

Characteristics and Etiology of Infants and Young Children with Disabilities

Autism Spectrum Disorder

Learning Activities

National Clearinghouse on Autism Evidence & Practice (NCAEP)

2020 NCAEP Evidence-Based Practices Report:

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

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Learning Activity 1: Antecedent-Based Intervention (ABI)

- Facilitator prepares an activity/visual that is meant to engage, offer choices and/or set the expectation for the activity. The following are sample items or activities:
 - o Facilitator provides written agendas on tables for participants to follow.
 - Facilitator provides a large visual schedule that includes pictures and words for the schedule of the day/meeting/etc. A large arrow points to the current activity and is moved at transition points.
 - Facilitator conducts a brief interactive game to engage the participants prior to introducing a new topic.
 - o Facilitator offers the choice of a 30 minute or 1 hour lunch break.
- Another approach is to set up the environment in the opposite manner in which the activity will occur so as to teach the importance of using the environment to set the expectations. The following are samples of such activities:
 - When participants arrive, have all chairs facing the back of the room. Note how either everyone was confused or simply sat in the chairs as placed.
 - Start the meeting without engaging the participants, such as not giving a greeting, simply start lecturing on a topic or don't give the topic of the meeting or agenda.

Learning Activity 2: Augmentative and Alternative Communication (AAC)

Set Up

- Participants are placed into small groups of 2 to 4.
- Facilitator explains the activity.

Process

- Facilitator gives each participant a "task card" to complete.
- Each participant is to communicate the message without using verbal language and written words. The other members of the group are to guess the message the "non-speaking" person is trying to convey.
- Do not specify, however if asked, allow non-speaking person to use standard items on the tables such as pens, paper, etc. They cannot use their phone to type or look up pictures of items. If you indicate that they are allowed to use them, then most participants will go straight to that method. The point of the activity is for the participants to have to struggle to find a mode in which to convey their message.
- Each member of the group will get a turn.

- Inquire as to how messages were received: were they understood or not?
- Inquire as to how participants attempted to communicate their messages: gestural, behavioral.
- Pose questions as to how it felt to be the person attempting to give the message. To receive the message.
- Relate the participant's responses to how the non-speaking student might feel.
- Discuss the frustration in communicating a "want" or "need" and how that may turn into behaviors.

Learning Activity 3: Behavior Momentum Intervention (BMI)

Set Up

- Participants will view the following video: https://youtu.be/0hkMrDzq8L4.
- Separate participants into small groups recommend groups of 2-3.
- Distribute an activity to each group (recommend 1 activity per group member). Activities can be commonly used items within the classroom/home setting. Ex: puzzle, ring stacker, identification of letters/numbers/shapes/colors, etc.
- Facilitator explains the activity.

Process

- Each group member will practice using behavioral momentum strategies with their partner prior to introducing the assigned activity.
- Repeat process as many times as desired.

- Leave participants in small groups.
- Ask for volunteers to reflect upon the process of building behavioral momentum.
- Ask for volunteers to reflect upon how it felt when their partner built momentum with them.
- Optional: participants note a task they dislike and what they might do to establish their own behavioral momentum.

Learning Activity 4: Differential Reinforcement (DR)

Set Up

- Participants are placed in small groups (group participants with common students together if possible).
- If participants have not yet worked with students, provide a student scenario to each participant. Ensure scenario includes target behavior and student preferences).
- Facilitator explains the activity.

Process

- Participants will share information regarding a student (their own student or the student in the scenario provided), including target behavior and student preferences.
- Groups will brainstorm ideas on how to utilize differential reinforcement to extinguish the target behavior.

- Groups will volunteer to share their scenarios and ideas.
- Encourage others to contribute additional ideas.

Learning Activity 5: Direct Instruction (DI)

Set Up

- Utilize the curriculum provided by your district/agency.
- Explain how the curriculum package is set up and how the lessons are to be implemented.
- Place participants into pairs or small group (depending on the lesson)
- Explain activity.

Process

- Provide each group with the assigned curriculum lesson and materials for implementation.
- Participants will practice implementing the lessons on their partner/small group, ensuring each participant has the opportunity to be the "teacher."
- Participants reflect upon the experience of being the teacher and the student within their small group.

- As a large group, ask participants to share any challenges, "a-ha" moments or lessons learned from the process.
- Brainstorm different possible adaptions/modifications that may arise within each lesson.

Learning Activity 5: Discrete Trial Training (DTT)

Set Up

- Utilize the materials provided in your district/agency curriculum package or the materials provided within the DTT Learning Module.
- Place participants in pairs.
- Explain activity.

Process

- Allow participants to practice implementing the program given with their partner. Ensure partner makes error so the error correction procedure can be practiced.
- Once each participant has had a turn within their partner group, have them each reflect on the process.

- As a whole group, discuss what was learned, what were challenges, what worked well
- Be sure to address management of materials and how the data collection process was completed.

Learning Activity 7: Exercise (ECE)

Set Up

- Provide 3x5 cards with various concepts from multiple domains (examples: patterning, washing hands, color identification, etc.)
- Place participants in pairs on small groups.
- Provide each pair/group with a card or allow them to select their own.
- Explain activity.

Process:

- Once in partners and pairs, participants will develop an exercise activity to teach/implement to skill on the card. Allow 3-5 minutes to develop activity.
- Pairs/teams will take turns stating their skill and performing the activity for the whole group.

- Discuss their engagement in the activity and how exercise and active movement can be used to engage students.
- Optional: Allow time for participants to brainstorm and/or develop activities that can be embedded throughout the day or with typically non-preferred activities.

Learning Activity 8: Extinction (EXT)

Set Up

- Ensure Audio Visual components are in full working order.
- Refresh participants on the ABC's of behavior and the 4 functions of behavior.
- ABC: Antecedent, Behavior, Consequence
- Functions: Sensory, Escape, Attention, Access

Process

- Show the following video: https://youtu.be/AgMmXR2sYIQ
- Place participants in small discussion groups. Direct students to consider students they know that are exhibiting behaviors that are interfering. Note: If participants share students, place these participants together.
- Participants brainstorm extinction strategies and extinction bursts within their settings.

Follow-up

• As a whole group, have participants share out ideas.

Learning Activity 9: Functional Behavioral Assessment (FBA)

Set Up

- Provide each participant with a copy of the blank FBA form your district/agency uses or from the module.
- Explain the activity.

Process

- Participants will watch the video.
- Participants will complete the FBA forms.
- In whole or small groups, discuss the behavior observed, ABC data, possible function and possible goals. Note which EBPs may be recommended for intervention.

- Discuss what was observed in the video and have participants share the information discussed above.
- Reflect upon differences in findings and strategies for intervention.
- Note that multiple conditions would typically be done in the true FBA process, and this is just an activity to review the portions of the FBA and the thought process in going through the process.

Learning Activity 10: Functional Communication Training (FCT)

Set Up

- Ensure audio video equipment is functioning.
- Place participants in groups of 3 with 1-2 toys/snacks and corresponding pictures.
- Use the video PECS Demonstration of Phases 1, 2, and 3.

Process

- Participants will watch the Phase 1 portion of this video.
- Participants will practice implementing this phase within their small group.
- Discuss challenges and answer questions regarding this phase.
- Participants will watch the Phase 2 portion of the video (begin at 1:40 minutes).
- Participants will practice implementing this phase within their small group.
- Discuss challenges and answer questions regarding this phase.
- Participants will watch the Phase 3 portion of the video (begin at 3:36 minutes).
- Participants will practice implementing this phase within their small group.
- Discuss challenges and answer questions regarding this phase.

Follow-up

Highlight the following regarding using picture exchange communication:

- Need for a third person as a prompter to eliminate prompt dependency on the communication prompter.
- Verbalizing the word when the child uses the picture, so the child learns the verbal word that corresponds to the picture.

Learning Activity 11: Modeling (MD)

Set Up

 Create sequential movement activity. Verbalize without modeling and have participants complete. Verbalize then model and have participants complete. Note the greater accuracy in model attempt.

Process

- Verbally tell participants 4-5 steps of a sequential activity or use a foreign/jargon language to tell participants to do a known activity. For example: stand up, take one step forward, touch your right hand to your left foot and then touch your head with your left hand OR tell the participants to collect materials from the back table by saying "gents furba incher furbish Narmer."
- Be careful to not provide any gestures or cues to what you are asking.
- Allow participants to struggle or be in confusion.
- Next model for the participants what you have asked them to do.
- Explain that children that are learning language or new skills benefit from having the skill modeled for them, just as they experienced.

Follow-up

• Challenge participants to think of times throughout their day where there are communication breakdowns and/or challenging behaviors and how they may incorporate modeling. Modeling expectations for activities is also beneficial.

Learning Activity 12: Music-Mediated Intervention (MMI)

Set Up

- Create 3x5 cards with an age-appropriate skill or learning domain.
- Place participants in small groups.
- Explain the activity to the participants.

Process

- Assign or have each group choose an activity card.
- Each group will develop a song to teach the activity.
- Groups take turns acting out their music and movement song to the whole group.

Follow-up

• Discuss the enjoyment displayed in the activity and how that aided in engagement. Remind participants that learning at this age learn through play. If the activity is fun and playful, they are more likely to learn the skill.

Learning Activity 13: Naturalistic Intervention (NI)

Set Up

- Consider teaching this concept as a contrast to structured teaching methods such as Discrete Trial Training.
- Provide materials and a script for teaching an activity.
- Place participants in groups.
- Consider modeling both the scripted and naturalistic teaching styles.

Process

- First, have participants take turns teaching using the provided script.
- Next, have participants take turns developing a natural or play activity to teach the skill.
- Participants discuss the differences between the two methods and how it felt teaching/learning by each method.
- Participants discuss pros/cons and activities where each teaching style may be utilized.
- Groups share out their experiences and discussions with the whole group.

Follow-up

 Remind participants that students will benefit from a variety of interventions/instructions. If students are not gaining a skill through this method, they may need to try other methods such as Direct Instruction or Discrete Trial Training.

Learning Activity 14: Parent-Implemented Intervention (PII)

Set Up

- Create 3x5 cards with an age-appropriate skill or learning domain.
- Place participants into groups of 3. One participant will be the "coach", one will be the "parent" and one will be the "student". Note: If activity is not appropriate.
- Explain the activity to the participants.
- Note: If your school/agency utilizes specific coaching strategies, these can be utilized for this activity.

Process

- Participants take turns being the "coach", "student" and "parent" to coach/learn how to implement the activity.
- After everyone has had a turn, participants reflect on process together.

- Participants share out their group experiences to the whole group.
- Discuss the need to "meet the parents where they are" and build from there. See ASD Family Module.

Learning Activity 15: Peer Mediated Instruction and Intervention (PMII)

Set Up

- Create 3x5 cards with an age-appropriate skill or learning domain.
- Place participants into groups of 3. One participant will be the "coach", one will be the "peer" and one will be the "student".
- Explain the activity to the participants

Process

- Distribute materials and activity cards to each group.
- Participants take turns being the "coach", "student" and "peer" to coach/learn how to implement the activity.
- After everyone has had a turn, participants reflect on process together.

- Participants share out their group experiences to the whole group.
- Participants that will use typically developing peers (e.g., sibling or general education students/peer buddy program) can also brainstorm times/activities during the day where PBII can be utilized.

Learning Activity 16: Prompting (PP)

Set Up

- Utilize your district's/agency's prompting hierarchy or a sample can be found <u>HERE</u> on page 11.
- Create 3x5 cards with an age-appropriate skill or learning domain.
- Place participants into groups of 2. One participant will be the "teacher" and one will be the "student."
- Explain the activity to the participants.

Process

- Distribute materials and activity cards to each group.
- Participants take turns being the "teacher" and "student" to teach the activity.
- Teacher should use a variety of prompts to ensure activity success for the student, then work backwards to fade each prompt.
- After everyone has had a turn, participants reflect on process together.

- Participants share out their group experiences to the whole group.
- Note the intent of this activity was for the "teachers" to practice moving up and down the hierarchy as needed, as well as the "student" to experience how it feels to be prompted.

Learning Activity 17: Reinforcement (R)

Set Up

- Embed this activity throughout the professional development training.
- Provide periodic reinforcements throughout the training. Examples: giving mini candy bars upon giving a correct answer or upon volunteering, providing tickets for participation and provide a "prize store" at the end of the day.

Follow-up

 At the end of the training period, ask participants to reflect upon how it felt to receive the rewards. Did they feel more engaged? Were they more apt to participate because they knew there was a reward? Just as we appreciate reinforcement, so do our students.

Learning Activity 18: Response Interruption and Redirection (RIR)

Set Up

- Ensure audio video equipment is functioning.
- Place participants in groups of 2.

Process

- Show the video <u>HERE</u> that provides examples of Response Interruption and Redirection.
- Optional: show the video <u>HERE</u> that provides an example of RIR for toddler throwing.
- Probe for questions regarding this EBP from the participants.
- Pairs will choose a behavior to focus on for this activity.
- Pairs will develop a "skit" to demonstrate how they will implement RIR for that activity.
- Pairs will act out skits for the large group.

Follow-up

• Discuss the positive tone of this intervention as opposed to the use of "no."

Learning Activity 19: Ayers Sensory Integration (ASI)

Set Up

- Embed this activity throughout the professional development training.
- Place fidget items such as the ones shown below where the participants are seated.
- Do not point them out to the participants. If asked if what they are for, just say they are for them to use today. No more explanation should be given.
- Continue with all your training topics.

Follow-up

• At the end of the training period, ask participants to reflect upon how many used the fidgets? Why? Did they feel more engaged? Did it help maintain focus and engage them in the day? These are all items that support or students as well.

Learning Activity 20: Social Narratives (SN)

- This is a "Make and Take" activity.
- Provide art materials or access to computer devices.

Process:

• Participants use the art materials/computers to create a social narrative for an activity or skill.

Follow-up

• Participants share their narrative with the group, including the skill it is targeting and what they hope the student will gain from using the narrative.

Learning Activity 21: Social Skills Training (SST)

Set Up

Place participants into groups of 2-3.

Process

- Instruct participants to choose a social skill to focus on, ensuring it is from one of the domains on the previous slide.
- Participants will develop a lesson/activity to teach the skill and practice role playing the activity.
- Participants will share their activity with the whole group.

Follow-up

 Participants reflect upon challenges and methods that worked well in developing the lesson.

Learning Activity 22: Task Analysis (TA)

Set Up

- Place participants into pairs.
- Give each pair a tub with set of Duplo (or other type) of blocks (10-12 large blocks), 8x10 piece of paper and writing utensil.

Process

- Pairs will decide who will be the builder and who will be the note taker.
- 1 person will use the 10 blocks to build a structure while the other person writes down how to build the structure.
- If possible, have participants take a picture of their finished product but do not share it.
- Place blocks and instructions back in the bin and exchange bins with another pair. Be sure the two pairs were not in view of each other during the original building process.
- Using the directions, the pairs will attempt to recreate the structure.
- Once both have completed, they will join pairs and evaluate how accurate their recreation was.
- Joined pairs discuss where the breakdown was in the directions for building.

- As a whole group discuss issues and where breakdowns occurred. What would have been helpful to aid in your recreating the structure?
- Remind participants that students we work with may require a specific break down in order to complete a task. If the student is not gaining a skill, we should look at how well we have analyzed the steps and skills needed to complete the targeted skill.
- Also, each step of this activity could allow for different prompting levels.
 Perhaps the participant had motor issues so could not place the blocks together; however, had a good concept of colors so could select the correct color. Point out that immediately going to prompting through an entire activity may not be the best solution. Analyze the activity to determine which steps the student may be able to do independently or at a lower prompting level/lower level of support.

Learning Activity 23: Technology-Aided Intervention and Instruction (TAII)

Set Up

- Materials: Tablets or other computer type device with access to YouTube.
- Create 3x5 cards with an age-appropriate skill or learning domain.
 (Recommendation: Avoid concepts such as numbers, letters, colors there are a multitude of videos addressing these concepts).
- Place participants in groups of 2-4 and explain the activity to the participants.

Process

- Distribute materials and activity cards to each group.
- Participants will find a video that will help teach their concepts.
- Participants will develop an interactive component to pair with the video. For example: hand or body movements, pausing the video at certain times and have a student point to the named object, etc.
- Participants will demonstrate the activity to the whole group. It may be useful for the technology device to be projected on a large screen for this portion.

Follow-up

• Discuss the concerns with young children's use of technology. Stress that the activity should be interactive.

Learning Activity 24: Time Delay (TD)

Set Up

- Embed this activity into the professional development training.
- Rapidly give directions to the participants to complete a given task or assignment. A sample can be found in the video F.A.T. City <u>HERE</u> (starts at 3:45 minute mark).

- At the end of the activity, ask participants to reflect upon how these interactions made them feel? Why?
- Discuss how children this can be how children with language, motor or processing delays can feel.
- Discuss how children need opportunities to be successful prior to adult intervention.
- Discuss how TD is essential for prompt fading and facilitating independence and success for the children.

Learning Activity 25: Video Modeling (VM)

Set Up

- Materials: Tablets or other computer type device with video recording options.
- Create 3x5 cards with an age-appropriate skill or learning domain.
- Place participants in groups of 2-4.
- Explain the activity to the participants.

Process

- Groups develop a video the model an activity/skill they would like to whole group to complete.
- Groups film the video.
- As a whole group, each small group will project their video on a large screen and have the participants complete the activity/skill.

Follow-up

• Participants share how they will use Video Modeling with their families/students.

Learning Activity 26: Visual Supports (VS)

Set Up

- This is a "Make and Take" activity.
- Provide photos or access to computer devices.

Process

- Participants use the photos/computers to create visual supports to utilize with their students/families.
- Before dispersing participants to begin, discuss options for students with low vision (larger photos/tactile photos) or the use of objects for students that do not yet attend to photos (e.g., a plastic fork as a symbol for lunch, piece of a diaper for diaper changing).

Follow-up

 Participants share their created materials and how they will use within their settings.

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