Using Evidence-Based Strategies to Support Social Communication Skills of Young Children

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Today's Presenters

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Today's Moderators

Maria Matticks

Consultant

Early Intervention Training Program

Michaelene M. Ostrosky

Head and Goldstick Family Scholar, Special Education, University of Illinois

Alissa Jones

Research Specialist

Early Intervention Training Program

Survey & Certificate

This webinar has ILLINOIS EI credit as well as ILLINOIS STATE LICENSURE* credit

***OT, PT, SLP, SW, Nutrition/Dietitian**

Look for "unique" email AFTER the webinar with the survey from Early Intervention Training Program (eitraining@illinois.edu)

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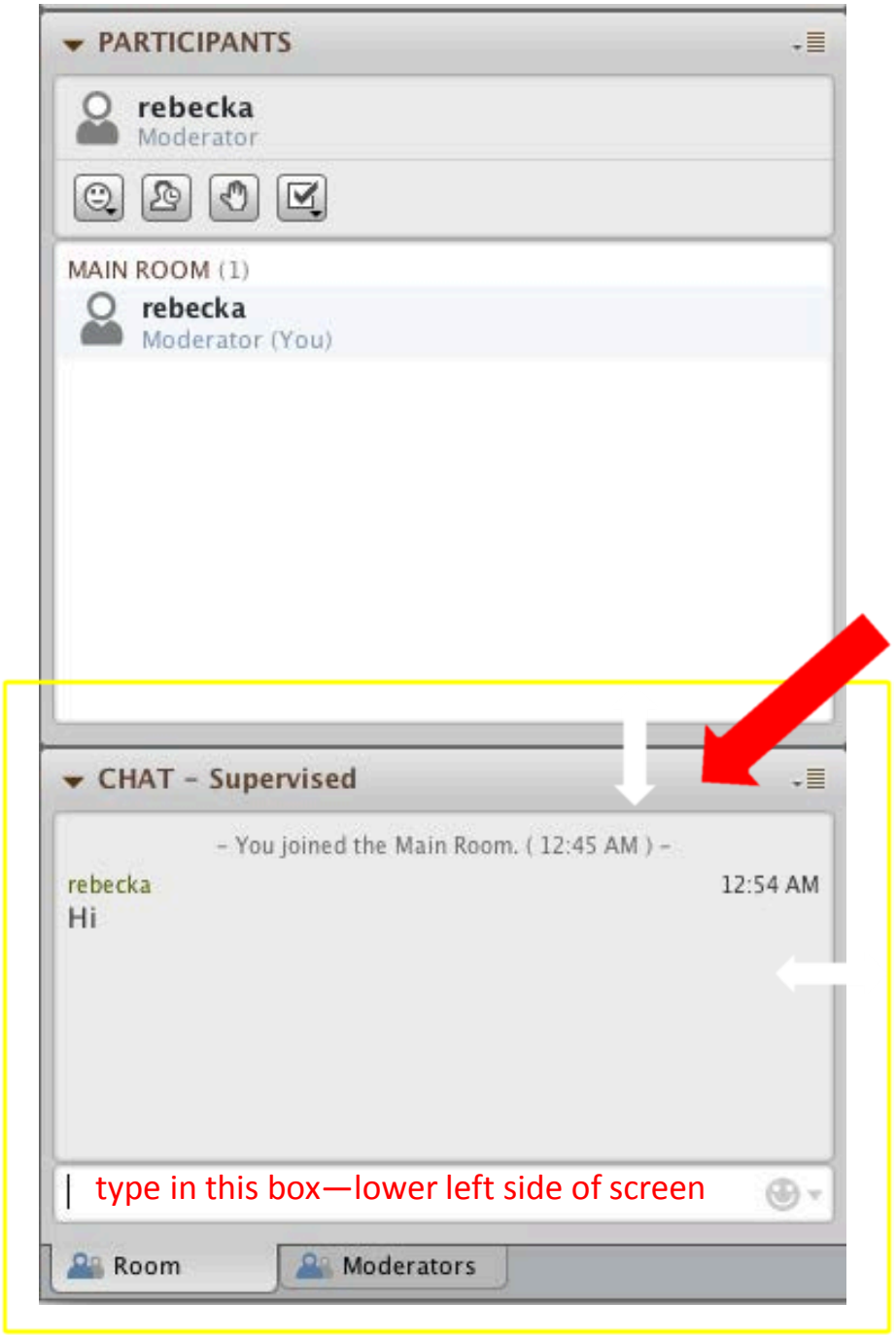
Chat

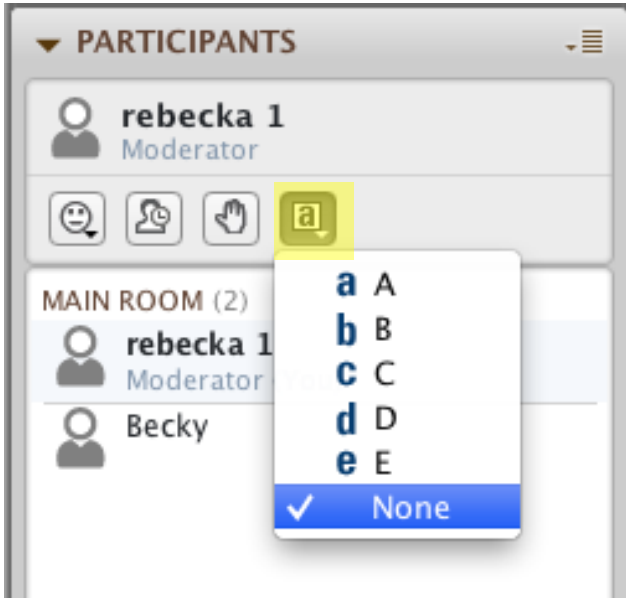


Move the column

Rollover the top or right side border to resize the chat box.

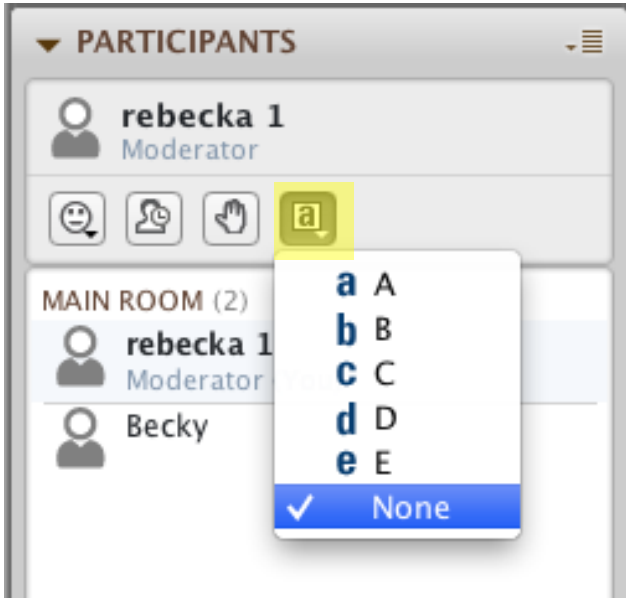
Who do we have participating with us today?

A. Parent/caregiver
B. Early Interventionist
C. CFC Staff
D. Administrators
E. Other (list in Chat Room)



If you are an early interventionist, what is your primary discipline?

A. Developmental Therapist
B. Speech/Language Pathologist
C. Physical Therapist
D. Occupational Therapist
E. Other (identify in chat box)



Agenda

- Who we are
- Objectives
- Social Communication Skills
- Evidence-Based Naturalistic Teaching Strategies
- Coaching Parents

About Us…

Objectives

- Social-communication challenges
- Evidence-based naturalistic strategies
- Collaborating with families
- Training and coaching families

Social Communication Skills

Social communication skills refer to the skills needed to communicate and engage with others

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Many young children who have autism and other developmental disabilities exhibit deficits in social-communication skills (Sigafoos, Arthur-Kelly, & Butterfield, 2006)

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Many young children who have autism and other developmental disabilities exhibit deficits in social-communication skills (Sigafoos, Arthur-Kelly, & Butterfield, 2006)

During the early childhood years, responsive adults facilitate the development of children's communication skills

Naturalistic Teaching Strategies

- Collection of strategies based on applied behavior analysis principles
- Designed to encourage specific behaviors based on a child's interests
- Used within typical settings, activities, or routines

Naturalistic Teaching Strategies

- Evidence-based Strategies

- Effective in addressing social, communication, behavior, play, and academic skills of children birth-11 (Wong et al., 2014)

Evidence-based Strategies

Table 7. Working Definitions for EBPs

Evidence-Based Practice	Definition	Empirical Support	
		Group (n)	Single Case (n)
Antecedent-based intervention (ABI)	Arrangement of events or circumstances that precede the occurrence of an interfering behavior and designed to lead to the reduction of the behavior.	0	32
Cognitive behavioral intervention (CBI)	Instruction on management or control of cognitive processes that lead to changes in overt behavior.	3	1
Differential reinforcement of Alternative, Incompatible, or Other Behavior (DRA/I/O)	Provision of positive/desirable consequences for behaviors or their absence that reduce the occurrence of an undesirable behavior. Reinforcement provided: a) when the learner is engaging in a specific desired behavior other than the inappropriate behavior (DRA), b) when the learner is engaging in a behavior that is physically impossible to do while exhibiting the inappropriate behavior (DRI), or c) when the learner is not engaging in the interfering behavior (DRO).	0	26
Discrete trial teaching (DTT)	Instructional process usually involving one teacher/service provider and one student/client and designed to teach appropriate behavior or skills. Instruction usually involves massed trials. Each trial consists of the teacher's instruction/presentation, the child's response, a carefully planned consequence, and a pause prior to presenting the next instruction.	0	13
Exercise (ECE)	Increase in physical exertion as a means of reducing problem behaviors or increasing appropriate behavior.	3	3
Extinction (EXT)	Withdrawal or removal of reinforcers of interfering behavior in order to reduce the occurrence of that behavior. Although sometimes used as a single intervention practice, extinction often occurs in combination with functional behavior assessment, functional communication training, and differential reinforcement.	0	11
Functional behavior assessment (FBA)	Systematic collection of information about an interfering behavior designed to identify functional contingencies that support the behavior. FBA consists of describing the interfering or problem behavior, identifying antecedent or consequent events that control the behavior, developing a hypothesis of the function of the behavior, and/or testing the hypothesis.	0	10
Functional communication training (FCT)	Replacement of interfering behavior that has a communication function with more appropriate communication that accomplishes the same function. FCT usually includes FBA, DRA, and/or EXT.	0	12
Modeling (MD)	Demonstration of a desired target behavior that results in imitation of the behavior by the learner and that leads to the acquisition of the imitated behavior. This EBP is often combined with other strategies such as prompting and reinforcement.	1	4
Naturalistic intervention (NI)	Intervention strategies that occur within the typical setting/activities/routines in which the learner participates. Teachers/service providers establish the learner's interest in a learning event through arrangement of the setting/activity/routine, provide necessary support for the learner to engage in the targeted behavior, elaborate on the behavior when it occurs, and/or arrange natural consequences for the targeted behavior or skills.	0	10
Parent-implemented intervention (PII)	Parents provide individualized intervention to their child to improve/increase a wide variety of skills and/or to reduce interfering behaviors. Parents learn to deliver interventions in their home and/or community through a structured parent training program.	8	12
Peer-mediated instruction and intervention (PMII)	Typically developing peers interact with and/or help children and youth with ASD to acquire new behavior, communication, and social skills by increasing social and learning opportunities within natural environments. Teachers/service providers systematically teach peers strategies for engaging children and youth with ASD in positive and extended social interactions in both teacher-directed and learner-initiated activities.	0	15

(Wong et al., 2014)

Specific Naturalistic Strategies

Environmental Arrangement

Specific Naturalistic Strategies

Environmental Arrangement

Modeling

Specific Naturalistic Strategies

Environmental Arrangement	Modeling	Mand-Model

The i-PiCS Program

Specific Naturalistic Strategies

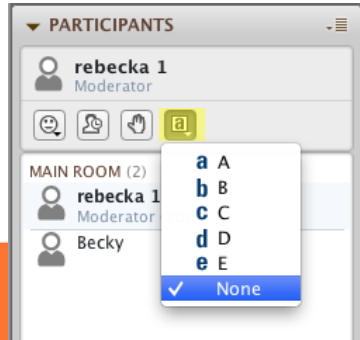
Environmental Arrangement	Modeling	Mand-Model	Time Delay

The i-PiCS Program

What do you think?

Which action is most likely to encourage communication?

a. Making sure the child gets enough playtime outside
b. Eating breakfast with the child
c. Using “baby talk” to make language easier for the child
d. Withholding preferred objects from a child until he or she asks for them



Environmental Arrangement

- Purpose: setting up opportunities for communication
- **Environmental arrangement** is best used in conjunction with the other naturalistic strategies

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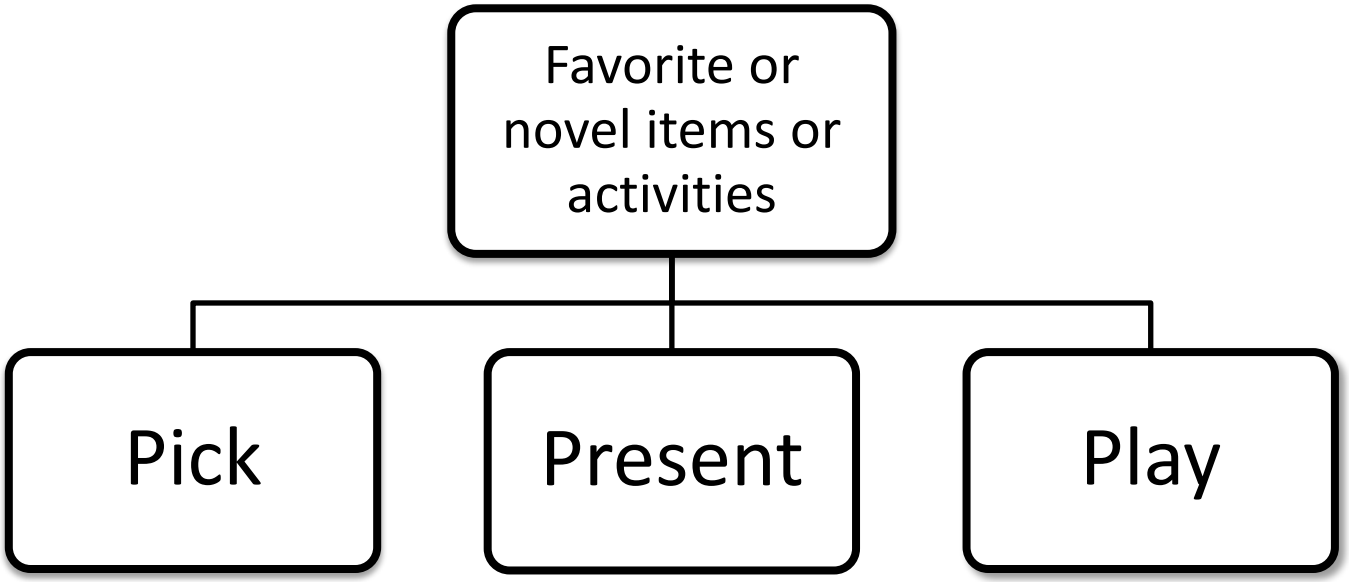

Meadan et al., 2014

Environmental Arrangement

Favorite or novel items or activities

- Pick
  - Examples
    - Pick activities or games that need more than one player.
    - Pick toys and materials that your child highly prefers.
- Present
- Play

Meadan et al., 2014

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    - Present your child's preferred toys on a shelf in view but out of reach.
    - Present your child's favorite snack in a clear container that is hard to open.
- Play

Meadan et al., 2014

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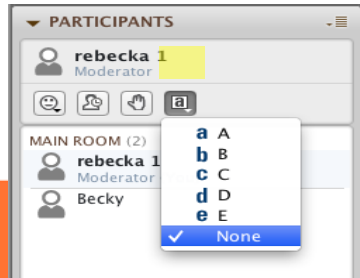
    - Present your child's favorite snack in a clear container that is hard to open.
- Play
  - Examples
    - Spin a top or start a toy and leave it on the table or floor until it stops.
    - Blow a few bubbles, close the bottle, and place the bottle in front of your child.

Meadan et al., 2014

What do you think?

Which is the best example of teaching communication skills?

a. When the child is playing with a favorite toy, the parent smiles and says or signs, “Good job.”
b. The parent places a favorite toy out of reach. When the child looks up at the toy, but does not request it, the parent says or signs, “Toy.”
c. When the parent realizes that the child wants a toy but the child does not ask, so the parent gives the child the toy and says, “Here you go.”
d. The parent gives the child a “high-five” when the child follows directions.



Modeling

Modeling

Modeling is a simple strategy in which you use demonstrations to teach the child **new** words, phrases, signs, or behaviors you want the child to imitate while you are doing activities she or he really enjoys.

Modeling

Establish **joint attention**

Model what the child should say or do

Wait 2-3 seconds

Meadan et al., 2014

Modeling

Establish **joint attention**

Model what the child should say or do

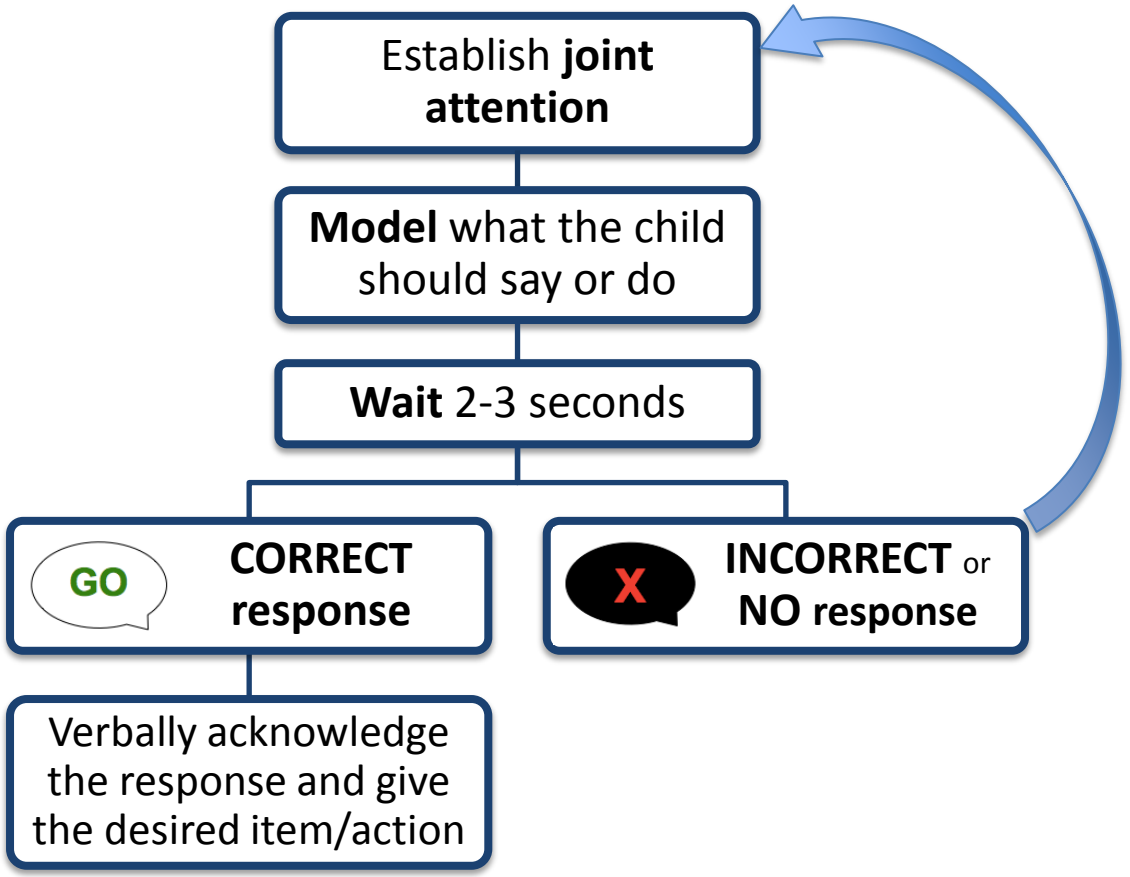
Wait 2-3 seconds

GO **CORRECT response**

Verbally acknowledge the response and give the desired item/action

Meadan et al., 2014

Modeling



Meadan et al., 2014

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X **INCORRECT** or **NO response**

Repeat the correct response and give the desired item/action

Meadan et al., 2014

Example

Example

Modeling

Purpose: Increasing imitation of communication skills

Modeling

Purpose: Increasing imitation of communication skills

Motivating the child to imitate you

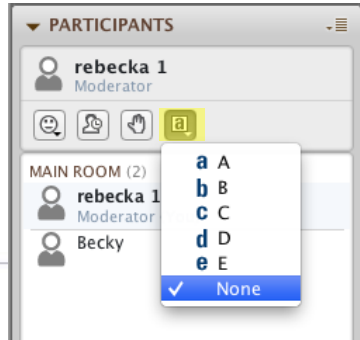
Prompting the child to communicate

Questions?

What do you think?

Which of the following is an example of a good direction that is likely to increase communication?

a. “Tell me what you want.”
b. “Put the ball in the toy box.”
c. “Give me a hug.”
d. “Eat your banana.”



Mand-Model

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Increasing use of developing communication skills through verbal prompting.

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Increasing use of developing communication skills through verbal prompting.

The **mand-model** strategy is similar to modeling and follows the same steps, but the adult presents a verbal prompt as:

- A question (e.g., “What do you want?”)
- A choice (e.g., “…this or that?”)
- A mand/direction (e.g., “Say, ‘more.’”)

Mand-Model

Establish **joint attention**.

Present verbal **choice**, **question**, or **mand**.

Wait 2-3 seconds.

Meadan et al., 2015

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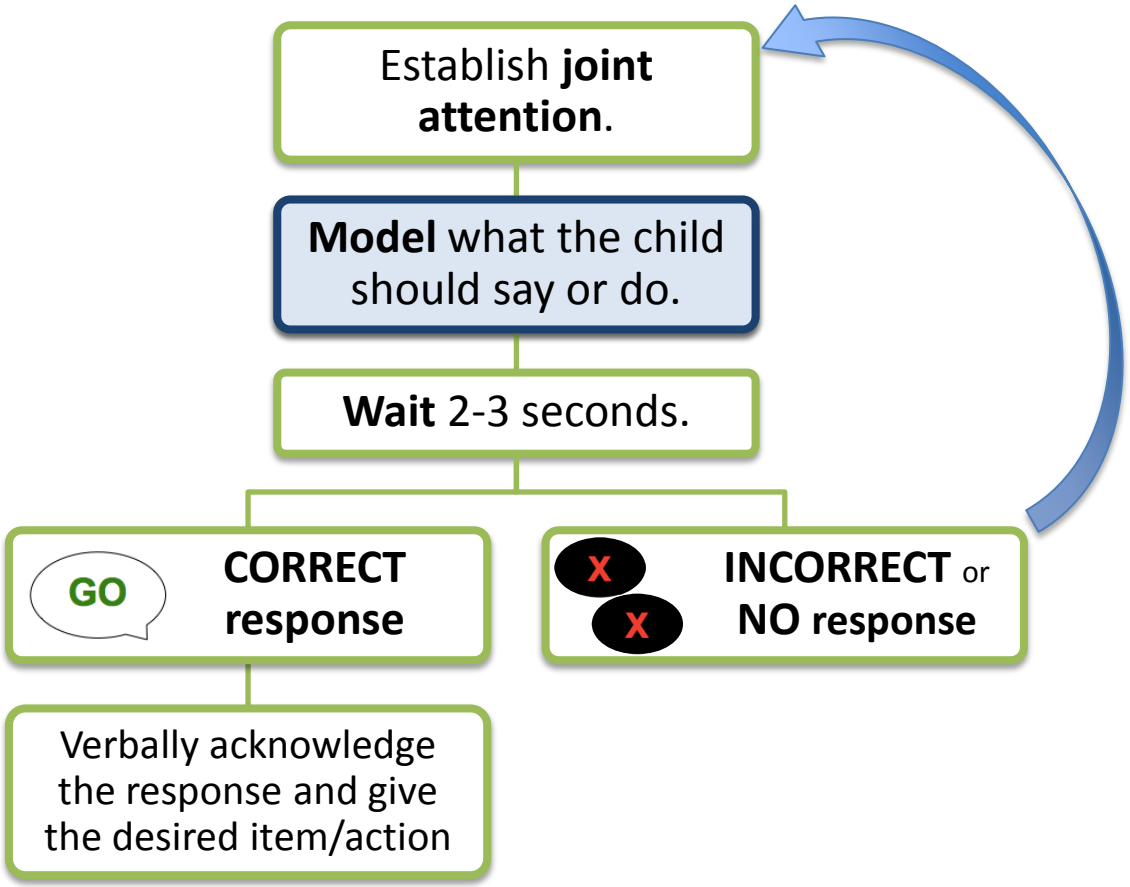
Mand-Model



Meadan et al., 2015

Mand-Model

Establish **joint attention**.

Mand- Model

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Repeat the correct response and give the desired item/action

Meadan et al., 2015

Example

Example

Mand-Model

Purpose: Increasing use of developing communication skills

Mand-Model

Purpose: Increasing use of developing communication skills

Developing spontaneous communication skills

Using known words or signs

Increasing independent communication skills

What do you think?

What is true about giving a child time to initiate communication?

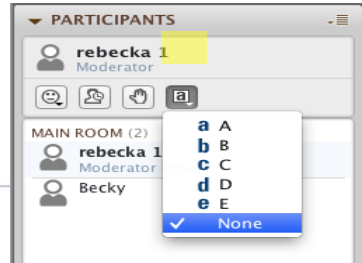
You should give the child *a lot* of extra time

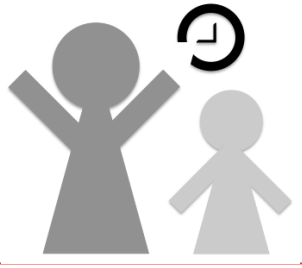
a. **before** and **after** you demonstrate the correct response or ask a question.

b. **after** you have already demonstrated the correct response or asked a question.

c. **before** you demonstrate the correct response or ask a question.

d. You should only give a child a lot of extra time if you are trying to teach in completely unfamiliar situations.





Time Delay

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Time delay is a strategy that encourages children to initiate communication.

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Time delay is most successful when used in familiar routines. The parents:

- Establish **joint attention** with their child,
- **Look expectantly** at their child, and
- **Wait** for their child to initiate a request or comment.

Time Delay

Establish **joint attention**

Look at the child expectantly

Wait 5-7 seconds

Meadan et al., 2015

Time Delay

Establish **joint attention**

Look at the child expectantly

Wait 5-7 seconds

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Verbally acknowledge the response and give the desired item/action

Meadan et al., 2015

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Meadan et al., 2015

Time Delay

Establish **joint attention**

Model what the child should say or do

Present verbal **choice**, **question**, or **mand**.

Wait 5-7 seconds

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Meadan et al., 2015

Time Delay

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Repeat the correct response and give the desired item/action

Meadan et al., 2015

Example

Example

Time Delay

Purpose: Increasing initiation of communication

Teaching the child to **initiate**, not just imitate

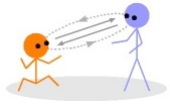
Time Delay

Purpose: Increasing initiation of communication

Teaching the child to **initiate**, not just imitate

Giving the child **time** to process what he or she wants to communicate

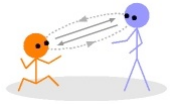
Time Delay



Get the **child's attention**.

Use **facial expressions** and **body language**.

Time Delay



Get the **child's attention**.

Use **facial expressions** and **body language**.

Use in combination with **environmental arrangement** and **known** words/signs.

Be patient!

Questions?

Empowering Parents

- Parents are experts on their children and their families believes, resources, and needs

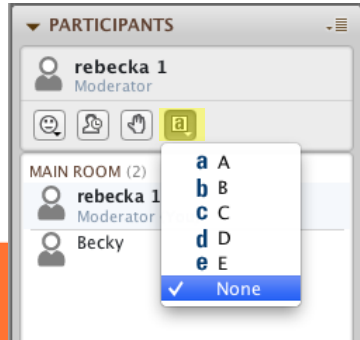
- IDEA supports parent involvement and builds an expectation that parents are advocates for their children

Parents and Young Children

- Parents seek access to research-based interventions (Boyd, Odom, Humphreys, & Sam, 2010)
- Parent-implemented interventions for young children with disabilities are effective (e.g., Kaiser, Hancock, & Nietfeld, 2000; Schultz, Schmidt, & Stichter, 2011)

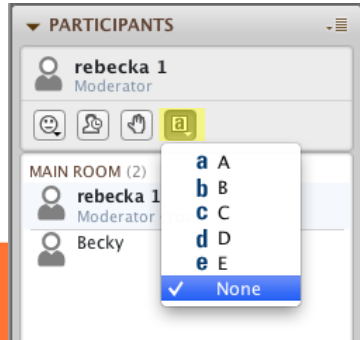
Your Experience

Please answer “Yes or No” if you have had experience coaching parents.



Your Experience

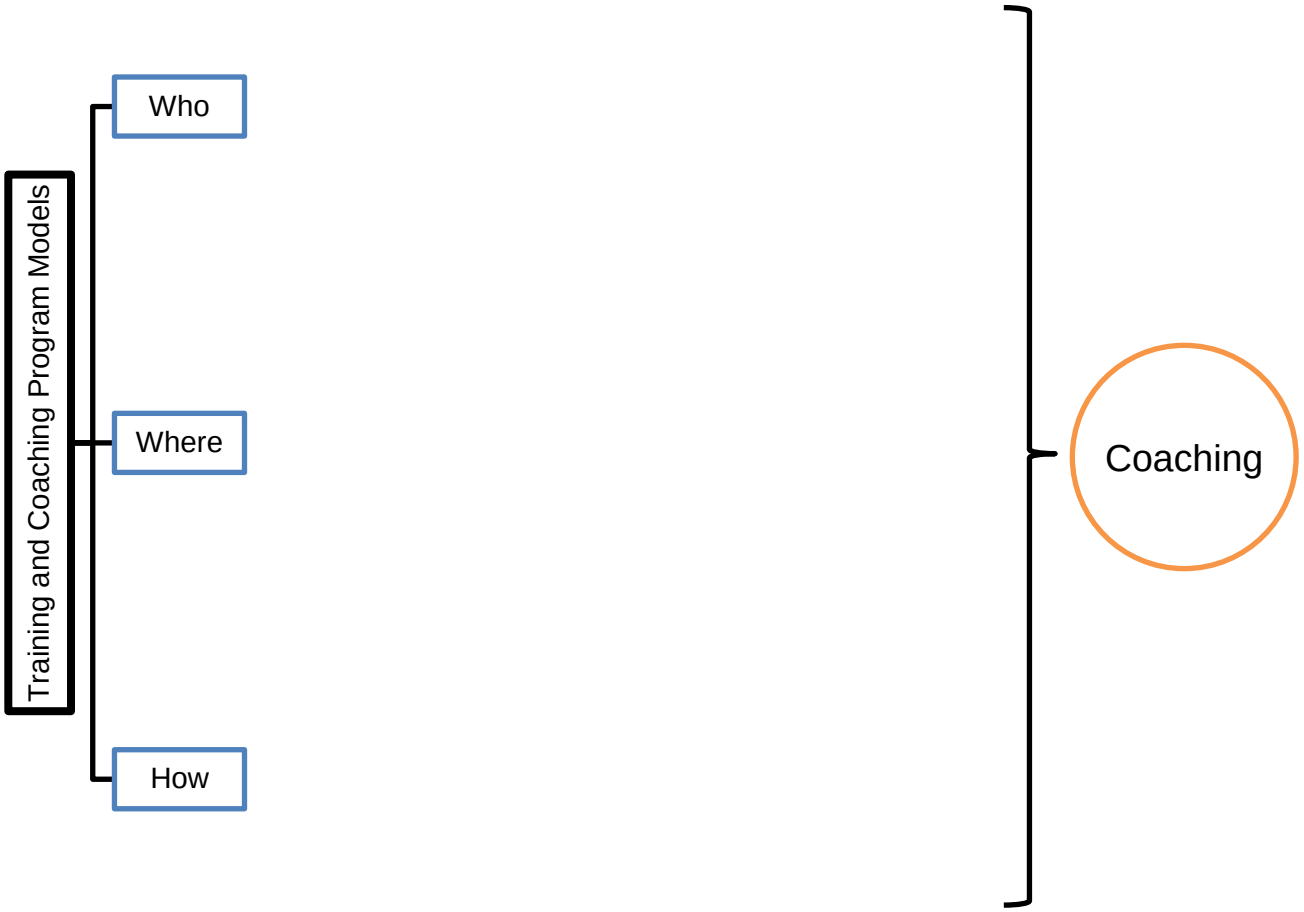
Please answer “Yes or No” if you have had experience coaching parents **from a distance**.



Adult Learning Theory

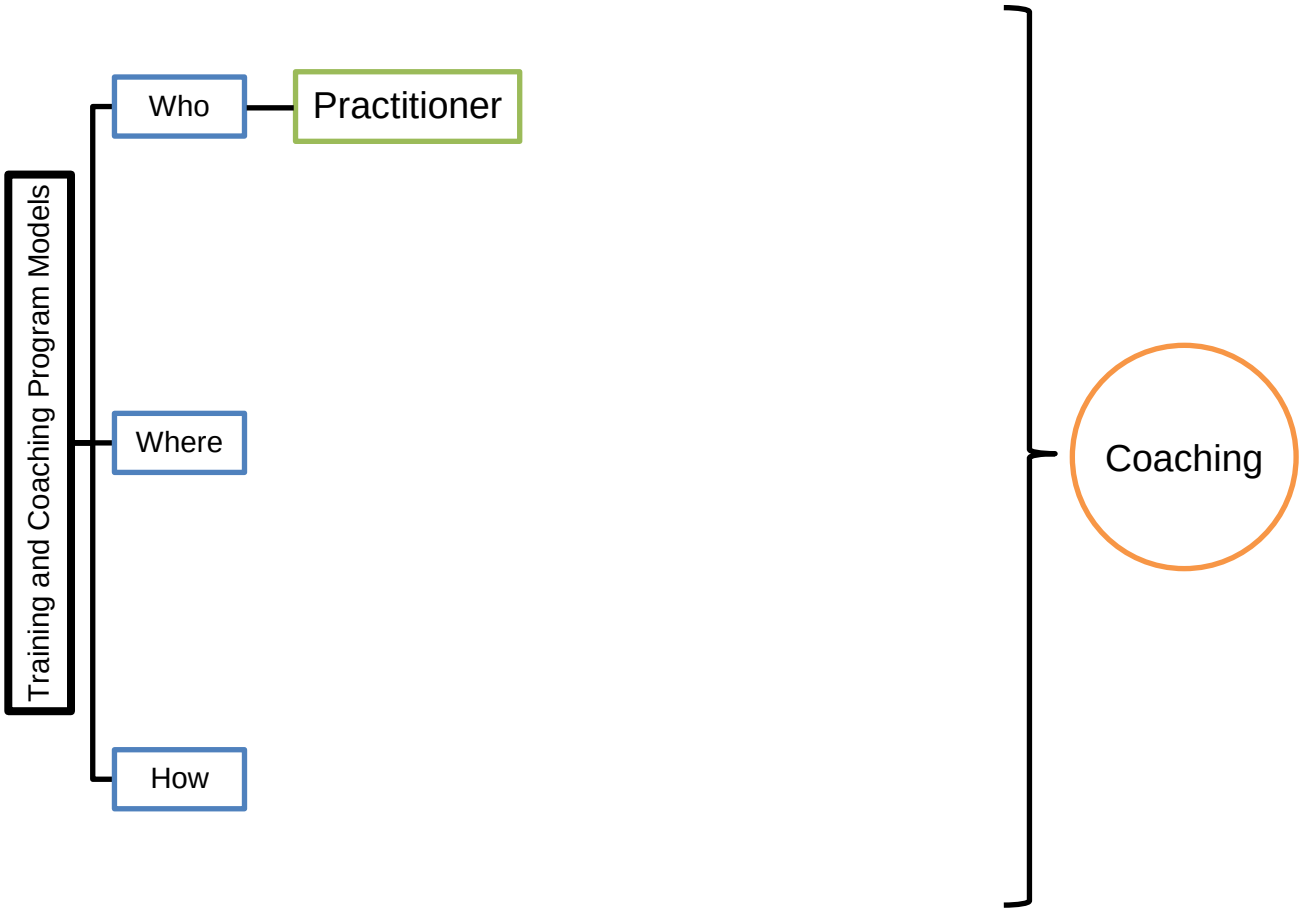
- ✓ Introduce
- ✓ Illustrate
- ✓ Practice
- ✓ Evaluate
- ✓ Reflect
- ✓ Mastery

Coaching Framework



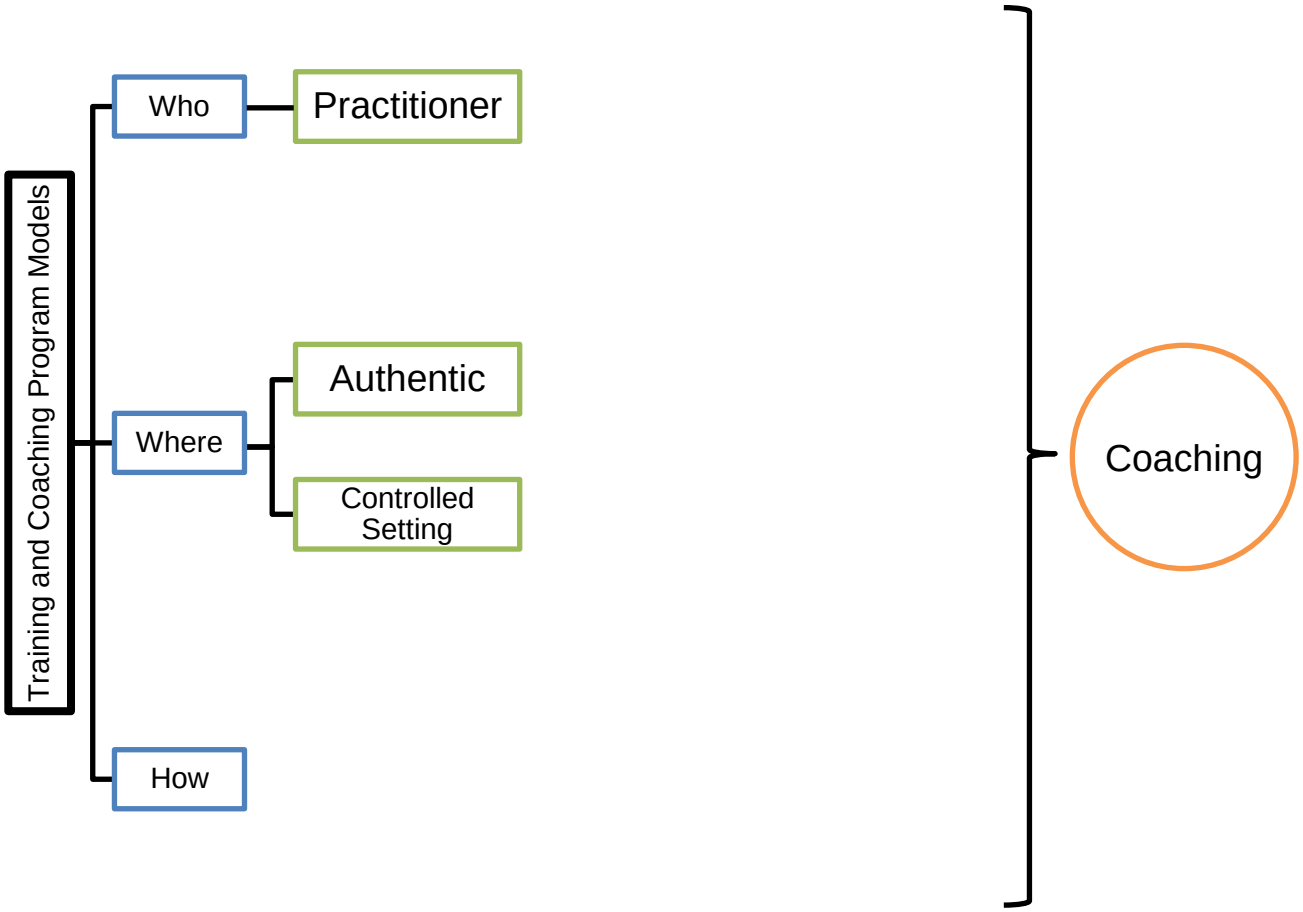
Meadan et al., in press

Coaching Framework



Meadan et al., in press

Coaching Framework



Meadan et al., in press

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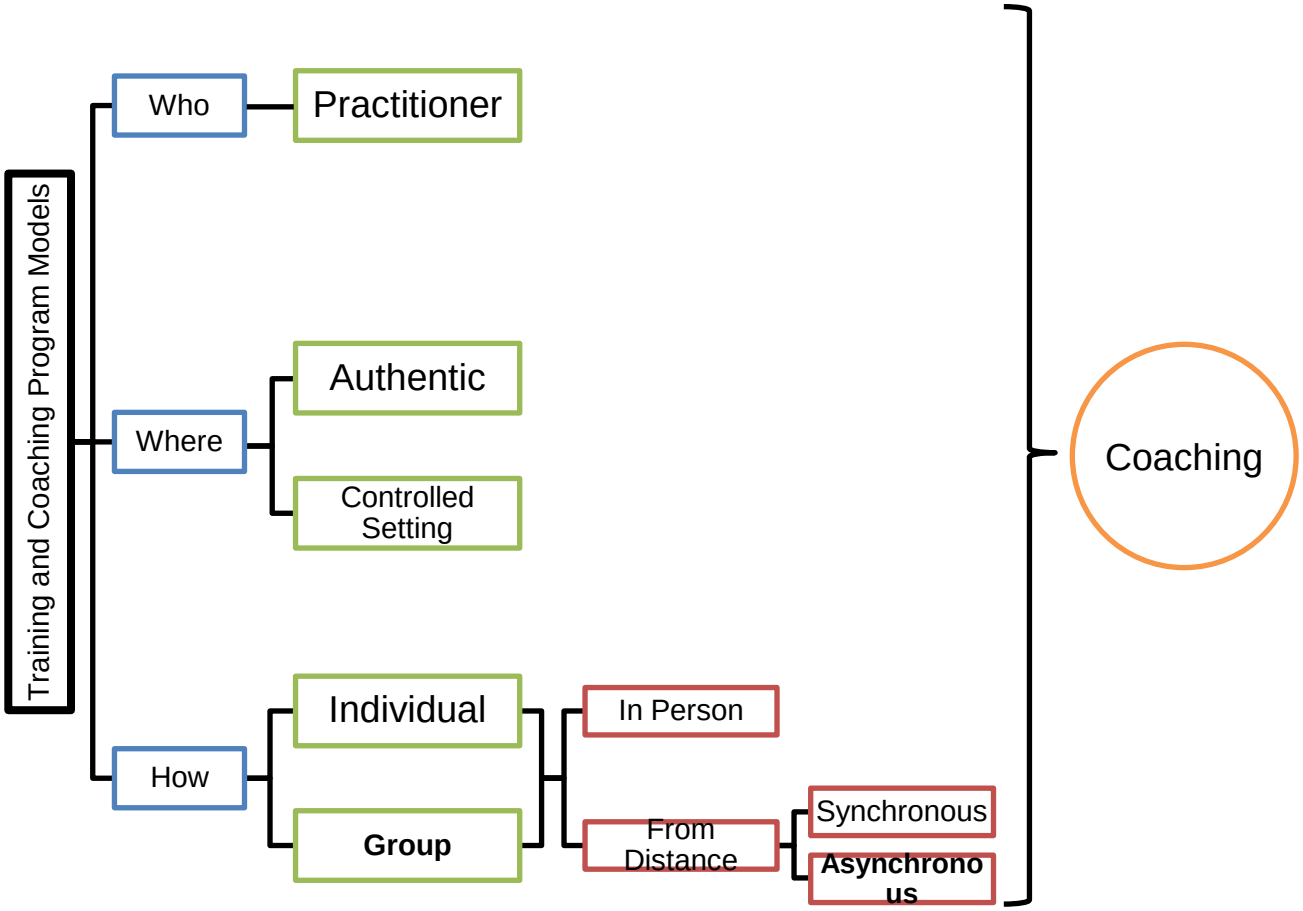

Meadan et al., in press

Resources

Table 1. Resources for Online Family Education

Resource	URL	Description	Issues affecting feasibility for parents	Implementation considerations
iPiCS	Available by contacting the author	The iPiCS program utilizes online modules and videoconferencing to teach and coach parents how to use environmental arrangement, modeling, mand-model, and time delay	• Parent has to create a login • Modules are video- and activity-based; parents upload videos and worksheets • Modules are self-paced and feature examples of parents implementing strategies with young children in the family home	• Fully created modules • Intended to be used with a videoconferencing/ coaching component • Manualized for practitioners • Targets young children with ASD or developmental disabilities and communication delays
Autism Internet Modules (AIM)	www.autisminternetmodules.org	45 different online modules for learning about strategies such as prompting, social narratives, and sensory differences	• Parent has to create a login • Examples in the modules are from parent and professional perspectives • Although each module has a video, much of the content is reading-based	• Fully created modules • Targets children with ASD throughout the life span
Do2Learn	www.do2learn.com	Resources, activities, and guidance for teaching visual communication, behavioral regulation, and social skills	• Most resources are free, but some must be purchased • Some examples are school-based, so parents may need examples of how to use the resource in the home setting • Resources are easy to use and intuitive	• Resources are simply listed and would need to be implemented within a broader online family education effort • Need-based supports for academics, social skills, and behavior management
Autism Speaks	www.autismspeaks.org www.autismspeaks.org/what-autism/video-glossary	Has toolkits and a video library providing overviews of many common instructional strategies	• Many resources require creating an account with Autism Speaks • Toolkits are reading-based • Videos require Flash	• Many of the toolkits are complete learning programs, but videos would have to be incorporated into an online family education program • Focuses on children with ASD
Handspeak	www.handspeak.com	American Sign Language videos and resources	• Video-based	• Videos would need to be incorporated into an online family education program • Need-based supports for children using sign language

Note. iPiCS = Internet-Based Parent-Implemented Communication Strategies; ASD = autism spectrum disorder.

AFIRM
http://afirm.fpg.unc.edu

(Curtiss et al., 2016)

Questions?

Contact Us

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Jamie Pearson, M.A.

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Survey & Certificate

You will receive email with survey from Early Intervention Training Program (eitraining@illinois.edu)

Must complete unique survey to get certificate

Certificate will be emailed after survey completion (within 24 hours)

Issues with survey or certificate, please contact us at eitraining@illinois.edu

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