



**A Practical and Comprehensive Approach:  
Generating Positive  
Outcomes Through  
Evidence-based Practices**

**Workshop Handout**

Information in this handout should not be copied without permission from Star Autism Support. This handout is to be accompanied with a live training; it is not intended to be a stand-alone document.

## Welcome and Introduction



Presenters



Agenda



Organizers



Handouts

2

## Workshop Objectives

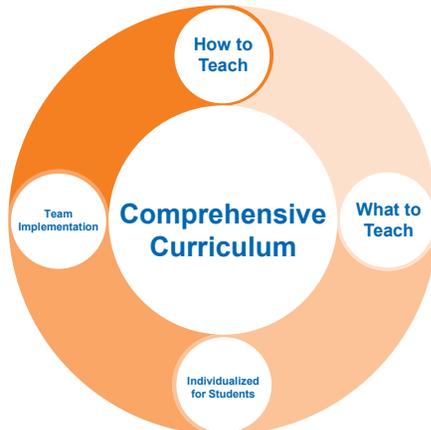
Participants will learn to:

The components needed for effective instruction for students with significant learning needs, intellectual disabilities and autism spectrum disorders.

1. Evidence-based instructional strategies
2. Instructional content individualized to student needs
3. Teacher tools and resources to ensure implementation
4. Data-based instructional decisions
5. Addressing challenging behavior through appropriate instructional practices

3

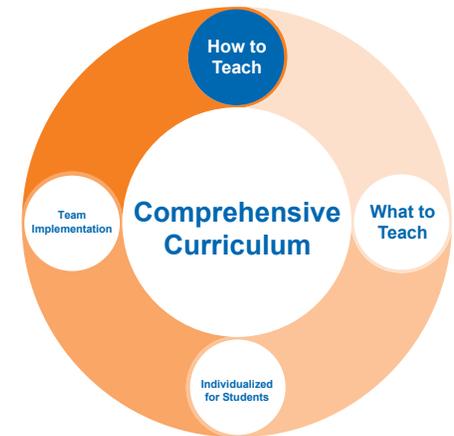
## Comprehensive Curriculum



4

## How to Teach

- ★ Evidence-based instructional practices
- ★ Focus on teaching students new skills
- ★ Includes detailed lesson plans and teaching materials



5

## Evidence-Based Practices

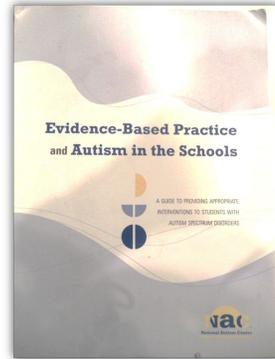
### National Standards Report: Phase 1 and 2

Pattern of findings suggest that treatments from the behavioral literature have the strongest research support at this time

Identified 14 established treatments

Comprehensive behavioral packages have the most evidence

[www.nationalautismcenter.org](http://www.nationalautismcenter.org)



6

## National Standards Project: Phase 2

### Established Treatments

- ☆ Comprehensive behavioral treatment for young children (Discrete Trial Training)
- ☆ Behavioral interventions (ABA methods)
- ☆ Pivotal Response Training (PRT)
- ☆ Schedules (student schedules)
- ☆ Language training (e.g. modeling verbalizations for the student to imitate)
- ☆ Self-management (promoting independence)
- ☆ Modeling (imitation of target behavior)
- ☆ Naturalistic teaching strategies (child-directed to teach functional skills)
- ☆ Scripting
  - Peer training package
  - Parent training
  - Cognitive behavioral intervention
  - Story-based intervention package
  - Social skills package

☆ Used in the STAR Program

7

## The STAR Program

### Strategies for Teaching Based on Autism Research



8

## Research on the STAR Program

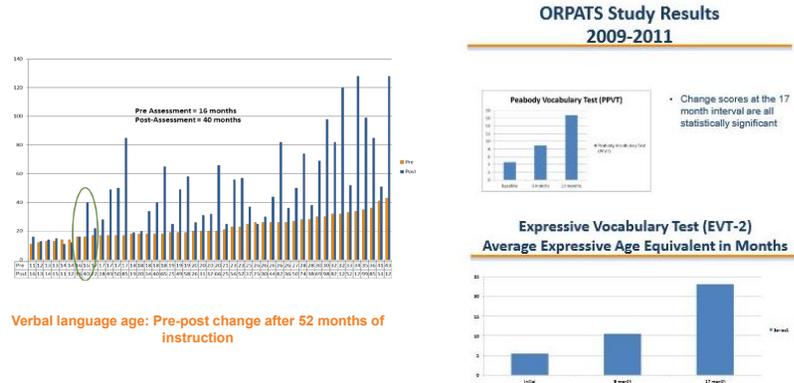
- ☆ The Autism Instructional Methods Study (AIMS)
- ☆ Designing an Outcome Study to Monitor the Progress of Students with Autism Spectrum Disorders
- ☆ Measuring Outcomes in Early Intervention Programs for Toddlers with Autism Spectrum Disorders
- ☆ Randomized, Controlled Trial of a Comprehensive Program for Young Students with Autism Spectrum Disorder
- ☆ Training Teachers to Use Evidence-Based Practices for Autism: Examining Procedural Implementation Fidelity

Additional information on research can be found in the Resource Section of this handout

9

# Autism Outcome Study: Data Collected

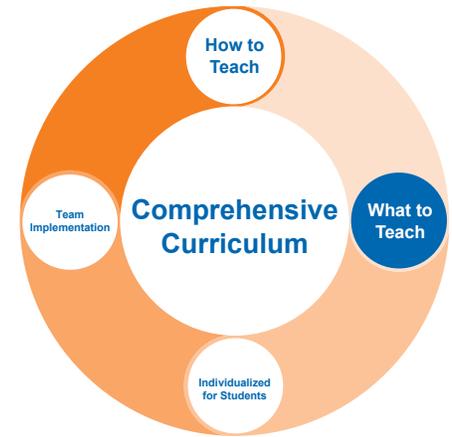
www.orpats.org



10

# What to Teach

- ☆ Receptive language
- ☆ Expressive language
- ☆ Spontaneous language
- ☆ Functional routines at school, home, and community
- ☆ Functional academic skills
- ☆ Play and social skills



11

# STAR Program Students Learn to . . .

**Level 1**

- Use basic language concepts
- Make verbal requests
- Accomplish simple routines independently
- Engage in beginning play/social skills
- Use pre-academic skills

**Level 2**

- Expand language concepts to include new nouns, people, and actions
- Use spontaneous language throughout the day
- Become independent in typical daily school routines
- Use basic math, reading, and writing academic skills
- Play with others at school

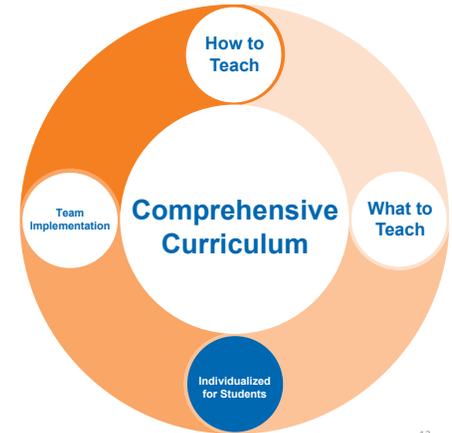
**Level 3**

- Understand complex language concepts
- Academic skills including: reading a simple book, writing from memory, time-telling, money use, and adding/subtracting
- Generalize skills in general education settings

12

# Individualized for Students

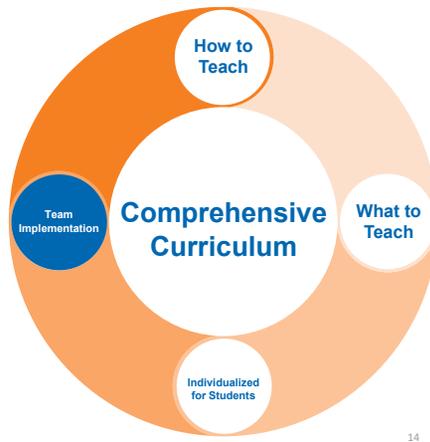
- ☆ Curriculum-based assessment
- ☆ Developmental sequence of instruction
- ☆ Data-driven instruction



13

## Team Implementation

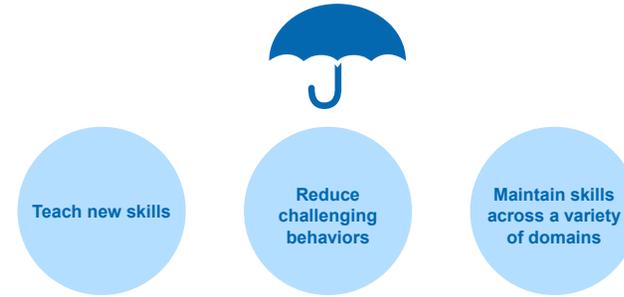
- ☆ IEP goals
- ☆ Connection to the general education curriculum
- ☆ Alignment to standards
- ☆ Consistency of instruction across classroom, school, and grade levels



14

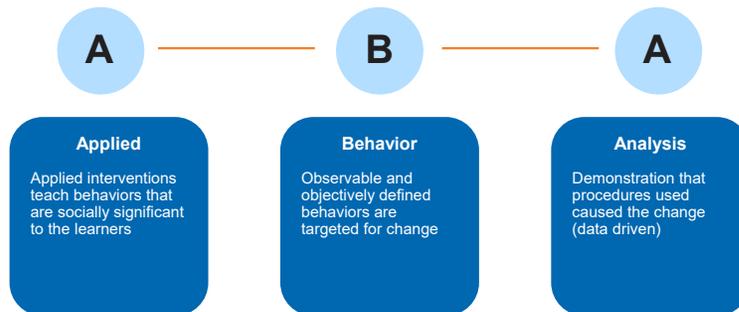
## What is Applied Behavior Analysis (ABA)?

ABA is an umbrella term for methods that change behavior in systematic and measurable ways



15

## Using ABA in Schools



16

## ABA Methods Used in STAR Program

Discrete Trial Training (DT)



Pivotal Response Training (PRT)



Teaching Functional Routines (FR)



Positive Behavior Supports



17

## Instructional Sessions: Recommendations

- 1:1 sessions for skill acquisition
  - ★ Length of 1:1 instruction is a decision based on individual student levels
  - ★ At a minimum, try and provide at least one hour per day of 1:1 instruction in short sessions
  - ★ Use teaching rotations to effectively schedule 1:1 instruction
- Routines throughout the day with a focus on independence
- Large group and inclusion with supports

18



19

## Student Learning Profile: A Curriculum Based Assessment



20

## Teachers Use Program Guides to Identify Lessons to Teach

STAR Program Guide ★ Level I

Receptive Language (DT)	Expressive Language (PRT)	Functional Routines (FR)	Preacademic (DT)	Play and Social Interaction (PRT/FR)
Lesson	Lesson	Lesson	Lesson	Lesson
1. Come Here 1	1. Readiness Skills 1	1. Arrival 1	1. Use of Taken Board 1	1. Readiness for Play (PRT) 1
2. Attending 1	Attending 1	2. Departure 1	2. Matching Colors 1	Sharing 1
3. Receptive Actions on a Walk 1	Babbling 1	3. Transition Between Activities 1	3. Matching Shapes 1	Turn Taking 2
4. Social Communication 1	Sound Pairing 2	4. Hand Washing 1	4. Coloring/Scrabbling 1	2. Initial Play Skills (PRT) 2
5. Nonverbal Imitation: Gross Motor 1	2. Initial Requesting: Initial Verbal Imitation 3	5. Snack 1		Initial Involvement Activities 2
6. Nonverbal Imitation: Object 1	Spontaneous Words 4	6. Restroom Use 1		Initial Play Commands 4
7. Matching Object to Object 1	3. Phrases for Requests 5	7. Going on a Walk 1		3. Independent Play (FR) 3
8. Matching Picture to Picture 2	Requests using "I want x" 6	8. Circle 1		4. Play with Adult (FR) 4
9. Matching Object to Picture 3	Requests using "I want x" 6	9. Centers/Choice 2		
10. Matching Object to Picture and "Give Me x" 4	"More x" 6	10. Learning to Work with Teacher 1		
11. Labels of Objects 5	"No x" for rejecting 6	11. Work with Teacher 2		
12. Labels of Pictures 6		12. Simple Art Activity 2		
13. Identifications of Body Parts 5		13. Independent Work 2		
14. Actions: One-Step 5				

21

# Assessment for Receptive Language: Example

Assessment		Receptive Language (DT)										Level 1	
		L2018-19 Receptive Language											
Lesson	Item	Current Response	1-2		3-4		5-6		7-8		9-10		
1. Color Word	Items: color name	Point to color, label color in 10 pictures	0/2	0/4	0/2	0/4	0/2	0/4	0/2	0/4	0/2	0/4	
		Indicate whether color is in picture	0/2	0/4	0/2	0/4	0/2	0/4	0/2	0/4	0/2	0/4	
2. Identifying	10 objects	Identify 10 objects from 10 pictures	0/2	0/4	0/2	0/4	0/2	0/4	0/2	0/4	0/2	0/4	
	10 actions	Identify 10 actions from 10 pictures	0/2	0/4	0/2	0/4	0/2	0/4	0/2	0/4	0/2	0/4	
3. Matching Actions on a Book	10 actions	Match 10 actions from 10 pictures	0/2	0/4	0/2	0/4	0/2	0/4	0/2	0/4	0/2	0/4	
	10 actions	Match 10 actions from 10 pictures	0/2	0/4	0/2	0/4	0/2	0/4	0/2	0/4	0/2	0/4	
4. Social Communication	10 items	Match 10 items from 10 pictures	0/2	0/4	0/2	0/4	0/2	0/4	0/2	0/4	0/2	0/4	
	10 items	Match 10 items from 10 pictures	0/2	0/4	0/2	0/4	0/2	0/4	0/2	0/4	0/2	0/4	

## STAR Program Guide

Receptive Language (DT)		Expressive Language (DT)		Spontaneous Language (PRT)		Functional Routines (FR)	
Lesson	Sequence	Lesson	Sequence	Lesson	Sequence	Lesson	Sequence
1. Expanded Labels	1	1. Labels	1	1. Expanded Requesting	1	1. Arrival	1
2. Accelerated Labels	2	2. Expanded Labels	2	2. Expanded Vocabulary	1	2. Departure	1
3. Identification of People	1	3. Accelerated Labels	2	3. Identification of People	1	3. Transition Between Activities	1
4. Actions Pictures	2	4. Identification of People	2	4. Actions: Two-Step Commands	3	4. Transition Between Locations	3
5. Actions: Two-Step Commands	2	5. Actions: Pictures	3	5. Actions: People	4	5. Transition between School Locations	3
6. Locations and Commands	3	6. Actions: People	4	6. Picture Sequencing	5	6. Circle	1
7. Sorting Categories	2	7. Picture Sequencing	5	7. Identification of Items in Books	6	7. Snacks	1
8. Picture Sequencing	3	8. Identification of Items in Books	6	8. Expanded Book Use	7	8. Restroom Use	1
9. Identification of Items in Books	4	9. Expanded Book Use	7	9. Emotions	4	9. Independent Work	1
10. Expanded Book Use	5	10. Emotions	4	10. Social Questions	4	10. Classroom Job	2
11. Emotions	3	11. Social Questions	4			11. Move from Center to Center	2
						12. Small-Group Work	2

Preacademic (DT)		Play and Social Interaction (PRT/FR)	
Lesson	Sequence	Lesson	Sequence
1. Math: Rote Counting 1-10	1	1. Expanded Initiated Actions (PRT)	1
2. Math: Counting 1 to 10 Objects	2	2. Expanded Play Commands and Sustained Independent Play (PRT)	2
3. Math: Receptive Identification of Numbers 1 to 10	3	3. Play with Adult (FR)	1
4. Math: Expressive Identification of Numbers 1 to 10	3	4. Play with Adult and Peer (FR)	2
5. Math: Receptive Counting Sets of Objects	3	5. Reading: Receptive Identification of First Name	2
6. Math: Matching Sets of Objects with Numbers 1 to 10	4	10. Reading: Receptive Identification of Letters	1
7. Reading: Receptive Identification of Letters	1	11. Reading: Expressive Identification of Letters	2
8. Reading: Expressive Identification of Letters	2	9. Reading: Receptive Identification of First Name	2
9. Reading: Receptive Identification of First Name	2	10. Reading: Receptive Identification of Letters	1
10. Reading: Receptive Identification of Letters	1	11. Reading: Sight Word Reading and Match to Picture	3
11. Reading: Sight Word Reading and Match to Picture	3	12. Writing: Tracing Name, Letters and Numbers	1
12. Writing: Tracing Name, Letters and Numbers	1	13. Writing: Coloring Within Lines and Attention to Task	1
13. Writing: Coloring Within Lines and Attention to Task	1	14. Other: Cutting and Pasting	1
14. Other: Cutting and Pasting	1		

Instructional Strategies: DT = Discrete Trial Training, PRT = Pivotal Response Training, FR = Functional Routines

## STAR Program Guide

Level 3

Receptive Language (DT)		Expressive Language (DT)		Spontaneous Language (PRT)		Functional Routines (FR)	
Lesson	Sequence	Lesson	Sequence	Lesson	Sequence	Lesson	Sequence
1. Functions of Objects and Community Members	1	1. Functions of Objects and Community Members	1	1. Advanced Expanded Requesting	1	1. Arrival	1
2. Prepositions	1	2. Prepositions	1	Expanded Vocabulary	1	2. Departure	1
3. Descriptors	1	3. Descriptors	1	Expanded Phrases	2	3. Transition Between Activities	1
4. Opposites	2	4. Opposites	2	2. Advanced Commenting	2	4. Transition Between Locations	2
5. Gender Identification	2	5. Gender Identification	2	Narration	1	5. Large-Group: Opening Activities	2
6. Possessives	3	6. Pronouns: He and She	3	Asking Questions	1	6. Large-Group: Story Time	3
7. First, Next, Last (Location)	3	7. Extended Sentences with Descriptors	2	3. Advanced Concepts	1	7. Cafeteria Lunch	1
		8. Expanded Social Questions	1	Using Prepositions	1	8. Restroom Use with Classmates	1
		9. Discriminating Wh- Questions	2	Gender Identification	1	9. Academic Seatwork	2
		10. Pronouns: My and Your	4	13. Student Asks Wh- Question	3	10. Classroom Job with Peer	3
		11. Yes or No for Facts	3	14. First and Last (Temporal Order)	4	11. Occupy Free Time in Classroom	1
		12. Recall Past Events	3	15. Commenting Using Phrases	4	12. Computer/iPad/Tablet Use	2
		13. Student Asks Wh- Question	3			13. Music Class	2
		14. First and Last (Temporal Order)	4			14. Library Class	3
		15. Commenting Using Phrases	4			15. PE Class	2
						16. Group Academic Instruction	3

Preacademic (continued) (DT)		Play and Social Interaction (PRT/FR)	
Lesson	Sequence	Lesson	Sequence
1. Math: Rote Counting 1-10	1	1. Advanced Play (PRT)	1
2. Math: Receptive Identification of Numbers	1	Advanced Functional Play	1
3. Math: Expressive Identification of Numbers	2	Symbolic Play	1
4. Math: Counting Objects Using Numbers	3	2. Play with Peer and Share Materials (FR)	1
5. Math: Adding One-Digit Numbers	4	3. Pretend Play with Peer (FR)	2
6. Math: Subtracting One-Digit Numbers	5	4. Recess: Individual or Independent (FR)	1
7. Math: Identification of Money and Use of Money	4	5. Recess with Peer (FR)	2
8. Math: Time Telling	5		
9. Reading: Receptive Identification of Letter Sounds	1		
10. Reading: Expressive Identification of Letter Sounds	1		
11. Reading: Identification of First and Last Names	1		
12. Reading: Sight Words	1		
13. Reading: Reading a Simple Book	2		

Instructional Strategies: DT = Discrete Trial Training, PRT = Pivotal Response Training, FR = Functional Routines

# Tools for Teachers

- ★ Data-based Decision Making
- ★ Visual Supports
- ★ Road Map
- ★ Guides to Common Core
- ★ Appropriate Curricula Content
- ★ Relationship to IEP Goals
- ★ Fidelity of Implementation
- ★ Instructional Strategies Consistency Between Staff
- ★ Lesson Plans
- ★ Age Appropriate Materials
- ★ Team Instructional Planning Tools

# Administrator Checklist

## Student Engaged Learning

- ☆ Classroom schedule posted
- ☆ Adult schedules are posted
  - ★ Reflect roles and responsibilities
- ☆ Classroom staff are teaching and students are engaged in learning



26

# Overall Daily Schedule

## DT/PRT are Done During Rotations

Example Classroom Schedule

Time	Mon.	Tues.	Wed.	Thu.	Fri.
7:20-8:10	Morning Work/Early Bids/ Edmark				
8:10-8:45	Morning Circle				
8:45-9:20	PE	Music/Computer Lab	PE	Library	Music/Computer
9:20-10:20	Rotation #1				
10:20-10:40	Recess	Recess	Recess	Recess	Recess
10:40-11:00	Writing/Language Group	Writing/Language Group	OT Group	Writing/Language Group	Writing/Language Group
11:00-12:00	Rotation #2				
12:00-12:20	Lunch	Lunch	Lunch	Lunch	Lunch
12:20-1:00	Recess	Recess	Recess	Recess	Recess
1:00-1:20	Literacy Circle				
1:20-1:45	Reading Groups				
1:45-2:10	Jobs/Games with Peers	Science with Peers	Jobs/Games with Peers	Jobs/Games with Peers	Science with Peers
2:10-2:20	Goodbye Circle				
2:20	Departure Routine				

27

# E-Scheduler

## STAR Media Center

Time	Activity/Goal	Details	Staff
7:45 am - 8:00 am	<b>ARRIVAL</b>	Collect data one time a week. Use mini-schedule. Limit verbal prompting. Use penny board/tangible reinforcers. Click on "View" for additional arrival routine supports.	Staff 1 Example: Greet students at the door and prompt, as needed.  Staff 2 Example: Get students 1-5 off bus. Bring tangible reinforcers, say "walk with me," and follow STAR Arrival Routine.  Staff 3 Example: Get students 6-10 off bus. Bring tangible reinforcers, say "walk with me," and follow STAR Arrival Routine.
8:00 am - 8:15 am	<b>CIRCLE - MORNING</b>	Use Circle mini-schedule, song choice wheel, and additional visual supports. Create generalization chart. Click on "View" for additional circle routine supports.	Staff 1 Example: Lead circle.  Staff 2 Example: Sit behind Students 1-2. Model actions and say "Go this." Reinforce attending commands (hands down, sit down, stand up, look at me) with tangible reinforcers.  Staff 3 Example: Sit behind Students 3-5. Model actions and say "Go this." Reinforce attending commands (hands down, sit down, stand up, look at me) with tangible reinforcers.
8:15 am - 8:30 am	<b>SNACK</b>	Students divided into two small groups. Snack tabs prepared for each group (including snacks, placemats, visual, and visual supports). Create generalization chart. Click on "View" for additional snack routine supports.	Staff 1 Example: Lead snack (Yellow table)  Staff 2 Example: Lead snack (Green table)  Staff 3 Example: Sit behind Student X. Physically prompt, when needed, to request with visual supports.
8:30 am - 9:50 am	<b>ROTATIONS</b>	Students rotate every 20 minutes using visual schedules to transition. Option 1: One DT station, one PRT station, and one small group station. Option 2: Add an Independent Work Station or computer station for those who are independent.	

28

# Administrator Checklist

## Classroom Environment and Supports

- ☆ Environment provides structure and well-defined spaces
- ☆ Individual student schedules posted and used by students
- ☆ Visual supports available for students and teachers



29

# Administrator Checklist

## Tools for Administrators



Administrator Checklist			
	Date	Observed	Observed
1 Student Support Learning		<input type="checkbox"/>	<input type="checkbox"/>
2 Classroom Environment and Supports		<input type="checkbox"/>	<input type="checkbox"/>
3 District/Tier Training Implementation with Fidelity		<input type="checkbox"/>	<input type="checkbox"/>
4 Personal Response Training Implementation with Fidelity		<input type="checkbox"/>	<input type="checkbox"/>
5 Functional Behavior Implementation with Fidelity		<input type="checkbox"/>	<input type="checkbox"/>
6 STAR Program Implementation with Fidelity		<input type="checkbox"/>	<input type="checkbox"/>
7 Positive Behavior Management Strategies		<input type="checkbox"/>	<input type="checkbox"/>
8 Rule Design Implementation Decision Making and Program Monitoring		<input type="checkbox"/>	<input type="checkbox"/>

### Student Engaged Learning

All students should be supported to meet high and challenging academic standards through the individualized supports necessary to meet their needs. Students with high needs should receive at least one hour of individualized instruction per week. This instruction should be provided in a structured, systematic, and data-driven manner to ensure student progress. For explanation of STAR and PRT, refer to the STAR and PRT manuals.

**Classroom objectives:**

- Student is accessible to all
- Student is engaged in learning
- Student is demonstrating growth
- Student is demonstrating skills
- Student is demonstrating progress
- Student is demonstrating skills
- Student is demonstrating progress

**Adult objectives:**

- Student is accessible to all
- Student is engaged in learning
- Student is demonstrating growth
- Student is demonstrating skills
- Student is demonstrating progress
- Student is demonstrating skills
- Student is demonstrating progress

**Classroom objectives:**

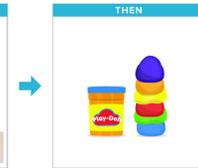
- All students meeting through STAR
- All students meeting through PRT
- All students meeting through STAR
- All students meeting through PRT
- All students meeting through STAR
- All students meeting through PRT

30

# Environmental Supports

Help children understand adult expectations:

- ★ What am I supposed to do?
- ★ Where should I go?
- ★ When will I be done?
- ★ What happens next?



31

# Arranging the Environment

## Visual Supports for Routines

### CIRCLE RULES

Look at Teacher: Illustration of a child looking at a teacher pointing to a board with 'ABC' written on it.

Quiet Voice: Illustration of a child sitting at a desk with their mouth closed.

Hands Down: Illustration of a child sitting at a desk with their hands on their lap.

Stay Seated: Illustration of a child sitting at a desk with their feet flat on the floor.

### Using a Computer Visual Strip

Go to Computer: Illustration of a child standing at a computer desk.

Find Program: Illustration of a hand clicking on a program icon on a screen.

Use Computer: Illustration of hands typing on a keyboard.

End Activity: Illustration of a hand clicking on a power button.

### Handwashing Sequence Strip

Turn water on: Illustration of a hand turning a faucet handle.

Get soap: Illustration of a hand dispensing soap from a dispenser.

Scrub hands: Illustration of hands being scrubbed with soap.

Rinse hands: Illustration of hands being rinsed under water.

Turn water off: Illustration of a hand turning a faucet handle.

Dry hands: Illustration of hands being dried with a paper towel.

Throw trash away: Illustration of a hand putting a paper towel in a trash bin.

32

# Arranging the Environment

## Visual Supports for Routines – Arrival and Transition



33

## Arranging the Environment

Visual Supports - Independent Work Stations



34

## Arranging the Environment

Generalization Charts Posted in Common Areas

Routine Essentials: Snack  
Generalization Board

Student	Language Skill	Academic Skill	Social Skill
Donovan	Label foods and peers	Count objects	Answer social questions
Allison	"I want X" with device	ID colors and shapes	- "Hands down" - Turn taking
Evan	Imitate 1 word	ID name	Respond to name
Eliza	Sound pair	Follow attending commands	Make choice with visuals

35

## Wall Schedules



36

## Increasing the Complexity of the Schedule

- ☆ Appropriate for students who are independently transitioning using a check schedule icon and "landing station"
- ☆ Introduce written schedules with a self-checkmark and/or time schedule



37

## Written Schedule

Writes in choices

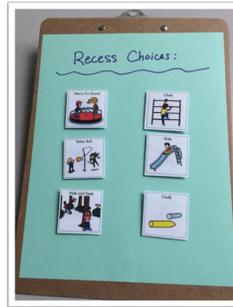
Today is \_\_\_\_\_

1	<input type="checkbox"/>	Blue	1. Get Pencil	2. Draw
2	<input type="checkbox"/>	Mrs. Martin	1. Write	2. Sign
3	<input type="checkbox"/>	PC	1. Read	2. Sit on chair
4	<input type="checkbox"/>	Circle		
5	<input type="checkbox"/>	Desk		
6	<input type="checkbox"/>	Yellow		
7	<input type="checkbox"/>	Card		
8	<input type="checkbox"/>	Recess	1. _____	2. _____
9	<input type="checkbox"/>	Snack		
10	<input type="checkbox"/>	Blue	Puzzles	

Choice Time

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

Copies words from back of clipboard



38

## Notebook Schedule



39

## Written Schedules

ACTIVITY SCHEDULE

Today is \_\_\_\_\_

	<input checked="" type="checkbox"/>	ACTIVITY	REMEMBER
1			
2			
3			
4			
5			
6			
7			
8			

MY TIME SCHEDULE

Today is \_\_\_\_\_

CLOCK	TIME	ACTIVITY	<input checked="" type="checkbox"/>

40

## Administrator Checklist

Instructional Strategies-Discrete Trial Training (DT)



41

# Discrete Trial Training Lesson Plan

## Lesson 6: Nonverbal Imitation—Object

**Objective:** Student will imitate 5 object actions when given the verbal cue “Do this” with 3/3 correct responses on the newest action learned and 3/3 correct responses on the set of previously learned object actions when randomly presented for 2 consecutive days.

**Prerequisite:** None.

### RECOMMENDED ITEMS TO TEACH

- Object actions to imitate:** 1. Ring bell; 2. Push car; 3. Stack blocks (2); 4. Shake; 5. Bounce ball

Cue	Correct Response	Consequence/Pause	Criteria
<p>1 Teach the first nonverbal object imitation. Start at Step 1 of DT introduction Procedure A. Teacher models an action with an object or toy, says, “Do this,” and labels the action. For example: A bell is in front of the student on a table. Teacher says, “Do this.” Teacher models ringing the bell. Teacher puts bell down on table. When student rings bell, teachers says, “Ringing bell!”</p> <p><b>Suggested RLT prompts:</b></p> <ul style="list-style-type: none"> <li>Use full or partial physical prompt to assist student complete correct response; after 3/3 correct, fade this prompt.</li> </ul>	<p>Student imitates appropriate object imitation action.</p> <p>Student watches teacher ring bell.</p> <p>Student picks up bell and rings it.</p>	<p><b>For a correct response:</b></p> <ul style="list-style-type: none"> <li>One-for-one tangible, highly preferred reinforcer and</li> <li>one-for-one social reinforcement.</li> </ul> <p><b>Pause:</b> Student enjoys reinforcer and brief social interaction with teacher.</p> <p><b>For an incorrect response, provide a CORRECTION</b></p> <p>If student is unable to perform task or makes 2–3 incorrect responses, provide <b>CUA</b>.</p>	<p>3/3 correct responses. Repeat this step until criteria are met.</p>

# Administrator Checklist

## Instructional Strategies-Pivotal Response Training (PRT)



# Pivotal Response Training Lesson Plan

## Lesson 1: Readiness Skills

**Objective:** Student will attain readiness for verbal imitation by attending, babbling, and sound playing verbal cue while playing or engaging in other meaningful activity with 80% correct responses for 2 consecutive weekly probes in presence of instructor and no prompt.

**Prerequisite:** None. Teach appropriate play and social interaction lessons simultaneously. Use PRT prerequisite lessons, teach simultaneously with Level 1, Play and Social Interaction, Lesson 1: Readiness for Play.

**WIDGET SKILLS TAUGHT IN THIS LESSON**

- Attending: Student responds to requests “Look at me,” “Stand down,” “Sit down” simultaneously with babbling or sound playing.
- Babbling: Student increases frequency and variety of spontaneous vocalizations of those previously learned (“ba,” “m,” “da”).
- Sound Playing: Student produces vocalizations in response to teacher’s verbal cue (“What?”).

**PRT rules of interaction for cue (opportunity to respond):** Control is shared. Student chooses activity or object to imitate. Turn taking occurs. Cue is clear and related to chosen activity. Maintenance tasks are interspersed in lesson.

<p>1 Student Chooses Material</p> <p>Teacher provides selection of appropriate and highly desirable materials that have potential for immediate reinforcement. Observe student’s interest to identify motivator. Instructors provide student with incentive to respond.</p>	<p><b>Examples of motivators:</b></p> <ul style="list-style-type: none"> <li>Items that stimulate senses, such as balloons, lights, sensory objects, or tactile toys.</li> <li>Toys with buttons that result in immediate action or sounds</li> <li>Items that have potential for immediate reinforcement, such as being picked up or being.</li> <li>Opening a door or cupboard, thereby allowing access to something highly desired.</li> </ul>
<p>2 Teacher Intentionally Interrupts</p> <p>Briefly redirect access to motivator. Provide ready access to motivate while preventing student from freely accessing it.</p>	<p><b>Examples of minimal interruptions:</b></p> <ul style="list-style-type: none"> <li>Handing a desired object, toy, or bubble wand to hand of student.</li> <li>Teacher covers the button that creates access to toy.</li> </ul>
<p>3 Teacher Presents Cue or Prompt</p> <p>Cue for attending or verbal. Attending is taught simultaneously with babbling and/or sound playing. <b>Examples:</b> “Look at me,” “Stand down,” “Sit down.”</p>	<p>Cue for babbling are nonverbal. <b>Examples:</b> Talking, free play, swinging, microphone, toys.</p>

### Materials Included in Program

- PRT Lesson Focus and Weekly Data Probe Items
- Pivotal Response Training (PRT) Lesson Readiness poster
- Pivotal Response Training (PRT) Level 1 Readiness poster

### Materials Provided by Teacher

- Items and activities of increasing functionality and complexity that are highly motivating for student.

**PRT rules of interaction for consequence (reinforcement is clear. Attempts are reinforced.)**

<p>5 Teacher Evaluates Response</p> <p>Although babbling is reinforced, sound through ultimate goal. Therefore, reinforce every good attempt at sound playing.</p>	<p><b>If a good attempt:</b> Give full access to motivator for 5–10 seconds.</p> <p><b>If not a good attempt:</b> Continue to model access to motivator and go back to cue (1).</p>
--------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

**PRT rules of interaction for praise:** Student is consistently observed and evaluated during praise.

- Student enjoys motivator. Record response on the PRT Lesson Focus and Weekly Data Probe, and decide next cue or prompt based on student’s current level of responding, energy level of student, and time already engaged with teacher.

- Questions to consider:
  - Are you reinforcing every attempt at sound playing?
  - Is student motivated?
  - Are you using praise ability to model play and language in order to engage student?
  - Are you interrupting maintenance tasks?
  - Is time for share or go back to maintenance task?
- Make every attempt to end session with success.

\* Level 1 Readiness Skills PRT Lesson 1: Readiness Skills

# Administrator Checklist

## Instructional Strategies-Functional Routines (FR)



# Functional Routine Lesson Plan

## Lesson 1: Arrival

**Objectives:** Children will recognize and simple verbal directions, student will greet staff, with verbal without holding hands, open door and enter classroom to receive hands and put backpack away, and go to table activity schedule, completing at least 90% of ways in arrival routine without prompts and 100% completion weekly observations.

### Lesson Plan

Code	Response	See Also
1	Vehicle arrives. Adult greets student and says, "Hello!"	Level 1, Receptive Language (PRT), Lesson 1
2	Adult says, "Hi"	Student looks at adult and communicates "Hi" to _____
3	Adult waves hand to student	Student waves hand
4	Adult says, "Walk with me" Collect data on _____	Student walks with _____ of adult, without holding hand, "Hi" _____
5	At classroom door, adult opens bellows cabinet	Student opens bellows cabinet door and enters.
6	Colleague teacher, or teacher in student with individualized instruction	Student goes to colleague teacher, or teacher in student with individualized instruction
7	Discrete Trial begins in other designated place to put away backpack and coat.	Student takes off backpack and coat and puts these items in correct place
8	After student puts belongings away, he or she receives instruction regarding activity schedule.	Student goes to table weekly checklist and begins instruction routine.

### Skills for Incidental Teaching

Code	Response	See Also
1	Teacher asks if student says, "Hi"	Student looks at adult or other student and communicates "Hi" to _____
2	Teacher asks if student waves at student	Student waves at other adult or student
3	Teacher asks if student follows verbal prompt to help to adult by _____	Student follows verbal prompt and communicates need to help to adult by _____
4	Teacher asks, "Hello?"	Student looks toward adult
5	Teacher asks, "Come here?"	Student comes to _____ (hand, or walks to hand of adult)

### Examples of Supports and Adaptations to Support Participation

**Reinforcement for Social Attempts**  
 Identify which step in procedure occurs independently (i.e., with prompts for some, rather than for all, of steps) or with better quality than one previously. Reward with verbal praise. Observe how students use their natural communication skills to communicate.

**Environmental Arrangements, Space, Visual Supports, Materials, and Time**

- Provide additional verbal, tactile, or tactile. Clearly model with and model throughout all activities. Generalize use.
- Provide a structured prompt over students' verbal, tactile, or tactile during steps in procedure.
- Arrange materials with activity schedule, clearly marked with an adult name and photograph, and in a table in classroom, near entrance.

**Supports for Choice Making, Communication, Social Interaction, and Problem Solving**

- Prepare adults and students who are likely to receive student data using the routine to periodically bring student name card "Hi" or "Hi" each week to class.

**Steps with Skills to Specify Student Responses**

1) Specify what action or with what words student communication (i.e., "Hi")

2) Identify required materials, or dependencies on the day (e.g., items on current performance in domain, the lesson time for the adult child of Receptive Language Lesson 1, Receptive Language (PRT), (including) program or recorded need for student and gradually to create a record sheet for more information on teaching, see STAR Program Manual, Chapter 9.

# Administrator Checklist

## Fidelity of Implementation



Educator Name: \_\_\_\_\_  
 Date(s): \_\_\_\_\_

The STAR Program: Fidelity of Implementation Checklist					Implementer
Program Implementation	1	2	3	Verified	Comments
Individualized student programs, including materials and data sheets, are organized and in use.					
STAR Program discrete trial training (DT) lesson plans are used, and staff record daily data for individual students, as needed.					
STAR Program pivotal response training (PRT) lessons are used, and staff record and maintain weekly data for individual students, as needed.					
STAR Program functional routines (FR) lessons are used, and staff record and maintain weekly data for individual students, as needed.					
<b>Discrete Trial (DT)</b>					
Effectively implements DT cue/impulse/consequence procedure according to lesson plan.					
Effectively implements DT correction procedure according to lesson plan.					
Effectively implements DT data collection procedure for each lesson.					
Effectively implements DT inductor procedures for introducing new target skills.					
Effectively implements reinforced learning that procedure according to lesson plan.					
Effectively implements the steps of the DT level II lesson plans.					
Effectively implements the steps of the DT level III lesson plans.					
<b>Pivotal Response Training (PRT)</b>					
Effectively implements PRT rules of interaction.					
Effectively implements PRT data collection procedures.					
Effectively implements instruction using the PRT level I lesson plans.					
Effectively implements instruction using the PRT level II lesson plans.					
Effectively implements instruction using the PRT level III lesson plans.					

# Administrator Checklist

## Positive Behavior Supports



- ★ Reinforcement strategies
- ★ Understanding and using behavioral principles to increase skills and decrease challenging behavior

# Administrator Checklist

## Data Driven Instructional Decisions and Progress Reporting

PRT Data Sheet: LANGUAGE & PLAY INITIAL LEVEL Date: \_\_\_/\_\_\_/20\_\_

Student Name: T.J. Date: \_\_\_/\_\_\_/20\_\_

LEVEL I, FUNCTIONAL ROUTINE – Lesson 1: ARRIVAL											
SETTINGS:											
STUDENT:	CUES										
RESPONSES	Date:	4-4									
1. Vehicle arrives. Adult greets	1	Looks at adult	4								

DAILY DATA SHEET FOR DISCRETE TRIAL												
STUDENT: Jason												
PROGRAM: Receptive Labels of Functional Objects (Lesson 1)												
Coding: + = correct response 0 = incorrect response and then corrected with a prompt												
- = incorrect response and not corrected even with a prompt												
Date	Tasks/Steps	1	2	3	4	5	6	7	8	9	10	Comments
5/14/08	Ball (presented alone) (X)	+	+	+								3/3 correct- criteria met
5/14/08	Ball with distractor (X with G)	+	0	+	+							Continue on this step
5/15/08	Ball with distractor (X with G)	+	0	+	+							3/3 correct- criteria met
5/15/08	Cup (presented alone) (Y)	+	+	+								3/3 correct- criteria met
5/16/08	Cup (presented alone) (Y)	+	+	+								New day, repeated steps, criteria met
5/16/08	Cup with distractor (Y with G)	+	0	+	0	0						3 errors, provide prompt with cue (go to RL7)
5/16/08	Cup with distractor (Y with G)	+	+	+								RL7-TP 3/3 correct when tap prompt was provided along with cue- go back to "in prompt"

Data Summary											
	+	0	-	PT	NT	NA	NA	NA	NA	NA	NA
	8	0	0	0	6	14					
	0	0	0	0	7	7					

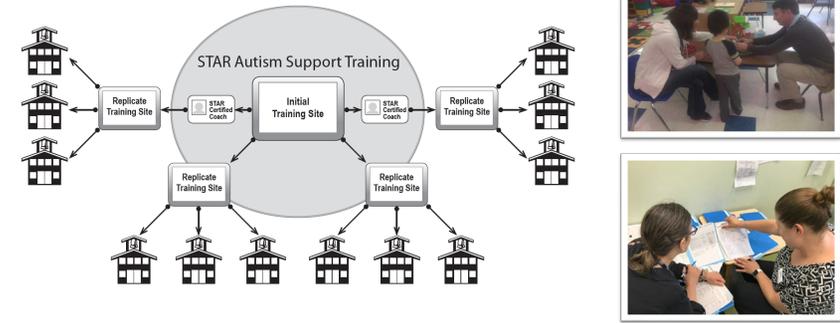
# The Student Learning Profile

## Update to Show Mastery

STAR Program Guide					★ Level 1
Receptive Language (RL)	Expressive Language (EL)	Functional Behavior (FB)	Prerequisites (PT)	Play and Social Interaction (PSI/PI)	
1. Name	1. Name				
2. Address	2. Address				
3. Phone Number	3. Phone Number				
4. Email	4. Email				
5. Date of Birth	5. Date of Birth				
6. Sex	6. Sex				
7. Race	7. Race				
8. Ethnicity	8. Ethnicity				
9. Religion	9. Religion				
10. Marital Status	10. Marital Status				
11. Number of Children	11. Number of Children				
12. Number of Siblings	12. Number of Siblings				
13. Number of Pets	13. Number of Pets				
14. Number of Vehicles	14. Number of Vehicles				
15. Number of Other Pets	15. Number of Other Pets				
16. Number of Other Vehicles	16. Number of Other Vehicles				
17. Number of Other Pets	17. Number of Other Pets				
18. Number of Other Vehicles	18. Number of Other Vehicles				
19. Number of Other Pets	19. Number of Other Pets				
20. Number of Other Vehicles	20. Number of Other Vehicles				

# Increasing Capacity

## Coach/Training Site Development



# Teacher Supports: STAR Media Center

## Scheduling, Routine and Training Supports

**E-Scheduler™**  
Create new staffing schedules! Get new ideas for daily activities and access visual environmental supports for those activities!

Patricia Penning

**Media Center Training Videos**  
Video Examples of all STAR Lesson Plans and strategies!

**Circle Rules**  
Access environmental supports, visual supports and other resources! Ideas for Circle Time, Transition, Snack and more!

**Current Theme Unit: CAMPING**  
Our current theme unit is Camping! Coming Soon: Friendship, Fall Fun, Winter Fun, Dinosaurs and more!

# Progress!



# Look to the Future



54

## Research

### Research on the STAR Program

- ★ Oregon Autism Outcome Study. (Arick, J., Young, H., Falco, R., Loos, L., Krug, D., Gense, M. and Johnson, S., 2003).  
*Students made significant progress in the areas of expressive language, receptive language, social skills, academics, and independence on functional routines.*
- ★ Philadelphia Autism Instructional Methods Study (AIMS) represents an academic-public partnership designed to improve intervention quality for elementary school children with autism in the School District of Philadelphia. Mandell (2010).  
*Results of the study indicated students made clinically significant gains in classrooms where STAR was implemented with fidelity.*
- ★ Randomized, Controlled Trial of a Comprehensive Program for Young Students with Autism Spectrum Disorder (Young, Falco and Makato, 2015).  
*The Comprehensive Autism Program "had a positive statistically significant impact on students' outcomes for receptive language and social skills at school compared to students' outcomes in the control group schools." The comprehensive program included the STAR Program.*
- ★ Measuring Outcomes in Early Intervention Program. (Bacon, E., Dufek, S., Schreibmann, L., Stahmer, A., Pierce, K. and Courchesne, E. 2014)  
*Children in early intervention programs made significant skill gains.  
Student Learning Profile correlated highly with standardized measures.*

For more information, visit [www.starautismsupport.com/curriculum/research](http://www.starautismsupport.com/curriculum/research)

55

## References

- ★ Arick, J. R., Loos, L., Falco, R., & Krug, D. (2015). *The Star Program: strategies for teaching based on autism research* (2nd ed.). Austin, TX: Pro-Ed.
- ★ Arick, J., Young, H., Falco, R., Loos, L., Krug, D., Gense, M. and Johnson, S. (2004). *Autism spectrum disorders outcome study: Final report*. Oregon Department of Education.
- ★ Arick, J., Young, H., Falco, R., Loos, L., Krug, D., Gense, M. and Johnson, S. (2003). Designing an outcome study to monitor the progress of students with autism spectrum disorders. *Focus on Autism and Other Developmental Disabilities*, 18: 75-87.
- ★ Aubyn, S., Rieth, S., Lee, E., Reisinger, E., Mandell, D. and Connell, J. (2015). Training teachers to use evidence-based practices for autism: Examining procedural implementation fidelity. *Psychology in the Schools*, 52, 181-195.
- ★ Bacon, E., Dufek, S., Schreibmann, L., Stahmer, A., Pierce, K. and Courchesne, E. (2014). Measuring outcome in an early intervention program for toddlers with autism spectrum disorder: use of a curriculum-based assessment. *Autism Research and Treatment*, 2014, 1-9.
- ★ Ingersoll, B., & Dvortcsak, A. (2010). *Teaching social communication to children with autism: a practitioner's guide to parent training*. New York: Guilford Press.
- ★ Koegel, R. L., Koegel, L. K., & Kuriakose, S. (2012). *The PRT pocket guide: Pivotal response treatment for autism spectrum disorders*. Baltimore, MD: Paul H. Brookes Publishing.
- ★ National Autism Center (2015). *National Standards Project findings and conclusions: Addressing the need for evidence-based practice guidelines for autism spectrum disorders*. Randolph, MA: National Autism Center.
- ★ Stahmer, A. C., Suhreinhich, J., Reed, S., Schreibman, L., & Bolduc, C. (2001). *Classroom pivotal response teaching for children with autism*. New York: Guilford Press.
- ★ Young, H., Falco, R. and Makoto, H. (2015). Randomized, controlled trial of a comprehensive program for young students with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 46, 544-560.

Note: The Outcome Study article and full report is available on the OrPATS.org website

56