

STAR
Discrete Trial Training
 Procedural Guidelines

STAR and Links Mini-Training

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What is Discrete Trial Training (DT)?

- ★ Skills are taught in a logical sequence building on previously learned skills
- ★ Concepts taught are identified, then broken down into specific steps for instruction
- ★ Teaching using repetition, scaffolding, and a high rate of reinforcement

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Examples – STAR Program

Receptive Language
Nonverbal Individual Client

Receptive Language
Verbalized Individual Client

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Examples – Links Curriculum

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Instructional Sessions Recommendations

- ★ Daily 1:1 sessions for skill acquisition
 - ★ Length of 1:1 instruction is a decision based on individual student levels
 - ★ Provide 1:1 instruction in short sessions (15 to 20-minute increments)
 - ★ Use teaching rotations to effectively schedule 1:1 instruction, or use existing 1:1 support times
- ★ Routines throughout the day with a focus on independence
- ★ Large and small group instruction, and inclusion with supports

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Getting Started – STAR

- ★ Start with the curriculum-based assessment
- ★ If necessary, baseline/probe/test student on skills to see if lessons are mastered
- ★ Use the STAR Program Guide page to identify lessons to teach
 - ★ O = current lessons to teach
 - ★ X or ✓ = mastered lessons

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The STAR Program

Find Lesson Plans Inside the STAR Kits

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STAR Lesson Plans: What's Included

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Getting Started – Links

Identify Lessons to Teach

ID	CUE	EXPECTED BEHAVIOR	DATA ACQUIRED				LINKS
			F	P	C	N/A	
1	1. The student will answer the question.	Answer the question correctly.	✓				18/18/18
2	2. The student will read the question.	Read the question correctly.	✓				18/18/18
3	3. The student will identify the correct answer.	Identify the correct answer.	✓				18/18/18
4	4. The student will explain the answer.	Explain the answer correctly.	✓				18/18/18
5	5. The student will answer the question.	Answer the question correctly.	✓				18/18/18
6	6. The student will read the question.	Read the question correctly.	✓				18/18/18

Online Assessment ORA

★ In addition, refer to the student's IEP to identify lessons that are a good match for their educational needs.

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Lesson Assessment

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Locating the Lesson Assessment

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Completing the Assessment

Phase 1: Identify student's beginning level.

Phase 2: Complete the initial assessment to baseline student skills and identify lessons to teach:
 Basal = 3/3 "Yes" answers
 Ceiling = 3/3 "No" answers

Phase 3: Update progress and continue the assessment to identify new lessons.

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Finding Links Lessons

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Print and Organize Materials

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Starting a DT session

1. Positioning	<ul style="list-style-type: none"> Choose an area with minimal distractions Sit beside the student Prompt from behind
2. Addressing Behavior	<ul style="list-style-type: none"> Present cue in a timely manner Provide reinforcement immediately Reinforce frequently for attending/early learning skills
3. Be prepared	<ul style="list-style-type: none"> Review the lesson plan prior to teaching Gather materials needed (e.g., pencils for data collection, extra tokens/pennies, etc.)

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Find Reinforcers

- Give choices frequently and avoid assuming
- Offer a variety of highly motivating toys, activities, or materials

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Basic DT Strategies

- Correct Response**
 - What to do when the student gets it right
- DT Intro Procedures**
 - Introducing new items or concepts in a sequential manner
- Error Correction**
 - What to do when the student makes an error
- Reinforced Learning Trials**
 - What to do when the student makes several errors
- Delivery of Reinforcement**
 - Effective delivery of reinforcement

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Discrete Trial Is a 4-Step Sequence

Lesson 6: Nonverbal Object Imitation

Strategy	Cue	Response	Consequence	Pause
Application	Teacher provides instructional cue	Student responds	Teacher provides social praise and tangible reinforcement	There is a pause
Example	Teacher says, "Do this" and models ringing the bell	Student rings bell	Teacher says, "Ringing bell," praises student, and gives student a reinforcer	Student uses reinforcer and teacher pauses before next cue

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DT Scenario: Correct Response


- ★ Correct Response:
 - ★ Reinforce immediately
 - ★ Record data
- ★ Mastery Criteria:
 - ★ Three in a row correct, follow Intro Procedures

****Demonstration: Correct Response****

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Choosing Skills to Pre-teach

- ★ STAR and Links lessons provide "recommended items to teach"
- ★ Think beyond the suggested materials and choose materials that will increase success daily in routines.



Think about items you could teach using this lesson that might increase success in the arrival routine.

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Data Collection

Correct Response Trials

Date	Task	Data	Comments
4/7	Ring Bell	+ + +	3 in a row- Move on


****Demonstration: Intro Procedures****

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Breakout 1: Practice

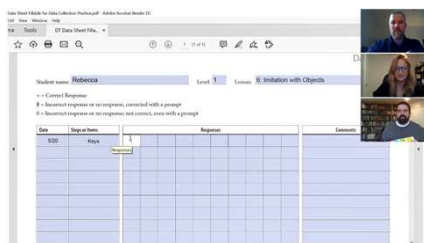
Non-Verbal Object Imitation

- ★ As a group decide on an item to practice imitation (keys, pen, computer mouse)
- ★ Teacher uses the cue "Do This," models the action, and places the item on table
- ★ Student makes the correct response (using their own similar item)
- ★ Teacher labels action and provides reinforcement after every correct response



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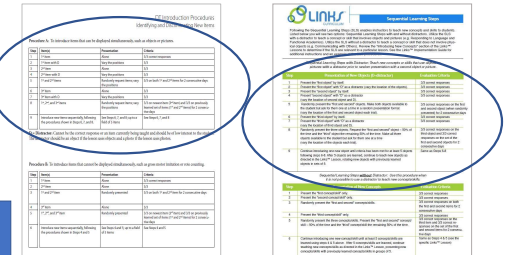
Breakout Room Video Example



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Intro Procedures – STAR

Sequential Learning Steps – LINKS



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Distractor (D) Considerations

1. In the same classification (object or picture)
2. Not overly distracting
3. Not an item you are currently teaching
4. It is never the correct response

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Data Collection

Example of Intro Procedure A – Distractor

Date	Task	Data	Comments
4/7	Bell	+ + +	1 st item
	Bell w/d	+ + +	1 st item w/ distractor
	Car	+ + +	2 nd item
	Car w/d	+ + +	2 nd item w/ distractor
	Bell	+ + +	Presented in random rotation Day 1
	Car } R1	+ + +	
4/8	Bell	+ + +	Presented in random rotation Day 2
	Car } R2	+ + +	
	Block	+ + +	3 rd item
	Block w/d	+ + +	3 rd item w/ distractor
	Block	+ + +	Presented in random rotation Day 1
	Car, Bell } R1	+ + +	

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Intro Procedures – STAR Sequential Learning Steps – LINKS

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Data Collection

Example of Intro Procedure B – No distractor

Date	Task	Data	Comments
4/7	Get pencil	+ + +	1 st item
	Open book	+ + +	1 st item w/ distractor
	Pencil	+ + +	2 nd item
	Book	+ + +	2 nd item w/ distractor
4/8	Pencil	+ + +	Presented in random rotation Day 1
	Book } R2	+ + +	
	Put on glasses	+ + +	Presented in random rotation Day 2
	Glasses } R1	+ + +	
	Pencil, book	+ + +	3 rd item
4/9	Glasses	+ + +	3 rd item w/ distractor
	Pencil, book	+ + +	Presented in random rotation Day 1
	Open wallet } R2	+ + +	

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DT Scenario: Error Correction

If the student makes an error or does not respond . . .

- Stop and restart trial
- Repeat cue
- Prompt with just enough assistance to get a correct response
- Reinforce with social praise or a less preferred item
- Repeat trial with highly preferred item available

****Demonstration: Error Correction****

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Prompt Levels for Error Correction

Prompting Hierarchy for DT Lessons

Least

Most

Prompt Level
Verbal
Visual
Model
Touch/Nudge
Prompt
Partial
Physical
Full Physical

- Understanding the prompting hierarchy is important for effective error correction
- Use the **least amount** of prompting needed – be a careful observer of the student
- Prompt from behind when possible
- Ensure the student is successful!
- Prompt levels may vary by lesson

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DT Collection

Error

Date	Task	Data	Comments
4/7	Bell	+ + O	

Error

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DT Collection

Error Correction

Date	Task	Data	Comments
4/7	Bell	+ + Ø	

+ = correct response

Ø = incorrect/no response and then corrected with a prompt

O = incorrect/no response and not correct even with a prompt

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Error Correction Video Example

DT Error Correction

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Error Correction Video Example

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Data Collection

+ = correct response

⊘ = incorrect/no response, and then corrected with a prompt

○ = incorrect/no response, and not correct even with a prompt

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General Reinforcement Procedure

- ★ For a Correct Response
 - ★ 1:1 Tangible reward or token (highly preferred R+ for this student)
 - ★ 1:1 Social praise
- ★ For a Prompted Response
 - ★ 1:1 Social praise
 - ★ (If needed, use a less preferred R+)

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DT Scenario:

Reinforced Learning Trials (RLT) - STAR
Errorless Learning Procedure (ELP) - Links

- ☆ Use RLT/ELP when the student is not learning from the correction procedure
- ☆ No more than three error corrections

Date	Task	Data	Comments
4/7	Bell w/ D	+ ∅ ∅ ∅	Go to RLT!

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Reinforced Learning Trials (RLT) – STAR Errorless Learning Procedure – Links

- ☆ Note change in prompt level on data sheet
- ☆ Reinforce with tangible and verbal reward
- ☆ Slowly fade back amount of assistance after student gets 3/3 correct at current step

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Reinforced Learning Trials (RLT) Demonstration

Date	Task	Data	Comments
4/7	Bell w/d	+ ∅ ∅ ∅	3 error corrections- go to Reinforced Learning Trial (RLT)
	Bell w/d	+ + +	RLT – PP (Partial Physical Prompt)
	Bell w/d	+ + +	RLT – TP (Touch Prompt)
	Bell w/d	+ + +	No Prompt – NP (No Prompt)

No Prompt (NP)	Touch Prompt (TP)	Partial Physical Prompt (PP)	Full Physical Prompt (FP)
No prompt	Touching lightly to initiate or change direction of the response	Student does some part of the response independently. Not a full physical prompt, but more than a touch	Student requires physical prompting throughout the response

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Video Example: RLT

- ☆ Lesson 7: Matching Object to Object
 - ☆ Cue: "Match bowl"
- ☆ Reinforcement
 - ☆ Student is using token board
- ☆ Prompting
 - ☆ Teacher starts the session using FP and fades to PP, then TP, then NP
 - ☆ This example shows fading in one session. Other students may need more sessions to learn to match independently.

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Matching Lessons: Material Set-up

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Level 1: Matching Objects - RLT

Reinforced Learning Trials
Full Physical Prompt

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Errorless Learning Procedure (ELP)

1. Give instructional cue.
2. Provide a **prompt** (just enough of a prompt to get a correct response) immediately following the cue.
3. Reinforce with a **tangible** and verbal reward.
4. Slowly **fade** back amount of assistance needed after student gets 3/3 correct at current step.

Skill	Data					ELC	Comments
Penny w/ D	+	+	Ø	Ø	Ø		Go to ELP!
Penny w/ D	+	+	+			CP	

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Video Example of Errorless Learning Procedure Following One-Step Directions: Expanded (Lesson 35)

Date	Skill/Task/Step	Instructional Lesson Data										Cycles	Starting Count (out of total)	Comments
		1	2	3	4	5	6	7	8	9	10			
5/17	get tube	Ø	Ø	Ø									NP	3 errors - use ELP
	get tube	+	+	+									GP	
	get tube	+	+	+									GP	
	get tube	+	+	+									NP	

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Understanding Prerequisites – STAR

Level 1 Program Guide/Curriculum-Based Assessment

Lesson	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Come Here														
2. Attending														
3. Receptive Actions on a Word														
4. Social Communication														
5. Nonverbal Imitation: Object Motor														
6. Nonverbal Imitation: Object														
7. Matching: Object to Object														
8. Matching: Picture to Picture														
9. Matching: Object to Picture														
10. Matching: Object to Picture and "Give Me X"														
11. Labels of Objects														
12. Labels of Pictures														
13. Identification of Body Parts														
14. Actions: One-Step														

- ★ Each column is independent
- ★ The sequence numbers are used for a quick guide for programming
- ★ Lesson 7 *must be* acquired or mastered before moving to Lesson 8
- ★ Move to the next sequence number when the previous prerequisite number is mastered

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Understanding Prerequisites – Links

Lesson #	Curriculum Area	Links Lesson Name	Suggested Prerequisite Lesson # (if applicable)
1	Receptive Language	Receptive Language	
2	Attending	Attending	
3	Receptive Actions on a Word	Receptive Actions on a Word	
4	Social Communication	Social Communication	
5	Nonverbal Imitation: Object Motor	Nonverbal Imitation: Object Motor	
6	Nonverbal Imitation: Object	Nonverbal Imitation: Object	
7	Matching: Object to Object	Matching: Object to Object	
8	Matching: Picture to Picture	Matching: Picture to Picture	7
9	Matching: Object to Picture	Matching: Object to Picture	7
10	Matching: Object to Picture and "Give Me X"	Matching: Object to Picture and "Give Me X"	7
11	Labels of Objects	Labels of Objects	8
12	Labels of Pictures	Labels of Pictures	8
13	Identification of Body Parts	Identification of Body Parts	8
14	Actions: One-Step	Actions: One-Step	8

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STAR Lesson Video Examples

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Links Lessons – Video Examples

Lesson	Response to Language	Communicating with Others	Functional Abilities	Play
1	Using a Receptiveness System for 3	Modeling Object Use	Verbal Imitation of Functional Words	10
2			Verbal Imitation of Functional Words	10
3			Verbal Imitation of Functional Words	10
4			Verbal Imitation of Functional Words	10
5			Verbal Imitation of Functional Words	10

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Links Lesson Visual Supports

Some Links lessons call for visuals, e.g., picture cards

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Organizational Ideas

Storage Systems for Reinforcers, STAR Materials, and Forms

Use plastic rolling cart with drawers to store reinforcers, red objects and photo cards.

Extra Forms – Include DT Data Collection, Summary Forms, and Extra Student Learning Profiles

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Organizational Ideas

DT Individual Student Bins

Student bins

Include lesson folders and specific reinforcers

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Organizational Ideas

Folders for DT

Drawers or Individual hanging folders labeled with students' names

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Organizational Ideas

Mastered Lesson Data

- ★ Create a binder or a folder for each student
- ★ As students master lessons, go back to the Student Learning Profile, check off the lesson that is mastered and choose a new lesson
- ★ Include tabs in the binder to organize DT, PRT and Routine Data

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Generalization Poster/Chart Ideas

Student	Language Skill	Academic Skill	Social Skill
Demetrius	Label, draw and label parts	Count objects	Answer social questions
Allison	"I said X" with object	Identify and label	Handshake Turn taking
Ellen	Include 2 word	Do subject	Response to subject
Ellen	Identify parts	Follow attending commands	Answer object with visible

Print a chart from the STAR Media Center. Go to Routine Essentials, Circle, Generalization Chart.

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Getting Started in DT

- ★ Find an area in your classroom
 - ★ Table with two chairs
- ★ Assess your student
- ★ Choose 2-5 lessons
 - ★ Print lesson plans and create "folders"
 - ★ Include lesson plans and data collection sheets in the "folders"
- ★ Post "cheat sheets" in your DT area
 - ★ Intro Procedures (STAR) Sequential Learning Steps (Links)
 - ★ Data Collection Poster
- ★ Teach lessons
 - ★ Follow lesson plans as written
 - ★ Follow Intro Procedures or Sequential Learning Steps
 - ★ Use data collection system

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Thank you for joining!



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Questions?

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