


Evidence Based Early ID & Intervention Practices for Young Children & Their Families



UNIVERSITY OF ARKANSAS

Suzanne Kucharczyk, EdD

Handout

Content Based On:



THE NATIONAL PROFESSIONAL DEVELOPMENT CENTER ON
AUTISM SPECTRUM DISORDERS

Joint Attention Mediated Learning Study



ASD toddler initiative

Collaboration with Easter Seals UCP of NC




THE UNIVERSITY
of NORTH CAROLINA
at CHAPEL HILL



CSESA
The Center on Secondary Education for
Students with Autism Spectrum Disorders

You?



Agenda

- Characteristics of young children with ASD
- Early Identification
- Quality Features of Early Intervention Programs
- Measuring Progress through Goal Attainment Scaling
- Evidence Based Practices
- Parent Implementation of evidence based practices
- Action plan

By the end of the day...

- Identify practice for effective early ID
- Identify key quality features of early intervention programs
- Construct a Goal Attainment Scale
- Identify Evidence Based Practices for infants, toddlers, and preschoolers with ASD
- Know 2 online resources for learning more about the implementation of EBPs



Characteristics of Young Children with ASD



Adult Outcomes

Well placed efforts = Can make a HUGE difference

...nearly 80% still... have no jobs or postsecondary contact with... the future, and many exp... coverage

– Paul Shattuck

Autism Spectrum Disorder (DSM-5)

- Developmental disability**
 - Not recognizable at birth
 - Typically lifelong
- Complex disorder**
 - Many areas affected
- Wide range of impairment**
 - Mild to severe across areas

Social Communication and Interaction Restricted and Repetitive Behaviors (RRB)

Learn the Signs. Act Early. www.cdc.gov/actearly

ASD Characteristics Vary

Social Interaction
Aloof-----Passive-----Active but odd

Communication
Nonverbal-----Verbal

Behaviors
Intense-----Mild

Measured Intelligence
Severe-----Gifted

Adaptive Functioning
Low-----Variable-----High in areas

Learn the Signs. Act Early. www.cdc.gov/actearly

Identified Prevalence of ASD ADDM Network 2000 - 2010

Surveillance Year	Birth Year	# of Sites Reporting	Prevalence per 1,000 children (range)	This is about 1 in x Children
2000	1992	6	6.7 (4.5 - 9.9)	1 in 150
2002	1994	14	6.6 (3.3 - 10.6)	1 in 150
2004	1996	8	8.0 (4.6 - 9.8)	1 in 125
2006	1998	11	9.0 (4.2 - 12.2)	1 in 110
2008	2000	14	11.3 (4.8 - 21.2)	1 in 88
2010	2002	11	14.7 (14.3 - 15.1)	1 in 68

Snapshot: ASD in the US

1 in 68 children overall (at age 8)

- 1 in 42 boys
- 1 in 189 girls
- 1 in 63 white children
- 1 in 81 black children
- 1 in 81 Asian/Pacific Islander
- 1 in 93 Hispanic children



1 in 3 with ASD also have Intellectual Disability

Who is at Risk for ASD?

Children with a sibling who has ASD. Sibling recurrence (Ozonoff, et al, 2011)

- 18.7% risk (1 older sibling)
- More than 1 older sibling – 32.2%
- Males
- Older parents
- Premature birth
- Low birth weight
- Family history of autoimmune disorders
- Parents with history of psychiatric conditions
- About 10-20% of children with ASD also have an identifiable genetic condition like Down syndrome or Fragile X



Learn the Signs. Act Early. www.cdc.gov/actearly

Early Developmental Concerns

Children with ASD

89% had documented developmental concern before age 3 years



(CDC, ADDM 2014)

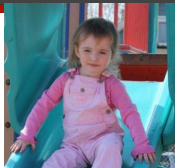
Parents Struggle for Answers

Because ...

- Early signs may be subtle
- Lack of clear physical signs
- Inconsistent skills – strengths and weaknesses
- Regression in some children
- Parents often suspect their child
 - has a hearing loss
 - was “too” good as a baby
 - has language delays
- Often told to “wait and see,” “boys talk later”



What does ASD look like?





Red Flags

Remember –
Takes more than a Red Flag



Even more than 2 Red Flags



Videos: Guiding Questions



What did you notice?

What is atypical?

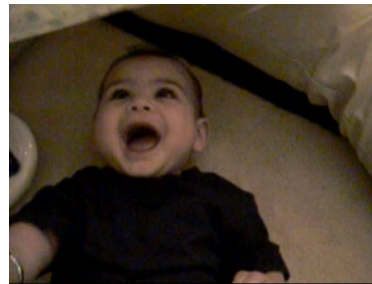
What would be typical of a child at the ages shown?

How might this affect learning and development?




http://www.youtube.com/watch?feature=player_embedded&v=QMylOiqoQI

Infant/Toddler from 5 months . . .



Videos: Guiding Questions




What did you notice?

What is atypical?

How might this affect learning and development?

19 month old twins – What do you see?



Benjamin, 1 Yr 7 Mos Nathan, 1 Yr 7 Mos

Response to Name

Observation:
Response to Name
Kyle, 12 Months

GeneticaLone

Observation:
Lack of Response to Name
Evan, 19 Mos


Impact of ASD on the Family

- Lack of support from other family members and community (know something is not going right)
- Navigating system to get help –
 - Just getting recognition of a problem is often a challenge
 - Hard to get intense intervention
 - Long waits for diagnosis
- Significant stress on parents and entire family
- Siblings may also have difficulties, or must act as “caretaker”
- Intense and complicated needs of child
- Emotional and financial costs of identifying problem and getting support
- Bombarded by options of interventions

Early Intervention is Key!

- ASD symptoms and behaviors change with development
- Development is affected by having ASD

Our early efforts are likely to change a child’s developmental trajectory.



Challenges to Early Identification

- Reluctance to diagnose very young children.
- Symptoms more varied and sometimes less apparent.
- Possible negative effects of “labeling” on the young child and family such as:
 - change in the parent-child relationship,
 - reduced expectations for child, and
 - limited access to typical experiences.
- Clinicians concerned about effect of incorrect diagnosis early in life.

Benefits of Early Identification of ASD

- Assists parents in replacing unfocused worry with mobilized efforts to learn about the disorder and find help for their child.
 - Average age of first concern – 14-15 months
 - First concerned about language or social skills
 - May not share concerns initially
- Child care providers can validate parental concerns through surveillance and screening and can support them in obtaining a diagnosis.
- Early identification leads to early intervention
 - Profiles of learning strengths and weaknesses different from others with DD
 - Better outcomes for young children who receive specialized approaches as *early as possible*

Early Identification Processes

Surveillance

Screening

Diagnosis



Developmental Milestones Materials

- Through Centers for Prevention and Disease Control (CDC) *Learn the Signs. Act Early.*:

www.cdc.gov/ncbddd/actearly/index.html



Universal Screening

- Population-based or universal screening – designed to evaluate all children and to identify those at risk for developmental differences.
- Generally screen to identify wide range of developmental problems.
- Examples include:
 - *Ages and Stages Questionnaire*
 - *Denver Developmental Screening Test*
 - *Infant–Toddler Checklist*

Examples of Autism Screening Tools

- Modified Checklist for Autism in Toddlers (M-CHAT Revised with Follow-up)
 - www.mchatscreen.com
- Pervasive Developmental Disorders Screening Test (PDDST)
- Social Communication Questionnaire (SCQ)
- Screening Tool for Autism in Two-year-olds (STAT)

Medical Diagnosis & Educational Eligibility

Medical Diagnosis	Educational Eligibility
<ul style="list-style-type: none"> ➤ Completion of a gold standard diagnostic measure (ADOS, ADI-R) ➤ Parental history of child's development ➤ Direct observation of child ➤ Tied to meeting DSM-5 or ICD diagnostic criteria 	<ul style="list-style-type: none"> ➤ Educational definition compatible with DSM-IV criteria for ASD ➤ Does not require a clinical diagnosis of autism ➤ Based on level of educational disability and need for early intervention or special education services

Assessment for Eligibility Purposes

“Core battery” recommended (Ozonoff, Goodlin-Jones, and Solomon, 2005):

- developmental history
- current functioning in all contexts
- diagnostic testing of the child to assess characteristics of autism
- assessment of (a) cognition, (b) communication/ language, and (c) adaptive behavior.

Detecting Concerns & Supporting Families

Listen to parents and other caregivers

- 75% of time parents express concerns, they are right (Glascoe, 2000).
- Accurate regardless of level of education or parenting experience (Squires & Bricker, 1999).
- By time parents express concerns, they've already tried “wait and see”
- Families who aren't ready – denial as hope and coping



High Quality Programs for Young Children with ASD ➤

What does High Quality Mean?





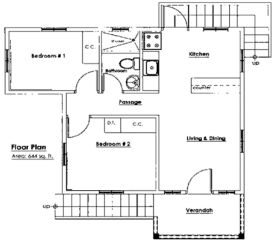
**AGREED UPON PRACTICES
FOR PROVIDING EARLY INTERVENTION SERVICES
IN NATURAL ENVIRONMENTS**

Assessing Program Quality as a Foundation



Program Quality Indicators and Evidence-Based Practices (EBP)

- **Program Quality**
- Contextual features of the program that represent best practices
- Program quality as the house in which practices are employed



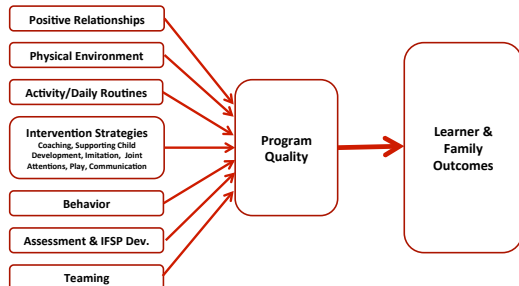
Autism Program Environment Rating Scale (APERS)-IT

- Designed to assess *quality indicators of programs* for infants and toddlers with ASD
- Purposes of the APERS
 - Coaching & Consultation
 - Professional development
 - Program evaluation

Features of APERS-IT

- APERS – IT is still in development
- Organized by domains (7) and subdomains; currently has 69 items
- Each item scored (1 to 5) with anchor descriptors at 1, 3, and 5
- Applicable in home-based and center-based programs
- Results can be summarized by scores or graphs

APERS – IT



Practice: Self-Assessment

- Individually read each item on selected APERS-IT self-assessment items. Use handout of intervention strategies domain
- For each item, check the box that corresponds with the statement that **best** describes how you provide early intervention services.

Handout 2

Practice: Self Assessment Identifying Strengths and Areas for Growth

- Individually identify 1 to 2 of the 6 sub-domains that are **areas of strength** for you and circle the sub-domain title.
- Individually identify 1 to 2 of the 6 sub-domains that are **areas for growth** for you and draw a box around the sub-domain title.

VIDEO – Observation in Home





Toddler in Child Care Center

Jason is a 2 year old with ASD who just began attending a child care center. He is a quiet toddler who loves to “rough house” with his father and mother. Jason has limited verbal abilities, has feeding issues, and has limited interactive play skills. His parents would like to see him play with other toddlers and communicate more.

- Pay attention to : [physical environment](#), [communication](#), [imitation](#), [engagement](#), and [play](#).

VIDEO – Observation in Center

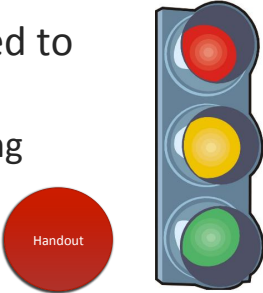



High Quality Programs


- Communication** (child needs and impact on family)
 - Teaching family specific EBPs for requesting during play
- Social Interaction** (child needs and impact on family)
 - Providing access or information to structured play groups
 - Supporting family’s interactions with child during routines
- Behavior** (child needs and impact on family)
 - Helping family develop plan for address community members concerns about child’s behaviors

Start/Stop/Continue

- What do I need to
 - Stop doing
 - Continue doing
 - Start doing



Scaling and Measuring Outcomes for Infants and Toddlers with ASD



Objectives

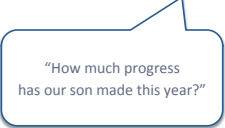
- Design high quality outcomes and benchmarks for toddlers with ASD
- Create outcomes related to the specific needs of toddlers with ASD (e.g., social, behavior, play, communication)
- Establish Goal Attainment Scales for toddlers with ASD
 - Create benchmarks that document progress
 - Organize benchmarks into an assessment for attaining outcomes
- Discuss data collection systems for assessing toddler’s performance related to benchmarks

An IFSP Problem

Toddler, TW – age 30 months – has 4 IFSP outcomes



At an annual IFSP meeting, Mom and Dad ask,



How does the team assess all of these skills?

How can IFSP teams easily summarize?

“Alternative measurement approaches are necessary and crucial for monitoring progress and measuring outcomes of essential skills for students in special education, such as those with autism.”

(Ruble et al. 2012)

A Solution!

Goal Attainment Scaling (GAS)



GAS is a tool to help assess and progress monitor fundamental outcomes targets essential to the success of learners with ASD, such as social-communication, adaptive, play, and behavioral skills.

What is Goal Attainment Scaling?

- a method for **measuring amount of progress** made on an outcome or benchmark
- compatible with **measurable** IFSP outcomes
- allows progress to be **easily summarized** across multiple outcomes, domains, or children
- supports **intervention design and implementation**
- used in conjunction with **data collection** procedures

GAS SHOUT OUTS

- GAS helped me...
 - understand what the next steps were for my son
 - write better outcomes
 - tie strategies and adaptations to the outcome
 - change how I serve infants and toddlers and families



SECTION 2: FOUNDATIONAL COMPONENTS OF DEVELOPING A GAS



Advantages of Measurable IFSP Outcomes

A measurable IFSP outcome is necessary for appropriate GAS development and use. Other advantages of well-written outcomes include:

- help teams pinpoint priorities for toddlers
- provide foundation for accurate progress monitoring
- guide intervention development and evaluation
- are legally defensible

Components of a Measurable IFSP Outcome

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

OUTCOME EXAMPLE: ANDREW

Which outcome is a highly measurable outcome?

OUTCOME EXAMPLE 1:

Andrew will play more with his brother.

OUTCOME EXAMPLE 2:

During a simple turn taking game (using a ball) with his brother and given a verbal prompt, Andrew will hand the ball to his brother, 4 out of 5 opportunities.

A Highly Measurable Outcome

Antecedent	Behavior	Criteria
During a simple turn taking game (using a ball) with his brother and given a verbal prompt,	Andrew will hand the ball to his brother,	4 out of 5 opportunities.

DATA COLLECTION: ANDREW'S OUTCOME:

During a simple turn-taking game (using a ball) with his brother and given a verbal prompt, Andrew will hand the ball to his brother, 4 out of 5 opportunities.

Tracking Andrew's play with his brother weekly

Date	Gives Ball to Brother	Comments
1/15	- , - , - , + , +	I put my hand over his the first 3 times and said "Drake's turn"
1/16	- , - , - , + , +	Same
1/18	- , - , - , + , +	Used hand over hand
1/19	- , - , + , + , + , +	Pointed to brother said "Drake's turn"
1/21	- , - , + , + , +	

GAS Activity 1

- Review the following real outcomes
- Antecedent?
- Behavior?
- Criteria?
- Measurable?
- Observable?
- How collect data?
- Fix it!

Outcomes

- **Outcome 1:** When Mom calls "Jeff" in a typical conversational tone, Jeff will respond by stopping what he is doing and turn his head toward the speaker with supports 3x/day at home.
- **Outcome 2:** Jeff will use an appropriate attention getting strategy with prompts to indicate he wants something from the kitchen. Then, when presented with two preferred food or drink choices, Jeff will use a gesture to indicate what he wants 2/3 opportunities at home.
- **Outcome 3:** Sharon will participate in the clean-up routine by completing 50% of the clean-up for 2 out of 3 activities.
- **Outcome 4:** When playing with toys that are closed ended, Sharon will complete all steps of each toy for 3 out of 3 toys.

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How to Develop a GAS

- Select learning objective/benchmark with a defined continuum of outcomes.
- Identify outcomes that reflect the five points on the continuum.
 1. Identify the current level of performance.
 2. Finalize expected level outcome
 3. Draft two benchmark
 4. Draft final benchmark (exceeds outcome)

CASE EXAMPLE: Joey Applying the GAS process

Meet Joey:

Joey is a 2-year-old young boy who has autism who lives on a farm with parents. They live close to extended family and there are many similar age cousins. Joey's interests: water play, being outside.

- Strengths: Joey eats most foods, extended family support parents, many peer opportunities
- Challenges: Joey doesn't nap or sleep through the night, doesn't sit down for family meals, parents would like to see him participate more in family routines

CASE EXAMPLE: Joey Applying the GAS process

Joey's IFSP team, including his family, met. Joey is a good eater, but not at the table. Mom and Dad find it very exhausting to watch Joey and try to have family time together. It is especially difficult on weekends when the extended family dine together. The family likes to eat outside on the patio for Sunday dinners. When eating outside, Joey tries to run down to the creek and will not eat as well as he does when he is inside.

The IFSP team wrote the following outcome:

Joey will join the family for meals at the dinner table on the weekends

From Outcome to Observable and Measurable Outcome

IFSP Outcome: Joey will join the family for meals at the dinner table on the weekends.

- What will this look like? How will we know when Joey is and is not meeting this outcome?
- How long do we want Joey to do this?
- How often do we want Joey to do this?
- What is a reasonable expectation of success?

CASE EXAMPLE: JOEY Applying the GAS process

The IFSP team decided to schedule a visit around one of Joey's mealtimes. They wrote down what they observed: Joey will not sit at the table. He walks to the table, takes food from his plate, and then eats it with his hands/fingers while walking around. Didn't sit for more than 1-2 min total per bite.

Given this information about what Joey can do at this time (baseline), the IFSP team rewrites the outcome and decide to begin with regular family dinners during the week.

During dinners with his immediate family, Joey will sit at the dining room table either eating or quietly playing with a toy for at least 5 min for 2 out of 3 dinners.

Case Example: Joey's Data

Date	Mom & Dad/ Extended (circle)	Time at Table (min)	Notes (e.g., ate, played, what helped, what was hard?)
5/27/11	Mom &/or Dad Extended	2min	Ate for a min with airplane in his hand/ used airplane to move Joey to table/ate for another min with mom giving Joey airplane after every bite.
5/28/11	Mom &/or Dad Extended	1min	What do we do when dinner is not ready but he's ready to eat? Had to put food on table but mom wasn't ready to sit and help.
	Mom &/or Dad Extended		

SECTION 3: STEPS IN THE GAS PROCESS

Step 1: Review IFSP outcomes

Step 2: Determine present levels of performance

Step 3: Develop each outcome into a goal attainment scale

Step 4: Implement EBPs and evaluate

GAS Process Step 1. Review IFSP Outcomes

Review the toddlers IFSP outcomes with parents, early interventionist, and service coordinator. Identify priority outcomes or skills to target.

- must align with the annual IFSP
- must be observable and measurable
- must be agreed on by family and team

Make modifications to IFSP as needed

GAS Process Step 2. Determine Present Level of Performance

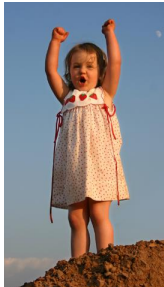
Ensure present levels are:

- highly observable and measurable
- accurate, using clear procedures for measurement
- reflective of the level of performance
- inclusive of any current prompting strategies, settings, persons, materials, etc. that may affect present levels of performance.
- summarized through meaningful data collection.

GAS Process Step 3. Scaling the Outcome

Establish a five point range of performances:

- Current level of performance (*present level*)
- Initial objective (*benchmark*)
- Secondary objective (*benchmark*)
- Expected level of outcome (*annual outcome*)
- Exceeds outcome



Considerations when scaling outcomes

(Ruble et al. 2012)







Dimension	GAS Score				
	0	1	2	3	4
Frequency of skill	Lowest	←	→	→	Highest
Frequency of prompting	Highest	←	→	→	Lowest
Form of prompting	Physical	←	→	→	Visual supports / Independent
Context	Structured / One context	←	→	→	Unstructured / Many contexts
Person	An adult	←	→	→	Many adults / Many peers
Materials	One set of materials	←	→	→	Variety of materials
Developmental sequence of skill	Lowest	←	→	→	Highest

GAS: SCALING JOEY'S OUTCOME

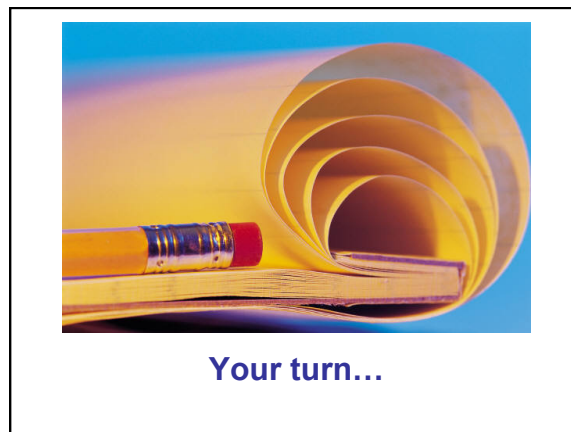
PRESENT LEVEL OF PERFORMANCE (BASELINE)	During mealtimes Joey gets up from the table and comes back to it to take one bite at a time.
INITIAL OBJECTIVE	During family dinners, Joey will sit at the dining room table either eating or quietly playing with a toy for at least 5 min for 2/3 dinners.
SECONDARY OBJECTIVE	During family dinners, Joey will sit at the dining room table either eating or quietly playing with a toy for at least 10 min for 2/3 dinners.
EXPECTED LEVEL OF OUTCOME	During weekend dinners with extended family, Joey will sit at the dining room table either eating or quietly playing with a toy for at least 5 min for 2/3 dinners.
EXCEEDS OUTCOME	During weekend dinners with extended family, Joey will sit at the dining room table either eating or quietly playing with a toy for at least 10 min for 2/3 dinners.

Current level of performance	Joey enjoys water and water play indoors and out. He engages in water play by himself. He does not participate with the family as they take care of the garden.
Initial Outcome	When watering the garden with mom or dad, Joey will follow a 1 step visual sequence (Step 3. When handed a can, water 3 plants so that each plant receives water) with verbal prompts as needed for 3 out of 4 times.
Secondary Outcome	When watering the garden with mom or dad, Joey will follow a 2 step visual sequence (Step 2. Walk to garden plot while holding can filled with water, Step 3. Water 3 plants so that each plant receives water) with verbal prompts as needed for 3 out of 4 times.
Expected Level of Outcome By When: _____	When watering the garden with mom or dad, Joey will follow a 3 step visual sequence (Step 1. Hold child size can while parent fills with water; Step 2. Walk to garden plot while holding can; Step 3. Water 3 plants so that each plant receives water) with verbal prompts as needed for 3 out of 4 times.
Exceeds Outcome	When watering indoor plants or the garden with mom or dad, Joey will follow a 3 step visual sequence (Step 1. Hold child size can while parent fills with water; Step 2. Walk to garden plot while holding can; Step 3. Water 3 plants so that each plant receives water) with verbal prompts as needed for 3 of 4 times.


Data Collection:

Date	5/27/11	5/28/2011	6/1/2011			
Step 3. When handed a can, water 3 plants so that each plant receives water.						
(Joey or parent place sticker/plant watered)						
Step 2. Walk to garden plot while holding can filled with water.			✓			
Step 1. Hold can while mom/dad fills it with water.						
Who helped?	Dad	Mom	Dad			

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GAS ACTIVITY 2: Scaling an IFSP outcome



Step 1:
Find a small group (2-3).

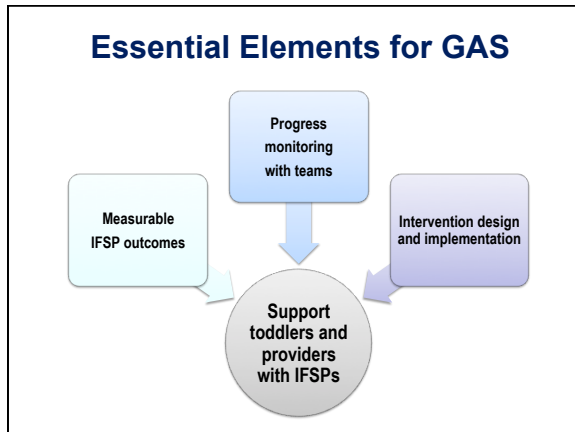
Step 2:
Identify target toddler

Step 3:
Identify one priority outcome.

Step 4:
Develop the GAS for the priority outcome for toddler.

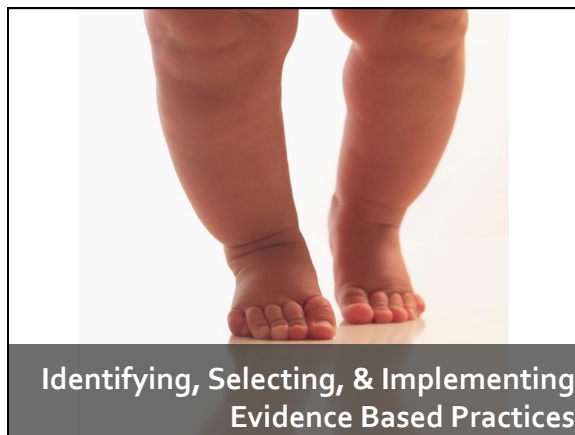
Step 5:
Discuss practical data collection procedures, potential evidence-based practices, potential challenges, etc.

Current level of performance	Step 1.
Initial Outcome	Step 3.
Secondary Outcome	Step 4.
Expected Level of Outcome By When: _____	Step 2.
Exceeds Outcome	Step 5.



Start/Stop/Continue

- What do I need to
 - Stop doing
 - Continue doing
 - Start doing



What are EBPs?

Focused interventions that:

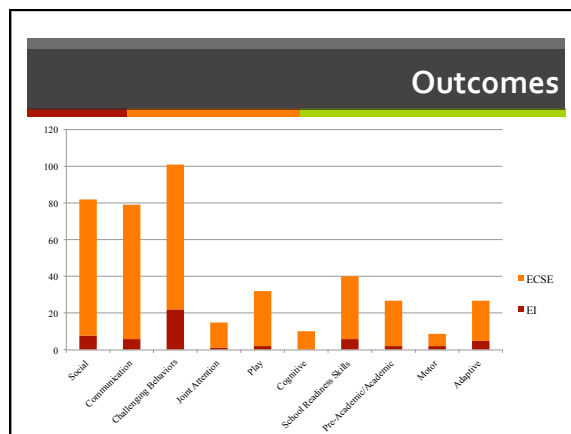
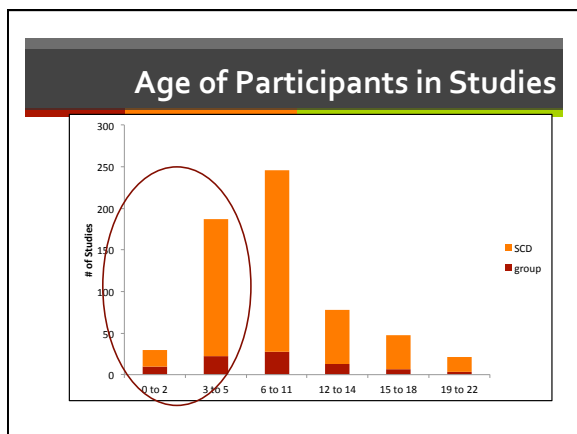
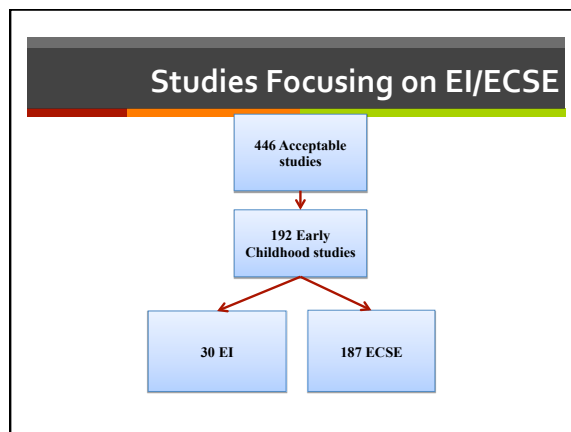
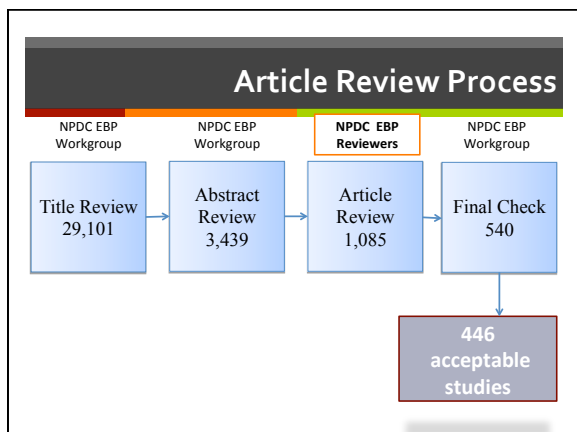
- Produce specific behavioral and developmental outcomes for a child
- Have been demonstrated as effective in applied research literature
- Can be successfully implemented in educational settings

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

Why we chose focused interventions?

- We had our audience in mind – teachers and early interventionists
- Flexibility of use of EBP to address individual needs of students. Not all students benefit from a given comprehensive treatment model.
- Build on the infrastructure that exists in programs and schools (IEPs/IFSPs).
- Assist teachers/interventionists improve on their use of strategies that are widely used: prompting, reinforcement, visual supports, etc. (fidelity)
- Demonstrate that use of EBPs can be applied universally

Previous Research Reviews: NPDC & NAC



Update on EBPs for Infants, Toddlers with ASD and Families

- Wong et al. 2014 recently updated Odom et al. (2010) EBP review <http://autismpdc.fpg.unc.edu/node/21>
- 27 EBPs identified
- AFIRM WEBSITE <http://afirm.fpg.unc.edu/afirm-modules>

Developing learning modules for the 27 evidence based practices.

Evidence – Based Practices (2014)

EBP Definitions Handout

Antecedent-based interventions	Pivotal response training
Cognitive behavioral intervention	Prompting
Differential reinforcement	Reinforcement
Discrete trial training	Response interruption/redirection
Exercise	Scripting
Extinction	Self-management
Functional behavior assessment	Social narrative
Functional communication training	Social skills training
Modeling	Structured play groups
Naturalistic interventions	Task analysis
Parent implemented interventions	Technology aided inst/intervention
Peer mediated interventions	Time delay
Picture exchange communication	Video modeling
	Visual supports

Evidence – Based Practices Validated for Infants & Toddlers


<p>Antecedent-based interventions</p> <ul style="list-style-type: none"> Cognitive behavioral intervention Differential reinforcement Discrete trial training Exercise Extinction <p>Functional behavior assessment</p> <ul style="list-style-type: none"> Functional communication training <p>Modeling</p> <p>Naturalistic interventions</p> <p>Parent implemented interventions</p> <ul style="list-style-type: none"> Peer mediated interventions Picture exchange communication 	<p>Pivotal response training</p> <p>Prompting</p> <p>Reinforcement</p> <ul style="list-style-type: none"> Response interruption/redirection Scripting Self-management Social narrative <p>Social skills training</p> <ul style="list-style-type: none"> Structured play groups Task analysis Technology aided inst/intervention Time delay <p>Video modeling</p> <ul style="list-style-type: none"> Visual supports
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Evidence – Based Practices Foundational

<ul style="list-style-type: none"> Antecedent-based interventions Cognitive behavioral intervention Differential reinforcement Discrete trial training Exercise Extinction Functional behavior assessment Functional communication training Modeling Naturalistic interventions Parent implemented interventions Peer mediated interventions Picture exchange communication 	<ul style="list-style-type: none"> Pivotal response training Prompting Reinforcement Response interruption/redirection Scripting Self-management Social narrative Social skills training Structured play groups Task analysis Technology aided inst/intervention Time delay Video modeling Visual supports
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What are Not - EBPs

- Probably more than any disability, or unique set of abilities, autism has been shrouded in a treatment mystique
- Treatments are more diverse than any known disabilities
- Treatment claims range from amelioration to recovery
- Defense against the dark arts!



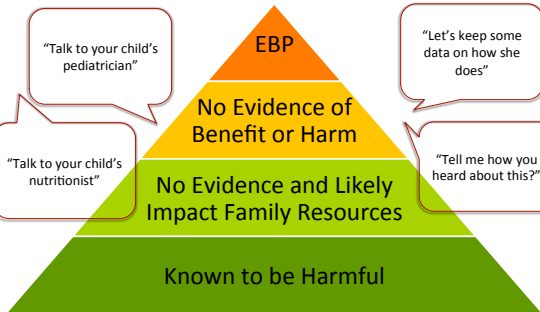
“Cutting Edge Interventions for Autism” (Seri & Lyons, 2011)

<ul style="list-style-type: none"> • Antifungal treatment • Aquatic therapy • Auditory Integration Therapy • Chelation Removal of Toxic Metals • Craniosacral and chiropractic therapy • Dietary interventions 	<ul style="list-style-type: none"> • Hyperbaric oxygen therapy • Medicinal marijuana • Neuroimmune dysfunction and antiviral therapy • Sensory gym • Traditional and indigenous healing • Stem cell therapy • Transcranial Direct Current Stimulation
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What We Know

- Current research shows that as many as 1/3 of parents have tried complementary or alternative medicine treatments, and up to 10% may be using a potentially dangerous treatment
- Such as:
 - Chelation
 - Hyperbaric oxygen therapy
 - Miracle Mineral Solution (MMS)

How do we talk to families about EBPs and other CAM treatments?




Evaluating Options – Questions for Parents to Ask

- What is the purpose of the practice? How will my child benefit? For how long?
- What do I have to benefit? How long must child be involved to benefit?
- Has this practice been scientifically studied? How do I know the results?
- Potential harm – physical, psychological to child?
- Family cost – time and money? Is the cost fair/reasonable?
- How are practitioners trained?
- Any legal actions current or past against those promoting this practice?
- How will I know it has worked for my child?
- If I choose this practice, what alternatives am I not pursuing?

Adapted from: <http://www.autism-society.org/living-with-autism/treatment-options/evaluating-options/>



Talking to Families about EBPs

- What are EBPs?
 - Difference between EBPs and programs (e.g. ABA practices vs Discrete Trial program)
- Why EBPs?
 - We know they work
 - We know we can implement them effectively
 - We can see if child is making progress and shift if needed
- Where to find EBPs?
 - Coming up...
- How to use EBPs?
 - Coming up...



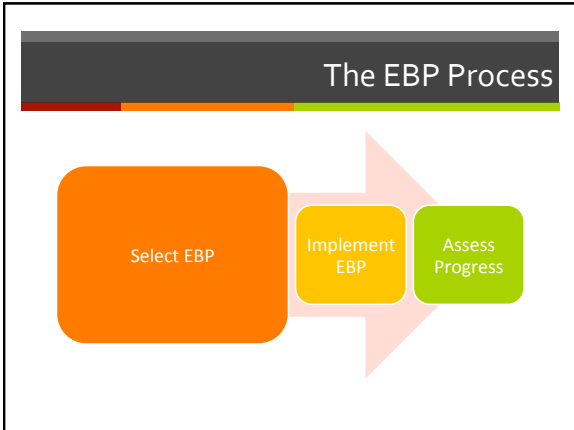
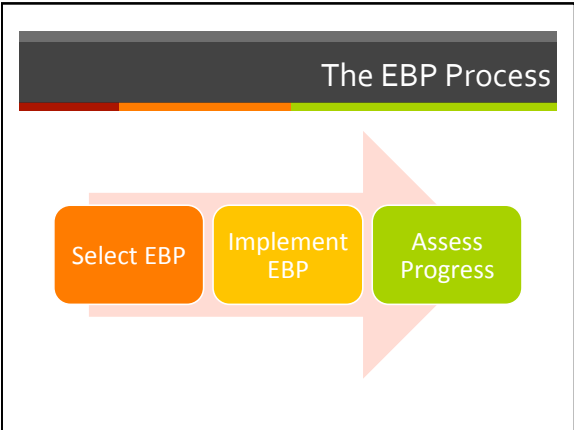
EBP – Self-Check

- Take out EBP list and EBP definitions
- Check off those that you use and feel confident you are implementing effectively
- Circle those that you aren't using but would like to learn how to implement
- Write 3 of the ones you want to learn about

Start/Stop/Continue

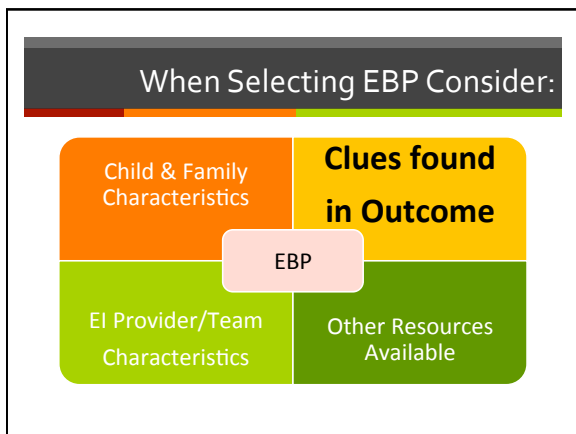
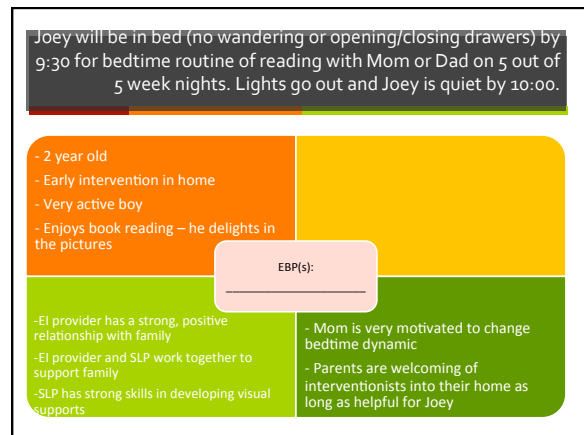
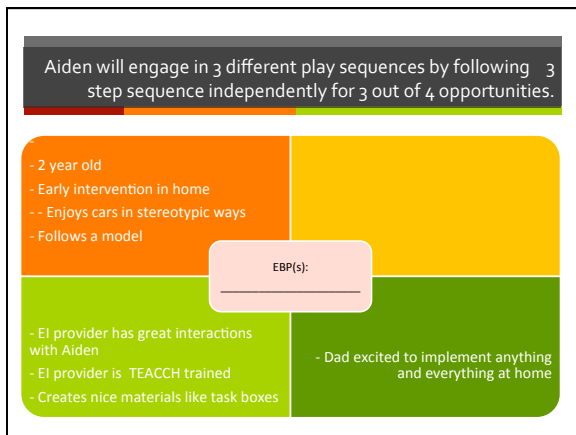
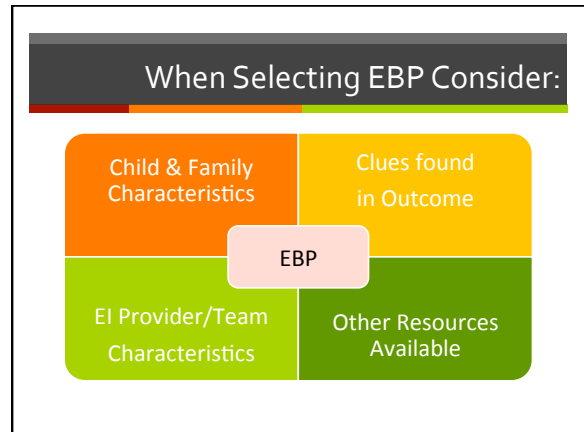
- What do I/my team need to
 - Stop doing
 - Continue doing
 - Start doing
- What do I/my team need to learn?
- What resources do I/we have?
- What resources do I/we need?
- Who can coach me/us through implementation?

Think About:

Child _____

1 priority outcome _____



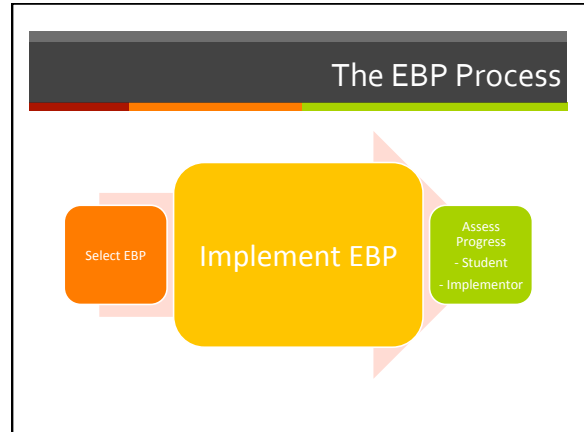
Matching EBPs to Outcomes

Matching EBPs Handout

- Upon seeing a desired item or activity that Jacob has limited access to, Jacob will spontaneously name the item (example - say "yogurt," "gummy," "pillow," "swing" or "jump") before receiving a small portion or 45 seconds of the activity at least 20 times a day 7 out of 7 days a week.
- Liam will take turns with his brother playing with cars and basketball hoop with mom or dad prompting 2 times a day for 3 out of 7 days per week.
- Jory will "stop" what she is doing within 5 seconds of being told to do so 5 out of 10 times a day without prompting.
- With items in sight but out of reach, Jaime will sign, say or exchange a picture from a notebook or folder for 5-10 reinforcing items spontaneously at least 15 times per day, 6 of 7 days per week.
- Throughout the day, between periods of direct 1:1 interaction, Gaetano will engage in independent, constructive play, entertaining himself for 10 minutes 3 of 5 times.

Child: _____
 Outcome: _____

EBP(s): _____



- ### Processes for Implementing EBPs
1. Measurable Outcomes
 2. Identify prerequisite/foundational EBP
 3. Determine setting for implementation
 4. Implementers
 5. Materials needed
 6. Collect baseline data
 - Toddler outcome
 - Fidelity
- Handout
-

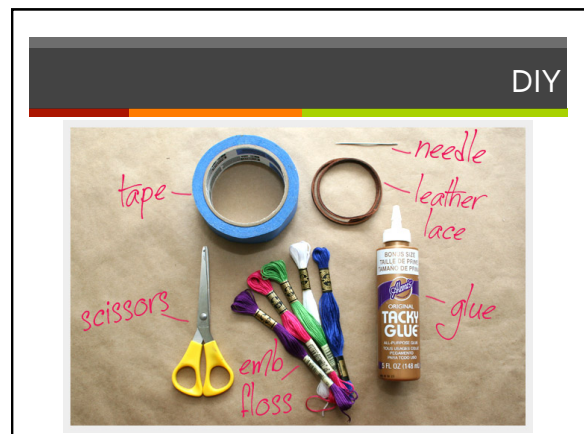
Now What?

How do you know what you don't know?

How do you fill in that gap?

When learning something new...

- Do It Yourself
- Training
- Coaching



Evidence-based Practice Resources

- EBP Briefs (<http://autismpdc.fpg.unc.edu>)
 - Overview
 - Evidence Base
 - Steps for Implementing
 - Implementation Checklist
 - Sample Data Collection Forms (optional)
- Afirm - AFIRM WEBSITE
<http://afirm.fpg.unc.edu/afirm-modules>
- Autism Internet Modules (<http://www.autisminternetmodules.org>)
- EI Specific Resources (<http://asdttoddler.fpg.unc.edu/>)

Example: Step-by-Step Directions

How to Use...

Self

Team

Family

Example: Implementation Checklist

How to Use...

Self

Team

Family

Afirm Learning Modules

<http://afirm.fpg.unc.edu/node/137>

Autism Internet Modules

<http://www.autisminternetmodules.org/>

ASD Toddler Learning Modules

<http://asdtoddler.fpg.unc.edu/>

How to Use...

Self

Team

Family

ASD Toddler – Parent Guides

Parent & Practitioner Guide to Prompting

Prompting is...

... any help given to toddlers to assist them in learning and using a skill. A prompt is given just before or as the toddler tries to use a skill. Prompting allows a toddler to be successful. Prompting helps the toddler use the skill across many activities and routines. Prompts may be verbal, gestural, visual, physical, or a model. Least-to-most prompting is used to teach a single skill or a series of skills (called chained skills). It uses prompting levels (at least 3), starting with the least amount of help (independent level), and ending with the last level (the most amount of help) called the controlling prompt. Chained skills, which all have a physical part to them, are "chained" together in order to complete a more complex skill, such as washing hands, brushing teeth, or a play skill such as building train track. Graduated guidance is used to teach chained skills, typically using physical prompts. The prompt is changed for each step (i.e. hand-over-hand, at the wrist or elbow, lightly touching hand or arm) based on the toddler's needs.

How to Use...

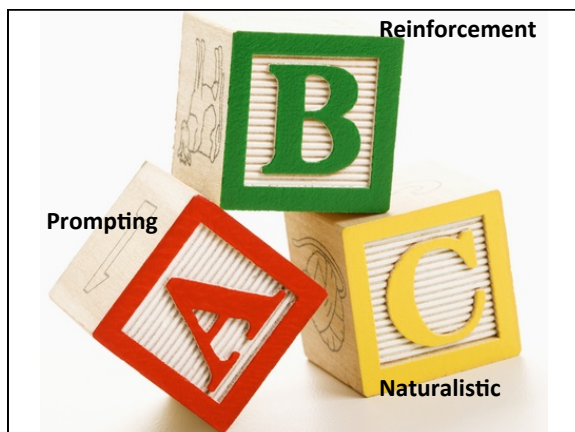
Self

Team

Family

When learning something new...

- Do It Yourself
- Training
- Coaching



For All EBPs

1. **Planning**
 - Choose skill/behavior
 - Collect baseline data
 - Make specific decisions related to EBP
2. **Implementing**
 - Check your fidelity of implementation related to that EBP
3. **Monitoring**
 - Collect data on child/family progress and your/parent's implementation



Common Uh-Oh's

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


Goals of Prompting

An efficient and effective way to provide instruction to toddlers with ASD that:

- maximizes their success and increases their generalized use of target skills
- is based on errorless learning (procedures designed to reduce incorrect responding as learners acquire new skills)

Prompting often used in conjunction with EBPs, such as time delay & reinforcement and are an integral part of other EBPs (e.g. Naturalistic interventions, PRT)


What did you notice?



- What were the prompts used?
- What was the hierarchy?
- How would you do differently?

Graduated Guidance Example

Sorting Colored Blocks



Collecting Data – Discrete Skills

Table 1-A. Example Data Collection Sheet for Discrete Skills. Target skill: Requesting crackers at snack by handing photo of cracker box to adult. Target stimulus: Box of crackers on table and empty bowl. Key: + = correct; - = incorrect; 0 = no response, P = prompted, UP = unprompted

Trial	Level 1	Level 2	Level 3	Level 4
1	0	0	-	+
2	-	-	0	+
3	-	0	-	+
Summary	0 correct	0 correct	0 correct	3 correct

Collecting Data – Chained Skills

Trial 1		Level 1	Level 2	Level 3	Level 4
Washing hands		(Independent)	(Verbal)	(Model)	(Physical)
1.	Turn on water	0	-	0	+
2.	Pump soap into hand	0	0	0	+
3.	Rub hands together in water	0	-	-	+
4.	Turn off water	0	0	-	+
Trial 2		Level 1	Level 2	Level 3	Level 4
Washing hands		(Independent)	(Verbal)	(Model)	(Physical)
1.	Turn on water	0	0	-	+
2.	Pump soap into hand	0	0	-	+
3.	Rub hands together in water	0	0	-	+
4.	Turn off water	-	+	+	+
Summary Data		Correct	1 correct	1 correct	8 correct
		0%	12.5%	12.5%	100%
		Incorrect	2 incorrect	5 incorrect	0 incorrect
		12.5%	25%	62.5%	0%
		No response	5 no response	5 no response	0 no response
		87.5%	62.5%	62.5%	0%

Adapted from Wolery, Ault, & Doyle (1992)

Collecting Data with Families


- Least amount of effort for the most information gained
 - Parent's preferred mode most likely to work
 - Tally Sheet
 - Texting you
 - Diary
 - Taking video and you mark
 - App
 - Search engine for apps: <https://www.autismspeaks.org/autism-apps>

Common Problems and Solutions

Problem	Solution
Child consistently makes errors at the final level in the prompting hierarchy.	The practitioner/parent selects a new, more controlling prompt that will ensure that the child uses the skill correctly.
Child consistently makes errors at an intermediate level in the prompting hierarchy.	The practitioner/parent (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.
Child consistently waits for a prompt instead of attempting to respond to the independent level after several sessions of instruction.	The practitioner/parent differentially reinforces prompted and unprompted correct responses OR eliminates reinforcement for prompted correct responses.
Child consistently fails to respond at any level, including the final level.	The practitioner/parent finds a more powerful reinforcer.

Adapted from Wolery, Ault, & Doyle (1992)

Avoid Prompt Dependence



OUT! CAUTION! KEEP OUT! CAUTION! KEEP OUT! CAUTION! KEEP OUT! C

Prompt Dependence

- Child does not respond until a prompt is delivered by adult.
- Avoid the following:
 - inconsistent target stimulus
 - Not waiting for a response from the child before prompting,
 - unnecessary prompts
 - not effectively fading the use of the prompts..


Fading

When high levels of prompting are used, toddler may appear to be learning but may be prompt dependent.

- Fading should be determined by monitoring toddler's unprompted and prompted correct responses
- Reduce/fade prompts and/or increase wait time gradually and systematically from most to least
- Reduce/fade prompts as quickly as possible

Parent Implementation & Prompting

- Why might prompting be challenging for parents to implement?
- How might you address these challenges?



PII Strategies

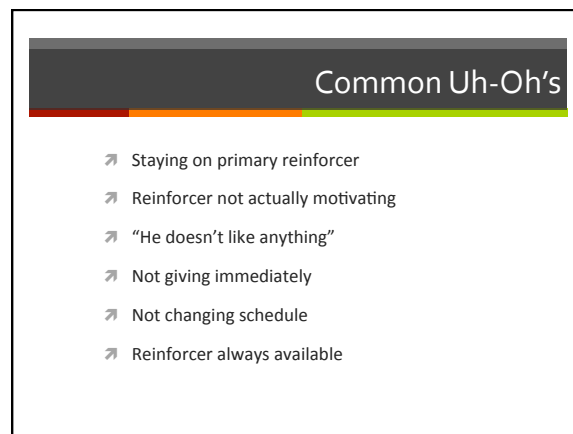
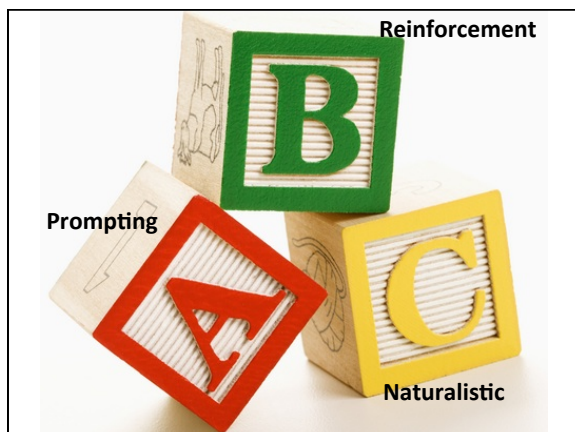





Start/Stop/Continue

- What do I/my team need to
 - Stop doing
 - Continue doing
 - Start doing
- What do I/my team need to learn?
- What resources do I/we have?
- What resources do I/we need?
- Who can coach me/us through implementation?





2 Types of Reinforcement

Positive Reinforcement


Present reinforcer after a learner uses a target behavior

- *primary* (e.g., food, liquids, comfort) or *secondary* (e.g., verbal praise, highly preferred activities, stickers, toys).
- primary reinforcers often naturally reinforcing
- the value of secondary reinforcers must be learned by pairing primary reinforcers with other types of reinforcement

Negative Reinforcement

- Removal of a stimulus (i.e., something that is aversive to the learner) after child uses a target behavior or skill.
- Learners work to get rid of something that is unpleasant to them.
- Often used to teach skills to replace challenging behavior
- Often used when positive reinforcement not proven effective for a toddler


Key to Reinforcement



Reinforcement is most likely to be effective when it:

- Immediately follows the target behavior
 - Give reinforcer
 - Remove mildly aversive situation
- Fits the target behavior
- Is meaningful to the child with ASD
- Is used in conjunction with other reinforcers

Steps for Implementation – Positive Reinforcement



ASD toddler initiative

Implementation Checklist for Positive Reinforcement


Instructions _____ State _____

Individual(s) Observed _____ Toddler's Initials _____

Skills below can be implemented by an EI provider, parent, or other team member

Step 1. Plan	Observation Date	1	2	3	4
1. Identify the toddler's target skill/behavior and positive reinforcers					
2. Select and describe the target skill/behavior in observable and measurable terms.					
3. Identify the activities and routines within which to teach the target skill					
4. Determine implementation of other evidence-based practices					
5. Collect baseline data					
6. Establish goals and criteria					
7. Select positive reinforcers					
8. Select a schedule of reinforcement – acquisition and					

Determining what reinforces a child



Identifying Positive Reinforcers

Primary

- Satisfy a physical need
- Food, liquids, sleep

Secondary

- Objects or activities the child has grown to like

Natural

- Naturally occur as a direct result of using the target behavior
- Provided more easily and available to learner after target skill/behavior learned.



Reinforcer Assessments

Date	Reinforcer 1 (+) or (-)	Reinforcer 2 (+) or (-)	Notes
5/01/12	Bubbles (+)	Coloring/drawing (-)	
5/01/12	Bubbles (+)	Squishy ball (-)	
5/01/12	Play doh (+)	Squishy ball (+)	
5/01/12	Squishy ball (+)	Favorite book (-)	
5/01/12	Favorite book (+)	Play doh (-)	
5/01/12	Favorite book (+)	Duplo blocks (+)	
5/02/12	Duplo blocks (+)	Play doh (-)	
5/02/12	Duplo block (+)	Coloring/drawing (-)	
5/02/12	Playdoh (+)	Coloring/drawing (-)	
5/02/12	Swinging (+)	Sitting in rocking chair (-)	
5/02/12	Swinging (+)	Trampoline (-)	

Key: + = toddler chooses; - = does not choose

- Creating preference lists (e.g., reinforcer checklists, reinforcer menus);
- Observing the learner;
- Interviewing family members;
- Interviewing other practitioners.




Schedules of Reinforcement

Varying schedules of reinforcement offers opportunities for avoiding satiation and building in fading

- Continuous Reinforcement
 - reinforcement of all instances of target behavior
- Intermittent Reinforcement
 - reinforcement after some but not all instances of target behavior
- Fixed/Variable Ratio
 - Reinforcing after every/a number of behavior/skills
- Fixed/Variable Interval
 - Reinforcing after same/different time passes

Which One?

- ◆ Buying a scratch lottery ticket and winning
- ◆ Checking for the mail when the mailman is extremely unpredictable
- ◆ A charity makes an average of 15 phone calls for every donation received
- ◆ Checking the oven to see if cookies are done when baking time is known
- ◆ Calling garage mechanic to see if your car is fixed yet
- ◆ Your paycheck



KEEP OUT! CAUTION! KEEP OUT! CAUTION! KEEP OUT! CAUTION! KEEP OUT! CAUTION! KEEP OUT!

Avoid Satiation!

To Avoid Satiation:	How to:
Menu of reinforcers	After conducting reinforcer sampling, observation and/or interest inventory keep on hand a number of the reinforcers identified.
Vary reinforcers	If the child very much enjoys tickles and silly faces, alternate tickles or silly faces when providing reinforcement for a skill/behavior. If the same child also enjoys pretzels, consider keeping pretzels as reinforcer for snack time and tickles are reinforcers for playtime.
Teach during several short sessions	Several short sessions helps to ensure that the child won't tire of the reinforcer before he has enough opportunities to practice the skill/behavior.
Avoid using edibles. If they must be used, use a variety.	Edibles (a primary reinforcer) should be used only when other reinforcers have not been identified or if the edible is a natural reinforcer (e.g., the child requests juice then juice is provided). If used, various types should be used and they should be paired with other types of reinforcement.
Shift from primary reinforcers to secondary reinforcers as soon as possible and pair them from the beginning.	Since toddlers with ASD are less likely than their typically developing peers to value secondary reinforcers, pair these with more valued reinforcers from the beginning. As the child becomes more motivated by secondary reinforcer, fade the primary reinforcer.
If child does lose interest in reinforcer, choose a new one.	If the child stops using the skill/behavior after mastering it or shows disinterest in reinforcer, change it. An inventory or reinforcer sampling may need to be repeated if no other reinforcers are immediately apparent.

Common Problems and Solutions


Potential Reason	Potential Solution
Is the reinforcer of value to the toddler? How do you know?	Conduct reinforcement sampling to identify reinforcers that the child prefers and ones that he or she doesn't.
Is the child satiated/bored with the reinforcer? Is the reinforcer overused?	Only use the specific reinforcer when expecting the child to use a specific behavior/skill. For example, if using an edible like crackers only have them available when working with the child on the specific skill. Do not provide crackers for snack right before working on skill.
Is the schedule of reinforcement inconsistent with what the child needs?	If the child hasn't made the connection between the desired behavior/skill and the reinforcer, he or she will require the reinforcement to be provided after every successful use of the behavior/skill. Shifting to another schedule or reinforcement (a different ratio or different interval) will have to wait.
Are you not sure if the reinforcer is working?	Collecting data is important in order to best understand if reinforcement is or isn't impacting the toddler's responses. When taking data on child responses make note of the reinforcers used to identify if some support the toddler's use of the target skill/behavior better than others.

Monitoring Progress

Date/Time	Requested How	Highest Prompt Used	Requested What	With Whom	Before or During reinforcement?
11/16 9:30	Yell	-	Bell toy	Mom	Before
9:50	Yell Scream	-	I have no idea	Mon	Before
10:20	Throwing	-	Juice	Mom	Before
10:22	Throwing herself	-	Juice (wasn't fast enough)	Mom	Before
10:40	Reach!!!	-	Cracker	Mom	Before
11:02	Reach!	-	Cracker	Mom	Before
11:15	Yell	-	Bell Toy	Mom	Before
11/18 110:00	Yell	Verbal	Cracker	Mom	During
	Yell	Verbal	Cracker	Mom	During
	Reach ☺	Ver-Vis	Cracker	Jan	During
	Reach	Ver-Vis	Cracker	Jan	During
	Reach	Ver-Vis	Cracker	Jan	During
	Reach	Ver-Vis	Cracker	Jan	During
	Reach	Ver-Vis	Cracker	Jan	During
	Reach	Ver-Vis	Cracker	Mom	During
	Reach	Ver-Vis	Cracker	Mom	During
	Reach	Ver-Vis	Cracker	Mom	During
10:20	Reach	Ver-Vis	Cracker	Mom	During
11:30	"bu"	Ver-Vis	Bubbles	Mom	During

Parent Implementation & Reinforcement

- Reinforcer isn't available until used to work on skill/behavior
- Reinforcer IS available when child uses target skill/behavior
- Child has opportunity to work on skill/behavior so that she can be reinforced
- Reinforcing the target skill/behavior
- Not reinforcing the non-preferred skill/behavior






PII Strategies




Video




- How was reinforcement used?
- How were PII strategies used?
- Feedback for mom?
- Feedback for EI provider?



Naturalistic

Who uses naturalistic strategies?



Common Uh-Oh's

- Over-leading
- Not finding opportunities to manipulate environment
- Not finding opportunities to embed practices throughout child's day
- Over-prompting
- Under-prompting
- Not reinforcing immediately

Goals of Naturalistic Practices


- A collection of practices that include:
 - environmental arrangement,
 - interaction techniques, and
 - behavioral strategies.
- Implemented in the natural environment during daily routines and activities to facilitate generalized use of target skills.
- Designed to address a toddler's target skills by using their interests to guide instruction
- Used to build more complex skills that are:
 - naturally reinforcing and
 - appropriate to the interaction.



Target Skills Addressed


Naturalistic intervention is most often used to facilitate the following language/communication skills:

- expressive vocabulary,
- speech intelligibility,
- gesture use,
- shared attention, and
- turn-taking.



Examples of Target Skills

1. Connor will use a point to request items that have been placed on a high shelf.
2. Anna will request a snack by saying “snack”, or approximating the type of snack “ap” for “apple” or pointing to her snack
3. James will initiate play with his mother or sister by saying “mama” or “Ana”.



Identifying Contexts for Intervention

- Naturalistic intervention takes place:
 - throughout the day and
 - within the context of daily routines/activities.




Identifying Opportunities

Target Behavior: Noah will engage in turn taking activities for five minutes within the context of at least five activities that occur throughout his day, three days of the week.

Wake Up and Dressing	Learning Opportunities: Exchange morning kisses back and forth. Take turns in the lead for putting on clothing (e.g., “I’ll help you put one arm into your shirt; you do the other arm by yourself”).
Breakfast	Learning Opportunities: Passing food items; self-feeding
Play Time with Mom	Learning Opportunities: Take turns around stacking blocks, linking and unlinking cars of a toy train, picking up toys for cleanup.
Snack	Learning Opportunities: Take turns around preparing food for a snack (e.g., putting sliced cheese on a plate, taking carrots out of a bag).
Play at Park	Learning Opportunities: Take turns tagging each other; or going first. Take turns burying a toy in the sand or filling a bucket full of sand.
Lunch	Learning Opportunities: Take turns carrying empty cups or dishes to the counter.
Nap	Learning Opportunities: Take turns putting stuffed animal to bed as part of a naptime routine (e.g., taking off shoes, pulling up blanket, patting back, saying “night night”).
Screen Time	Learning Opportunities: Take turns pushing keys/keypad on a simple Internet game/app.
Dinner	Learning Opportunities: Take turns scooping food into the dog’s bowl.
Bath Time	Learning Opportunities: Take turns washing a bath tub toy dog.
Bedtime	Learning Opportunities: Take turns turning pages in a book.

Find Opportunities

- Take one of the IFSP Outcomes
 - Are naturalistic interventions appropriate to work on outcome?
 - Why?
 - Why not?
 - If yes, identify 3 opportunities for parents to implement naturalistic interventions
 - Where would you start? Why
- RETURN at 3:30 from Snack ☺



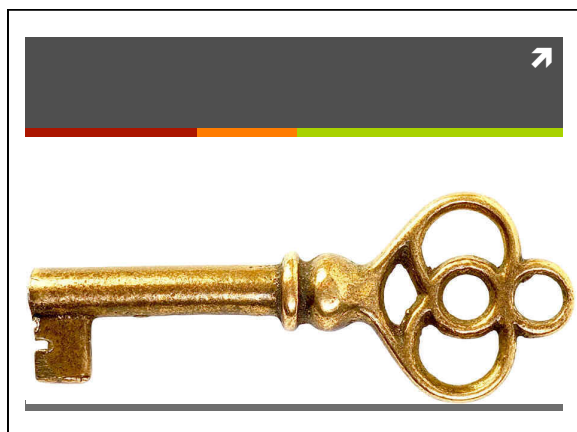
Steps for Implementation – Naturalistic Interventions



Implementation Checklist for Naturalistic Intervention for use with Toddlers

	Observation	1	2	3	4
Step 1. Plan the Naturalistic Intervention					
1.1 Identify a Target Behavior	Date				
1.2 Collect Baseline Data	Observer's Initials				
1.3 Identify the Contexts for Interventions					
1.4 Develop Trainers to Train or Identify Interventionists					
Step 2. Use the Naturalistic Intervention: Implementation					
2.1 Arrange the Environment to Elicit the Target Behavior	Observation	1	2	3	4
2.2 Elicit the Target Behavior	Date				
2.3 Engage the Toddler in an Interaction	Observer's Initials				
2.4 Use Strategies Based on Applied Behavior Analysis (ABA) to Elicit Target Behaviors					
Step 3. Monitor Progress					
3.1 Collect Data to Monitor Toddler Progress and Determine Next Steps	Observation	1	2	3	4
3.2 Analyze Data to Determine Next Steps	Date				
	Observer's Initials				

*Scoring Key: 2 = implemented, 1 = partially implemented, 0 = did not implement, NA = not applicable



Arranging the Environment to Elicit the Target Skill



Early interventionists use and coach parents to use environmental arrangement strategies:

- choosing motivating materials/activities;
- managing teaching materials in a way that encourages toddlers to communicate; and
- arranging the intervention context to encourage the use of the target skill and maintain the toddler's interest.

Motivating Toddlers to Communicate



- Motivating materials:
 - have multiple parts (e.g., legos, shape sorter)
 - are added onto another activity (e.g., adding animals to blocks, favorite blanket to play with dolls),
 - require adult/peer assistance (e.g., having lid on bubbles, placing pencils on high shelf), and
 - encourage turn-taking (e.g., throwing a ball, card games).

Managing and Distributing Materials



- To encourage toddlers to communicate, materials should be managed by a communicative partner (i.e., provider, parent, sibling).
- The communicative partner is the “keeper of the goods”

EXAMPLES:

- Providing too few paintbrushes
- Having sibling pass out snack to family, but waiting for toddler to request
- Others?

Arranging the Intervention Context




- Early interventionists arrange and coach family to arrange the intervention context to promote use of target skills.
- **EXAMPLES:**
 - Placing preferred items/materials visible, but out of reach (e.g., clear bin of match box cars on high shelf)
 - “Forgetting” to provide a necessary item for an activity (e.g., not turning on Thomas the train, missing bubble wand)
 - Including novel materials into a familiar activity (e.g., different animals in water table)



Naturalistic Interventions In Action

- What did you notice?
- What aspects of Naturalistic Interventions were implemented?
- What could have been enhanced, changed...?
- How could the interventionist use this moment to coach the toddler's mom?




PII & Naturalistic Interventions

- Parents may need support recognizing opportunities in their routines/activities
- Parents may not notice how much they *anticipate* and *meet* their child's needs
- Coach parents in allowing child to have needs and to communicate these
- Parents may need coaching with immediacy
 - Prompting and responding with request
- Other likely issues?

OUT! CAUTION! KEEP OUT! CAUTION! KEEP OUT! CAUTION! KEEP OUT! C



Using Data to Monitor Toddler Progress

- Language samples
- Frequency data



Week/ Day of Week : (e.g. April 5-7)	Target Behavior: Using Words/Word Approximations During Bath Time	List of Potential Words used	Number of Words Used
Sunday		Toys: Ball_Duck_Towel_Soap_Water_Book Body Parts: Nose_Face_Eyes _Arms_Legs_Feet_Toes_Tummy_Hand_Fingers Other:	
Monday		Toys: Ball_Duck_Towel_Soap_Water_Book Body Parts: Nose_Face_Eyes _Arms_Legs_Feet_Toes_Tummy_Hand_Fingers Other:	
Tuesday		Toys: Ball_Duck_Towel_Soap_Water_Book Body Parts: Nose_Face_Eyes _Arms_Legs_Feet_Toes_Tummy_Hand_Fingers Other:	
Wednesday		Toys: Ball_Duck_Towel_Soap_Water_Book Body Parts: Nose_Face_Eyes _Arms_Legs_Feet_Toes_Tummy_Hand_Fingers Other:	
Thursday		Toys: Ball_Duck_Towel_Soap_Water_Book Body Parts: Nose_Face_Eyes _Arms_Legs_Feet_Toes_Tummy_Hand_Fingers Other:	
Friday		Toys: Ball_Duck_Towel_Soap_Water_Book Body Parts: Nose_Face_Eyes _Arms_Legs_Feet_Toes_Tummy_Hand_Fingers Other:	
Saturday		Toys: Ball_Duck_Towel_Soap_Water_Book Body Parts: Nose_Face_Eyes _Arms_Legs_Feet_Toes_Tummy_Hand_Fingers Other:	

PII Strategies

Coaching with self-reflection and feedback

Video analysis

Role playing feedback

Written information

Direct instruction

Modeling the practice

Let's Put it Together Watch for Evidence of Each




Prompting

Reinforcement

Naturalistic

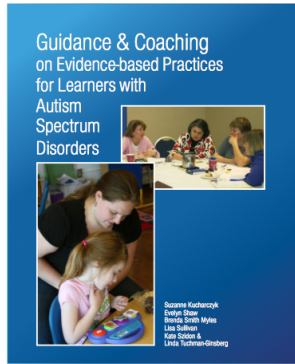
Video



- What EBP?
- What PII Strategies?
- What feedback to mom?
- What feedback to EI provider?

When learning something new...

- Do It Yourself
- Training
- Coaching



<http://autismpdc.fpg.unc.edu/coaching-resources>



Outcome 1:				
EBP(s)	How to implement	Who will implement	When/Where	How/When to Measure Progress
	Fidelity Baseline _____ Fidelity Check Dates _____ _____			
Plan for Professional Development				
Plan for Coaching Family				
Resources Needed (visuals, laminating, data forms)				

Handout

