

## **Embedded Instruction for Early Learning** *Tools for Teachers*

## Linking the DRDP 2015, Curricula, and Embedded Instruction

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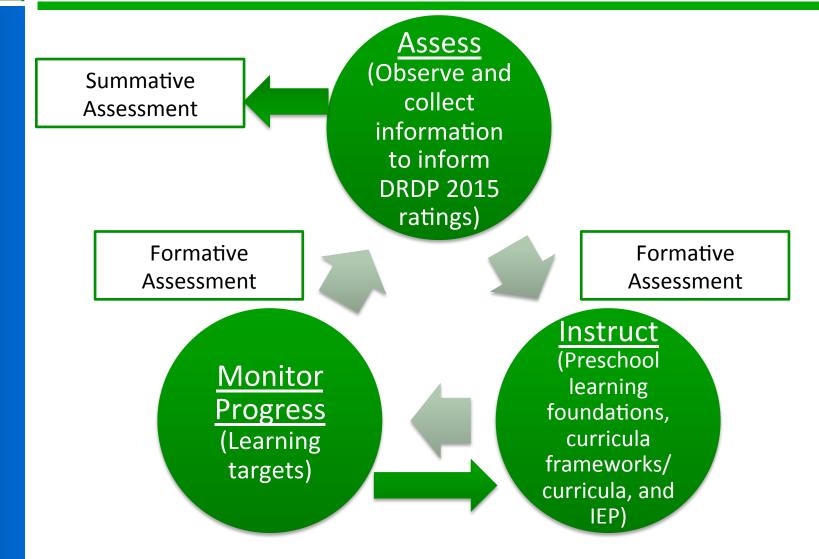


### **Session Description**

- Describe embedded instruction for early learning
- Illustrate and discuss key components of embedded instruction
- Learn about a <u>pilot project</u> occurring in CA to link the Preschool Learning Foundations, the DRDP 2015, and children's individualized education programs (IEPs) to embedded instruction for early learning strategies



### Importance of Linking....





# Define and Illustrate Embedded Instruction



## Foundation for Embedded Instruction: How Children Learn

Interests and Preferences

Experiences and Observations

**Mastery** 



**Engagement** 

in Activities, Routines, and Transitions

Learning Opportunities

Adapted from Dunst (2000, 2001)

#### **Child-Guided Experience**



#### **Adult-Guided Experience**



#### **Optimal Learning**



### What is Embedded Instruction?

Multi-component approach to provide intentional and systematic instruction on priority learning targets during typically occurring activities, routines, and transitions to support child engagement and learning







What to Teach: Priority Learning Targets



#### **How to Evaluate:**

Monitor Implementation and Child Progress

#### When to Teach:

Activities, Routines, and Transitions



How to Teach:

Complete Learning Trials





### Key Practices: What to Teach

- 1. Develop and implement activities that are designed to support the engagement and learning of all children.
- 2. Obtain information about children's skills in activities, routines, and environments (activity-focused assessment) and use it to inform priority instructional learning targets.
- 3. Break down larger goals to identify the behavior or skill for the child to achieve in the next few weeks and ensure alignment with general preschool curricular content.
- 4. Write developmentally appropriate; functional and alignment; generative; observable and measureable (i.e., conditions and criteria specified) priority learning targets.



#### Key Practices: When to Teach

- Select which activities, routines, and transitions are logical and appropriate for embedded instruction given a specified instructional target.
- 6. Plan which and how many instructional learning trials to embed within and across activities, routines, and transitions.
- 7. Develop an <u>activity matrix</u> to record when you plan to embed instructional learning trials for individual children.



### Key Practices: How to Teach

- 8. Use systematic instructional strategies with fidelity to teach skills and promote child engagement and learning.
- 9. Implement instructional learning trials that include (a) an environmental arrangement and/or prompt to elicit the learning target behavior (antecedent), (b) additional help to elicit the learning target behavior if the behavior does not occur, and (c) an appropriate response following the child behavior (consequence).
- 10. Implement massed, spaced, or distributed instructional learning trials.
- 11. Implement the frequency, intensity, and duration of instruction needed to address the child's phase and pace of learning.



### Key Practices: How to Evaluate

- 12. Implement strategies to help determine whether I am implementing instructional learning trials with fidelity (i.e., *Am I doing it?*).
- 13. Implement strategies to help determine if children are making progress on their learning targets (i.e., *Is it working?*).
- 14. Make data-based decisions about whether changes are needed to my instruction by considering (a) *Am I doing it?* and (b) *Is it working?*



#### **Embedded Instruction in Action**



Helping Children Learn in Everyday Activities

What are children doing?

In what activity or routine?

What might they be learning?

For children who need extra help or additional instruction, what do you see that illustrates embedded instruction?



## Embedded Instruction Builds on Intentional Teaching

#### **Intentional Teaching**

- Clearly defined learning objectives
- Play- or activity-based
- Instructional strategies
   likely to help children
   achieve learning
   objectives
- Continually assess progress and adjust strategies based on assessment

#### **Embedded Instruction**

- What to Teach
- Where and When to Teach
- How to teach

How to Evaluate



#### Meet Mia









## What to Teach Practices





### Mia's Everyday Experiences and Activities as the Foundation for Embedded Instruction









### Assess: Mia's Fall DRDP 2015 SED 4

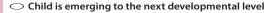
Developmental Domain: SED — Social and Emotional Development

#### **SED 4: Relationships and Social Interactions with Peers**

Child becomes increasingly competent and cooperative in interactions with peers and develops friendships with several peers

	Mark the latest develo	pmental level the child has mastered:
--	------------------------	---------------------------------------

Responding		Expl	oring	Building			Integrating	
Earlier	Later	Earlier	Later	Earlier	Middle	Later	Earlier	
Shows awareness of other people, including children	Shows interest in other children	Plays alongside other children, rarely interacting with them	Interacts in simple ways with familiar peers as they play side by side	Participates in brief episodes of cooperative play with one or two peers, especially those with whom child regularly plays	Participates in extended episodes of cooperative play (including pretend play) with one or two friends	Initiates sustained episodes of cooperative play (including pretend play), particularly with friends	Organizes or participates in planning cooperative play activities with several peers, particularly with friends	
<ul> <li>Possible Examples</li> <li>Cries when hearing the sound of another child crying.</li> <li>Orients toward other children.</li> <li>Notices another child nearby.</li> </ul>	Moves excitedly when another child comes near.     Reaches toward another child to gain attention.     Smiles at another child.	Selects a truck when other children nearby are playing with trucks.  Explores a toy alongside another child who is also exploring.  Reaches for a toy in the water alongside other children at the water table.	Hands a bucket to a familiar peer sitting next to child in the sandbox.  Offers a block to a peer building a tower next to child.  Splashes excitedly with a peer at the water table, continuing back and forth.	Takes a few turns trying on hats with a peer in the dramatic play area.  Plays chase briefly outside with two peers, and then goes to play alone in sandbox.  Plays cars with a peer for a short while.	Builds a train track with two friends, taking turns connecting the track pieces.     Laughs and makes funny noises or faces with a friend while singing a song together.     Plays a game of telephone that involves having a conversation with a friend about going on a shopping trip together.	Invites friends to build a pretend barn for toy animals and, at clean-up time, asks to save it so they can play with it tomorrow. Invites friends to continue playing family from the day before.  Offers a new object for a fort that child has built with peers over several days.  Plays restaurant with friends, showing them the signs for food to be ordered.	Plans how to build a boat with several peers, choosing materials and negotiating tasks. Plays superheroes with peers, planning different characters and scenarios. Joins peers in planning and gathering materials needed for a nature walk, such as nets, baskets, and bags.	



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### Assess: Mia's Fall DRDP 2015 COG 2

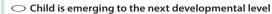
Developmental Domain: COG — Cognition, Including Math and Science

#### **COG 2: Classification**

Child shows an increasing ability to compare, match, and sort objects into groups according to their attributes

#### Mark the latest developmental level the child has mastered:

Responding		Expl	oring		Building	Integrating	
Earlier  Attends to people, objects, or events	Later Interacts differently with familiar people and objects than with unfamiliar people and objects	Associates a person or object with another person or object, based on a similarity or relationship between them	Selects some objects that are similar from a collection of objects	Sorts objects into two groups based on one attribute, but not always accurately	Middle  Sorts objects accurately into two or more groups based on one attribute	Later  Sorts objects into two or more groups based on one attribute, then puts all the objects together and re-sorts the entire collection into new groups	Sorts objects into groups based on at least two attributes, sometimes sorting by one attribute and then subdividing those groups based on a second attribute
<ul> <li>Possible Examples</li> <li>Looks at people's faces.</li> <li>Quiets in response to an adult's voice.</li> <li>Closes hand around an adult's finger.</li> </ul>	Smiles at a familiar adult's face or voice. Reaches for own special blanket or toy from home. Turns face away from an approaching unfamiliar adult.	Looks for the hammer that goes with the pounding bench.     Looks at another child when the child's parent walks into the room.     Looks for baby bottle when playing with baby doll.	Selects the shovels from among toys in the sandbox. Takes some apples out of a basket that contains apples and bananas while helping an adult prepare a snack. Picks out some train cars from a box of toys.	Separates blocks into a blue pile and a green pile, leaving a few green blocks in the blue pile. Sorts rocks into two piles, big and small, after a neighborhood walk. Picks out toy trucks from a basket of toys and sets them on a nearby shelf, and then picks out toy cars from the basket and sets them on a different shelf.	Separates a pile of toy animals by kind (e.g., dogs, cats, and birds). Puts crayons, pencils, and markers into different containers. Sorts a group of big squares and little squares into two piles by using eye gaze to indicate where an adult should put each square.	Sorts buttons by color, and then sorts all of them again by shape or size. Sorts shoes based on color, and then re-sorts by type (e.g., slippers, boots, tennis shoes).  Sorts flannel-board pieces by type (e.g., shoes, pants, and shirts), and then separates them by adult items and baby items.	Separates tiles into four groups: blue circles, blue squares, red circles, and red squares. Removes utensils from the play kitchen and sorts them into groups: big spoons, small spoons, big forks, and small forks. Sorts the bin of interlocking blocks into several piles, first by color, then by shape (e.g., squares and rectangles).



Unable to rate this measure due to extended absence



COG 2 Classification



### Assess: Mia's Fall DRDP 2015 LLD 6

Developmental Domain: LLD — Language and Literacy Development

#### **LLD 6: Comprehension of Age-Appropriate Text**

Child develops capacity to understand details and ideas from age-appropriate text presented by adults

#### Mark the latest developmental level the child has mastered:

Respon	Responding		Exploring		Building			Integrating	
Earlier	Later	Earlier	Middle	Later	Earlier	Middle	Later	Earlier	
Possible Examples		There are no earlier levels for this measure	Shows interest when attending to books, pictures, or print materials, with an adult	Provides simple one- or two-word responses to questions when attending to books or other materials that include text, with an adult	Makes comments or asks questions about text presented in books or the environment	Demonstrates knowledge of main characters, events, or ideas in familiar narrative or informational text	Demonstrates knowledge and understanding of details in narrative or informational text that includes order of events or cause and effect	Demonstrates understanding of both narrative and informational text by summarizing, comparing, or mak- ing inferences abou people, objects, or events	
Possible Examples			Looks at a picture book with an adult.     Brings a favorite book about baby animals to an adult, to be reread often.     Points to photos, with captions, that were taken while on a nature walk.     Turns the page after an adult stops reading a book.     Touches Braille and image of sheep with textured wool in a book and says, "Sheep."	Answers, "Cow," when adult asks, "What do you see?" while reading a book about farm animals together.     Communicates, "Alli dentro," ["In there," in Spanish] when asked, "Where's the mouse?" while an adult reads a book aloud.     Communicates, "Pasta," after an adult points out items on a children's menu.	Communicates, "Elephants have really big ears," after an adult reads about elephants. Asks, "Why did they go there?" during the reading of a story. Points to a lighted exit sign and asks, "What does that say?"	Reenacts a story about firefighters with peers, using props for hoses, boots, and hats. Pretends to direct traffic on the bike path after listening to a book about what community helpers do. Uses a shawl to carry a doll after a read-aloud of the storybook What Can You Do with a Rebozo? ["Shawl" in Spanish]. Communicates that the caterpillar will have a stomachache, after rereading The Very Hungry Caterpillar.	Predicts that the firefighters will come quickly to put out the fire, after an adult pauses while reading a book about firefighters to ask, "What will happen next?"  Draws a caterpillar, a cocoon, and a butterfly after an adult reads a story about the life of a butterfly.  Pretends to be Max, refuses to eat dinner, and then pretends to turn into a monster and become the king of the monsters, after hearing the book Where the Wild Things Are.  Comments, "The man got mad because the monkeys took his hat," during a read-aloud of the story Caps for Sale.	Communicates, using a communication board, "Firefighters have to wear special clothes so that they don't get burned," after an adult reads a book about wha firefighters do. Holds up two books abo bears and communicate "Ang dalawang aklat na ito ay tungkol sa mga uso, a goldilocks ay mamaganda," ("These two books are about bears, but the bears in Goldiloc are nicer," in Tagalog]. Relates what happens ir a familiar storybook to a peer as they begin to share the book together. Brings a book from hom and communicates to th class about what happe in the story and why.	

- Child is not yet at the earliest developmental level on this measure
- Child is emerging to the next developmental level
- Unable to rate this measure due to extended absence







### Intentional Instruction: Activities and Experiences for All Children

### **CA Preschool Learning Foundations**

- Vol 1, 2, and 3
   <a href="http://www.cde.ca.gov/sp/cd/re/psfoundations.asp">http://www.cde.ca.gov/sp/cd/re/psfoundations.asp</a>
- "... outline key knowledge and skills that most children can achieve when provided with the kinds of interactions, instruction, and environments that research has shown to promote early learning and development."
- "... provide early childhood educators, parents, and the public with a clear understanding of the wide range of knowledge and skills that preschool children typically attain when given the benefits of a high-quality preschool program."

### CA Curriculum Frameworks

- Vol. 1, 2, and 3
- "Ongoing classroom planning is an integral part of intentional teaching" (Vol 1, p. 31)
- ... presents an integrated approach to the planning of environments, interactions, and strategies to support young children's learning in those [socialemotional development, language and literacy, English-language development, and mathematics] domains" (Vol 1, p. 31)



#### Instruct: Mia's IEP Goals

Mia will label objects using at least one describing word (e.g., color, size) with decreasing adult modeling or prompting. We will know she has met this goal when she uses 10 different describing words during two or more activities and routines as documented in anecdotal notes in her portfolio. (Preschool Foundation 2.0 – Vocabulary and DRDP 2015 Cog 2)

Mia will participate in play activities and games with peers during centers or outdoor activities in order to build positive relationships with peers. She will spend increasing amounts of time in interactions with her peers (i.e., 5 minutes per day for 4 out of 5 days). (Preschool Foundation 2.0 – Interactions with Peers and DRDP 2015 SED 4)



#### Your turn!

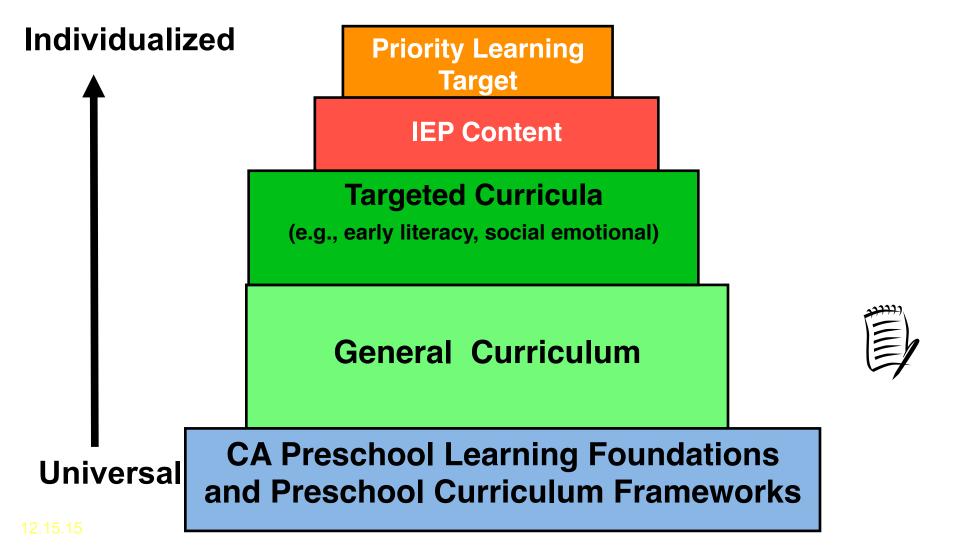
- Mia will use 2-3 word phrases to make requests to obtain toys, materials, or food during classroom activities and routines. We will know Mia has met this goal when she uses 2-3 word phrases for 80% or more of the requests she makes during two or more activities for 3 consecutive days.
  - Preschool Foundation(s)?
  - DRDP 2015 measure(s)?
- Mia will manipulate a variety of objects and write using different instruments with decreasing adult assistance for hand positioning in order to develop eye-hand coordination and object manipulation skills. We will know Mia has met this goal when she is able to grasp objects of different sizes (diameter 1-4cm; for example, crayon, jug handle) and maintain her grasp without adult support to complete tasks for at least 7 of 10 planned observations for 5 days.
  - Preschool Foundation(s)?
  - DRDP 2015 measure(s)?



### Priority Learning Target in Embedded Instruction

- A statement of the behavior or skill the child will learn to do
- Includes information that will help you design your embedded instruction plan
- Behavior or skill specified should be "proximal"
- Identify learning targets by:
  - Activity or routine analysis
  - Activity- or routines-based assessment
  - Breaking down "IEP" goal

### Priority Learning Targets: Align with CA Foundations, Curricula Framework, and Curricula



## An Example of What to Teach: Alignment Universal to Individualized

Individualized

Mia will initiate interactions with peers by tapping them on the shoulder and asking them to play using 1-2 word sentences (I play?, play, we play) in order to build positive relationships with peers. She will do this following an adult model during outdoor activities and centers on 4 occasions each day for 3 consecutive days

Priority Learning
Target for
Embedded
Instruction

Mia will participate in play activities and games with peers during centers or outdoor activities in order to build positive relationships with peers. She will spend increasing amounts of time in interactions with her peers (i.e., 5 minutes per day for 4 out of 5 days)

OSEP/ECO Outcome:
Positive socialemotional skills and
relationships

**Targeted** 

Targeted Social-Emotional Curricula: Peer-to-peer interaction skills

CA Preschool Curricular Framework: Interactions with Peers (pp. 65-68)

2.0 Interactions with Peers

**2.1** – Interact easily with peers in shared activities that occasionally become cooperative efforts (at around 48 mo)

2.1 – More actively and intentionally cooperate with each other (at around 60 mo) (CA Preschool Learning Foundations, 2008)

Universal

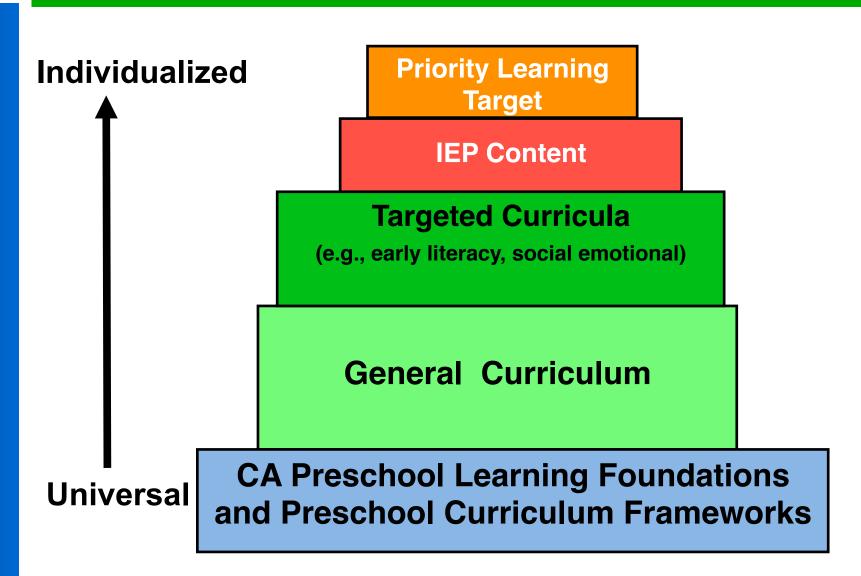
DRDP 2015:

SED 4

12 15 15



## You Try It with Another of Mia's IEP Goals!





## When to Teach: Ongoing activities, routines, and transitions





### Types of Activities

Teacher-directed activities

Child-initiated activities

Routines

Transitions

#### Consider "Fit"

#### **Learning Target**

(Consider child's abilities, priority skills, preferences, & support needs)

## Activity, Routine, or Transition

(Characteristics & "demands")

High-Quality Teaching & Embedded Instruction

#### **Learning Target**

(Consider child's abilities, priority skills, preferences, & support needs)

Activity, Routine, or Transition

(Characteristics & "demands")

#### **Matching**

Ask a peer to pass the juice

Snack

**←→ Natural** 

Name Color Objects

**Snack** 

**←** Logical

Point to objects in books

Snack

→ Might not be a good fit



### Selecting Times and Activities

An <u>activity matrix</u> helps ensure instruction occurs. It reminds teachers about:

- the planned activities and routines
- the priority learning targets for children who need targeted and embedded instruction learning opportunities
- targeted times to embed learning opportunities
- the "fit" between activity and learning target

#### CREATING AN ACTIVITY MATRIX

Step 1: List the activities and times of day in the left-hand column of the chart.

Step 2: List children in the top row.

	Mia	Addie
Arrival		
Free Play  • Initiates an interaction with peers by tapping them on the shoulder and asking them to play		
Circle		
Outside		<ul> <li>Invites another child to play</li> <li>Identifies the problem in a conflict with another child</li> </ul>
Meal	Labels object using one describing word (e.g., color or bowls)	
Centers		
Transition		Labels an emotion
Departure		

Step 3: Put the child's learning target in the appropriate activity



## Classroom Activity Matrix Examples

T	Anna	Kiana	Xander	
Arrival	Remove	Respond to Geneting X3		
Free Play	complete closed ended task x2	Accept and use toy offered by feer	Initiate Request Join in to Peer Ongoing Play	
Circle	Jump up with 2 feet together ×3	Imitale Gross Notor Actions	Answer "where" question	1
Dutside	2 word phrase with 1 descriptive X2	Follow 1-Step Directions X3	Catch and throw for 3 cycles	
inack	2 word phrase with 1 description x3	Drink from open cup	Respond to peer request	
ree Play	Complete closed ended +ask	use 2 hands together	Initiale Regust to Recr ×3	





#### Specific Area of Classroom Matrix





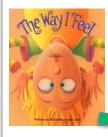
## Scheduled Activity and Associated Activity Types Matrix

	Outside Play							
	Anna	Kiana	Xander					
Group Game	Jump up with 2 feet together X2	Follow 1 Step Directions X1						
Big		Follow 1 Step Directions X 2						
Toy Play	2 Word phrase With I descriptive X2		Catch and throw for 3 cycles					

## TIPS FOR IMPLEMENTING: MAKE IT WORK FOR YOU!

	Mia	Addie	Carlos
Arrival			
Free Play	Talks about people or objects in view	<ul> <li>Invites another child to play</li> <li>Identifies the problem in a conflict with another child</li> </ul>	Writes using pictures, squiggles or letterlike forms
Circle	Sorts a collection by color	Labels an emotion	
Outside	Responds when another child initiates an interaction	<ul> <li>Invites another child to play</li> <li>Identifies the problem in a conflict with another child</li> </ul>	Writes using pictures, squiggles or letterlike forms
Meal		Labels an emotion	
Class Activity	Sorts a collection by color		Writes using pictures, squiggles or letterlike forms
Departure	Responds when another child initiates an interaction		
Transitions	Talks about people or objects in view	Labels an emotion	

## TIPS FOR IMPLEMENTING: PROVIDE THE RIGHT MATERIALS



	Mia	Addie	Carlos
Arrival			
Free Play	Talks about people or objects in view	<ul> <li>Invites another child to play</li> <li>Identifies the problem in a conflict with another child</li> </ul>	Writes using pictures, squiggles or letterlike forms
Circle		Labels an emotion	
Outside	Responds when another child initiates an interaction	<ul> <li>Invites another child to play</li> <li>Identifies the problem in a conflict with another child</li> </ul>	Writes using pictures, squiggles or letterlike forms
Meal		Labels an emotion	
Class Activity	Sorts a collection     by color		Writes using     pictures, squiggles     or letterlike forms
Departure	Responds when another child initiates an interaction		
Transitions	Talks about people or objects in view	Labels an emotion	



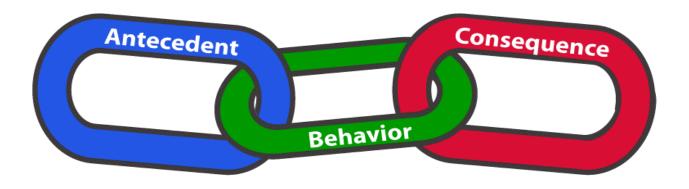


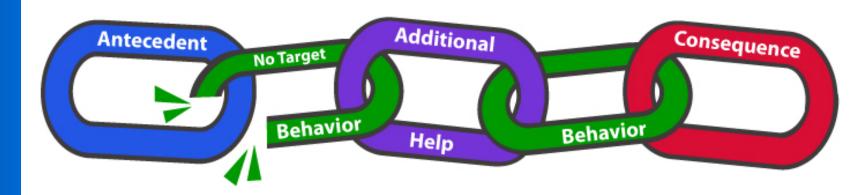
## How to Teach





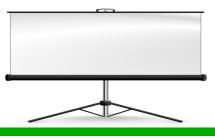
## **Complete Learning Trials**







## **Example of CLT**





Embedded Instruction for Early Learning
Tools for Teachers

Illustration of A – B – C



### Another Example of CLT



A - B - C in Everyday Activities



### Instructional Planning for CLTs

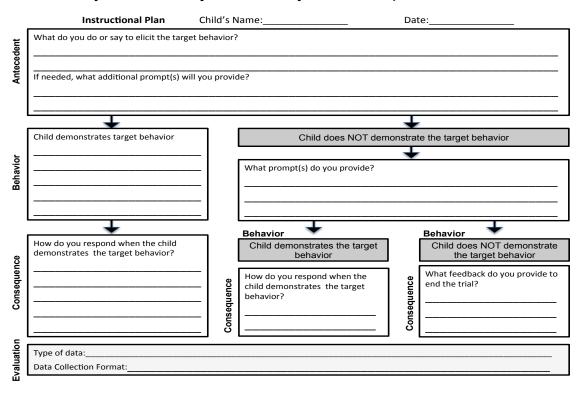


Child's name: Mia

Learning Target: Mia will ask a peer or adult for object or toy by tapping the peer or adult and using 1-2 words to ask for the item after a verbal or gestural prompt from an adult. Mia will ask for an item in 3 different activities each day for 4 out 5 days in a week.

Routines/Activities: Outside, Free Play, Lunch

Materials: Identify different objects and toys that Mia prefers



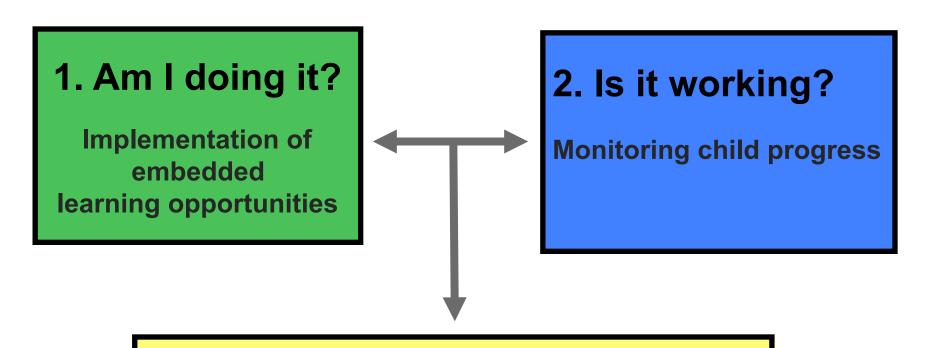
**Data collection:** Select a week to video Mia and count how many times she asks for an object or toy in 3 different activities



## How to Evaluate



### Three Key Questions for Evaluating Embedded Instruction



3. Do I need to make changes?

Continue or revise the learning target and instructional plan



## **Counting CLTs**





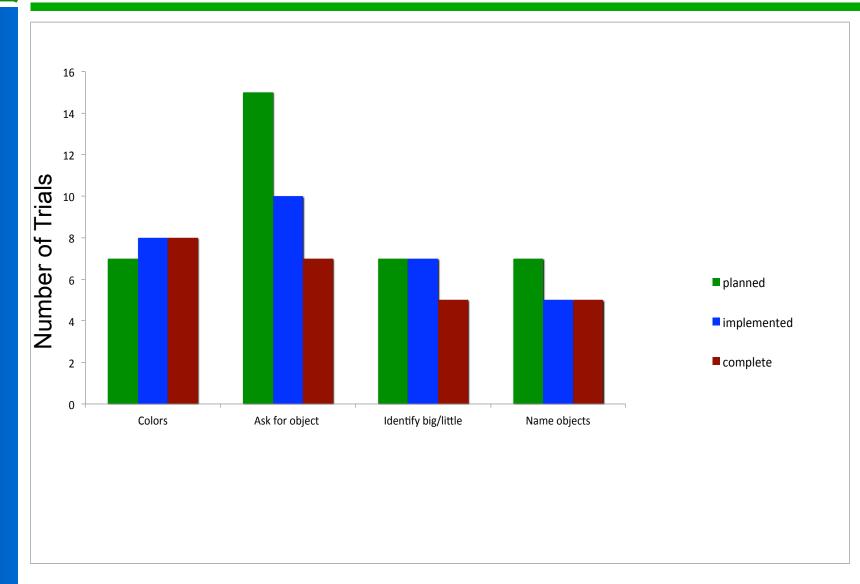


Counting Complete Learning Trials

Linking DRDP, Curricula, and Embedded Instruction



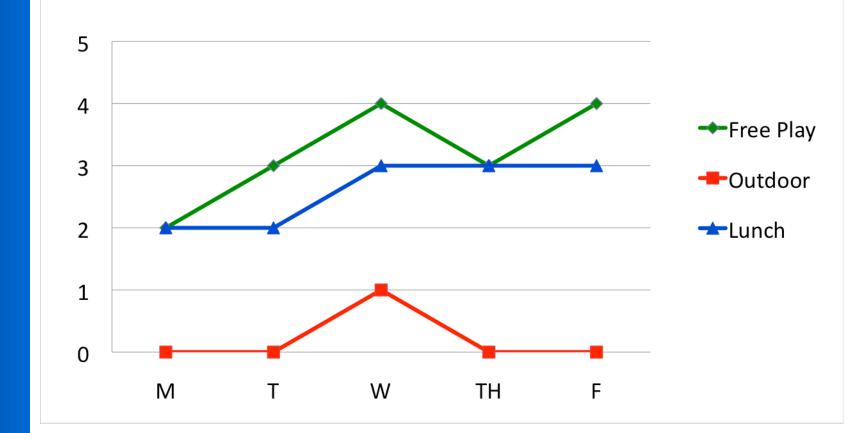
## Am I Doing it?





## Is it Working?

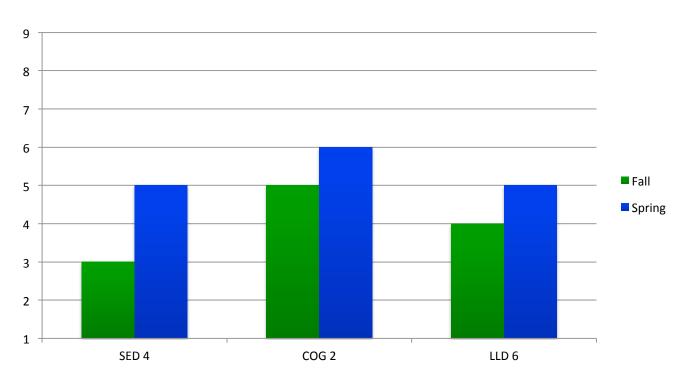
Mia will ask a peer or adult for object or toy by tapping the peer or adult and using 1-2 words to ask for the item after a verbal or gestural prompt from an adult. Mia will ask for 10 items across 3 different activities each day for 4 out 5 days in a week.





### Mia's DRDP 2015 Data

#### **DRDP 2015 – Fall and Spring Data**



Note. 1 = Responding Earlier, 2 = Responding Later, 3 = Exploring Earlier, 4 = Exploring Middle, 5 = Exploring Later, 6 = Building Earlier, 7 = Building Middle; 8 = Building Later, 9 = Integrating Earlier



# CA Embedded Instruction Pilot Project





## CA Embedded Instruction Pilot Project

- Funded by the California Department of Education Special Education Division
- Purpose:
  - Support preschool teachers to implement embedded instruction with fidelity in classrooms that enroll preschool children with IEPs
  - Support alignment of DRDP 2015, preschool foundations, and embedded instruction for preschool children with IEPs
- Pilot sites
  - LA Unified School District
  - Santa Clara County Office of Education
  - Fresno County Office of Education
- 8-9 teachers at each site and 3 "target" children in each teachers' classroom
- Workshops on 4 key components of embedded instruction followed by 16 weeks of practice-based coaching
- Pre-post evaluation design to examine impacts on teaching practices and child learning outcomes
- Began September 2015
- Presentation by Karen Krische next!

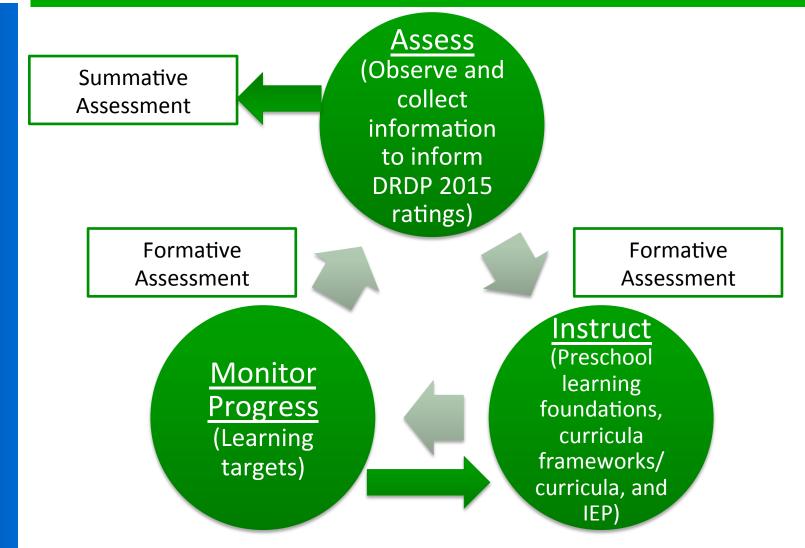


## Wrap-Up





## Linking....





## Key Components of Embedded Instruction: Further Reflection



#### What to Teach:

Priority Learning Targets



#### **How to Evaluate:**

Monitor Implementation and Child Progress

#### When to Teach:

Activities, Routines, and Transitions



#### How to Teach:

Complete Learning
Trials







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