



# Background

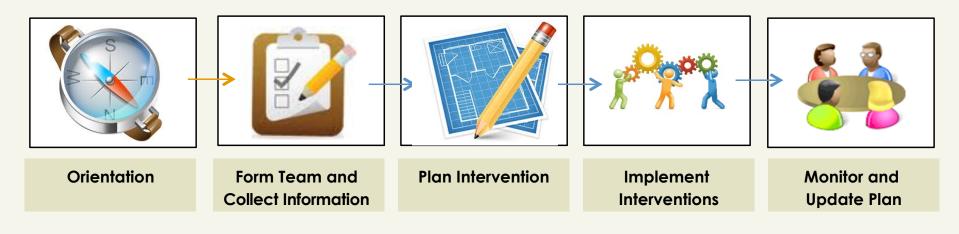
#### **SPONSORSHIP**

The Center on Secondary Education for Students With Autism Spectrum Disorders (CSESA) is funded by the U.S. Department of Education to develop and study a comprehensive high school program for students on the autism spectrum.

CSESA includes the Frank Porter Graham Child Development Institute, The University of North Carolina at Chapel Hill; Waisman Center, University of Wisconsin-Madison; Vanderbilt Kennedy Center, Vanderbilt University; The University of Texas at Austin; The University of North Carolina at Charlotte; San Diego State University; and UC Davis MIND Institute.

### WHAT IS PRISM?

- PRISM stands for personal responsibility, independence, and selfmanagement—the behavioral outcomes we all strive for when working with adolescents on the autism spectrum.
- PRISM is a process that supports school staff members in selecting goals and interventions to achieve optimal outcomes for students.



#### RATIONALE

- Self-management is considered an emerging and effective evidencebased practice with strong effect sizes (deBruin, Deppeler, Moore, & Diamond, 2013; Odom et al., 2003).
- Self-management has been successfully used to improve independent work skills in inclusive settings (Harrower & Dunlap, 2001).
- Little research has been conducted with adolescents with autism spectrum disorders (ASD; Mesibov & Shea, 2011).
- No study has looked at self-management and academic engaged time in high-school-age students with autism in a public school setting (deBruin et al., 2013; Lee, Simpson, & Shogren, 2007; Southall & Gast; 2011).

#### **RESEARCH QUESTION**

What is the effect of a multicomponent self-management intervention on academic engaged time for two high school students with ASD?

# Participants and Setting

#### **PARTICIPANT SELECTION**

- Met the district criteria for ASD
- Accessed general education academic content throughout the school day
- Participated in a study skill period
- IQ ≥ 80
- Had behavioral individualized education program (IEP) goals and were selected by staff as needing behavioral support

#### PARTICIPANT CHARACTERISTICS

- Andrew: 18 years old and in the 12th grade
- **Derek:** 17 years old and in the 11th grade

#### SETTING

- Rural Central Texas high school approximately 30 miles southeast of Austin
- More than 800 total students
- 65% of students were economically disadvantaged
- Pullout study skills period in the special education setting

# The Effects of a Self-Management Intervention on Academic Engagement for High School Students With Autism

Garrett Roberts, M.S., and Colleen Reutebuch, Ph.D. • The Meadows Center for Preventing Educational Risk, The University of Texas at Austin

# Goal Development

## **EVALUATION FORM**

kill Evaluation		Prio	rity Ran	nking
1 2 N/O N/A =not like student =much like student	O1. Accesses and follows daily schedule Note: Format & length may vary based on student needs (e.g. written, objects, pictures, ipad); student refers to it throughout day	O 0=no conce	□ 1 concern 2 ern	□ 2 2=major
0 1 2 N/O N/A	O2. Uses tools to document assigned work and/or scheduling information Note: Format may vary (e.g planner, calendar, technology, putting information in backpack)	0	□ 1	□ 2
0 1 2 N/O N/A	O3. Uses organizational system to document work completion Note: Format may vary (e.g. work system, planner, checklist, system to track grades, syllabus)	□ 0	□ 1	□ 2
0 1 2 N/O N/A	O4. Brings appropriate materials to assigned location Note: Includes bringing home and turning in homework, bringing supplies to class	0	□ 1	□ 2
0 1 2 N/O N/A	O5. Materials/work space are organized Note: Includes neat paperwork, tidy work space	0	□ 1	□ 2
0 1 2 N/O N/A	<b>O6.</b> Identifies steps required to complete assigned activities* Note: Includes breaking down larger projects into smaller steps, sequencing steps, listing steps in organizational systems	0	□ 1	□ 2
0 1 2 N/O N/A	O7. Begins assigned activities within allotted time* O8. Completes assigned activities within allotted time*	0	1	2
0 1 2 N/O N/A	O9. Returns materials to correct location at the end of activities	0	1	2
0 1 2 N/O N/A		0	1	2
0 1 2 N/O N/A	O10. Arrives at assigned location or activity on time Note: May include within classroom or across school/community	0	□ 1	□ 2
0 1 2 N/O N/A	O11. Moves to next destination or next activity Note: May include within classroom or across school/community	0	□ 1	2
0 1 2 N/O N/A	O12. Attends scheduled meetings with work groups, staff, etc.	□ 0	□ 1	□ 2
0 1 2 N/O N/A	O13. Requests/Initiates meetings with work groups, staff, as appropriate	0	□ 1	2
0 1 2 N/O N/A	O14. Manages free time appropriately* Note: before, during, after school/work, breaks	□ 0	□ 1	□ 2

kill Evaluation	PP1. Selects age & school/job appropriate clothing and footwear	Prie	ority Ranl
1 2 N/O N/A =not like student =much like student	PP1. Selects age & school/job appropriate clothing and lootwear	0	1 concern 2=r
1 2 N/O N/A	PP2.Clothes: Demonstrates general cleanliness	0	□ 1
1 2 N/O N/A	<b>PP3. Hygiene: Demonstrates grooming of hair, teeth, nails, and skin</b> <i>(e.g. shaving, brushing teeth)</i>	□ 0	□ 1
1 2 N/O N/A	<b>PP4. Physical Wellness: Demonstrates behavior that supports a healthy lifestyle</b> (e.g. choosing healthy snacks/lunch, participating in exercise during PE/sports)	0	□ 1
1 2 N/O N/A	PP5. Demonstrates environment-appropriate behavior related to sexuality/sexual health Note: Includes touching of self/others, respecting personal space	0	□ 1
1 2 N/O N/A	PP6. Demonstrates age & environment appropriate behavior related to bodily functions Note: Includes spitting, passing gas, belching, picking nose	0	□ 1
1 2 N/O N/A	<b>PP7. Demonstrates appropriate table manners</b> <i>Note: Includes chewing with mouth closed, use of utensils</i>	0	□ 1
1 2 N/O N/A	PP8. Washes hands after using restroom and/or before food preparation or consumption	0	□ 1
1 2 N/O N/A	PP9. Other:	□ 0	□ 1

Key for
0= This is NOT like
My student
supports I p
1=This is sort of like
<ul> <li>My student</li> </ul>
additional s
additional re
<ul> <li>My student</li> </ul>
supports I p
2=This is very muc
<ul> <li>My student</li> </ul>
supports I p
N/O= I have not ob
N/A= This skill area
Key for S
0= Not a concern
Though the
independen
1= Minor concern
<ul> <li>Demonstrat</li> </ul>
be helpful ir
2= Major concern
Demonstrating this
requirement in this

### **BEHAVIORS EVALUATED**

- Personal responsibility and independence: Organization, planning, problem-solving, personal presentation
- **Community engagement:** Conversation, other communication, emotion recognition, cooperation, understanding, school/community culture
- **Self-management:** Self-regulation of emotion and behavior, flexibility, self-monitoring

# Research Design

#### **ABAB WITHDRAWAL DESIGN** WITH 2 DAYS OF TRAINING FOLLOWING THE FIRST BASELINE

#### **BASELINE AND WITHDRAWAL**

- Students completed 30-minute independent "business-as-usual" sessions.
- Students completed unfinished assignments from other classes.
- Redirects were given to students.
- Students could ask for help if needed.

#### **Training Day 1**

- A trained peer with autism led training.
- Video modeling was used.
- Opportunities to practice, ask questions, and give feedback were provided.

#### **Training Day 2**

- Adults retaught the rules.
- Students practiced, using the selfmanagement device.

# **SELF-MANAGEMENT INTERVENTION**

- Same as baseline, except students did the following:
- Began working on the items on the checklist • Filled out a self-management form when work was completed
- Checked the accuracy of the work and the self-management sheet with a teacher or paraprofessional
- Earned time for desired activities (e.g., 5 to 10 minutes of movie, phone time) upon accurate completion of work on the checklist

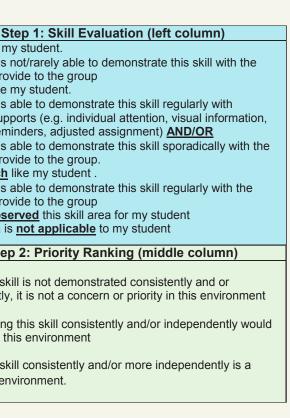
# Student Materials

### **TO-DO LIST**

Nam	e:	Date:
	X When Completed	Items to Complete
1.		
2.		
3.		
4.		
5.		
6.		

### **SELF-MANAGEMENT SHEET**

Name:					
Goals	Mon.	Tues.	Wed.	Thurs.	Fri.
	Date:	Date:	Date:	Date:	Date:
	10/1/13	10/2/13	10/3/13	10/4/13	10/5/13
1. I came in					
and sat					
down					
2. I quickly					
began					
working					
on my					
checklist					
3. I tried my					
best					
Adult agrees?					
Yes=2					
No=0					
Total Points					
<b>Student Prize</b>	Vec	Vee	Vec	Vec	Var
(6 pts)?	Yes	Yes	Yes	Yes	Yes
Circle one:	No	No	No	No	No



• Completed a "to-do" checklist of work to be done

#### **GOAL SETTING** Measurable **IEP Goals** Goal Attainment Scaling Data Collection Erik asks teachers 41 off topic and 0 on topic questions during a Given visual prompts, Erik will ask teachers no more than 10 questions (on or off topic) during a class period across one week SECONDAR questions (on or off topic) during a class period across one week OBJECTIVE iven visual prompts, Erik will ask teachers at least 2 on topic and less than 2 off topic questions during the class period across on Given visual prompts. Erik will ask teachers at least 2 on topic EXCEEDS questions and no off topic questions during the class period across one week of data.

### **DEPENDENT VARIABLES**

#### Academic Engaged Time

- **Included:** Working on an assigned task in seat (i.e., looking at paper, text, or writing), looking away from text for up to 1 second, talking to adult about task
- **Did not include:** Asking an off-topic question or engaging in an off-topic conversation, organizing materials, getting out of seat, flipping through pages not as part of an assigned task

#### **Social Validity Measures**

- **Teacher:** Training, coaching, and support; feasibility and acceptability; usefulness and effectiveness
- **Student:** Working on independence

#### **DATA COLLECTION**

- Percent of time academically engaged
- 10-second whole intervals
- Interobserver agreement:
  - 24% of sessions
- Exact interval agreement
- Teacher and student surveys

### SAMPLE

Name: <u>Andrew</u>						
Goals	Mon. Date: 10/1/13	Tues. Date: 10/2/13	Wed. Date: 10/3/13	Thurs. Date: 10/4/13	Fri. Date: 10/5/13	
1. I came in and sat down	2	2	2	2	2	
2. I quickly began working on my checklist	2	2	2	2	2	
3. I tried my best	2	2	/	/	2	
Adult agrees? Yes=2 No=0	2	0	2	2	2	
Total Points	7	Ч	7	7	8	
Student Prize (6 pts)? Circle one:	Yes No	Yes	Yes No	Yes No	Yes No	

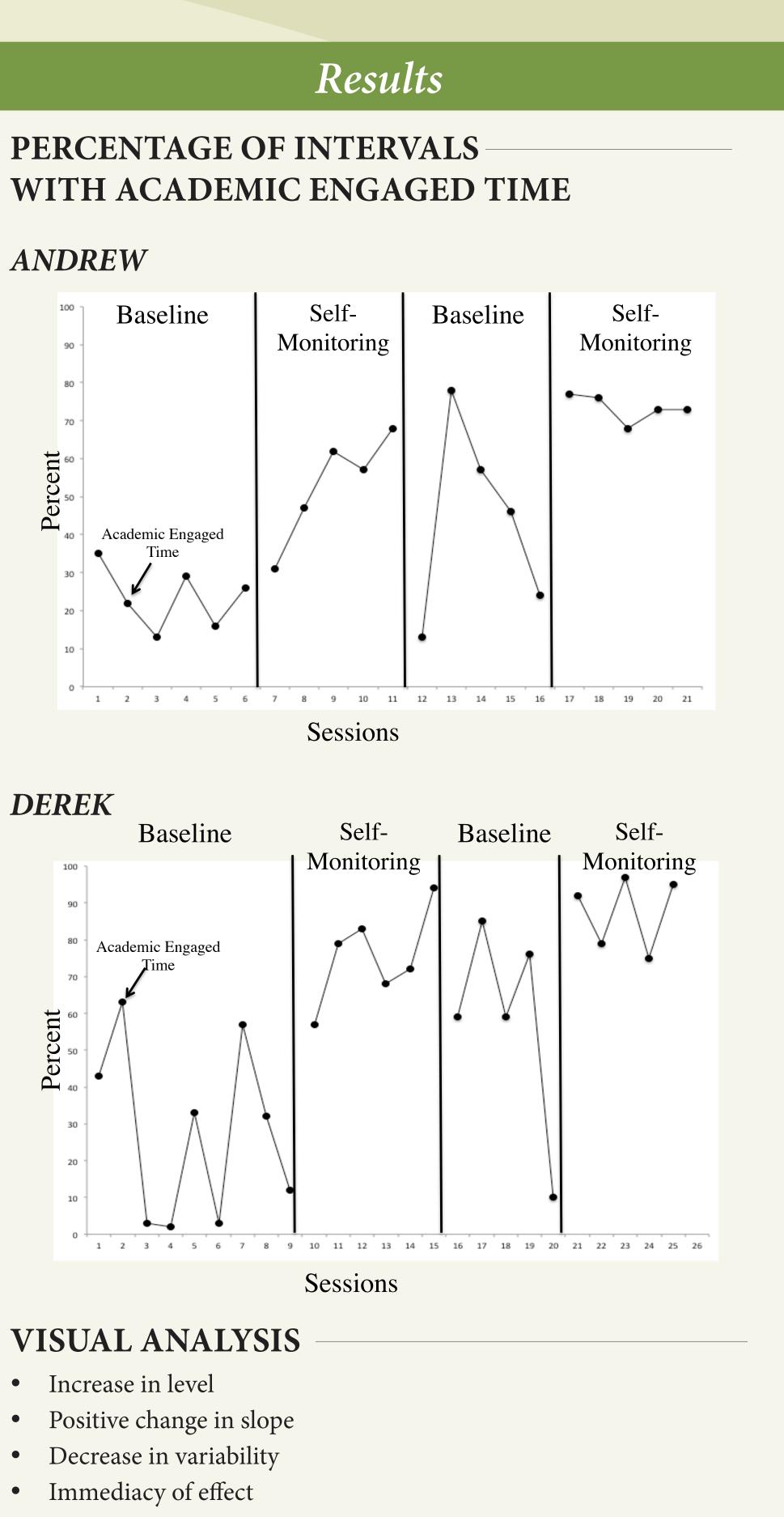
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# **IMPLICATIONS**

# LIMITATIONS

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### Discussion

• Findings suggest that self-management interventions can improve academic engagement for high school students with autism. • Multicomponent interventions (e.g., self-management, visual

schedules, video modeling) may improve academic engagement for high school students with autism.

• Teacher reports suggest that this multicomponent intervention is feasible and beneficial.

• Limited number of participants • Special education setting

• Lack of generalization data

#### **DIRECTIONS FOR FUTURE RESEARCH**

• Future research is warranted to examine the generality of selfmanagement strategies for high school students with autism across settings and content areas.

• Future research can examine the effects of self-management on the academic outcomes of high school students with autism. • Future research can investigate the effects of each approach employed through component analysis.