Effective Interventions for Students with ASD: Practical Applications for Classroom Success

Center for Autism and Related Disabilities
University at Albany State University of New York

Seminar Two
Objectives

• Participants will learn how to use naturalistic interventions to improve social and communication skills

• Participants will learn the components of video modeling along with evidence-based implementation

• Participants will be able to describe the steps necessary to develop a self-management system for their student
Naturalistic Intervention
Naturalistic Interventions

- Strategies primarily involving child-directed interactions to teach real-life skills in natural environments

- Facilitate generalization across different settings, people, and materials
Naturalistic Interventions

• **Who:**
  - Effective for toddlers (0-2 years) to elementary school-age learners (6-11 years) with ASD
  - Effective for individuals with minimal communication and social skills

• **When/Where:**
  - Occurs within typical settings, activities, and/or routines in which the learner participates
Components of NI

- Occurs during routine daily activities
- Capitalizes on the child’s preferences, interests, needs, and abilities
- Child-initiated episodes for teaching
- Adults reinforce the child’s attempt to respond
- Adults provide inherent or natural consequences of the behavior as the reinforcer

Why use NI?

• Increases motivation by incorporating child’s interests

• Uses direct and natural consequences that are found within the environment

• Uses materials readily found in different environments

• Teaches skills in a variety of settings and/or situations
## Naturalistic Interventions vs. Discrete Trial Training

<table>
<thead>
<tr>
<th>Naturalistic Interventions</th>
<th>Discrete Trial Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loosely structured sessions</td>
<td>Highly structured, pre-planned sessions</td>
</tr>
<tr>
<td>Initiated and paced by student</td>
<td>Initiated and paced by teacher</td>
</tr>
<tr>
<td>Occur in a variety of locations and positions</td>
<td>Occur in a controlled, one-to-one setting</td>
</tr>
<tr>
<td>Employ a variety of stimuli</td>
<td>Use same stimuli repeatedly and consecutively</td>
</tr>
<tr>
<td>No pre-determined order of responses; a variety of prompts may be used to elicit a desired response</td>
<td>A single acceptable response is targeted for multiple successive training episodes using same prompt repeatedly</td>
</tr>
<tr>
<td>Allow the desired object chosen by student and used as stimulus to serve as a natural reinforcer</td>
<td>Use of reinforcers that are not functionally related to the stimulus</td>
</tr>
</tbody>
</table>
Goals Addressed

- Communication skills
- Interpersonal skills
- Play skills
- Increase language behavior & decrease disruptive behavior

How to Implement NI
Step 1: Identify Target Behavior

- Choose target skill
- Collect baseline data
- Choose contexts for intervention
- Train other team members
**Collecting Baseline Data Example**

**Student:** Billy  
**Age:** 5 ½ years  
**Grade:** Kindergarten  

**Target Skill:** Making verbal requests

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity/ Class Period</th>
<th>Environmental Modification</th>
<th>Behavioral Strategy Used</th>
<th>Target Behavior Tally</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/2</td>
<td>Free play</td>
<td></td>
<td></td>
<td></td>
<td>Didn’t interact with teacher or other students; played with legos</td>
</tr>
<tr>
<td>10/2</td>
<td>Snack</td>
<td></td>
<td></td>
<td></td>
<td>Pointed when teacher asked if he wanted more</td>
</tr>
<tr>
<td>10/2</td>
<td>Arts &amp; crafts</td>
<td></td>
<td></td>
<td>X</td>
<td>Said “more” when he ran out of paint</td>
</tr>
<tr>
<td>10/3</td>
<td>End of the day</td>
<td></td>
<td></td>
<td>X</td>
<td>Said “help” when he couldn’t put his coat on</td>
</tr>
<tr>
<td>10/4</td>
<td>Snack</td>
<td></td>
<td></td>
<td></td>
<td>Reached for snack; became upset when teacher didn’t notice</td>
</tr>
</tbody>
</table>
How to Implement NI
Step 2: Arrange the Environment

• Choose motivating materials
• Have adult manage materials
• Arrange the context and environment to encourage use of the target skill
Create an engaging setting
How to Implement NI
Step 3: Elicit Target Behavior

• Engage Child in Interaction
  – Follow child’s lead
  – Be at learner’s level
  – Respond to initiations
  – Provide feedback
  – Expand utterances
How to Implement NI
Step 3: Elicit Target Behavior

• Use Behavioral Interventions
  – Modeling
  – Mand-modeling
  – Modified time delay
  – Incidental teaching
# Mand-modeling

<table>
<thead>
<tr>
<th>Steps</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Establish shared attention</td>
<td>Billy and his teacher are reading a book on the rug where the books are.</td>
</tr>
<tr>
<td>b. Provide a verbal direction or question</td>
<td>Teacher says, “What book do you want to read Billy?”.</td>
</tr>
<tr>
<td>c. If the learner responds correctly, expand the response and provide the requested material</td>
<td>When Billy says the target response (“Want this book”), his teacher provides the book and expands the utterance to “Want this book, please!”</td>
</tr>
<tr>
<td>d. If the learner does not respond, provide another directive or model</td>
<td>When Billy points to the book instead of verbalizing, his teacher prompts him, “Say, ‘Want book’.”</td>
</tr>
<tr>
<td>e. If the learner gives the target response, expand the response and provide requested material</td>
<td>When Billy repeats, “Want book,” the teacher provides the book and expands, “Want book please!”</td>
</tr>
<tr>
<td>f. If the learner still does not respond, say the target response and provide the material.</td>
<td>When Billy says, “Book,” which is not complete and at the target level, his teacher says, “Want book please,” and provides the book</td>
</tr>
</tbody>
</table>
Wait for the child to initiate
# Lesson Plan

**Week of: October 12**

**Student:** Billy  
**Goals:** To make a verbal request of two or more words when he wants something

<table>
<thead>
<tr>
<th>Activity</th>
<th>Modifications</th>
<th>Interventions: Mo Ma TD IT</th>
</tr>
</thead>
</table>
| Snack          | Put snacks on high shelf  
Use childproof containers                                    | Adult asks Billy what kind of snack he wants and uses IT to expand request: “What kind of snack do you want?”, “What kind of cookies?”  
Adult waits for Billy to request help opening container: “Say open please”             |
| Free Choice    | Favorite toys placed out of reach but in sight                                                | Adult asks Billy what he wants to play with during free choice  
Expand response to include “please”: “Cars please”  
Some activities require a partner:  
Model a request to play for Billy:  
Walk to peer with him, say, “Billy wants to play with you. Billy, say ‘Play with me?’” |
| Circle Time    | Include “requests” into daily classroom assignments during circle time                       | Provide models for Billy  
Daily weather person- ask a friend to walk to window, “Help me please”  
Day counter- let Billy request a specific pointer for counting, “Blue pointer please”  |
| Outside Play   | Withhold basketball until verbally requested                                                  | Hold ball with expectant look and wait for request  
Expand request to include “please”: “Ball please”  |
How to Evaluate

• Monitor the child’s progress by tracking the use of the target skill
# Collecting Data

**Student:** Billy  
**Age:** 5 ½ years  
**Grade:** Kindergarten

**Target Skill:** Making verbal requests

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<th>Date</th>
<th>Activity/Class Period</th>
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<td></td>
<td></td>
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<td></td>
<td>X</td>
<td>Said “help” when he couldn’t put his coat on</td>
</tr>
<tr>
<td>10/4</td>
<td>Snack</td>
<td></td>
<td></td>
<td></td>
<td>Reached for snack; became upset when teacher didn’t notice</td>
</tr>
<tr>
<td>10/12</td>
<td>Snack</td>
<td>Put snacks in childproof containers</td>
<td>Mand-modeling</td>
<td>X X</td>
<td>Said “want crackers” and “more crackers, please”</td>
</tr>
<tr>
<td>10/12</td>
<td>End of the day</td>
<td></td>
<td>Time delay; mand-modeling</td>
<td>X</td>
<td>Said “Need coat”</td>
</tr>
<tr>
<td>10/13</td>
<td>Free play</td>
<td>Moved legos to shelf, put in difficult-to-open box</td>
<td>Mand-modeling</td>
<td>XXX</td>
<td>Said “legos,” “more legos,” and “green legos, please”</td>
</tr>
</tbody>
</table>

**Baseline Data**

**Intervention Data**
Student: **Billy**

<table>
<thead>
<tr>
<th>Goals</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>To make a verbal request of two or more words when he wants something</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>To correctly use the pronouns <em>he, she, and it</em></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>To use a verbal response of at least two words when asked a question</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Questions to Consider

• Does the student perform the skill?
• Does the student perform the skill without prompts?
• Does the student perform the skill in different settings? With different people?
• Does the student perform the skill consistently?
• Was the intervention implemented with fidelity?
Examples

Scenario 1

Student: Jane
Instructor: Paraprofessional
Interests: Cars
Teaching goals: Color identification, counting
Scenario 1

Paraprofessional plans to use cars in free play area to work on goals. However, Jane shows an interest in balls. Para follows Jane’s interest, waiting for her to reach for one of the balls. He holds the ball slightly out of reach, asking Jane to identify its color, prompting her by telling her the name of the color. Then, he gives Jane the ball. He repeats with each ball. At the end of the session, the para asks Jane to count each ball using a 1:1 correspondence.
Scenario 2

Student: Jorge
Instructor: Teacher
Interests: n/a
Teaching goals: Tie shoes
Scenario 2

The teacher wants to teach Jorge to tie his shoes. She observes his day and assesses when naturally occurring opportunities to tie his shoes occur. She decides to create more opportunities for Jorge in a natural setting. She develops a daily activity of doing relaxation training for the entire class. The activity involves removing shoes and wiggling toes.
Scenario 3
Video Modeling
Video Modeling (VM)

Video Modeling is a mode of teaching that uses video recording and display equipment to provide a visual model of the target behavior or skill.
Why Use Video Modeling?

• Video modeling has several advantages over in vivo modeling, including:
  – Time and cost efficient
  – Depicting a variety of naturalistic settings
  – Having more control over the model
  – Presenting the model repeatedly
  – Reusing videos for other individuals
# Autism Spectrum Difficulties Addressed with VM

<table>
<thead>
<tr>
<th>Difficult Area</th>
<th>VM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stimulus over selectivity</td>
<td>Assists students to focus and maintain attention to relevant stimuli</td>
</tr>
<tr>
<td>Complex or unfamiliar directions</td>
<td>Condenses content to only essential information</td>
</tr>
<tr>
<td>Executive Functions: Shifting</td>
<td>Makes abstract concepts more concrete</td>
</tr>
<tr>
<td>Remembering auditory information</td>
<td>Uses strength of learning through visual means</td>
</tr>
</tbody>
</table>
VM and Individual Goals

- Increase appropriate social interactions
  - Conversational skills
  - Play skills
- Improve daily living skills
- Reduce problem behaviors
- Improve academic and task oriented behaviors
Basic Video Modeling

• Procedure in which learner is shown a videotape of a model performing a target behavior or completing a desired task

• After viewing entire video, learner is then given the opportunity to perform the modeled behavior or complete the task
Basic Video Modeling
Components of Video Modeling

1. Identify the Target Skill
2. Produce the Videos
3. Implement the Video Modeling Intervention

Step 1: Identify the Target Skill

- Assessment
  - Ecological Assessment
- Prioritizing Skills/Behaviors
- Defining the Skill/Behavior
- Collecting Baseline Data

<table>
<thead>
<tr>
<th>Performance of peer/person without disabilities Instructional</th>
<th>Performance of student with disabilities (+) Performed Correct (-) Performed Incorrect</th>
<th>Decision Teach (T) Adapt (A) Support (S)</th>
<th>Skill Instruction, Adaptation, or Support Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students find seats in the classroom.</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students take out notebooks.</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students complete Power Up displayed on the board (3 questions, students write 2 paragraphs).</td>
<td>- Student copies Power Up onto paper and then writes words unrelated to classroom content on a flyer passed out by the teacher.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Given verbal direction by Mr. Davis, students put Power Up in their binders and pass in their homework as teacher makes announcement regarding class pictures.</td>
<td>- Student writes words on a flyer passed out by teacher</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Given verbal direction by Mr. Davis, students turn to page 80 in the Science textbook.</td>
<td>- Student writes words on a flyer passed out by the teacher. She does not have a textbook.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students receive science textbooks passed out by a peer.</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students read along silently from the textbook as an individual student reads out loud.</td>
<td>- Student is turning the pages of the textbook. A peer assists her to find page 80</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Questions to Ask When Prioritizing Skills/Behaviors

1. The behavior of most concern to the individual/teacher/parent
2. The easiest behavior to change
3. The behavior most likely to affect other problem behaviors/skills
4. The behavior most likely to generalize to other behaviors/skills
5. The earliest behavior in a behavior chain
6. The behavior that, if changed, leads to the most opportunities for new behaviors and more reinforcement

## Defining the Skill/Behavior Collecting Baseline Data

### Choosing Appropriate Clothing Task Analysis

<table>
<thead>
<tr>
<th>Date &amp; Initials</th>
<th>FP - Full physical prompt</th>
<th>PP - Partial physical prompt</th>
<th>G - Gestural prompt</th>
<th>V - Verbal prompt</th>
<th>VC - Visual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Checks weather</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identifies if it will be very cold, cold, warm, hot, or very hot</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identifies special weather conditions (rain, snow, wind)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Takes out underwear</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chooses appropriate socks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chooses appropriate pants or shorts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chooses appropriate shirt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>States need for additional clothing (coat, hat.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>States need for additional items (umbrella)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PERCENTAGE INDEPENDENT</th>
<th>FP</th>
<th>PP</th>
<th>G</th>
<th>V</th>
<th>VC</th>
</tr>
</thead>
</table>

**Student Name:** ____________________________
Step 2: Produce the Videos

• Have the correct equipment
  – Video recording device
  – Determine how the video will be played back
  – Be familiar with how to use equipment

• Planning for recording
  – Script writing/task analysis

Applications for Video Production

- Video Tote
  - www.videotote.com
  - $2.99

- iModeling
  - http://imodelingproject.com/
  - $11.99
Step 2: Produce the Videos

• Making the Video
  – Identify the type of video modeling (4 types)
  – Questions to ask:
    • Do you want to show the target behavior from the learner’s point of view or from a third person?
    • If video modeling, who will be the model?
    • If video self-modeling, how will you prepare the learner to be videotaped?

• Record a video that is satisfactory in quality and accurately reflects the steps of the task analysis
Video Modeling Techniques

- 4 Types of Video Modeling Techniques
  - Basic Video Modeling
  - Video Self-Modeling
  - Video Prompting
  - Point-of-View Video Modeling

http://autismpdc.fpg.unc.edu/content/video-modeling
Video Self-Modeling (VSM)

- Specific application of VM that allows the individual to imitate targeted behaviors by observing him or herself successfully performing a behavior
Video Self-Modeling

I can take deep breaths or relax in a beanbag to feel better.

https://sites.google.com/a/ttacodu.org/video_modeling/home
Video Self-Modeling
Video Prompting (VP)

- Variation of VM
- Learner is shown a series of video clips in sequence
  - First, a video clip depicting only the first target behavior or only the first step in a task
  - Then the learner is given the opportunity to perform the behavior/complete task
  - After that opportunity, the learner is shown the next video clip in the sequence and so on until all target behaviors have been shown

Video Prompting

http://www.youtube.com/watch?v=zEHPwIyNRM
Point-of-View Video Modeling

- Placing the camera at an angle that illustrates the target skill from the point of view of the target student

Video Based Modeling

- Style
  - Whole Video
  - Video Prompting

- Perspective
  - Scene
  - Point of View

- Model
  - Other
  - Self
Step 3: Implement the Video Modeling Intervention

- Prepare for teaching
- View the videos
- Engage in the Target Skill
- Collect Intervention Data
- Program for generalization

Prepare for Teaching

• Arranging the environment for watching the video
  – Consider how and when it will be used in natural routines
  – How often and when will it be shown?
  – Where will the learning take place?

• Show ing the video
  – Allow learner to watch video an appropriate number of times before expecting the learner to use target skill
Engaging in Target Skill

• Immediately after viewing video, provide student with opportunity to practice the skill in the natural setting.

• If practice in natural setting is not possible, arrange situations within the setting where the student is required to use target behavior.
Collect Intervention Data

- Collect data on the performance of the target behavior, noting specific steps of task learner is able to do independently
- Note how often and when learner watches the video when using the target behavior
- If, after collecting data on 3-5 occasions, learner is not making progress, begin troubleshooting
Troubleshooting

• Adjust intervention tactics to help learner make progress by considering the following:
  1. Is the learner watching the video enough times per week?
  2. Is the learner watching the video, but not attending to the most relevant parts?
  3. Are enough prompts to use target behavior being given?
  4. Amount/type of reinforcement for performing, attempting to perform target behavior
  5. Is the video too complex?
  6. Task Analysis to ensure video includes correct steps?

http://autismpdc.fpg.unc.edu/content/video-modeling
Program for Generalization

- Varying settings
- Peers
- Scripts
- Self-monitoring
Self-Management
The Big Picture

How do our students with ASD fare after they leave high school?

Mailick Keynote Address IMFAR 2014
Waisman Center, University of Wisconsin-Madison
Large grant-funded center studying life course of individuals with ASD
The Big Picture

- 397 individuals with ASD
- Community Sample
- Time 1: 1998
- Examining trajectories of change over 10 years
- Assessed approximately every 18 months
High School Exit: Slowing of Improvement

Autism Symptoms – ADI-R

Behavior Problems – SIB-R

More severe

Less severe

Taylor & Maillick Seltzer, JADD, 2010

Lower income = < 25th percentile
Higher income = > 75th percentile

Wisconsin Center, University of Wisconsin – Madison

IMFAR
International Meeting for Autism Research
Percent of Adults with ASD in Each Vocational Index Category

- Post-secondary degree-seeking program
- Employed in the community without supports
- Employed in the community with supports
- Sheltered setting with employment
- Sheltered setting (with or without volunteering)
- Minimal activities or volunteering only
- No vocational/educational activities

Taylor & Maillick Seltzer, JADD, 2011

Wisconsin Center, University of Wisconsin–Madison
Self-Management Systems

Self-management approaches are appropriate for individuals of all ages on the autism spectrum

Self-management systems are an important part of building independence in students with ASD
Self-Management Systems

Teach students with ASD to:
1) Monitor their own behavior
2) Record their performance
3) Obtain reinforcement when their performance meets a pre-established behavior criterion

Self-Management: Steps for Implementation

1) Prepare the system to be implemented
2) Teach the learner to use the system
3) Implement the system with adult support
4) Promote learner independence with the system

Preparing Self-Management System

- Identify target behavior
- Clearly define!!!
Preparing Self-Management System

Identifying Target Behaviors

• Are there behaviors that are interfering with the student’s ability to communicate, engage socially, participate in academic work?

• What are the new skills that would increase the students independence later in life?

• What skills have been identified as areas of need in recent assessments (e.g., adaptive behavior assessments, functional behavioral assessments?)
Preparing Self-Management System

• Defining Behavior
  – What does it look like, sound like
  – Have student model behavior for you
  – Does it look different in different settings?

I will answer my teacher’s questions respectfully
Preparing Self-Management System

• I will answer my teacher’s questions respectfully
• I will stay on-task
• I will talk to peers more
• I will be safe

What do these behaviors look like for your student?
Do these behaviors look the same in different environments (e.g., math, PE, lunch)?
Example of Rules Poster

I will stay in my seat for 5 minutes without talking during English class.

Classroom Rules

1. I will stay seated in my chair during English class.
2. I will not talk while the teacher is talking.
3. When the timer rings, I will get a chip.
# PRIDE, RESPECT, & COOPERATION

<table>
<thead>
<tr>
<th></th>
<th>Classroom</th>
<th>Hallways</th>
<th>Playground</th>
<th>Cafeteria</th>
<th>Restrooms</th>
<th>Entering/Exiting</th>
<th>Assemblies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cooperation</strong></td>
<td>Follow teacher directions.</td>
<td>Walk to the right of the hallway.</td>
<td>Take turns and share equipment.</td>
<td>Eat most or all of my food and drink.</td>
<td>Take turns.</td>
<td>Use the doors on the right.</td>
<td>Sit down.</td>
</tr>
<tr>
<td></td>
<td>Work well with other students.</td>
<td></td>
<td>Follow playground and game rules.</td>
<td>Stay in my own space in line.</td>
<td>Use quiet voices.</td>
<td>Keep to the right in the hallways.</td>
<td>Follow teacher directions.</td>
</tr>
<tr>
<td></td>
<td>Work together to keep the classroom clean and organized.</td>
<td></td>
<td>Share the grass area with students in other grade levels.</td>
<td>Sit quietly until dismissed.</td>
<td>Return to class quickly and quietly.</td>
<td></td>
<td>Sit quietly until dismissed.</td>
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<tr>
<td></td>
<td>Actively participate in class.</td>
<td></td>
<td>Return the equipment to the shed or the classroom.</td>
<td></td>
<td>Flush toilets.</td>
<td></td>
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<tr>
<td></td>
<td>Complete and turn in homework.</td>
<td></td>
<td>Be a good winner and a good loser (sportsmanship).</td>
<td></td>
<td>Throw trash in trash cans.</td>
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<tr>
<td></td>
<td>Take care of classroom materials.</td>
<td></td>
<td></td>
<td></td>
<td>Put toilet paper in the toilet.</td>
<td></td>
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</tr>
<tr>
<td><strong>Respect</strong></td>
<td>Listen to the teacher and to other students.</td>
<td>Keep my hands and feet to myself.</td>
<td>Be responsible for my own actions.</td>
<td>Use table manners.</td>
<td>Wash my hands.</td>
<td>Walk on the sidewalks and crosswalks.</td>
<td>Listen to the speaker.</td>
</tr>
<tr>
<td></td>
<td>Raise my hand to speak.</td>
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<td></td>
<td></td>
<td>Be courteous: saying thank you, please, excuse me, etc.</td>
<td>Keep myself and others dry.</td>
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<tr>
<td></td>
<td>Ask to borrow what belongs to someone else, take care of and return it</td>
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<td></td>
<td></td>
<td>Talk quietly.</td>
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<tr>
<td></td>
<td>promptly.</td>
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**Center for Autism and Related Disabilities**

University at Albany State University of New York
Preparing Self-Management

• Identify reinforcers
  – Variety
  – Motivating
  – Using student input
FORCED-CHOICE REINFORCEMENT MENU

Name: ____________________________________________

In order to identify possible classroom reinforcers, it is important to go directly to the source, namely, you the student. Below is a paragraph that provides instructions for completing a series of “controlled choice” survey items about individual reinforcement preferences. Please read the following paragraph carefully:

“Let’s suppose that you have worked hard on an assignment and you think that you have done a super job on it. In thinking about a reward for your effort, which one of the two things below would you most like to happen? Please choose the one from each pair that you would like best and mark and “X” in the blank that comes in front of it. Remember, mark only one blank for each pair.”

1. ___ Teacher writes “100” on your paper. (A)
   Be first to finish your work. (CM)

2. ___ A bag of chips. (CN)
   Classmates ask you to be on their team. (P)

3. ___ Be free to do what you like. (I)
   Teacher writes “100” on your paper. (A)

4. ___ Classmates ask you to be on their team. (P)
   Be first to finish your work. (CM)

5. ___ Be free to do what you like. (I)
   A bag of chips. (CN)

6. ___ Teacher writes “100” on your paper. (A)
   Classmates ask you to be on their team. (P)
Use your points to buy treats:

<table>
<thead>
<tr>
<th>Reward</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>candy</td>
<td>5 points</td>
</tr>
<tr>
<td>ipod break</td>
<td>8 points</td>
</tr>
<tr>
<td>break area</td>
<td>5 points</td>
</tr>
<tr>
<td>ipod break</td>
<td>10 points</td>
</tr>
<tr>
<td>computer</td>
<td>10 points</td>
</tr>
<tr>
<td>coloring break</td>
<td>8 points</td>
</tr>
</tbody>
</table>
Want today's wifi password?
1. Make your beds
2. Vacuum downstairs
3. Walk the dog
Preparing Self-Management

• Data collection system
  – Set up for success!!
  – Interval or Frequency
Preparing Self-Management

• Interval Systems
  – Student must demonstrate (or not demonstrate) the behavior for ___ number of ___ second/minute intervals
  – Always start with interval goals that are at least equal to or slightly less than the amount of time they are currently exhibiting the behavior
  – Get an idea of how long a peer can engage in the behavior
  – Good for behaviors like: staying on task, conversing with peers, not engaging in a challenging/stereotyped behavior for a length of time
Self Management Form

Student Name: Jane ____________________ Date: 9/13/04

When you hear the beep put a smiley face in the box if you working on your assignment.

How many times was I working on my assignment when I heard the bell?

My goal is: 5

1 2 3 4 5 6 7 8 9 10
😊😊😊😊😊😊😊😊😊

The number of times I was working on my assignment: 6

My goal is to be working on my assignment: 5

I met my goal (yes or no): yes

I will reinforce myself when I meet my goal by: scheduling 30 minutes extra time on the computer
Interval Recording Sheet for Self-Management (Learner)

Learner: ______________________  Class/setting: ______________________

Date: ______________  Target skill/behavior: ______________________

Instructions: This recording sheet is designed to be used with five time intervals. At the end of each interval, the learner circles whether he or she stayed and played with friends. After the last interval, the learner determines if he or she met the criterion to receive a reinforcer.

---

1  2  3  4  5

How many smiles did I get? _______  Do I get a reward? _______

---

YES

GET A REWARD!!!

NO

Try Again
Preparing Self-Management

• Frequency Systems
  – Student must demonstrate ___ number of times or demonstrate no more than ___ number of times
  – Always start with frequency goals initially that are low (e.g., if new behavior may only have to exhibit once)
  – Get an idea of how often peers exhibit the behavior
  – Good for behaviors like: raising hand in class, taking bites of food, asking peers questions
Daily

Rinsed off the dishes I used?

Reviewed, ordered and checked off my scheduled events and my tasks to do:

Schedule

Task Cards

Breakfast  Lunch  Dinner

Daily

 Ended tasks when the timer went off?

Daily

Hung up my clean clothes in my closet?

Put on acceptable clothes for task or event?

Put on acceptable clothes for task or event?

Placed my dirty clothes in the laundry room or basket?
Preparing Self-Management

• Select recording device
  – Make it clear and easy to use
  – Consider Intrusiveness
    • Paper/Pen
    • Clickers
    • Token Boards
    • Paperclips/rubber bands
    • Timers, stopwatches, wristwatches
Teaching Self-Management System

• **Demonstrate** target behavior
  – Did it occur/not occur
    • Discriminate teaching
    • Modeling
  – Accurately record
  – Manage Reinforcers
    • Discriminate teaching
    • Modeling
Implementing Self-Management

- Provide materials or teach them to get motivation (physical guidance)
- Provide cues
- Teach self-record – prompt/reinforce (prompt faded until independent 80% accuracy)
- Teach to gain access to reinforcer
Gurpreet Kaur, MA, BCBA, UC Davis MIND Institute - Self-monitoring and Self-management

Promoting Independence

• Intervention checks – accuracy, collect reinforcement
  – Frequent
  – 20% all sessions

• Increase criterion once using consistently

• Increase session length while increasing criterion (hand raising example)

• Increase interval length as session length increases (with interval based systems)
## Self-Management Implementation Checklist

**Skills below can be implemented by a practitioner, parent, or other team member**

<table>
<thead>
<tr>
<th>Observation</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
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<tr>
<td>Observer’s Initials</td>
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### Planning (Step 1)

#### Step 1. Preparing the Self-Management System

1. To prepare the self-management system, engage in the following activities by:
   a. identifying the target behavior to increase or decrease and
   b. developing a clear description of the target behavior that adults agree upon and is presented in a format that learners are able to comprehend.

2. Identify reinforcers that reward the learner by:
   a. asking family members,
   b. asking or formally assessing the learner, and

**Scoring Key:** 2 = implemented; 1 = partially implemented; 0 = did not implement; NA = not applicable
Can you think of students that would benefit from Self-Management?

Which students would not benefit?
Last Thoughts

- It is important to look at individual strengths, difficulties, and goals before choosing an evidence-based model.
- In order to know if an intervention is effective and/or if it’s time for maintenance and generalization, data collection needs to be completed.
CARD Albany is now on Facebook
https://www.facebook.com/cardalbany

Required Coursework for Special Education Professionals now online – “Responding to the Needs of Students with ASD”
http://www.albany.edu/autism/nysed_autism_training.php

Online Distance Learning Training
http://www.albany.edu/autism/33452.php
New York State Regional Centers for Autism Spectrum Disorders

http://www.albany.edu/autism/nysrcasd.php

<table>
<thead>
<tr>
<th>Regional Center</th>
<th>Address</th>
<th>Phone</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Albany Regional Center for Autism Spectrum Disorders</strong></td>
<td>SUNY Albany • 1535 Western Ave. • Albany, NY 12203</td>
<td>(518) 422-2574</td>
<td><a href="mailto:card@albany.edu">card@albany.edu</a> • <a href="http://www.albany.edu/autism">www.albany.edu/autism</a></td>
</tr>
<tr>
<td><strong>Old Westbury Regional Center for Autism Spectrum Disorders</strong></td>
<td>SUNY Old Westbury • 223 Store Hill Road • Old Westbury, NY 11568</td>
<td>(516) 628-5647</td>
<td><a href="mailto:autism@oldwestbury.edu">autism@oldwestbury.edu</a> • <a href="http://www.owautism.com">http://www.owautism.com</a></td>
</tr>
<tr>
<td><strong>Rochester Regional Center for Autism Spectrum Disorders</strong></td>
<td>University of Rochester • 601 Elmwood Ave. • Box 671 • Rochester, NY 14642</td>
<td>855-508-8485</td>
<td><a href="mailto:rrcasd@urmc.rochester.edu">rrcasd@urmc.rochester.edu</a> • <a href="http://www.golisano.urmc.edu/rrcasd-nyautism">www.golisano.urmc.edu/rrcasd-nyautism</a></td>
</tr>
<tr>
<td><strong>Western NY Regional Center for Autism Spectrum Disorders</strong></td>
<td>Summit Educational Resources • 150 Stahl Road • Getzville, NY 14068</td>
<td>716-629-3445</td>
<td><a href="http://www.summitautismcenter.org">www.summitautismcenter.org</a></td>
</tr>
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</table>
Questions?

Center for Autism and Related Disabilities
Phone: (518) 442-2574 or toll free 1+(866) 442-2574
Email: card@albany.edu
Website: www.albany.edu/autism