Going to School and Being Effective

Doreen Granpeesheh, Ph.D., B.C.B.A.
– What is Applied Behavior Analysis?
  • How does it apply to Autism?

– When is a child ready for school?
– How can we prepare at Home?
– How does this transfer to school?
– What is the shadow’s role?
Applied Behavior Analysis

• What is ABA?
• ABA is based on the principles of Operant Conditioning Theory:

“Human Behavior is affected by events that precede it (antecedents) and events that follow it (consequences)”

Change these events…change Behavior!
What behaviors do we want to change?

**Deficits**
- Language
- Play
- Social Skills
- Theory of Mind
- Executive Functions

**Excesses**
- Self Stimulatory Behaviors
- Maladaptive Behaviors
  - Tantrums
  - Aggression
  - Noncompliance

Skill Repertoire Instruction  Behavior Management
• **Theory of Mind:** The ability to infer the mental states of others’

  - Emotions
  - Thoughts
  - Knowledge
  - Desires
  - Beliefs
  - Intentions
Classic Test of a “Theory of Mind”

“Sally-Anne” or False-Belief Task

Where will Sally look for her ball?
Where does she think her ball is?
“Typical” Social Cognitive Development

First few months: Sense of Self

9 months: Joint Attention / Social Referencing

15 months: Pretense

18 months: Desire / Intention

2 years: Emotion

3 years: Knowing / Thinking

4 years: Belief / False-Belief

5 years: Intention – Accident vs. Purpose
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9 Target Areas

- Emotions
- Desires
- Sensory Perspectives
- Knowing
- Preferences
- Thinking
- Beliefs
- Intentions
- Deception

Theory Of Mind
Deception: Jokes
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What is Executive Function?
- Process that underlies goal directed behavior

Goal Directed Behavior Involves...
- Visualizing situation
- Identifying desired objective
- Determining plan to meet objective
- Monitoring progress to goal
- Inhibiting distractions
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Executive Function

Inhibition
Planning & Problem Solving
Self-Monitoring
Flexibility
Working Memory
Attention
Problem Solving: clarification
When is my child ready for school?

Behaviors

Self-Stimulatory behaviors replaced?

Problem Behaviors under control?
• Hopefully, our child already learned all this at home!

• Now all we have to do is generalize to school!

• Even if our child has the necessary skills, generalization is not easy!
What’s our goal?

Teach our child to successfully learn in the school setting

- Stimulus Generalization
- Response Generalization
- Generalized Reinforcers
## Stimulus Generalization

Different stimulus.....same response

<table>
<thead>
<tr>
<th>Stimulus</th>
<th>At home</th>
<th>At School</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Different People</td>
<td>Therapist</td>
<td>Teacher or Peer</td>
<td>Look and interact</td>
</tr>
<tr>
<td>Different Setting</td>
<td>1:1 at table</td>
<td>1:20 in classroom</td>
<td>Pay attention</td>
</tr>
<tr>
<td>Different Time</td>
<td>2 hour sessions</td>
<td>5 days</td>
<td>Behave appropriately</td>
</tr>
<tr>
<td>Different Stimuli</td>
<td>Picture cards</td>
<td>Books, Black Board</td>
<td>Identify labels</td>
</tr>
<tr>
<td>Stimulus</td>
<td>At Home</td>
<td>At School</td>
<td></td>
</tr>
<tr>
<td>----------------------------------</td>
<td>----------------------------------</td>
<td>------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>What letter is this?</td>
<td>It’s “B”</td>
<td>Wait until called on, raise hand, say “it’s B”</td>
<td></td>
</tr>
<tr>
<td>What do you want to do?</td>
<td>I want to play with the cars</td>
<td>Look and see what peers are doing, pick activity with peer</td>
<td></td>
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</tbody>
</table>
## Reinforcement

Your most important tool!

<table>
<thead>
<tr>
<th>Reinforcement</th>
<th>At Home</th>
<th>At School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary: Food</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Tangibles</td>
<td>Toys, TV, computer, etc</td>
<td>Only at scheduled intervals</td>
</tr>
<tr>
<td>Social Praise</td>
<td>Loud “yippey”, frequently</td>
<td>Mild “good”, occasionally</td>
</tr>
<tr>
<td>Escape</td>
<td>Breaks whenever child needs it</td>
<td>Breaks on schedule</td>
</tr>
<tr>
<td>Attention</td>
<td>Access to mom/dad</td>
<td>Have to share attention with peers</td>
</tr>
</tbody>
</table>
So what are we expecting of our child?

• To identify important stimuli
  – Pay Attention

• Respond appropriately
  – Behave well

• Maintain responses under a thin schedule of reinforcement
  – Share the attention
Lets Get ready at home

- Increasing Attending skills at Home
  - Increase length of programs
  - Increase and vary background noise
  - Reduce the clarity of instructions
  - Use different people to teach
  - Interrupt routines
  - Teach at a distance
Preparing at Home

- Teaching Self-Monitoring Skills at Home
  - Teach child to reinforce himself for appropriate behavior
  - Teach child to identify own problem behaviors
  - Teach child techniques to redirect problem behaviors
    - Ask for breaks
    - Count and breath
    - Modeling your behavior
Preparing at Home

- Classroom Skills
  - Raising hand
  - Taking Turns
  - Crossing Legs at Circle time
  - Standing in Line
  - Eating in groups
  - Looking at the board for instructions
Preparing at Home

**Social Skills**

- **Observing Peers**
  - “do you want to play with me?”

- **Initiating Conversation**
  - “what are you guys doing?”

- **Joining Groups**
  - “what are you guys doing?”

- **Reading Social Cues**
  - He walked away…he’s not interested…maybe I should talk about something else.

- **Understanding Intentions**
  - He didn’t mean to knock over my bag

- **Understanding Rules**
  - I can’t grab her lunch, everyone eats their own lunch!
Responding to Social Cues
Preparing at Home

- Play Skills
  - Sharing
  - Building on other’s play
  - Finding peers with similar interests
  - Following play/ directing play
  - Playing cooperatively
  - Types of games/play
Play in response to peer
Preparing at Home

- **Academic Skills**
  - Cutting
  - Pasting
  - Calendar
  - Reading
  - Writing
  - Math
Factors to consider before starting

- All children are different
  - One child may be independent and able to modify own behaviors by observing peers
  - Another child may need more prompting, and more reinforcement
  - You will need different level of instruction by shadow, based on abilities of child
Schools are Different

- **Classroom Setting**
  - Are there posters on the wall?
  - Are there distractions?
  - What is the class size?
  - Do the children sit at desks or on the floor?
Schools are Different

- Teacher’s style of instruction
  - Does the teacher repeat instructions?
  - Does the teacher write instructions on the board?
  - Is the teacher always shouting at the class?
  - Does the teacher reward good behavior?
Schools are Different

- Adult to Child Ratio
- Peers: Friendly or Mean?
- Schedule
  - Frequent breaks?
  - Snacks given?
  - Easy and difficult activities alternated?
  - Can the child pick his own schedule?
We are ready!

- Picking the school
  - Is the teacher on board?
  - Is the teacher/student ratio low?
  - Is the program academically appropriate?
  - Are there enough reinforcers?
  - Will the school make modifications for us?
- Curriculum
- Classroom setting
- Instructional procedures
- Shadow aide allowed
What is the role of the shadow?

- To assist my child in
  - Learning from the teacher’s instructions
  - Learning by observing peers
  - Controlling his/her problem behaviors
  - Applying previously learned skills to the school setting
  - Playing appropriately with Peers

- The role of the shadow is to shadow.... and then fade out!
What does the shadow do?

• Help the child pay attention to stimuli
  – Stand close enough to see the cues child should see
  – Point out important stimuli
    • Teacher’s instructions
    • Peer initiations
    • Peer reactions
    • Social and contextual cues
What does the shadow do?

- Help the child respond appropriately
  - Prompt the child, as necessary to ensure success
    - Be close to child when a lot of prompts are needed
    - Be far from child when few prompts are needed
    - Use progressively less intrusive prompts
      - physical → verbal → modeling
      - Modeling therapist → modeling teacher → modeling peers
What does the shadow do?

- Help the child manage own behaviors
  - Replace problem behaviors with requests
    - “can I have a break” instead of tantruming
  - Predict difficult situations and step in to help
    - He doesn’t like reading comp, I should help more!
  - Reinforce child as much as necessary
    - Immediate and frequent reinforcement at first
    - Fade amount and frequency of reinforcers gradually
    - Replace reinforcers with naturally occurring reinforcers
What does the shadow do?

• Avoid encouraging dependence
  – Fade whenever possible
    • Easier activities
    • More rewarding activities
    • Activities with lower teacher/child ratio
    • Activities during child’s preferred time of day
4 phases of shadowing

• Working on 3 main areas
  – In class behaviors
  – Play/Social behaviors
  – Problem behaviors

• Always starting out with prompting responses and reinforcing them

• Then fading the prompts and just reinforcing good responses

• Then fading the reinforcers and maintaining good responses
Phase 1: (20% independence)

- Prompt child to participate in classroom activities
  - Use high level of prompting so child is successful
- Redirect inappropriate behaviors
  - Shape appropriate replacement behaviors
- Engage child in parallel play
  - Help child play near other children
  - Use familiar play activities
Phase 2: (50% independence)

• Fade prompts from Phase 1
• Reinforce appropriate behaviors
• Promote use of language
  – Greetings
  – Eye Contact
  – Teach statements for initiation with peers
    • “do you want to play”
    • “can I have the toy”
  – Reinforce responding to teacher
Phase 2

• Reinforce Interactive Play
  – Shadow should become friends with peers
  – Shadow attracts peers and engages child

• Target appropriate classroom behavior
  – Following group instructions
  – Participation in stations
  – Asking for breaks or use of bathroom
  – Raising hand
Phase 3: (75% independence)

- Fade prompts from Phase 2
- Encourage independent classroom behavior
  - Fade back on instructions
  - Direct child to pay attention to teacher
  - Promote peer modeling
  - Teach basic self-regulation
    - Written prompts
    - Symbols in classroom
Phase 3

• Target Language expansion
  – Encourage asking questions
  – Reward good responses to peers
  – Require child to gain attention of listeners

• Increase play interactions
  – Require child to find a friend to play with
  – Encourage sharing of toys

• Promote child’s academic skills
Phase 4: (90% independence)

- Require independence in the classroom
  - Work with the teacher
  - Ask teacher to take over stimulus control

- Confederate shadow can be introduced
  - Act as shadow for the whole class
  - Step in only when necessary
  - Prompt rapidly and step out
Phase 4

• Assess child’s abilities
  – Can he do it on his own?
  – Exactly where does he need help?
  – What skills need to be worked on at home?

• What can we do to make sure our child is successful?
## 4 Phases of Shadowing

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Phase I</th>
<th>Phase II</th>
<th>Phase III</th>
<th>Phase IV</th>
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<tbody>
<tr>
<td>In class Behavior</td>
<td>Prompt &amp; reinforce responses</td>
<td>Reinforce responses</td>
<td>Reinforce Indepen.</td>
<td>Fade and observe</td>
</tr>
<tr>
<td>Play and Social Behavior</td>
<td>Prompt &amp; Reinforce Parallel play</td>
<td>Prompt &amp; Reinforce Interact play</td>
<td>Reinforce Interactive Play</td>
<td>Fade and observe</td>
</tr>
<tr>
<td>Problem Behavior</td>
<td>Redirect problem behaviors</td>
<td>Reinforce Appropriate behaviors</td>
<td>Teach Self-Regulation</td>
<td>Fade and observe</td>
</tr>
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</table>
How to avoid the stigma

- Fade the shadow
- Change to unknown or confederate shadow
- Shadow should help other children as well
- Gradually reduce the days with shadow present
- Go from shadowing to school observations
Gradually fade from a home program to a school program.....

Allocation of Hours

Year 1  Year 2  Year 3  Year 4

Home-based  School-based
A Good Shadow…

• Adjusts to child all day long
  – Gets involved when necessary and backs off when child is doing well

• Pays attention to the child all day long
  – Tries to predict how the child will react to different situations and helps when needed

• Brings the school staff and peers on board
  – Is polite and courteous to the teacher
  – Respects the teacher’s knowledge and position
  – Gets other children involved

• Provides accurate assessments of the child’s progress in school
A Bad Shadow

• Is overbearing and interferes with the natural interactions of the child
• Is scared to fail and does the child’s homework for them
• Is stigmatizing and makes the child stand out from his peers
• Is frustrated and scolds the child inappropriately
• Is rude and antagonizes the teacher
• Is lazy and counts the minutes to the end of the day
Remember…

– Teach the necessary skills at home
– Find the right school
– Generalize gradually

• Every child can be successful at school!