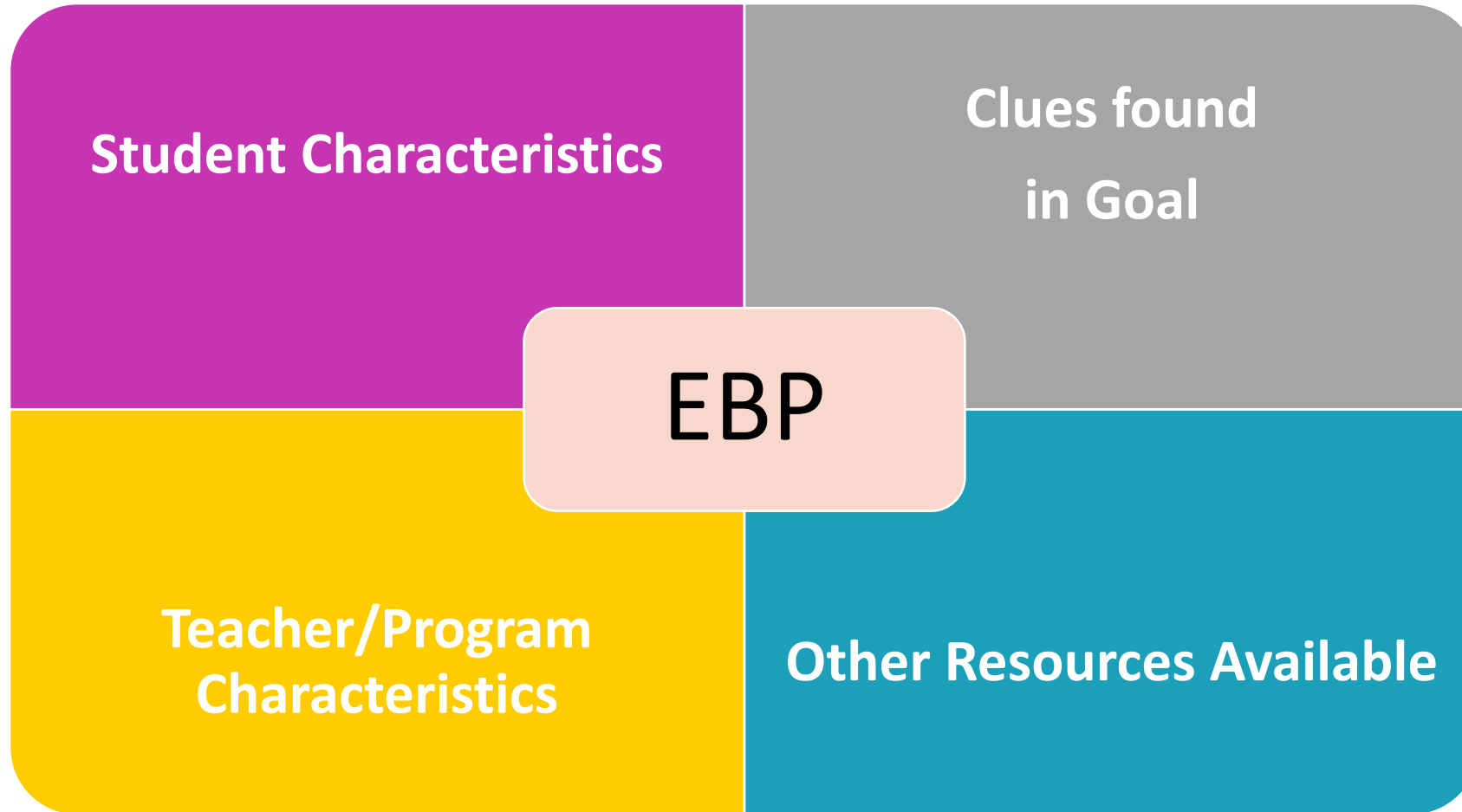
- **Assess Progress**



# The EBP Process



# When Selecting EBP Consider:



# Matthew

When given an assignment, Matthew will present completed to-do list and assignment to teacher by the due date for 4 of 5 assignments per week.

- 11 year old
- General education setting
- Wants to fit in
- Disorganized

EBP(s):

---

- Great relationship between SPED and Gen Ed English teacher
- Student teacher present in English class; teacher is able to help individual students

- Student received iPad for birthday to use at school
- iPads allowed in school

# Matrix of Evidence-based Practices by Outcome and Age

EBP - Evidence-based Practice	Social			Communication			Joint Attention			Behavior			School-Readiness			Play			Cognitive			Motor			Adaptive			Vocational			Mental			Academic		
	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 Interventions (ABI)	Yellow	Teal	Pink	Yellow	Teal	Pink				Yellow	Teal	Pink	Yellow	Teal		Yellow	Teal			Teal			Yellow	Teal							Yellow	Teal	Pink			
Cognitive Behavioral Intervention (CBI)																					Teal												Teal			
Differential Reinforcement of Alternative, Incompatible, or Other Behavior (DRA/I/O)	Yellow	Teal			Teal			Teal		Yellow	Teal	Pink	Yellow	Teal			Teal				Teal			Teal	Pink								Teal			
Discrete Trial Training (DTT)	Yellow	Teal		Yellow	Teal		Yellow	Teal			Teal		Yellow	Teal									Yellow	Teal						Yellow	Teal					
Exercise (ECE)										Yellow	Teal		Yellow	Teal							Teal										Yellow	Teal				
Extinction (EXT)		Teal		Yellow	Teal	Pink		Teal		Yellow	Teal	Pink		Teal								Yellow	Teal													
Functional Behavior Assessment (FBA)					Teal					Yellow	Teal	Pink	Yellow	Teal																Yellow	Teal					
Functional Communication Training (FCT)	Yellow	Teal		Yellow	Teal	Pink									Yellow	Teal									Pink											
Modeling (MD)	Yellow	Teal	Pink		Teal	Pink	Yellow						Yellow	Teal														Pink			Yellow	Teal				
Naturalistic Intervention (NI)	Yellow	Teal		Yellow	Teal		Yellow			Yellow	Teal				Yellow	Teal														Yellow	Teal					
Parent-implemented Interventions (PII)		Teal			Teal					Yellow	Teal		Yellow	Teal				Yellow					Yellow	Teal						Yellow	Teal					
Peer-mediated Instruction and Intervention (PMII)		Teal	Pink	Yellow	Teal		Yellow	Teal					Yellow	Teal																	Teal	Pink				
Picture Exchange Communication System (PECS)		Teal			Teal			Teal																												
Pivotal Response Training (PRT)		Teal		Yellow	Teal										Yellow	Teal																				
Prompting (PP)	Yellow	Teal			Teal		Yellow	Teal		Yellow	Teal	Pink	Yellow	Teal	Pink				Yellow	Teal		Yellow	Teal	Pink			Pink			Pink			Teal			
Reinforcement (R+)		Teal	Pink		Teal	Pink	Yellow		Pink	Yellow	Teal	Pink	Yellow	Teal	Pink			Teal		Yellow		Yellow	Teal	Pink		Teal	Pink		Teal	Pink		Yellow	Teal	Pink		
Response Interruption/Redirection (RIR)		Teal			Teal					Yellow	Teal	Pink	Yellow	Teal									Yellow	Teal												
Scripting (SC)	Yellow	Teal	Pink	Yellow	Teal	Pink	Yellow	Teal							Yellow	Teal			Yellow	Teal								Teal								
Self-management (SM)		Teal			Teal					Yellow	Teal	Pink	Yellow	Teal	Pink													Pink			Yellow	Teal				
Social Narratives (SN)	Yellow	Teal		Yellow	Teal		Yellow	Teal		Yellow	Teal	Pink	Yellow	Teal		Yellow	Teal					Yellow	Teal							Yellow	Teal					
Social Skills Training (SST)	Yellow	Teal	Pink	Yellow	Teal					Yellow	Teal		Yellow	Teal	Pink			Teal																		
Structured Play Group (SPG)		Teal			Teal					Yellow	Teal		Yellow	Teal																					Teal	
Task Analysis (TA)		Teal			Teal			Teal														Teal			Teal										Teal	
Technology-aided Instruction and Intervention (TAII)	Yellow	Teal	Pink	Yellow	Teal	Pink		Teal	Pink	Yellow	Teal	Pink	Yellow	Teal	Pink			Yellow				Yellow	Teal	Pink		Teal	Pink		Teal	Pink		Yellow	Teal	Pink		
Time Delay (TD)	Yellow	Teal		Yellow	Teal	Pink	Yellow	Teal		Yellow	Teal		Yellow	Teal				Yellow	Teal		Yellow	Teal		Yellow	Teal					Yellow	Teal					
Video Modeling (VM)		Teal	Pink		Teal		Yellow	Teal		Yellow	Teal		Yellow	Teal	Pink		Teal			Yellow		Yellow	Teal	Pink		Teal	Pink		Teal	Pink		Yellow	Teal			
Visual Support (VS)	Yellow	Teal	Pink	Yellow	Teal					Yellow	Teal		Yellow	Teal		Yellow	Teal				Yellow	Teal									Yellow	Teal				

# Allison

During lunch, Allison sits at the end of the table in the cafeteria by herself without speaking and watches her classmates. Her teacher would like for Allison to participate in the lunchroom conversation with her classmates.

- In self-contained 4<sup>th</sup> grade setting but goes to Art class
- Has a “best “ friend in the class
- Allison can verbally communicate

EBP(s):

---

- Teacher and para have good relationship with Allison
- Have tried sitting with Allison and modeling a conversation during lunch without success

- Parents concerned about limited social interaction and want the school to help with this



# Matrix of Evidence-based Practices by Outcome and Age

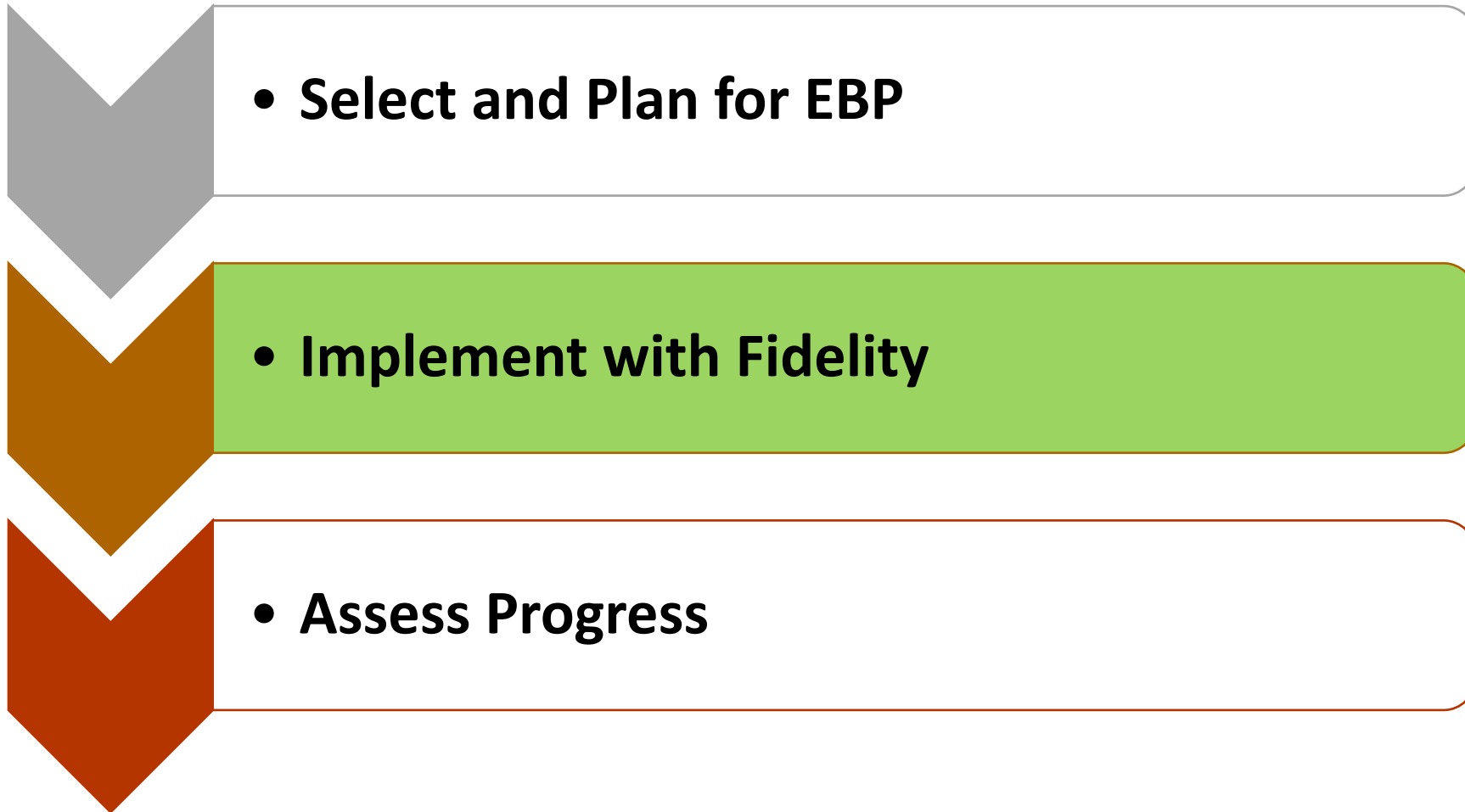
EBP - Evidence-based Practice	Social			Communication			Joint Attention			Behavior			School-Readiness			Play			Cognitive			Motor			Adaptive			Vocational			Mental			Academic		
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Antecedent-based Interventions (ABI)	Yellow	Teal	Pink	Yellow	Teal	Pink				Yellow	Teal	Pink	Yellow	Teal		Yellow	Teal			Teal			Yellow	Teal							Yellow	Teal	Pink			
Cognitive Behavioral Intervention (CBI)																				Teal												Teal				
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Discrete Trial Training (DTT)	Yellow	Teal		Yellow	Teal		Yellow	Teal					Yellow	Teal									Yellow	Teal						Yellow	Teal					
Exercise (ECE)										Yellow	Teal		Yellow	Teal						Teal										Yellow	Teal					
Extinction (EXT)		Teal		Yellow	Teal	Pink		Teal		Yellow	Teal	Pink										Yellow	Teal													
Functional Behavior Assessment (FBA)					Teal					Yellow	Teal	Pink	Yellow	Teal															Yellow	Teal						
Functional Communication Training (FCT)	Yellow	Teal		Yellow	Teal	Pink									Yellow	Teal								Pink												
Modeling (MD)	Yellow	Teal	Pink		Teal	Pink	Yellow			Yellow	Teal		Yellow	Teal													Pink		Yellow	Teal						
Naturalistic Intervention (NI)	Yellow	Teal		Yellow	Teal		Yellow			Yellow	Teal		Yellow	Teal		Yellow	Teal						Yellow	Teal					Yellow	Teal						
Parent-implemented Interventions (PII)		Teal			Teal					Yellow	Teal		Yellow	Teal				Yellow					Yellow	Teal					Yellow	Teal						
Peer-mediated Instruction and Intervention (PMII)		Teal	Pink	Yellow	Teal		Yellow	Teal					Yellow	Teal																Teal	Pink					
Picture Exchange Communication System (PECS)		Teal			Teal			Teal																												
Pivotal Response Training (PRT)	Yellow	Teal		Yellow	Teal					Yellow	Teal		Yellow	Teal		Yellow	Teal																			
Prompting (PP)	Yellow	Teal			Teal		Yellow	Teal		Yellow	Teal	Pink	Yellow	Teal	Pink	Yellow	Teal			Yellow	Teal		Yellow	Teal	Pink			Pink		Yellow	Teal					
Reinforcement (R+)	Yellow	Teal	Pink		Teal	Pink	Yellow		Pink	Yellow	Teal	Pink	Yellow	Teal		Yellow	Teal	Pink	Teal		Yellow	Teal	Pink		Teal	Pink		Teal	Pink	Yellow	Teal	Pink				
Response Interruption/Redirection (RIR)	Yellow	Teal		Yellow	Teal		Yellow	Teal		Yellow	Teal	Pink	Yellow	Teal		Yellow	Teal						Yellow	Teal												
Scripting (SC)	Yellow	Teal	Pink	Yellow	Teal	Pink	Yellow	Teal							Yellow	Teal												Teal								
Self-management (SM)		Teal			Teal					Yellow	Teal	Pink	Yellow	Teal	Pink	Yellow	Teal											Pink		Yellow	Teal					
Social Narratives (SN)	Yellow	Teal		Yellow	Teal		Yellow	Teal		Yellow	Teal	Pink	Yellow	Teal		Yellow	Teal					Yellow	Teal						Yellow	Teal						
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Technology-aided Instruction and Intervention (TAII)	Yellow	Teal	Pink	Yellow	Teal	Pink	Yellow	Teal	Pink	Yellow	Teal	Pink	Yellow	Teal	Pink	Yellow	Teal		Yellow			Yellow	Teal	Pink		Teal	Pink	Yellow	Teal	Pink	Yellow	Teal	Pink			
Time Delay (TD)	Yellow	Teal		Yellow	Teal	Pink	Yellow	Teal		Yellow	Teal		Yellow	Teal		Yellow	Teal				Yellow	Teal		Yellow	Teal				Yellow	Teal						
Video Modeling (VM)		Teal	Pink	Yellow	Teal		Yellow	Teal		Yellow	Teal		Yellow	Teal	Pink	Yellow	Teal			Teal		Yellow	Teal	Pink		Teal	Pink		Yellow	Teal						
Visual Support (VS)	Yellow	Teal	Pink	Yellow	Teal					Yellow	Teal		Yellow	Teal		Yellow	Teal				Teal									Yellow	Teal					

Implement EBP with Fidelity

# Why Is Implementing with Fidelity Important?

- For a practice to work, it has to be implemented as designed.

# The EBP Process



Now What?



# Implementation

## What you know!

- ✓ Understand student characteristics
- ✓ Clear, observable, and measureable goal that is scaled
- ✓ Resources available in your classroom or at the school

## What you need to do!

- Determine who will implement
- Decide how to best learn about practice
- What data will I need to collect and on what form
- Check fidelity of implementation
- Who to help!





# When learning something new...

- Do It Yourself (DIY)
- Training
- Coaching



# When learning something new...

- Do It Yourself
- **Training**
- Coaching



# When learning something new...

- Do It Yourself
- Training
- Coaching



# Classic Coaching Model

<https://www.youtube.com/watch?v=0Cd7Bsp3dDo>

# Coaching Components



# Coaching

- Key ingredient in all components of the model
- Internal and external coaches
- Relationship-based



# Coaching Is an Essential Feature of Implementation

- A minimum of one day per week on site or remotely
- Rapport and relationship
  - Mutual respect
  - Agreed upon goals
- Time
- Tools
  - EBP or other practices
  - Fidelity checklists
- Feedback
- Planning

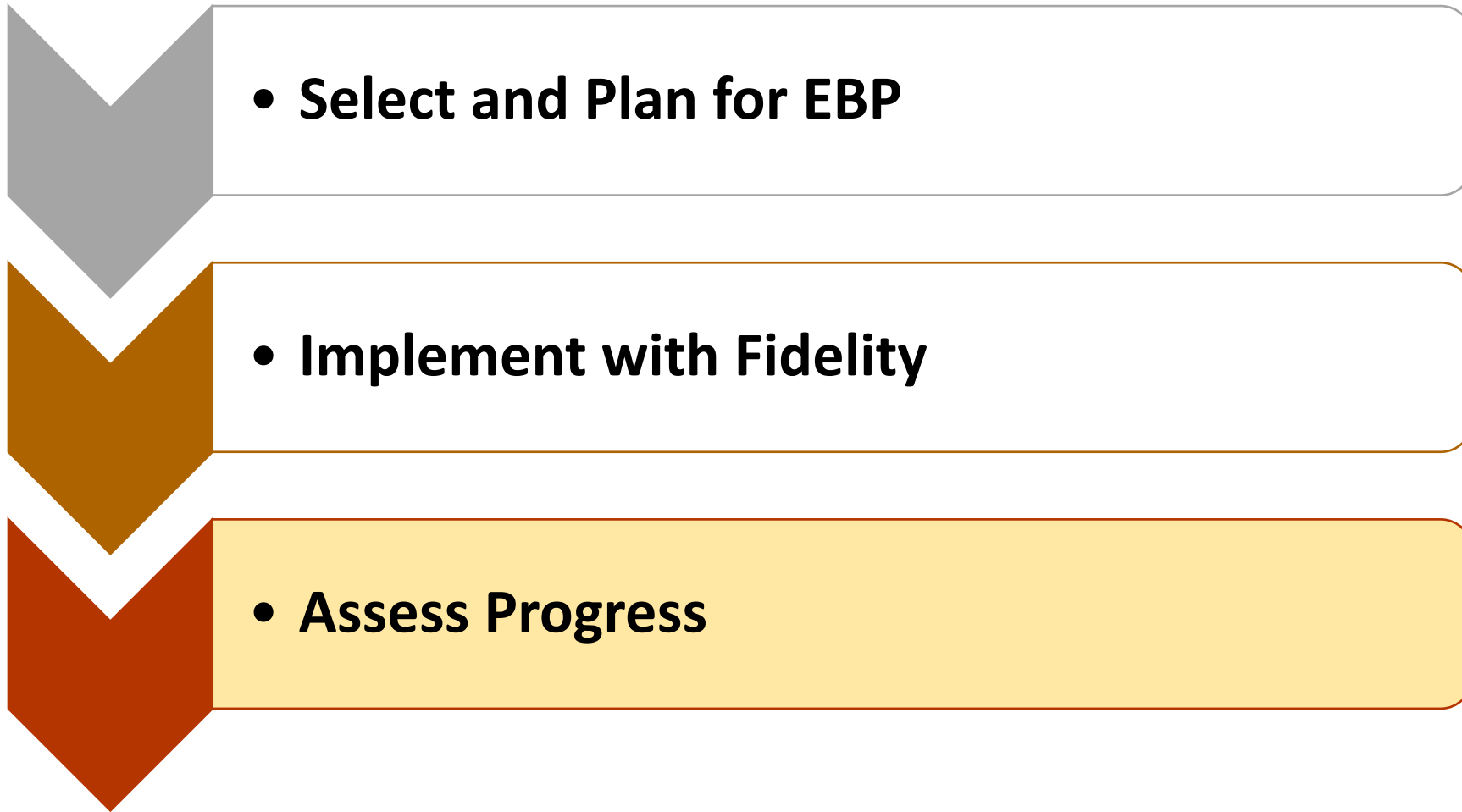
[http://autismpdc.fpg.unc.edu/sites/autismpdc.fpg.unc.edu/files/NPDC\\_CoachingManual.pdf](http://autismpdc.fpg.unc.edu/sites/autismpdc.fpg.unc.edu/files/NPDC_CoachingManual.pdf)

Guidance & Coaching  
on Evidence-based Practices  
for Learners with  
Autism  
Spectrum  
Disorders



Suzanne Kucharczyk  
Evelyn Shaw  
Brenda Smith Myles  
Lisa Sullivan  
Kate Szidon &  
Linda Tuchman-Ginsberg

# The EBP Process



# Gather and Analyze Progress

- Student Progress
  - Goal based data collection
- Implementer Progress
  - Implementation Checklists
- Revise Plan as necessary



# Example Data Sheet



**Reinforcement**

## Reinforcement Event Sampling Data Collection

Autism Focused Intervention Resources & Modules

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Learner's Name: \_\_\_\_\_ Age of Learner: \_\_\_\_\_

Activity: \_\_\_\_\_

Date	Skill:	Total	Before, During, or after reinforcement

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

# Website Resources

- NPDC
- <https://autismpdc.fpg.unc.edu>
- AFIRM
- <https://afirm.fpg.unc.edu>
- CSESA Resources
- <http://csesa.fpg.unc.edu/resources/learning-resources>
- AIM Modules
- [www.autismInternetmodules.org](http://www.autismInternetmodules.org)

**PRESENTATION FINISHED**



**...ANY QUESTIONS?**