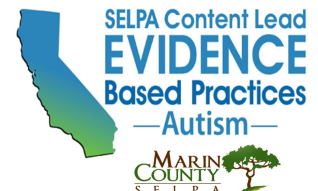# Evidence Based Practice Training:
Direct Instruction (DI)

Adapted from Steinbrenner, J.R. et.al. (2020). Direct Instruction Evidence-Based Practices for Children, Youth, and Young Adults with Autism Spectrum Disorder Report, National Clearinghouse on Autism Evidence and Practice (NCAEP)
https://ncaep.fpg.unc.edu/

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What is CAPTAIN

The California Autism Professional Training And Information Network (CAPTAIN) is an interagency network developed to support the understanding and use of evidence based practices (EBPs) for individuals with Autism across the state of California
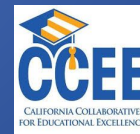

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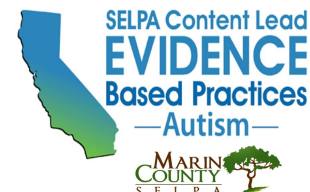
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What is CAPTAIN

Marin County SELPA in partnership with CAPTAIN, are members of the Statewide System of Support as the Special Education Content Lead for Autism.
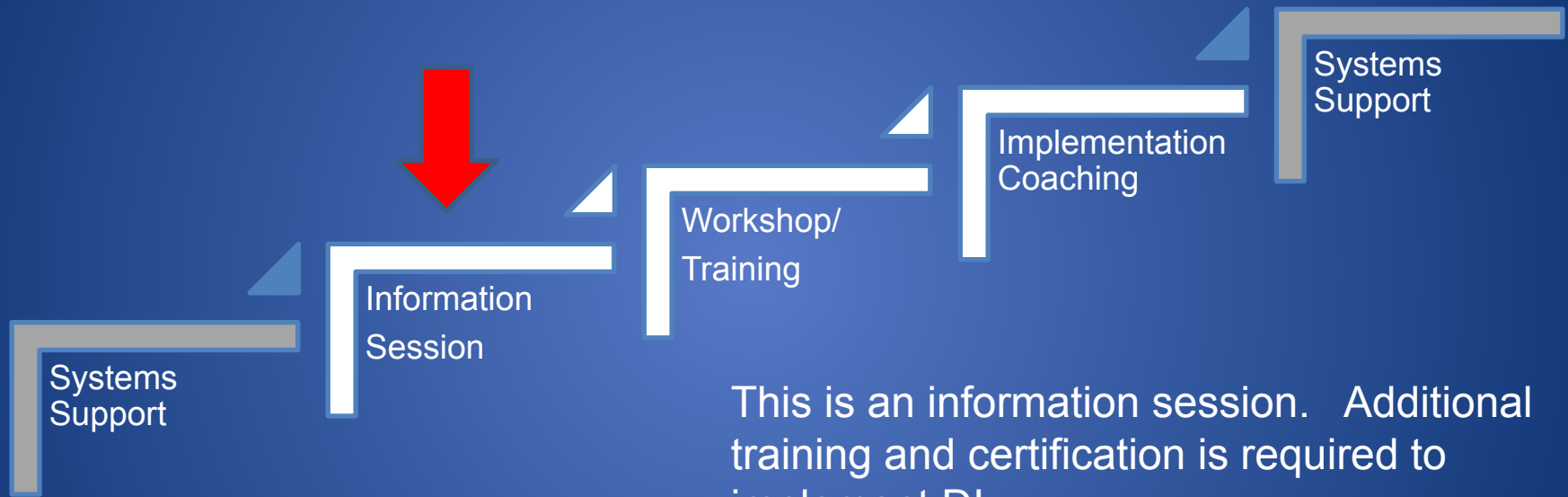
This project is funded by the California Department of Education and the California Collaborative for Educational Excellence.

Levels of Professional Development to Reach Implementation

Systems Support

Information Session

Workshop/ Training
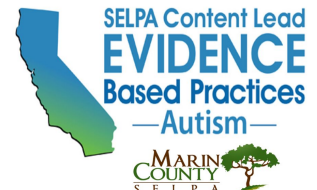
Implementation Coaching

Systems Support

This is an information session. Additional training and certification is required to implement DI.

Before We Begin…

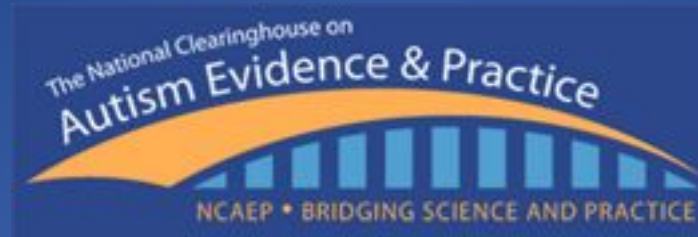Please complete the **Pre Training Survey** sent to your email

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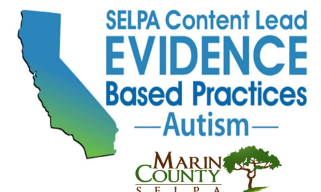# What are Evidence Based Practices?

NCAEP definition of an EBP:

"Focused intervention practices that have evidence of efficacy in promoting positive outcomes for learners with ASD."

Steinbrenner, J. R., Hume, K., Odom, S. L., Morin, K. L., Nowell, S. W., Tomaszewski, B., Szendrey, S., McIntyre, N. S., Yücesoy-Özkan, S., & Savage, M. N. (2020). Evidence-based practices for children, youth, and young adults with Autism. The University of North Carolina at Chapel Hill, Frank Porter Graham Child Development Institute, National Clearinghouse on Autism Evidence and Practice Review Team.

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Evidence Based Practice Matrix (28 EBPs)

Table 3.7 Matrix of evidence-based practices, outcomes, and age categories

Selecting EBPs

Before beginning a new practice with a learner, it is important to follow four planning steps

1.   Identify the behavior

2.   Collect baseline data on the behavior

3.   Establish an observable and measurable goal

4.   Choose an EBP
    –   Consider the child and family characteristics
    –   Consider the teacher and team characteristics
    –   Consider other available resources

Selecting an EBP Checklist

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High Quality Training:
Autism Focused Intervention Resources and Modules (AFIRM)

Designed to help you learn the step-by-step process of planning for, using, and monitoring EBPs with learners with Autism from birth to 22 years of age

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Core Components: Learning Objectives

By the end of this training, participants will be able to:

- Describe what DI is and what skills it can be used to teach
- Identify the components of DI
- Describe DI procedures

DISCLAIMER:

This module is not intended to replace the Direct Instruction training, but rather, to introduce basic knowledge of DI as an evidence-based practice for learners with autism.

To obtain training in DI, visit the National Institute for Direct Instruction (NIFDI) at www.nifdi.org

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Evidence (Age and Domains)

EVIDENCE-BASE:	ACADEMIC	COGNITIVE	COMMUNICATION	SCHOOL READINESS
3-5	Yes		Yes	
6-11	Yes	Yes	Yes	Yes
12-14		Yes	Yes	Yes
15-18			Yes	

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What is DI?

- A teaching model that accompanies curricula for instruction on language, reading, math, and other academic subjects created by Dr. Siegfried Engelmann and Dr. Wesley Becker

What is DI?

- It is a teacher-directed model of instruction that emphasizes how the student is taught and what the student is taught
- DI can be used as a comprehensive curriculum for teaching academic subjects or to target specific skills

Let's Watch and Overview of DI

DI Goals

Language Goals:

– Answer "why" questions,

– make action statements,

– answer yes/no questions,

– using prepositions,

– identify materials from which items are made,

– expressive labeling

By using a Reading Direct Instruction scripted lesson, the teacher is able to systematically scaffold students' comprehension of language.

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DI Goals

Reading Goals

- Letter-sound knowledge
- Sight word recognition
- Decoding
- Statement inferences
- Use of facts
- Identify analogies

Math Goals

- Telling time

What Are the DI Programs/Curriculum Supported by Research for Students with Autism?

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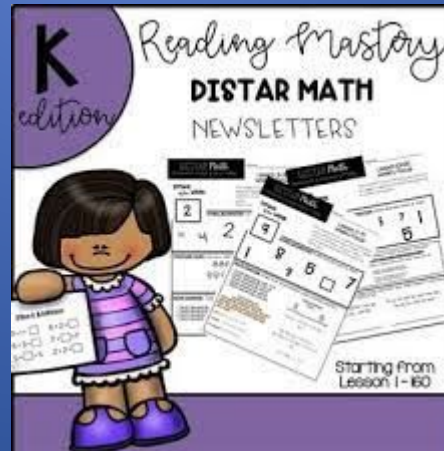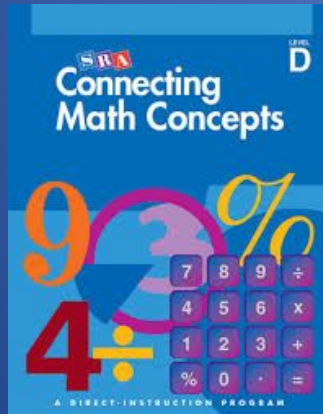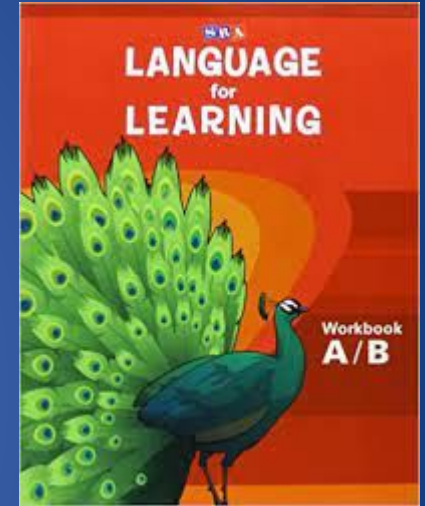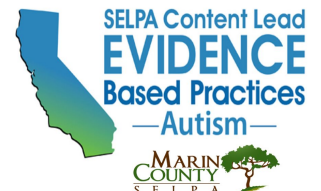
Think - Pair - Share
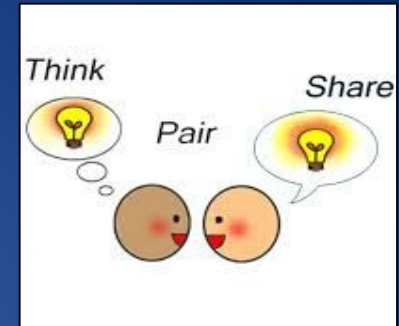
Can you think of a student or group of students who could potentially benefit from direct instruction?

In what subject areas?

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Planning for DI

STEP 1: PLANNING	
1.1	Receive initial DI training
1.2	Conduct student placement assessments
1.3	Prepare for the appropriate DI level(s)
1.3a	Purchase curriculum materials
1.3b	Obtain training on the specific DI levels to be taught
1.4	Organize DI learning groups
1.5	Create daily DI schedule
1.6	Plan for reinforcement
1.7	Organize session materials and set-up instructional space
1.8	Practice the script for the first lesson as outlined in the 'Teacher Presentation Book' (TPB)

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Receive Initial DI Training

- Training is necessary due to DI being highly specialized
- DI utilizes fast pace of instructor-delivered content in each scripted lesson, specific audio/visual cueing, and differentiation for a range of student skill levels
- To obtain training, visit the National Institute for Direct Instruction (NIFDI) at www.nifdi.org

Conduct Learner Placement Assessment

- Team members should assess learners for placement in specific level of DI programs

- Supports students receiving content that is at their current skill level.

- Placement tests can be found in the teachers guide at https://www.mheducation.com.prek-12/explore/direct-instruction.html

PLACEMENT TEST

PART 1

Exercise 1 Total possible: 2 points

(Circle 1 point on the scoring sheet for each correct response at b and c.)

This is an oral exercise. For step c, say the sound d, not the letter name.
- a. You're going to say some sounds.
- b. (test item) Say (pause) rr. rr.
- c. (test item) Now say (pause) d. d.

Exercise 2 Total possible: 10 points

(Circle 1 point on the scoring sheet for each correct response at b.)

- a. (Point to the sounds.) These are sounds. (Point to the boxed m.) This sound is (pause) mmm. What sounds? (Touch m.) mmm.
- b. (test items) (Point to each unboxed sound in the column. For each sound, ask:) Is this (pause) mmm?

(Circle 1 point on the scoring sheet for each correct response at step d.)

- c. (Point to the boxed a.) This sound is (pause) ááá. What sound? (Touch a.) ááá.
- d. (test items))Point to each unboxed sound in the column. For each sound, ask:) Is this (pause) ááá?

8   *Reading Mastery* Grade K   Teacher's Guide

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Prepare For the Appropriate DI Level/s

PURCHASE CURRICULUM MATERIALS

- After identifying the program levels for your learner/s, it is time to order the program materials.

- Most DI programs can be purchased through McGraw-Hill Education:

- https://www.mheducation.com/prek-12/explore/direct-instruction.html

OBTAIN DI TRAINING ON THE SPECIFIC DI LEVELS TO BE TAUGHT

- After ordering the materials, obtain live training on the specific levels the team will teach.

- NIFDI provides training information at: https://www.nifdi.org/services/training.html

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Organize DI Learning Groups

- When using DI with multiple learners, it is important to organize the learners into learning groups according to skill level. These levels are based on the placement tests.

The Factors that Guide Student Placement in Instructional Groups Are:

- Placement assessment score
- Number of learners placing in different starting points
- Instructional group size limit, as indicated by each program level

A note on the fluidity of groups:

During DI, learners should be working toward mastery every lesson. Teaching to mastery every lesson leads to strong foundational skills and high self-esteem. The amount of new material should be manageable for students. Therefore, only 10-15% of the lesson is new each day, the rest is previously mastered material. It is expected that learners should perform correctly 70% of the time on new material and 90% of the time on previously mastered material. If a pattern is observed in which a learner is unable to maintain these first-time correct response rates, the team should (a) determine if the program is being delivered with fidelity or (b) discuss the learner's instructional group placement. A learner may move to a lower or higher instructional group depending on their performance.

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Create Daily DI Schedule

- Scheduling sufficient instructional time for DI is crucial for efficacy.

- Because instruction is provided at a faster rate, learners are more likely to master a greater number of concepts

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Plan for Reinforcement

- The DI program suggests to the use of social praise as well as a reinforcing game:
  - I.e. teacher student game for when students are working hard and vice versa
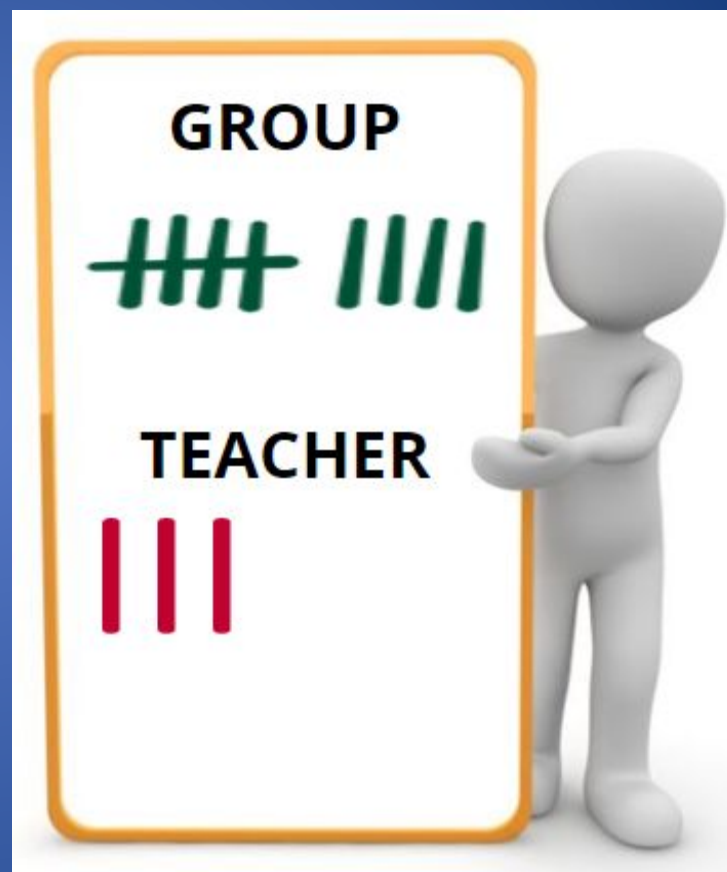
Plan for Reinforcement

- Team members may choose to pair DI with more immediate tangible reinforcers or token boards for correct responses.

I am working for [ ]

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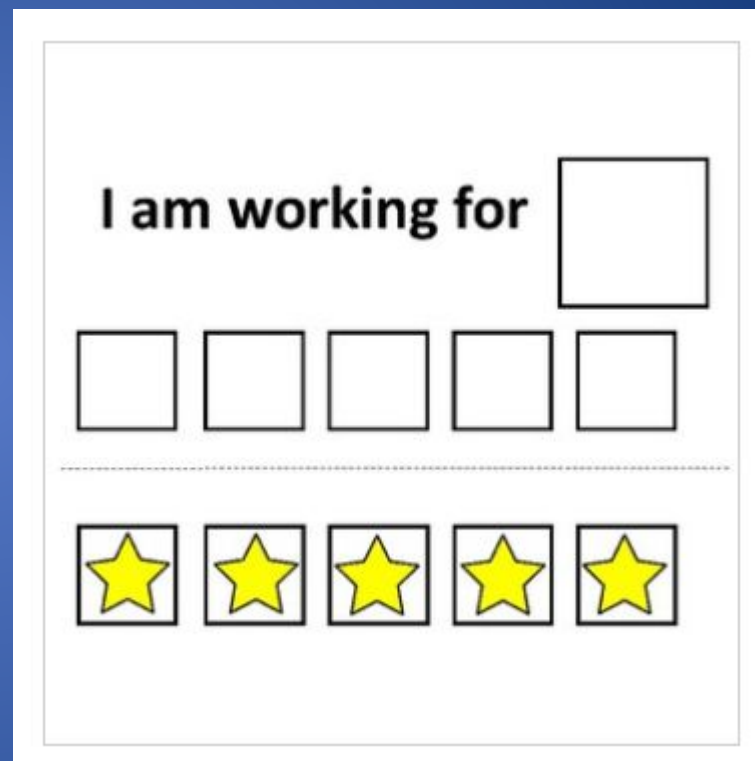
Organize Session Materials and Instructional Space

- It is important to become familiarized with the curriculum and its materials.
  - Types of teacher presentation books (TPB)
  - Guidebooks
  - Student Workbooks
  - Instructional Materials

Organize Session Materials and Instructional Space

- Since students may receive DI individually, small groups, or as a whole class, team members will need to plan for their circumstances.

- Prior to DI sessions beginning, all materials, reinforcement systems and items should be in place and READY!

Practice Using the Scripts and Cues from the Teacher Presentation Book (TPB)

Mrs. Slater's third grade classroom team is starting to use DI to target math skills with their students. As they are beginn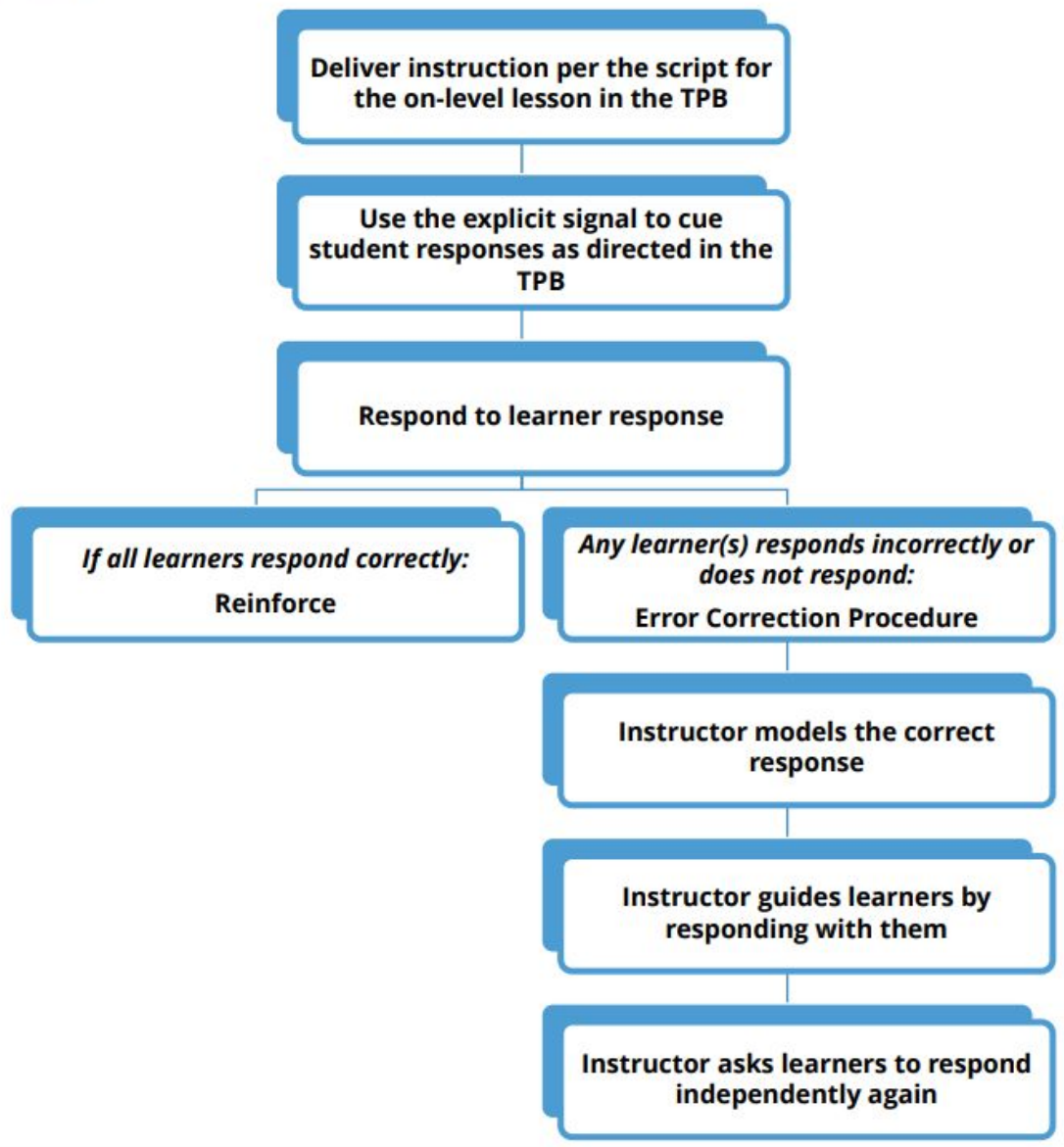ing to use DI, the team plans to practice with each other daily for about 10 minutes. During their practice time, they focus on giving each other feedback on following the scripts, their pace of delivery, and their use of signals to cue student responses. This also gives them the opportunity to become familiar with the color-coding in the Teacher Presentation Books. This daily practice has allowed the team to gain fluency as they begin to carry out DI lessons.

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Using DI

STEP 2: USING							
2.1	**Follow the TPB for implementing DI instruction:**						
2.1a	Deliver instruction per the script for the on-level lesson in the TPB						
2.1b	Use the explicit signal to cue student responses as directed in the TPB						
2.1c	**Respond to learner's response:**						
2.1c.i	*If learner responds correctly:*						
2.1c.i.1	Provide reinforcement						
2.1c.ii	*If learner responds incorrectly or does not respond, use the following correction procedure:*						
2.1c.ii.1	Model the correct response						
2.1c.ii.2	Guide the students by responding with them						
2.1c.ii.3	Ask students to respond independently again						
2.2	Implement Mastery Tests as indicated by the DI program						

Deliver instruction per the script for the on-level lesson in the TPB

Use the explicit signal to cue student responses as directed in the TPB

Respond to learner response

If all learners respond correctly:

Reinforce

Any learner(s) responds incorrectly or does not respond:

Error Correction Procedure

Instructor models the correct response

Instructor guides learners by responding with them

Instructor asks learners to respond independently again

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Let's Watch a DI Lesson

Let's Practice!

Identify how to respond to student when he gives a correct or incorrect answer:

LEARNER GIVES A CORRECT RESPONSE	LEARNER GIVES AN INCORRECT RESPONSE
Teacher guides students by responding with them.	Teacher models the correct response.
Teacher says, "Excellent!"	Teacher says, "Great! Next one."

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Monitoring DI

STEP 3: MONITORING	
3.1	Collect data
3.2	Weekly review of collected data
3.3	Conduct weekly training and practice sessions for all team members
3.4	Determine next steps based on learner progress

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Types of Data To Collect

Data Collection Method	Description
Observation of student performance during lessons	Instructors will closely monitor the instructional group for correct responding to instructor cues. Learners should respond correctly 70% of the time to new material. If learners are not achieving that high rate of correct responding, the instructor should repeat parts of the lesson the following day.
Lesson Progress Chart	Instructors will record which lessons were delivered to each instructional group daily. The Lesson Progress Charts are included in the DI curriculum materials.
Student Test Summary Chart	Instructors will record each student's performance on the mastery tests. Mastery tests and summary charts are included in DI curriculum materials. Remember, mastery tests will be conducted every 5-10 lessons depending on the program and

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Frequency of Data Collection

Daily
- Observe student performance daily
- Team members need to collect daily data on each learner's progress

Weekly
- Team members should review all collected data
- Meet to make programming decisions

Every 5-10 lessons
- Students should complete Student Mastery Tests
- The team should complete the Student Test Summary Chart

High Rates of Correct Responding

- Learners should maintain high rates of correct responding
    - 70% for new material
    - 90% on previously mastered material
- Based on data, move students to higher or lower levels

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Fidelity is Key When Using DI

- Instructors must be fluent with the practice for greatest success
- Practice daily for 10-15 minutes
- Access coaching from designated DI coach
- Form site based practice groups

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Based on your student observation during today's lessons, you notice that students are responding correctly about 60% of the time when given new material. What should you plan for tomorrow's lesson?

| Repeat parts of the lesson tomorrow | Continue with the next schedule lesson | Give the Student Mastery Test | Wait to discuss at the weekly team meeting |

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Troubleshooting Tips

If team members determine that the learner is not making progress, consider the following:

- ❑ Have you received DI training or is additional training needed?
- ❑ Is the learner's instructional group placement appropriate?
- ❑ Has enough time been devoted to implementing DI daily?
- ❑ Was DI implemented with fidelity (see Implementation Checklist)?
- ❑ Does the learner need additional supports?
- ❑ Are the selected reinforcers preferred items/activities for the learner?

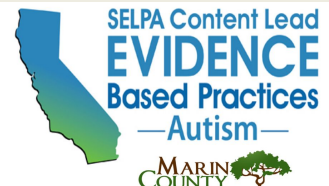# Next Steps

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My Takeaways

1. What are 4 things you remember from today's training?

2. What are 2 things you see yourself doing?

3. What is the 1 thing you can implement tomorrow?

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After the Training…

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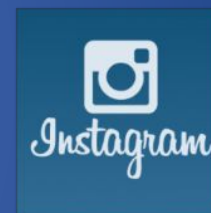
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