

## “You Can’t Try Just One: Teacher and Parent Tested Interventions for Students with ASD.”

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What are evidence based practices?

- Curriculum, behavioral intervention, system change, or educational approach designed for use by families, educators, or other students
- Expected to result in measurable educational, social, behavioral, or physical benefit
- Expectation is there because “quality research” has validated its success across many participants, settings, and researchers.

The Evidence-Based practices that we will talk about:

- Visual Strategies
- “The Teaching Loop”
- Functional Communication Training
- Antecedent Strategies

### VISUAL STRATEGIES

#### ➤ Schedules

**What is a schedule?** A schedule is a group of pictures or objects that combined together provide information to the learner about the day, activity, or routine.

**What has it be used for?**

Increasing on-task behavior, decreasing problems with transitions, increasing social interactions, increasing independent activity routines.

#### **General Teaching Guidelines**

1. Two things for student to learn:
  - What the pictures mean

- How to use the system

*Don't teach them at the same time! Teach symbols first individually. Then teach schedule.*

2. Use physical prompts to teach schedule. Don't simply tell child, "Go check your schedule!"
3. Start by using schedule with preferred activities to encourage the use of the schedule
4. If the learner has difficulty checking the schedule, provide him with a more salient cue to indicate that it is time to check the schedule

### **Special Considerations**

- ✓ Don't use the schedule if it isn't necessary.
- ✓ Include a "surprise" item to teach flexibility.

### **Useful Resources**

Visual Strategies for Improving Communication : Practical Supports for School & Home by Linda A. Hodgdon

Activity Schedules for Children with Autism: Teaching Independent Behavior by Lynn E. McClannahan, PhD and Patricia J. Krantz, PhD

"Structured Teaching: Strategies for Supporting Students with Autism"  
by Susan Stokes. <http://www.cesa7.k12.wi.us/sped/autism/structure/str10.htm>

## ➤ Video Modeling

**What is video modeling?** A videotape created depicting a model performing a particular behavior. The learner watches the videotape of a model engaging in a target behavior and then performs the behavior.

### **What has it been used for?**

Social interactions, academic skills, communication skills, daily living skills, and perspective taking

### **Teaching Guidelines**

1. Decide who will model the target behavior for the videotape
2. Make the videotape
3. Show learner the videotape

1. Decide how many times the learner will watch the video before having to perform the behavior
2. Decide where to show the videotape
3. Decide if you will prompt the target behavior during task performance
4. Ask the learner to perform the task
5. Provide feedback for correct or incorrect responding

### **Special Considerations**

- ✓ May be best for kids who find videos very motivating.
- ✓ Look for kids who have good attending and imitation skills.
- ✓ Requires video equipment and expertise. Commercial tapes are available, but we don't know how effective they are.

### **Useful Resources**

Video Modeling: A Visual Teaching Method for Children with Autism (2<sup>nd</sup> Edition). By Lisa Neuman. <http://ideasaboutautism.com/video.html>

## ➤ **Social Stories**

**What is a social story?** Short, personalized stories, usually written by parents or teachers, that can assist individuals with autism in interpreting challenging or confusing social situations (Carol Gray).

**What has it be used for?** Prevention of challenging behaviors, interpreting social situations.

### **General Teaching Strategies**

1. Write the story (see Carol Gray's website or books for details).
2. Review the story with the child on a regular basis.

### **Special Considerations**

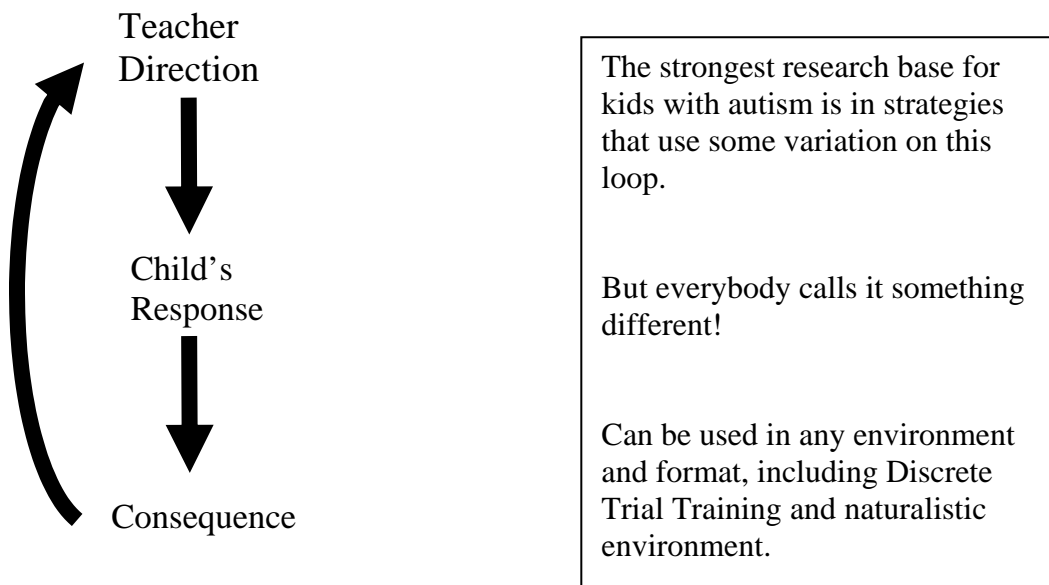
- ✓ Student may need to have a certain level of language development to benefit from social stories
- ✓ Observe the "Social Story ratio:" two to five descriptive, perspective and/or affirmative sentences for every directive sentence.

### **Useful Resources**

- [http://www.thegraycenter.org/Social\\_Stories.htm](http://www.thegraycenter.org/Social_Stories.htm)
- My Social Stories Book by Gray, C., White, A.L. and McAndrew, S.

- The New Social Story Book : Illustrated Edition  
by Carol Gray

## THE TEACHING LOOP



**What has it been used for?** Just about everything!

### General Teaching Guidelines:

1. Make sure child is attending before issuing direction.
2. Use prompting to increase the likelihood of correct responding (so that you can reinforce it) and to avoid frequent errors.
3. Consequence needs to happen IMMEDIATELY after child's response:  
Correct response => Reinforcement  
Incorrect response => Feedback on their error  
Most consequences should be reinforcement.
4. Fade prompts gradually until child is responding independently.

### Special Considerations

- ✓ Reinforcers are individual. Don't assume something is a reinforcer for a child.

- ✓ Two evidence based types of prompt fading:
  - Most-to-least: Progressively decrease assistance from the most amount of help the student needs to respond correctly until the student is responding independently.
  - Time Delay: Give the student as much help as necessary to respond correctly, but gradually increase amount of time you wait for student to respond before prompting.

### **Useful Resources**

A work in progress: Behavior management strategies and a curriculum for intensive behavioral treatment of autism. By Leaf, R., & McEachin, J. E. (1999)

## FUNCTIONAL COMMUNICATION TRAINING

**What is functional communication training?** It is a communication intervention that focuses on teaching an appropriate alternative to challenging behavior. This is done by teaching a new communicative response that is said to serve the same function or have the same effect on the environment as another less acceptable communicative response.

**What has it be used for?** Prevention of challenging behaviors, interpreting social situations.

### **General Teaching Guidelines**

1. Determine how long the learner will stay engaged in the task before engaging in challenging behavior
2. Just prior to arriving at this point, provide the child with the event (a break, a tangible, attention, assistance) to match the request you are teaching
  - For example: if you are trying to teach the child to request a break, immediately prior to the point in which problem behavior usually occurs, release the child from the task
3. Once the task has been associated with reinforcement, prompt the child to request at the critical point before problem behavior occurs
4. After a correct response, the child should be immediately provided the request

5. Over time fade the prompts necessary for the child to make the desired request
6. If the child begins to use the communicative request earlier, establish additional conditions

### **Special Considerations**

- ✓ Do not continue to reinforce the problem behavior
- ✓ Minimize the probability that a problem behavior will occur prior to the acceptable communicative response
- ✓ If possible, select a new response that is already part of the learner's repertoire

## ANTECEDENT STRATEGIES

### ➤ Self-Monitoring

**What is self-monitoring?** The learner is taught to discriminate their own target behavior and record the occurrence or absence of that behavior.

**What has it be used for?** Increasing social skills and interactions, decreasing disruptive and stereotypic behaviors , ncreasing appropriate play

### **General Teaching Guidelines**

1. Choose self-monitoring method or device.
2. Teach child to identify target behavior by observing both appropriate and inappropriate behavior modeled by the instructor. Reinforce child for correct identification.
3. Teach child to use self-monitoring device by prompting them to engage in the target behavior and then showing them how to self-record the occurrence (or non-occurrence). Reinforce them for correct recording. Continue to practice until child is recording accurately and independently.
4. Teach self-monitoring independence by gradually fading all prompts and reinforcement and increasing the time the child self-records.

### **Useful Resources**

Teaching Children with Autism: Strategies for Initiating Positive Interactions and Improving Learning Opportunities. By Koegel, R.L. and Koegel, L.K. (1995).  
Has a good chapter on self-monitoring.

## ➤ High Probability Requests

**What are high probability requests?** High probability requests is a strategy in which a set of short easy requests is delivered prior to a request in which the learner does not typically respond

Teacher	Child	Consequences
Alan, give me five.	<b>Gives teacher five</b>	<b>Teacher gives praise</b>
Touch your ears.	<b>Touches ear</b>	<b>Teacher gives praise</b>
What is on your shirt?	<b>Says “Batman”</b>	<b>Teacher gives praise</b>
Sit in your chair.	<b>Sits in chair.</b>	<b>Teacher gives praise</b>

### What has it be used for?

- Increase compliance
- Increase social interactions
- Increase communication
- Increase duration of attending
- Decrease latency to beginning tasks

### General Teaching Guidelines

1. Identify those requests that the child typically will complete. These tasks should be easy and quick to complete (high-p requests)
2. Identify those requests in which the learner will not complete
3. Validate those requests
4. Deliver three high-p requests immediately prior to delivering the low-p request.
5. Provide some type of feedback (i.e., praise, gesture, tangible)

### Special Considerations

- ✓ Deliver immediate praise upon performance of each high-p request
- ✓ Deliver the low-p within 5 seconds of the child’s response to the last high-p request.
- ✓ Randomize the order of the high-p requests
- ✓ Identify a large pool of high-p requests

## SOME RESEARCH REFERENCES

### VISUAL STRATEGIES

#### ➤ Schedules

Bryan, L. C., & Gast, D. L. (2000). Teaching On-Task and On-Schedule Behaviors to High-Functioning Children with Autism Via Picture Activity Schedules. *Journal of Autism and Developmental Disorders*, 30(6), 553-567.

Dooley, P., Wilczenski, F. L., & Torem, C. (2001). Using an activity schedule to smooth school transitions. *Journal of Positive Behavior Interventions*, 3(1), 57-61.

#### ➤ Video Modeling

Charlop, M. H., & Milstein, J. P. (1989). Teaching Autistic Children Conversational Speech using Video Modeling. *Journal of Applied Behavior Analysis*, 22(3), 275-285.

Haring, T. G., Kennedy, C. H., Adams, M. J., & Pitts Conway, V. (1987). Teaching generalization of purchasing skills across community settings to autistic youth using videotape modeling. *Journal of Applied Behavior Analysis*, 20(1), 89-96.

D'Ateno, P., Mangiapanello, K., & Taylor, B. A. (2003). Using video modeling to teach complex play sequences to a preschooler with autism. *Journal of Positive Behavior Interventions*, 5(1), 5-11.

#### ➤ Social Stories

Lorimer, P. A., Simpson, R. L., Myles, B. S., & Ganz, J. B. (2002). *The use of social stories as a preventative behavioral intervention in a home setting with a child with autism.*

Scattone, D., Wilczynski, S. M., Edwards, R. P., & Rabian, B. (2002). Decreasing disruptive behaviors of children with autism using social stories. *Journal of Autism & Developmental Disorders*, 32(6), 535-543.

### THE TEACHING LOOP

Ault, M. J., Wolery, M., Gast, D. L., Doyle, P. M., & et al. (1988). Comparison of response prompting procedures in teaching numeral identification to autistic subjects. *Journal of Autism and Developmental Disorders*, 18, 627-636.

Charlop, M. H., Schreibman, L., & Thibodeau, M. G. (1985). Increasing spontaneous verbal responding in autistic children using a time delay procedure. *Journal of Applied Behavior Analysis*, 18(2), 155-166.

Heckaman, K. A., Alber, S., Hooper, S., & Heward, W. L. (1998). A comparison of least-to-most prompts and progressive time delay on the disruptive behavior of students with autism. *Journal of Behavioral Education*, 8(171-201).

Breen, C. (1985). The Training and Generalization of Social Interaction during Breaktime at Two Job Sites in the Natural Environment. *Journal of the Association for Persons with Severe Handicaps (JASH)*, 10(1), 41-50.

## FUNCTIONAL COMMUNICATION TRAINING

Durand, V. M., & Crimmins, D. B. (1987). Assessment and Treatment of Psychotic Speech in an Autistic Child. *Journal of Autism & Developmental Disorders*, 17(1), 17-28.

Keen, D., Sigafoos, J., & Woodyatt, G. (2001). Replacing prelinguistic behaviors with functional communication. *Journal of Autism & Developmental Disorders*, 31(4), 385-398.

## ANTECEDENT STRATEGIES

### ➤ Self-Monitoring

Mullins, J. L., & Christian, L. (2001). The effects of progressive relaxation training on the disruptive behavior of a boy with autism. *Research in Developmental Disabilities*, 22(6), 449-462.

Koegel, R. L., & Koegel, L. K. (1990). Extended Reductions in Stereotypic Behavior of Students with Autism through a Self-Management Treatment Package. *Journal of Applied Behavior Analysis*, 23(1), 119-127.

Shearer, D. D. (1996). Promoting Independent Interactions between Preschoolers with Autism and Their Nondisabled Peers: An Analysis of Self-Monitoring. *Early Education and Development*, 7(3), 205-220.

### ➤ High-Probability Requests

Davis, C. A. (1994). Effects of High-Probability Requests on the Social Interactions of Young Children with Severe Disabilities. *Journal of Applied Behavior Analysis*, 27(4), 619-637.

Houlihan, D. (1994). Replication of a High-Probability Request Sequence with Varied Interprompt Times in a Preschool Setting. *Journal of Applied Behavior Analysis*, 27(4), 737-738.