An Overview of Naturalistic ABA Strategies for Young Children with Autism

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Agenda

• What is ABA?
• Components of naturalistic teaching strategies
• Three step activity organization
• Addressing specific goal areas using naturalistic ABA teaching strategies
WHAT IS ABA?
What is Applied Behavior Analysis?

– Scientific approach to understanding behavior and how it is affected by the environment
– The use of behavior analytic methods and research findings to change socially important behaviors in meaningful ways
– Consumer confusion...

Out-Dated ABA Approach

The “Umbrella” of ABA

- Discrete Trial Training
- Reciprocal Imitation Training
- Incidental Teaching
- Pivotal Response Training
- Early Start Denver Model
A-B-C Model of Behavior

A
Antecedent

Events that occur immediately BEFORE the behavior
Can be altered to increase or decrease the occurrence of the behavior

B
Behavior

Response to the things and events around us at any given time.

C
Consequence

Events that occur immediately AFTER the behavior
Can increase or decrease the likelihood that the person will display the behavior again

ABA Program Features

• A-B-C model of behavior
• Comprehensive or specific programs
• Blend of teaching strategies (structured and naturalistic)
• Individualized
• Intensive
  • Repeated practice
  • Embedded learning opportunities
  • Quality of learning trials
• Data-driven decisions
• Builds on the child's interests and actively engages the child
• Teaches tasks as a series of simple steps
• Use of reinforcement to teach new behaviors
• Generalization of skills

Increase desirable behaviors

Basic ABA Outcomes

Teach new skills

Decrease undesirable behaviors

Promote generalization of skills
NATURALISTIC TEACHING STRATEGIES
Naturalistic Teaching Strategies

Naturalistic teaching strategies have many names including:

- Early Start Denver Model
- Reciprocal Imitation Training
- Incidental Teaching
- Embedded Learning Opportunities
- Pivotal Response Training
- Natural Language Paradigm
Naturalistic Teaching

Common Characteristics

• Based on the behavioral principals of ABA
• Materials and pace determined by child
• Occurs in the natural environment
  – Playing, daily routines, home, community
• Can be used for pre-verbal, non-verbal, and verbal children
• Capitalizes on motivation
• Generalization and maintenance are built into intervention
Naturalistic Developmental Behavioral Interventions (NBDIs)

Common features:

- A-B-C model
- Manualized practice
- Criteria for implementation fidelity
- Individualized treatment goals
- Ongoing measurement of progress
- Child-initiated teaching opportunities
- Environmental arrangement

Schreibman et al., 2015
Naturalistic Developmental Behavioral Interventions (NBDIs)

Common features:

• Natural reinforcement
• Use of prompting and prompt fading
• Turn taking with objects and within social play routines
• Modeling
• Adult imitation of child’s behavior
• Broadening attentional focus of child

Schreibman et al., 2015
Opportunity presented

Child moves toward ball and parent holds up ball

Prompt

“Ball!”

Child responds

Response reinforced

Parent hands child the ball to play with
Naturalistic Teaching: Reinforcement

• Reinforcement is delivered contingent on the child’s response
  • Immediate
  • Delivered in the absence of disruptive or other behaviors
  • Directly and functionally related to activity
• Reinforce reasonable attempts
  • Increases motivation to respond
  • Examples of attempts:
    • Attention to the task
    • Related to the task
    • Reasonable effort
Naturalistic Teaching
Why Use Natural Reinforcers?

• Natural consequence
• Directly/functionally related to the behavior
• Supports generalization to the natural environment

• Dog Treat Video
## Structured vs. Naturalistic Teaching Strategies

<table>
<thead>
<tr>
<th></th>
<th>Highly structured</th>
<th>Naturalistic Teaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structure of session</td>
<td>Highly structured; paced by adult</td>
<td>Loosely structured; paced by child</td>
</tr>
<tr>
<td>Settings</td>
<td>Usually seated with minimal distractions</td>
<td>Varied, naturally occurring settings</td>
</tr>
<tr>
<td>Materials</td>
<td>Chosen by clinician</td>
<td>Chosen by child</td>
</tr>
<tr>
<td>Number of Teaching Trials</td>
<td>Mass trials</td>
<td>Fewer trials</td>
</tr>
<tr>
<td>Reinforcer</td>
<td>Not necessarily related to teaching activity</td>
<td>Functionally and meaningfully related to reinforced behavior</td>
</tr>
</tbody>
</table>
THREE STEP ACTIVITY
ORGANIZATION
How to Organize Activities

Each activity can be broken into 3 parts:

1. Open and establish
2. Expand
3. Close
Open and Establish Routine

- Set up the environment
- Follow child’s interest/lead
- Positioning is important: get at eye level, face the child
- Be a helpful partner
- Limit demands
- Establish what you will do with materials and how you will do it
- Give a little for free to increase motivation and engagement
Introduce Demand/Elaborate

• When child is more accepting of your help begin to take a more active role in the activity...introduce your demand or elaborate the routine

• Begin to establish a contingency for continuation of the routine
  • Provide opportunities to target identified goals
    • Manage the materials by giving some for free but limiting access to the rest
    • Take turns
Close an Activity

- Be aware for a shift in interest/engagement
- End routine by cleaning up materials
  - Put toys away in an all done box or on shelf
  - Sing clean up song
- Follow child’s lead or check schedule for the next activity
ADDRESSING SPECIFIC GOAL AREAS USING NATURALISTIC ABA STRATEGIES
Requesting

The purpose of requesting is...

• To receive item or elicit desired action from another person (e.g. getting out-of-reach object or opening bottle)
• To continue/discontinue activity
• To make choices

The primary purpose of the communication is to obtain something, rather than to establish a social interaction
Tips to Improve Requesting

• Identify the target skill (verbal request, point, give)
• Determine child’s interests and motivators
  • Toys, food, drink, actions, social routines, songs, activities
• Once you’ve determined the child’s interest or motivator give a little for free then create a contingency for access to item or activity
  • Make that item or activity accessible only after a request
• Get at child’s level
• Establish eye contact/gain attention
• Model simple language appropriate to activity (limit questions/commands/comments)
• Embed opportunities to request
Ideas for Creating Opportunities to Request

Create an environment rich with opportunities to request – communicative temptations

• Place items on a shelf out of reach
• Place items in a container the child can’t open
• Give one item at a time to increase the number of requesting opportunities
• Break up larger items into pieces (break a larger cookie into pieces or give a little juice in the cup)
• Interrupt an activity (song or video)
• “Sabotage” the child’s environment (give a juice box with no straw, give a toy without its battery)
Joint Attention

• Joint attention is communication for the purpose of sharing enjoyment or interest with another person
• Develops between 9-18 months of age
• Two forms:
  • Responding to Joint Attention
    – Following another person’s focus of attention or interest
  • Initiating Joint Attention
    – Getting another person to follow your focus of attention
Tips to Improve Joint Attention

• Get at eye level
• Establish a routine
• Model descriptive language
• Pause with anticipation
• Use exaggerated affect
• Encourage eye contact with comments
• Model directing attention by pointing and commenting
• Prompt child to direct your attention
• Respond to your child’s bid for attention with enthusiasm
Tips to Improve Play and Imitation

• Follow the child’s interests
• Imitate him/her in play
• Teach child to imitate your actions with toys
• Teach child to respond to simple directions
• Narrate play by modeling language
• Be animated
• Model actions with toys for the child to imitate
• Prompt the child to engage in play action/activity
Questions