Teaching Students with Sensory Impairments and Additional Disabilities

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Illinois State University
Welcome!
Agenda

1. Background
2. Sensory disabilities
3. Teaching Strategies
4. Questions
The purpose of this presentation is to describe the current population, provide an overview of service provision, and discuss a guidance framework for professionals supporting students who have sensory disabilities with disabilities.
Prevalence

![Additional Disabilities Graph](chart.png)
Prevalence
40% of students with hearing loss have an additional disability

- 1 in 76 children with hearing loss was receiving services for both a hearing loss and ASD (GRI, 2008; Szymanski & Brice, 2008)
- 1 in 59 students with hearing loss also have autism. 1 in 68 for hearing students in 2012.
Why does this matter?

"The brain is plastic, its moldable. We can re-wire it, re-train it, re-teach it."

-Dr. Jeremy Lawson
Taking accountability for our students

When teachers hear something about a student such as autism, adhd, bad home life, their internal verbal mindset may change their thoughts

If you believe a kid is bad, you will find everything they do wrong.

We have the ability to change behaviors

-Lani Lawson
### Sensory impairment with Additional Disabilities

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>01</strong></td>
<td>Teachers of the Deaf face the challenge of teaching an increasingly complex population of students (Borders &amp; Bock, 2014).</td>
</tr>
<tr>
<td><strong>02</strong></td>
<td>If a student receives an initial diagnosis of D/HH but is later found to have an ASD, s/he will likely be educated using D/HH methodologies. The opposite is also true (Guardino, 2008).</td>
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<tr>
<td><strong>03</strong></td>
<td>Students with a dual diagnosis of D/HH and ASD exhibit clinically significant behavior that interferes with their ability to learn.</td>
</tr>
<tr>
<td><strong>04</strong></td>
<td>Lower levels of functional communication = higher levels of inappropriate or atypical behavior (Dominick, Davis, Lainhart, Tager-Flusberg, &amp; Folstein, 2007)</td>
</tr>
</tbody>
</table>
Sensory impairment with Additional Disabilities

01. It typically takes a child 3 times to hear something before they learn it.

02. It takes a child with hearing loss, 40-70 times to hear something before they learn it.

03. It takes a child with ASD, 70 times to hear something before they learn it.

04. It takes a child with hearing loss and ASD over 120 times to hear something before they learn it.
What are evidence-based practices?

- Using research to inform practice
- Provides a coherent chain of reasoning
- Replication and generalization across studies
- Pressure for districts to provide effective services
What can EPB's do?

Increase Behavior
- Academic tasks
- Communication skills
- Higher Cognitive Functions
- Interpersonal skills
- Learning Readiness tasks
- Motor skills
- Personal Responsibility tasks
- Play skills
- Self Regulation

Decrease Behavior
- Problem Behaviors
- Restricted, Repetitive, Nonfunctional patterns of behavior, interests and activities
- Sensory or Emotional Regulation
When teaching and supporting children who have a hearing loss and autism, the approach to each disability cannot be viewed without consideration of the impact of the other (Steinberg, 2008)

40 years, DHH 964 articles focused on literacy and only 22 considered research with an intervention, and control group.

National Standards Project Report, ASD, reviewed 50 years, 1060 reviewed, 775 considered rigorous research and remained for analysis
EBP’s for Autism

- Antecedent-Based Instruction
- Differential Reinforcement
- Discrete Trial Instruction
- Visual Supports
- Functional Communication Training
- Video Modeling
- Naturalistic Intervention
- Task Analysis
- Parent Implemented Interventions
- Peer Mediated Instruction
- Social Narratives
- Prompting
- Reinforcement
- Self-Management
Hearing / Vision

- Bilingual/Bicultural Strategies
- Literacy Instruction
- Language Instruction (speech or visual)
- Audiological Equipment

- Modeling
- Shaping
- Prompting
- Language, speech, listening, reading
Less than 50% of teachers had familiarity with most behaviorally-based interventions. If they were familiar, they did not always feel that the intervention would be effective. They were familiar with some evidence-based practices in the field of ASD.
Study 2

Course Topics

Percentage of Programs

Behavior management  Additional disabilities  Academic or behavioral interventions
Study 3

10 Most Recommended Interventions for Dual Diagnosis

- Teach, model, prompt, reinforce
- Visual Strategies - school setting
- Provide choices
- Routine/schedule
- ISRC Library materials
- Social stories
- Reinforcement chart/earning rewards
- Data collection coaching
- Environmental changes
- Sign language skills
Prompting Hierarchy

- Natural Cue
- Gesture
- Verbal
- Visual/Picture
- Model
- Physical (partial, full)
- Full Physical
T, M, P, R Strategies

Teaching requires progressively shaping, modeling, cueing and eventually fading to increase the independent use of the problem behavior.

- **Shaping**: Reinforcing closer and closer approximations to desired behavior.
- **Modeling**: Demonstrating the desired behavior.
- **Cueing**: Signaling the behavior is desired.
- **Fading**: Gradual decreasing of prompting, cueing and reinforcing new behavior while maintaining desired behavior.
Teach, model, prompt, reinforce

Work with a partner or independently

• Choose a behavior in your room that you want to change.
• Think about a replacement behavior
• How will you teach it and collect data?
• Most to least prompting?
• Least to most?
Knowledge of additional disabilities

• You all know about characteristics and diagnosis of Deafness/Hearing loss, vision loss
• Characteristics of the additional disability may overlap with D/HH
  • ASD - triad of impairment
  • Speech Language Impairment
  • Low Vision/Blindness
  • Severe ADHD
  • Developmental Delay
  • The list continues
D/HH
Delays in listening development

Delays in:
- Communication
- Language development
- Socialization

ASD
Delays in social-emotional reciprocity
Restrictive, repetitive behaviors
What are your sensory needs?

The Sensory Profile- take a minute to rate yourself.
Olfactory

Olfactory input is our sense of smell
Olfactory System

**Hypersensitive**
- May find any environment overpowering
- May show extreme aversive reactions to odors and substances
- Will not use toilets

**Hyposensitive**
- May smell things obsessively
- Seeks strong odors
Gustatory

Gustatory input is the sense of taste
Gustatory System

<table>
<thead>
<tr>
<th>Hypersensitive</th>
<th>Hyposensitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor eater</td>
<td>Eats everything</td>
</tr>
<tr>
<td>Uses tip of tongue for eating</td>
<td>Mouths and licks objects</td>
</tr>
<tr>
<td>Gags/vomits easily</td>
<td>Eats mixed foods (i.e. several tastes in combination)</td>
</tr>
<tr>
<td>Craves certain foods</td>
<td>Regurgitates</td>
</tr>
</tbody>
</table>
Tactile

Tactile input is the sense of touch.
Tactile System

**Hypersensitive**
- Resists being touched
- Avoids getting messy
- Eating issues
- Self-help / Grooming
- Temperature & pain
- Discomfort with clothing

**Hyposensitive**
- May have a high pain tolerance
- Likes pressure
- Seeks rough and tumble
- Prone to self injury - low reaction to temperature and pain
- May mouth hands or objects
- May constantly touch objects or other people
Visual

Visual input is the sense of vision or sight.
Located in the retina of the eye
Visual System

Hypersensitive
- Dislike of dark and bright lights
- Frightened by sharp flashes of light (i.e. lightning)
- May look down a lot to try to block out excessive stimulus

Hyposensitive
- Attracted to light - stares
- Stares intensely at objects and people
- Fascinated by shadows and reflections
Auditory input is our sense of hearing.
Located in the inner ear.
## Auditory System

<table>
<thead>
<tr>
<th>Hypersensitive</th>
<th>Hyposensitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unable to filter out noises</td>
<td>Seeks noisy environments</td>
</tr>
<tr>
<td>Avoids sounds and noises - dislikes crowds, storms etc</td>
<td>Likes to make noise</td>
</tr>
<tr>
<td>Self care tasks difficult</td>
<td>Makes loud rhythmic noises</td>
</tr>
<tr>
<td>May use own voice to ‘drown out’ environmental noise</td>
<td></td>
</tr>
</tbody>
</table>
Vestibular

Vestibular input is the sense of movement and balance and position in space.
## Vestibular System

<table>
<thead>
<tr>
<th>Hyposensitive</th>
<th>Hyposensitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enjoy swings, merry-go-rounds - may be excessive</td>
<td>Enjoys swings, merry-go-rounds - may be excessive</td>
</tr>
<tr>
<td>Spins, runs round and round</td>
<td>Spins, runs round and round</td>
</tr>
<tr>
<td>Rocks back and forth</td>
<td>Rocks back and forth</td>
</tr>
<tr>
<td><strong>Hypersensitive</strong></td>
<td><strong>Hypersensitive</strong></td>
</tr>
<tr>
<td>Fearful reactions to ordinary movement activities</td>
<td>Fearful reactions to ordinary movement activities</td>
</tr>
<tr>
<td>Difficulties walking or crawling over uneven or unstable surfaces</td>
<td>Difficulties walking or crawling over uneven or unstable surfaces</td>
</tr>
<tr>
<td>Dislikes being upside down</td>
<td>Dislikes being upside down</td>
</tr>
<tr>
<td>Becomes anxious or distressed when feet leave the ground</td>
<td>Becomes anxious or distressed when feet leave the ground</td>
</tr>
</tbody>
</table>
Proprioceptive

Proprioceptive input is the sense of body position
Located in the muscles and joints

Proprioception

The Brain receives and interprets information from multiple inputs:

- Vestibular organs in the inner ear send information about rotation, acceleration, and position.
- Eyes send visual information.
- Stretch receptors in skin, muscles & joints send information about the position of body parts.
Proprioceptive System

**Hypersensitive**
- Places body in strange positions
- Turns whole body when looking
- Difficulty manipulating small objects

**Hyposensitive**
- Low muscle tone
- Lack of awareness of body in space
- Tendency to fall
- Rocks back and forth
Sensory Integration and Processing

Sensory integration can be broken down into 5 components:

A process that involves organizing sensation from the body and environment for use (Ayers, 1979)

1. Registration
2. Orientation/attention
3. Interpretation
4. Organization of a response
5. Execution of a response
Sensory Integration and Processing

Registration
Sensory registration occurs when one first becomes aware of a sensory event.

Orientation
Orientation allows someone to pay attention to new sensory input being received.

Interpretation
Our brain interprets and gives meaning to sensory information. The ability to interpret sensory information allows us to determine what to respond to.

Organization of response
Our brain determines if a response to a sensory message is necessary.
**Execution of adapted response**

- The execution of a response is the final stage of the sensory integration process.
- A response is an action that generates the process to begin again.
Collaboration & Integration

Lots of overlapping and collaboration amongst the sensory systems.
Why is self-regulation so important?
Sensory Processing

- Healthy - The brain takes in or register sensory information from our 7 senses

- Disordered - The brain is unable to process sensory information in one of two ways.
  - Over vs Under Registration
    - Over registration - The amount of sensory information needed is much less than what is coming in therefore the brain over responds or over registers
Sensory processing cont.

- Under registration -
  - The brain taking in sensory input doesn't get enough
  - The child is not able to make a goal directed response

- Filtering -
  - All of the sensory input coming into the brain gets bottle necked like a traffic jam. As a result the child is unable to filter out unnecessary sensory input because their brain considers it all important
How does this affect an individual with sensory disabilities and additional disabilities?

- Faulty filters
- Alertness
- Arousal levels
- Hypersensitivities
- Hyposensitivities
1. True or false. Signs of sensory processing issues can appear as early as infant or toddler stages?
2. True or false. A child who has difficulty sitting still during circle time and is rolling around on the floor is always seeking attention from peers and the teacher?
3. True or false. A child who is chewing on clothing may be overstimulated within their environment and is using chewing as a way to soothe.
4. True or false. A child who is experiencing sound sensitivities may have difficulty in environments such as the grocery story, mall, cafeteria, and school assembly.
5. True or false. Most children will grow out of sensory processing issues.
DO YOU KNOW ME?

- I hate having my hair washed, brushed or cut.
- I cry and shield my eyes from the sun and other bright lights.
- I have “selective hearing” or difficulty listening.
- I am a picky eater; I resist new foods and textures.
- I complain about tags in my clothing.
- I seem to be unaware of normal touch or pain; I often touch others too soft or too hard.
- I hate being tickled or cuddled.
- I have poor gross motor skills, such as running and riding a bike.
- I always walk on my tiptoes.
- I have trouble focusing and/or concentrating.
- I am overly sensitive to loud sounds such as vacuums and blenders.
- I am always smelling people, food and objects.
- I chew on everything.
- I have poor fine motor skills, such as handwriting and cutting.
- I have difficulty dressing myself.
- I sit with my legs in a “W” position.
- I put my socks on “just so” or maybe I never go barefoot.
Example of Sensory Processing
Sensory processing cont.

What you need to know:
1. Meltdown
2. Potential Triggers
3. Potential accommodations
Consider potential triggers

1. Sound -
   - too loud
   - too much background noise
   - unexpected loud noises (airhorn, screaming and shouting, clapping)

1. Touch -
   - students bumping or touching one another
   - unexpected light touch
   REMEMBER: LIGHT TOUCH = PAIN for some students

1. Smell -
   - Strong odors
Consider potential triggers

4. Taste -
   - picky eaters due to taste, consistency or texture sensitivities
   - may cause gagging or make them feel sick
5. Sight-
   - too bright
   - flashing lights
   - fluorescent lights - some children hear the buzzing of fluorescent lights
6. Movement -
   - Sensitivity to movement
   - Fear of feet leaving the ground
Accommodating Students

- **Sound**
  - Noise Cancelling headphones or earplugs
  - Move away from noisy environment
  - Allow the student to be a spectator versus participant
  - If needed remove them completely to take a break
  - Foreshadow for older students - warn about triggers
Accommodating Students

- Touch
  - Warn (foreshadow) for your student if there will be movement that may result in being touched unexpectedly.
  - Allow them to sit or stand in proximity to their group that is comfortable for them.
Accommodating Students

- Smell
  - Watch their facial and body response when strong odors are present
  - Watch for anxious behaviors
  - Watch for face flushing or turning pale
  - Offer a break and leave the environment until the odor clears.
Accommodating Students

- Sight
  - Offer sunglasses
  - Warn them about dramatic change in lighting or flashing lights during worship

- Movement
  - Respect their hesitancy to participate in movement activities.
  - Offer an alternative activity
Other General Accommodations:

- If you know that there are sensory tools or strategies that work for the student (noise canceling headphones, movement breaks, visual schedules, fidgets) make sure you have them available all the time.

- Avoid touch to redirect the student as much as possible. Unexpected touch can cause anxiety and over awareness of their environment which can cause their behavior to escalate.
When you recognize that the student you are working with is becoming more and more fidgety, take them out for a short break. A quick walk may be all that they need to calm down and be ready to join the activity.

When you notice that the student is beginning to escalate and is not responding to your requests, stop talking to them as much as possible. When they are in an escalated state, their ability to process your requests becomes more and more difficult. Give them clear one step instructions. Use gestures or visuals to redirect them if possible.
Don't forget, behavior may serve many different functions!
Some reasons for behaviors

- Language/Communication Difficulties • Social Deficits
- Restricted Interests or Activities
- Emotional Difficulties
- Attention Problems
- Unique Cognitive Profile
- Sensory Processing Difficulties • Biological/Medical Factors
Behavior is communication

- Behavior is a form of communication
- Individuals with ASD may communicate through behaviors rather than words/gestures
- Behavior may be a response to the environment, not a deliberate choice
- Behavior may be due to sensory regulation difficulties

How do we contribute

- We are inadvertently inconsistent
- We place the person in confusing, disorganized environments
- We misinterpret the behaviors of individuals with developmental disabilities
- We allow too much “down time”
- We show stress/anxiety
FBA (Functional behavior assessment)

It is a means for understanding the function or purpose of a student’s behavior.

“Function” is associated with what the student achieves by engaging in a problem behavior: “the payoff.”
What are the steps?

COLLECT DATA!

01 Description of the inappropriate behavior (target behavior)
02 Determine the antecedents
03 Identification of functions
04 Description of positive alternatives
05 Identification of prior interventions
Functions

Hitting
- attention
- escape
- control

Attention
- throwing a pencil
- tantrum
- talk out
- refuse
Functions of behavior

Sensory

Escape

Attention

Tangible
## 4 Functions of Behaviour

<table>
<thead>
<tr>
<th></th>
<th>What It Does For Me</th>
<th>When Does it Happen</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>S</strong></td>
<td>Provides preferred sensory experiences; behaviour feels good to do</td>
<td>Anytime, even when alone. Especially if I’m anxious</td>
</tr>
<tr>
<td><strong>E</strong></td>
<td>Removes undesired activities or interactions</td>
<td>When task is too: hard, easy, boring, or scary</td>
</tr>
<tr>
<td><strong>A</strong></td>
<td>Provides access to people or interactions</td>
<td>When I want social interaction</td>
</tr>
<tr>
<td><strong>T</strong></td>
<td>Provides preferred items or activities</td>
<td>When I want a preferred item or activity</td>
</tr>
</tbody>
</table>

**S** - Sensory  
**E** - Escape  
**A** - Attention  
**T** - Tangibles
Sensory

Discussed earlier
Engaging in a behavior so the individual can get away from or avoid an activity altogether

Examples:

Aggressive behavior when approached with difficult task

Crying when it is time to go into the store because it is too loud

Spitting out food when they do not like it
Attention

When you think the child is looking for a reaction from you

Attention-seeking behaviors

Possible examples: Crying, Whining, Screaming, Negative Statements
Tangible

Child displays behavior to gain a preferred item or gain access to a preferred activity.
Categories of Behavior

- **Distracting:** making noises, wiggling, stimming, self-talk, pacing
  - INTERVENTION BEGINS HERE

- **Disrupting:** crying, screaming, sometimes pacing
  - REMOVE A DISRUPTIVE CHILD FROM THE ENVIRONMENT FOR A SHORT BREAK THEN RETURN

- **Dangerous:** aggression, self-harm
Behavior Strategies

- First/Then Statements
- Redirecting - with replacement activity or behavior
  - Instead of denying the activity (I want to blow bubbles) by saying no, not now - try “how about we color instead, bubbles aren’t a choice”
- Extinction - ignoring the small annoying behaviors and they will likely go away
- Offer Choices - These are your preferred choices
  - Choice and Control go a long way - when possible give the students some choices so they feel like they are in control
<table>
<thead>
<tr>
<th>$700 dollars</th>
<th>Live in nanny for 3 months</th>
<th>Free wine delivery every week for 3 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Going to the spa every week for 3 months</td>
<td>The goodness of your heart</td>
<td>Being given the time to workout everyday for 2 hours</td>
</tr>
<tr>
<td>An all inclusive trip to Mexico with airfare included</td>
<td>A personal chef for 3 months</td>
<td>A 3 day trip to Italy, all airfare and food cost included</td>
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<td>-------------</td>
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</tr>
<tr>
<td>A massage every week for 3 months</td>
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</table>
Everyone’s laughter (a positive social reinforcer) makes it more likely that you will tell another joke at this party and/or that you will tell a joke at a similar party in the future.

The lack of laughter (i.e., people don’t laugh at your jokes) will reduce the chances of you telling a joke (or at least that joke) in the future.
Know the reinforcers!

- Understand there is a difference between ‘liking’ something and ‘working’ for something
- Don’t tell me you can’t get the child to work for anything…this means you haven’t found Alpha Omega
- Use sensory preferences for reinforcers
- The only constant is change- be prepared to make changes to the reinforcement list over time
- Take them out of rotation- it’s a reinforcer, not an addiction (Diet Coke, coffee)
Method for determining reinforcers

- Ask the student
- Having the student list reinforcers in order of preference
- Observe the student
- Reinforcer sampling/Preference Assessment
Method for determining reinforcers

○ Primary
○ Edible
○ Sensory
○ Secondary
○ Tangible
○ Privilege/activity
○ Social
Reinforcement is key

- Behavior results in high rate of reinforcement
- Provide reinforcement all day
- How are we delivering attention?
- FBA
  - Check the function
  - See if it is related to escape, attention or a tangible item
o Expose them to the function for behavior (tangible, attention, escape)

o Catch them being good

o You do something good, you get something good

o We need to reinforcement as often as possible
Mistakes that we make

- Assuming work refusal has an escape function
- Focusing too much on work compliance
- Letting problem behavior get in the way of good teaching
- Telling instead of teaching
- Inflexibility
- Assuming kids should be interested in school work
Strategies
Structured Teaching

• Rate your classroom - how structured is your classroom?
  • 1 (not at all) - 5 (VERY structured)

• Rate your instruction - how structured is your instruction?
  • 1 (not at all) - 5 (VERY structured)
Why Structured Teaching?

• Developed by Division TEACCH (Training and Education of Autistic and related Communication-handicapped Children)

• Based on extensive understanding of autism and partnering with families
  • How ASD impacts thinking, learning, and behavior

• ASD = differences in auditory processing, imitation, motivation, and organization
Structured vs. traditional strategies

**Structured Teaching**
- Predictable, meaningful routines
- Added visual & structural support
- Increase engagement
- Reduced anxiety
- Increase appropriate behavior

**Traditional Strategies**
- Verbal instructions
- Demonstrations
- Social reinforcement
- Sequencing chunks of information

Structured Teaching Pyramid

Visual Structure of Materials

Routines and Visual Strategies

Work Systems

Schedules

Physical Structure

Physical Structure

Most important - serves as the foundation!

How classroom is set up and where materials and furniture are placed

Which room would you feel more relaxed in?
Why Physical Structure

• Provides organization
• Helps staff, students, and classroom visitors understand what activities are occurring in each area at any given time
• Helps students anticipate the requirements of a specific setting and to predict what will be happening
• Minimizes competing distractions
• What would you look at?
• Results == more on-task behavior and higher academic achievement (Heflin & Alberto, 2001)
Schedules

• Communicates the sequence of upcoming events non-linguistically
• Tells WHERE and WHEN
• Designed to match individual needs
• Assessment of required skills
Why Visual Schedules

<table>
<thead>
<tr>
<th>Enhance</th>
<th>Assist</th>
<th>Reduce</th>
</tr>
</thead>
</table>
| Enhance receptive language  
  - Capitalizes on strength in visuospatial skills (Quill, 1997) and attention to visual information (Garretson, Fein, & Waterhouse, 1990) | Assist with increases in independence; decreased reliance on prompts (Green, 2001) | Reduce anxiety and increase flexibility |
Implementation considerations

1. Form of representation
2. Length of schedule and presentation format
3. Ways of manipulation
4. Location
5. Initiation of use
Work Systems

- Systematic and organized presentation of tasks and materials that communicates at least 4 pieces of information
Why Work Systems?

Addresses Challenges:

- Decrease adult supervision and prompt dependency
- Organization
- Distractibility
- Sequencing
- Generalization
- Independent Initiation
Visual structures

• Adds a physical or visual component to tasks
• HOW an activity should be completed
• Visual instructions - tells where to begin and the sequence of steps
• Visual organization - how the space and materials are limited or arranged
• Visual clarity - emphasizes or draws attention to important or relevant information
Why Visual structures?

• Increases meaning and understanding
• Allows students to continually refer to instructions
• Clearer understanding of what is expected
• Provides more opportunities to practice a skill independently (without relying on adult directives)
How to implement visual structure

1. Consider how instructions will be provided.
   • Supplementing "verbal" directives increases independence

2. Decide what types of organization may be needed to allow student to be more successful and independent.

3. Provide additional clarity to students to help identify what is most important.

4. Include student interests.
Tips for implementation

• Think about how materials can be used across curricular areas or for more than one purpose to ensure the most use.

• Think creatively about how activities can be made. Use parent volunteers, student helpers, scout troops, and/or community members.

• Consider how you might share resources with other teachers or create an activity lending library in your building/district.

• Instructional activities should relate to your individual assessment of student needs and curricular requirements.
CHECK YOUR TIMETABLE CARD
ANTECEDENT-BASED INTERVENTIONS (ABI)

Basically—things you can implement to stop or minimize the behavior before it actually begins.
ANTECEDENT-BASED INTERVENTIONS (ABI): REINFORCEMENT, VISUAL STRATEGIES, & CHOICE-MAKING

Designed to modify the environment before the behavior occurs
Interfering
On-task behaviors
Typically after a FBA has been conducted
Observe in the setting where problem behavior occurs
Determine changes to environment
ANTECEDENT-BASED INTERVENTIONS (ABI): REINFORCEMENT, VISUAL STRATEGIES, & CHOICE-MAKING

Steps involved in implementation

● Step One - identify student’s reinforcers
● Step Two - identify interfering behavior and collect information (where, with whom, specifics)
● Step Three - pair the intervention with the ABI strategy
● Step Four - collect data and use for decision-making
ANTECEDENT-BASED INTERVENTIONS (ABI) strategies

- Learner preferences (reinforcement)
- Altering the environment
- Implementing pre-activity interventions
- Using choice-making
- Altering how instruction is delivered
- Enriching the environment
ABI strategies

Altering the environment
• Add visuals
• Change the visual structure by defining areas
• Change seating
• Add space between students
• Visual timers
ABI strategies

Pre-activity interventions
Pre-teaching materials
Providing transition warnings
mini schedules/task organizers
Used with activities associated with unwanted behavior
Visual Supports

Any tool presented visually that supports the student throughout the day

- Schedules
- Labels
- Visual boundaries
- Organization systems
- Scripts
- Choice boards
Functional Communication Training

Designed to decrease unwanted behaviors by replacing them with meaningful or functional communication

• Emphasis is on functionality instead of form
• Relies on knowing the function behind the behavior
• Functional Behavior Assessment is always performed first
Functional Communication Training

Replace unwanted behavior with more socially acceptable behavior

• Focus of new behavior is communication

• Step one:
  • Perform an FBA

• Step two:
  • Match the function of the behavior to the message of the alternative communication

  • Other children must be informed
  • Target child must have share icon in close proximity
FCT cont.

• Step three:
  • Prompt the use of the replacement communication
  • Reinforce the desired behavior

• Other steps:
  • Collecting data
  • Sabotaging the environment
  • Planning for generalization
  • Fading the use of prompts
FCT example.
Video Modeling/ social stories

Uses a video recording to teach the child with ASD a new skill

Several types

● Basic video modeling
● Video self-modeling
● Point-of-view video modeling
● Video prompting
Video Modeling/ social stories

- Point-of-view video modeling
  - Made from the perspective of the learner
- Video self-modeling
  - Video the learner performing the desired behavior
  - Learner watches self performing desired behavior
- Video prompting
  - Break the video into steps
  - Include a pause for the learner to advance to the next step
Video Modeling/ social stories

- Consider
  - Is the skill present?
  - How does the learner learn best?
  - Can they see another’s perspective?

- To begin...
  - Select type of modeling
  - Write a script
  - Gather equipment
  - Decide when and how often
  - Collect data
Task Analysis

- Simple tasks can be difficult
- Use to break up a skill into smaller, more manageable steps
- Understand all steps involved to identify any steps that need extra instruction
- Teach in logical progression
- Keep in mind
  - Skill level
  - Age
  - Communication ability
  - Processing ability
  - Prior experience with the task
One task analysis is not appropriate for all children
• Individualize each task analysis
• Number of steps and/or wording will differ
• Use chaining procedures to teach the task
• Collect data on the steps

Objective: Nikki will complete 9 out of the 10 steps involved in setting a table with 2 or fewer prompts.
Task Analysis

Step One:
- Identify the target skill to be taught
- A series of chained discrete steps

Step Two:
- Identify prerequisite skills of the learner
- Collect baseline data by
  - Telling student what do
  - Observe what they can and cannot do
  - What they cannot do is part of the task analysis
Task Analysis

Step Three:
● Break the skills into the necessary components
● Observe someone doing the task
● Write down the steps you observe
● Document the materials you will need to complete the task
● Give to someone else to complete

Step Four:
● Focus on how to teach the task
● Total task presentation
● Backward chaining
● Forward chaining
Task Analysis

Step Five:
• Plan on removing prompts you build in to teach task analysis
• Point of task analysis is that a child can do something independently
• Independently means no prompts!
Task Analysis example
Task Analysis practice
<table>
<thead>
<tr>
<th></th>
<th>Backward Framework</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Open battery door.</td>
</tr>
<tr>
<td>2</td>
<td>Remove the old battery.</td>
</tr>
<tr>
<td>3</td>
<td>Pull the sticker off the new battery.</td>
</tr>
<tr>
<td>4</td>
<td>Put the sticker on the table next to you.</td>
</tr>
<tr>
<td>5</td>
<td>Locate the + on the new battery.</td>
</tr>
<tr>
<td>6</td>
<td>Place the + so it faces you.</td>
</tr>
<tr>
<td>7</td>
<td>Keeping the + facing you, insert the new battery into the battery drawer.</td>
</tr>
<tr>
<td>8</td>
<td>Close the battery drawer.</td>
</tr>
<tr>
<td>9</td>
<td>Dispose of the battery and sticker.</td>
</tr>
</tbody>
</table>

Adapted from "Insert the Battery in Behind-the-Ear Hearing Aids," by Oticon (n.d.).
Task Analysis practice

Choose a scenario to make a task analysis for.

1. Going on vacation - nothing is planned
2. Bedtime routine
3. Doing laundry
Implications and Next Steps

1. Programs need to engage in the conversation of how to address the needs of complex learners
2. Prioritize content
3. Add additional courses in the areas of behavior management, additional disabilities, and academic and behavioral interventions
4. Infuse content from the identified areas into existing course material
5. Provide resources in the different areas to pre-service teachers
Questions?
Thank you!