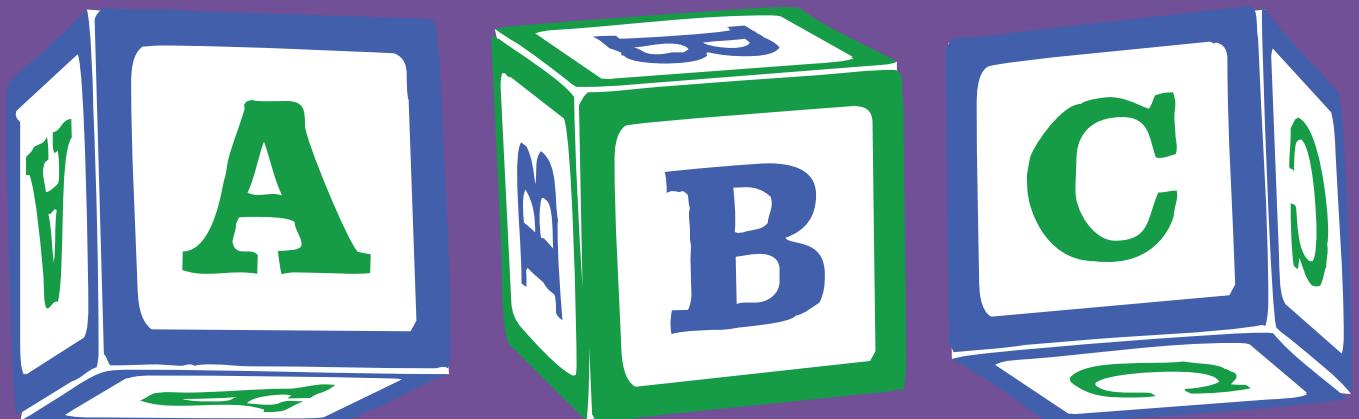




# Embedded Instruction for Early Learning

Tools for Teachers

## Module 3: How to Teach







# Embedded Instruction for Early Learning

## Module 3: How to Teach Workbook and Practice Guide Research Version 3.0

Produced by the “Impact of Professional Development on Preschool Teachers’ Use of Embedded Instruction Practices” Goal 3 study funded by the National Center for Special Education Research, Institute of Education Sciences (Project Number: R324A150076). The Principal Investigator and Co-Principal Investigators are Patricia Snyder, James Algina, and Mary McLean, University of Florida, and Mary Louise Hemmeter, Vanderbilt University. Brian Reichow, University of Florida, is an Investigator. The Project Coordinator is Crystal Bishop, University of Florida. Susan Sandall, Tara McLaughlin, and Larry Edelman contributed to a previous version of this workshop module, workbook, and practice guide

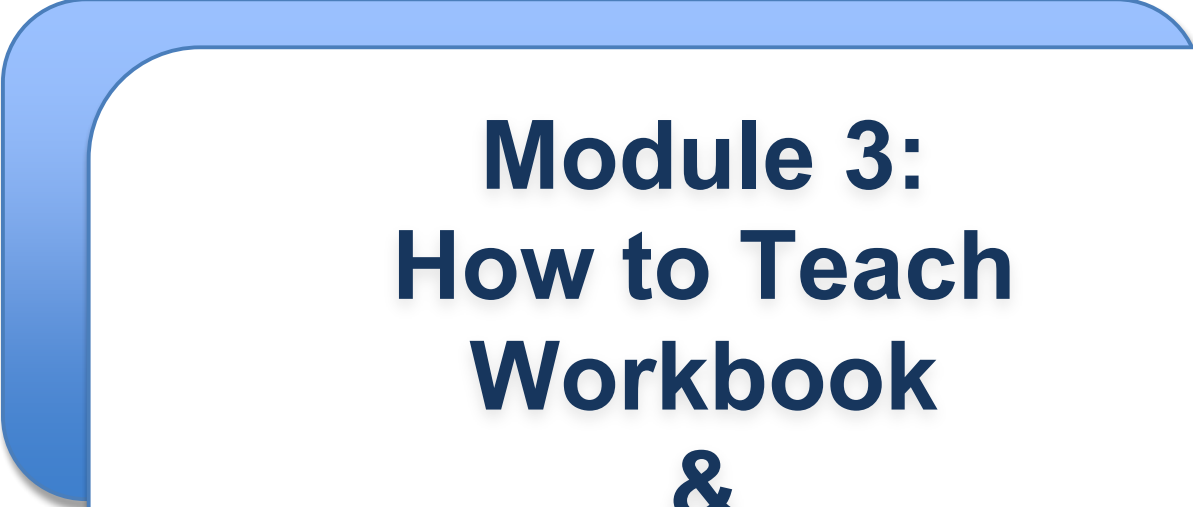
### Suggested citation:

Embedded Instruction for Early Learning Project. (2015) *Tools for teachers: Module 3: How to Teach* [Workbook and Practice Guide]. Unpublished professional development series. College of Education, University of Florida, Gainesville, FL.

For additional information or permissions contact: Patricia Snyder ([patriciasnyder@coe.ufl.edu](mailto:patriciasnyder@coe.ufl.edu)), or Crystal Bishop ([crowecd@coe.ufl.edu](mailto:crowecd@coe.ufl.edu)), Anita Zucker Center for Excellence in Early Childhood Studies, University of Florida, Gainesville, FL 32611.

Copyright © 2015 Embedded Instruction for Early Learning Project.  
All rights reserved. Do not copy or disseminate without permission.





**Module 3:  
How to Teach  
Workbook  
&  
Practice Guide**



Welcome to the third in a series of four workshops focused on embedded instruction for early learning. The workshops are organized as learning modules. This workshop is Module 3: How to Teach. The four learning modules are part of a comprehensive professional development “toolkit” known as *Tools for Teachers*.

The **Module 3 Workbook** is designed for you to use during the workshop. Follow along with the slides and activities. Write your notes and ideas directly into this booklet. After the workshop, review the material for a refresher on what you have learned. The Module 3 Workbook starts on page 9 of this booklet.

The **Module 3 Practice Guide** is designed for you to use back home in your classroom. The guide provides additional information and references related to the content of this workshop. Use the practice guide to learn more about embedded instruction, refresh your memory, or use the materials to help your team learn about embedded instruction. The Module 3 Practice Guide starts on page 69 of this booklet.





# Table of Contents

<b>Workbook</b> .....	<b>9</b>
<b>Practice Guide Introduction</b> .....	<b>69</b>
<b>Key Components of Embedded Instruction</b> .....	<b>71</b>
<b>How to Teach</b> .....	<b>73</b>
<b>How to Teach: Key Practices</b> .....	<b>75</b>
<b>Complete Learning Trials</b> .....	<b>76</b>
<b>Antecedents</b> .....	<b>78</b>
<b>Providing Additional Help (Prompts)</b> .....	<b>82</b>
<b>Consequences</b> .....	<b>83</b>
<b>Feedback</b> .....	<b>85</b>
<b>Putting the Pieces Together for Complete Learning Trials</b> .....	<b>86</b>
<b>Instructional Procedures</b> .....	<b>87</b>
<b>Instructional Procedures Reference Chart</b> .....	<b>92</b>
<b>Using the Instructional Plan to Design the Instructional Procedures for your Classroom</b> .....	<b>94</b>
<b>Wrap-Up</b> .....	<b>95</b>
<b>References</b> .....	<b>97</b>
<b>Appendix</b> .....	<b>99</b>
<b>Instructional Plan</b> .....	<b>100</b>
<b>Classroom Activity Matrix (Three Children)</b> .....	<b>101</b>
<b>Classroom Activity Matrix (Five Children)</b> .....	<b>102</b>





# Workbook



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

### Module 3: How to Teach



Institute of Education Sciences  
Project No. R32A150076

Version 3.0

1

Notes:



## Ground Rules

- Settle in and be comfortable
- Participate, ask, and reflect
- Parking lot
- Talk or text in the hallway
- Silence phones
- Get to know each other and enjoy...



2

Notes:



## Tools for Teachers Workshops

---

Module 1: Overview

Module 2: What to Teach & When to Teach

Module 3: How to Teach

Module 4: How to Evaluate

3

**Notes:**



## 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.

4

**Notes:**



## After completing Module 3, you will be able to:

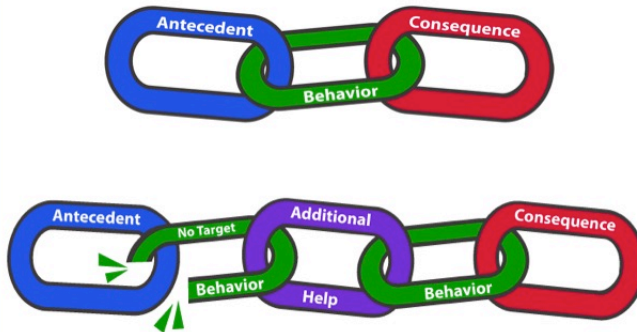
- Identify the instructional components of complete learning trials
- Develop instructional plans to guide the implementation of embedded instruction that includes the following components:
  - How to identify the target behavior
  - What to say or do to elicit the target behavior (antecedent)
  - What additional help (prompts) to provide if the child does NOT demonstrate the target behavior
  - How to respond when the target behavior occurs (consequence)
  - What feedback to provide to end the trial if child does not demonstrate the target behavior after additional help

5

**Notes:**



## Complete Learning Trials



6

**Notes:**



## Planning For Success: Developing Instructional Plans

- Describe the target behavior
- Plan for how you will implement each component of a complete learning trial
  - Antecedents
  - Additional Help
  - Consequences/Feedback
- Plan for collecting data on your implementation of complete learning trials
- The instructional plan is a tool for learning about the components of complete learning trials, but is not needed for every target

7

**Notes:**

**Notes:**

**Instructional Plan**      Child's Name: \_\_\_\_\_      Date: \_\_\_\_\_

**Antecedent**

What do you do or say to elicit the target behavior?

---

---

---

---

**Behavior**

Child demonstrates target behavior

---

---

---

---

↓

Child does NOT demonstrate the target behavior

↓

What additional help (prompts) do you provide?

---

---

---

---

**Consequence**

How do you respond when the child demonstrates the target behavior?

---

---

---

---

↓

**Behavior**

Child demonstrates the target behavior

↓

**Behavior**

Child does NOT demonstrate the target behavior

↓

**Consequence**

How do you respond when the child demonstrates the target behavior?

---

---

---

---

↓

**Consequence**

What feedback do you provide to end the trial?

---

---

---

---

**Evaluation**

Type of data: \_\_\_\_\_

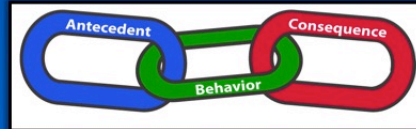
Data Collection Format: \_\_\_\_\_





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

### Complete Learning Trial Components



9

Notes:



### Today we will consider...

- Behaviors
- Antecedents
- Additional Help
- Consequences & Feedback Strategies

10

Notes:



## Davion's Story



11

**Notes:**

**Notes:**

# Davion's Story

Miss Lou has just met Davion, a new student who will join her early childhood inclusion class tomorrow. Miss Lou feels apprehensive because she knows Davion's needs will be great and, of course, they will be different from everyone else's needs.



The tiny 4-year-old boy with thick glasses has lived with his supportive grandparents since he was 2 years old. Davion was born at 24 weeks gestation, spent many months in the NICU, and has undergone multiple surgeries. Home-based early intervention therapy services ended when Davion turned 3, and he has gone without an intervention program for the past year, as his grandparents did not yet feel comfortable enrolling him in the school-based program for children over age 3. In addition to delays in general development, Davion has been diagnosed with mild cerebral palsy and vision impairment.

Due to vision impairment, Davion has worn glasses since 18 months of age. Davion holds objects close to look at them and seems to need bright lighting. Davion's current vision is 20/200-20/400. His glasses have a high minus (nearsighted) prescription. Objects look smaller through the lenses (all nearsighted prescriptions do this). When he takes his glasses off, his right eye turns in (esotropia); when he puts them on again his eyes straighten. Davion's eyesight affects him in a couple of ways, including trouble walking up and down stairs, difficulty walking across mixed terrains, trouble finding objects that are not in front of him, not liking the lights turned off, and walking into objects as he approaches them (depth perception problems). Furthermore, Davion has a limited vocabulary. Davion's school psychologist has reported that he does not appear to have the language or play skills required for interactive play but will attend to what others are doing and manipulate materials himself.

How can Miss Lou meet the needs of the 15 children already in her class and Davion's? Miss Lou's current class of 15 has seven other children who have IEPs to address special needs. Miss Lou feels comfortable that the group has gotten to a point in which all 15 children are benefitting from her program. As Miss Lou reviews Davion's initial IEP, she feels overwhelmed thinking about how to make sure Davion learns skills that are important for him in the midst of her busy classroom.

Miss Lou knows she will need to work carefully with the vision specialist, therapists, the paraprofessional in her classroom, and Davion's family to address his learning targets so that he can take advantage of the learning opportunities in her classroom.

To get a head start, Miss Lou has gone to her mentor teacher to get some ideas about how she can provide the systematic learning opportunities that Davion needs within the ongoing routines of her classroom. Miss Lou's mentor has shown her how to write developmentally appropriate; functional and aligned; generative; and observable and measurable learning targets and how to use an activity matrix to plan when to provide instructional opportunities across the day. Now she is anxious to begin implementing embedded instruction with Davion.

### Davion's Learning Targets

- Davion will initiate play with another child by asking to join in after a teacher model during center activities and outdoor play at least once a day for five consecutive days.
- When asked, Davion will correctly count out sets of 1-5 moveable objects (such as blocks, toy cars, crackers, etc) without help from an adult during free play, snack or clean-up time for 80% of the opportunities across a day for two consecutive days.
- Davion will use three word phrases when making requests to an adult or peer during circle time, free play or class activities with or without an adult prompt at least four times a day across two activities for four consecutive days.
- Davion will walk up and down stairs with decreasing adult assistance (i.e., from holding onto an adult and the hand railing to independently using the hand railing) during transitions between classroom activities around the school building on four opportunities provided each day for consecutive five days.



## Davion's Instructional Plan

Davion will initiate play with another child by asking to join in after a teacher model during center activities, free play, or outdoor play at least once a day for five consecutive days.

What is the target behavior?

What activities were selected for embedding trials on this target?

Why do we think these activities were selected?

What would we do or say to elicit this behavior?

If the child does NOT demonstrate the target behavior, what additional help (prompts) could we provide?

How would we respond when the behavior occurs?

If after additional help, the child still does NOT demonstrate the target behavior, what feedback could we provide to end the trial?

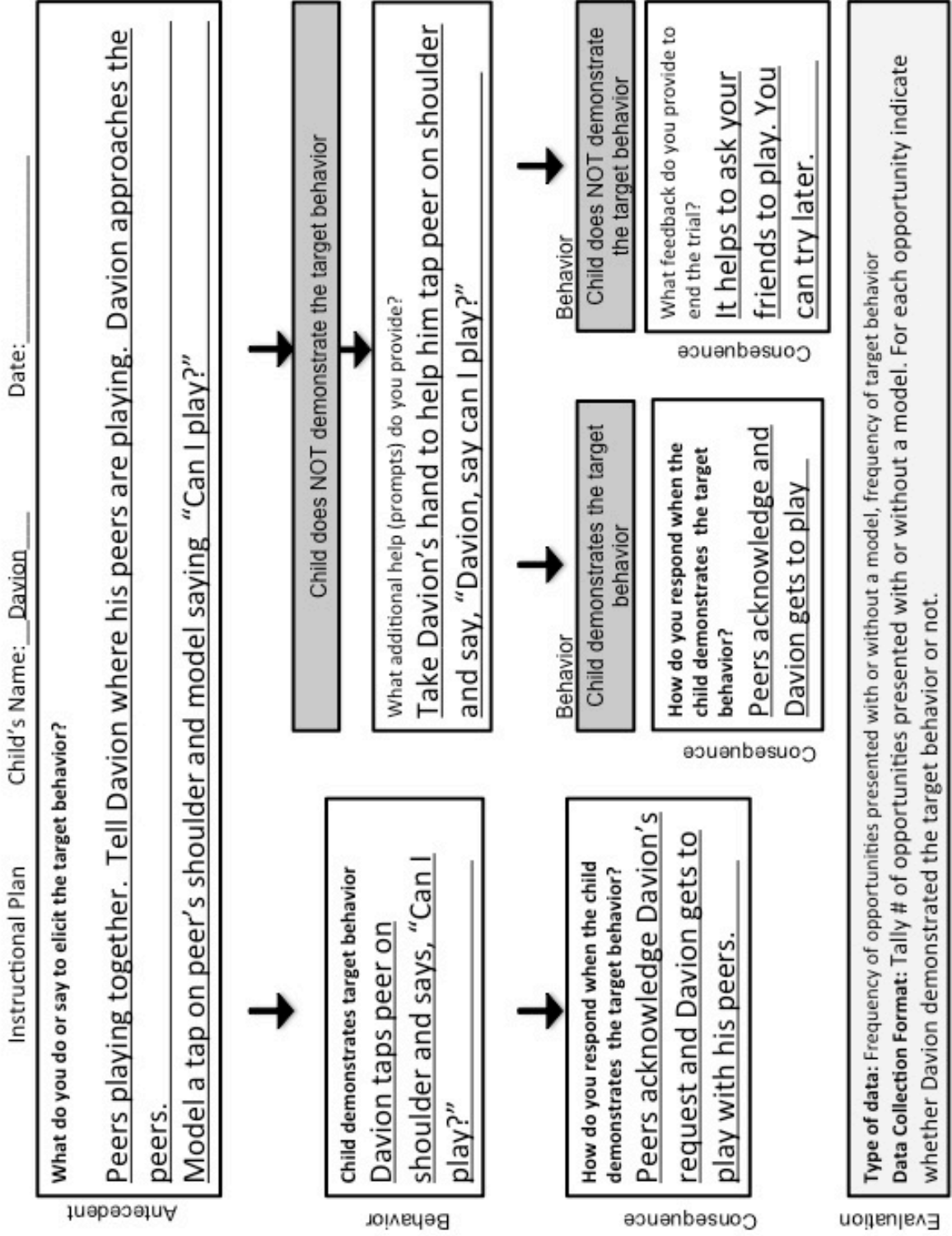
12

**Notes:**

**Notes:**

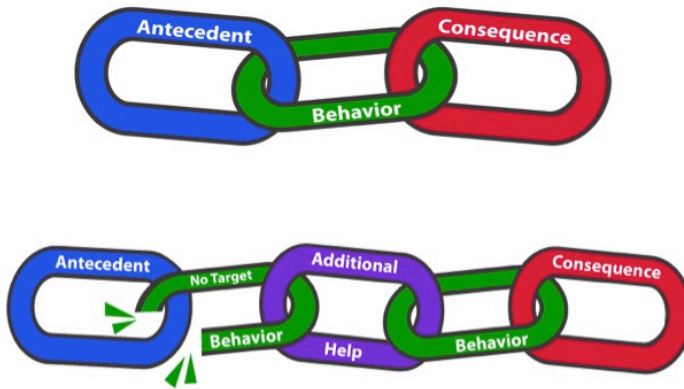
## ***Classroom Activity Matrix*** ***(Davion and Classmates)***

	Davion	Sam	Cindy
Arrival		Point to name--2	Greet peers--2
Circle	Count 3 objects--2	Point to name--1	
Centers	Ask peer to join in play--2 Count 3 objects--2	Point to shapes--5 Use 1 word to request more--5	Use both hands pour--2 Use 2 words to request preferred item--5
Outside	Ask peer to join in play--2	Jump over small objects--5	Greet peers--2
Snack	Use 3 word phrases for requests--3		Use both hands pour--5
Class Activity	Count 3 objects--2	Point to name--2 Point to shapes--3	Follow 2 step directions--3
Free Play	Ask peer to join in play--2	Use 1 word to request more--5	Use 2 words to request preferred item--5
Departure		Jump over small objects--2	Follow 2 step directions--1
Transitions	Walk up and down stairs-- 4		Follow 2 step directions--2





## Complete Learning Trials



13

Notes:

## Components of a Complete Learning Trial

What is the target behavior?

A

What do you say or do to elicit the behavior?

B

Did the target behavior occur following A?

Additional Help (Prompt):  
What do you do if the child does NOT demonstrate the target behavior?

C

How do you respond when the target behavior occurs?

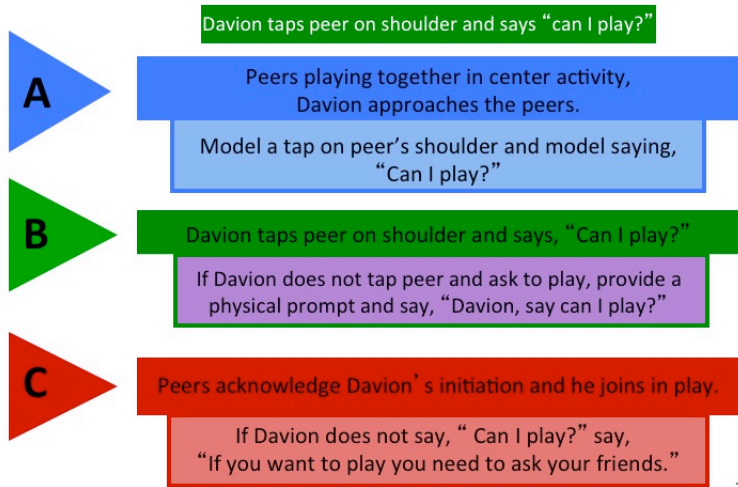
How do you end the trial if the target behavior does not occur, even with additional help?

14

Notes:



## Example CLT for Davion



15

Notes:

Notes:

Instructional Plan Child's Name: \_\_\_\_\_

Date: \_\_\_\_\_

Antecedent  
What do you do or say to elicit the target behavior?

Peers playing together. Tell Davion where his peers are playing. Davion approaches the peers.

Model a tap on peer's shoulder and model saying "Can I play?"

Behavior  
Child demonstrates target behavior

Davion taps peer on shoulder and says, "Can I play?"

Child does NOT demonstrate the target behavior

What additional help (prompts) do you provide?

Take Davion's hand to help him tap peer on shoulder and say, "Davion, say can I play?"

Consequence  
How do you respond when the child demonstrates the target behavior?

Peers acknowledge Davion's request and Davion gets to play with his peers.

Behavior  
Child demonstrates the target behavior

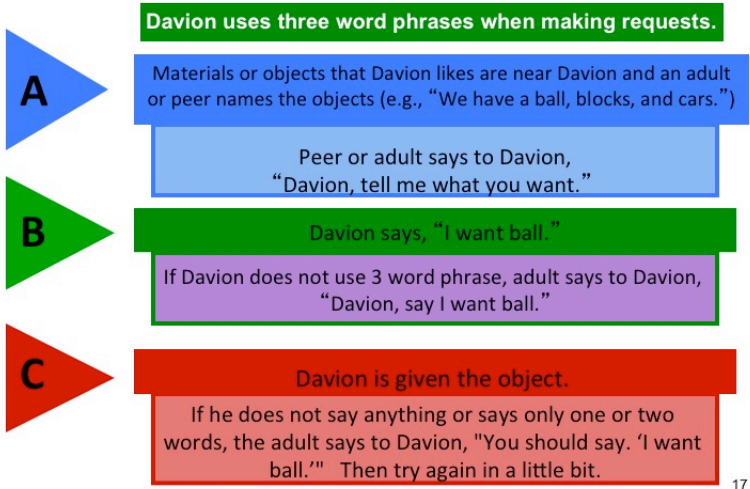
How do you respond when the child demonstrates the target behavior?  
Peers acknowledge and Davion gets to play

Behavior  
Child does NOT demonstrate the target behavior

What feedback do you provide to end the trial?  
"It helps to ask your friends to play. You can try later."

Evaluation  
Type of data: Frequency of opportunities presented with or without a model, frequency of target behavior  
Data Collection Format: Tally # of opportunities presented with or without a model. For each opportunity indicate whether Davion demonstrated the target behavior or not.

## Another Example CLT for Davion



17

Notes:

Notes:

Antecedent  
 What do you do or say to elicit the target behavior?

Materials or objects that Davion likes are near Davion and an adult or peer names the objects (e.g., "We have a ball, blocks, and cars.").  
 Peer or adult says to Davion, "Davion, tell me what you want."

Behavior  
 Child demonstrates target behavior  
 Davion uses 3-word phrases when making requests \_\_\_\_\_

Child does NOT demonstrate the target behavior

What additional help (prompts) do you provide?  
 Adult says to Davion, "Davion, say I want ball." \_\_\_\_\_

Consequence  
 How do you respond when the child demonstrates the target behavior?  
 Give Davion what was requested \_\_\_\_\_

Behavior  
 Child demonstrates the target behavior

Consequence  
 How do you respond when the child demonstrates the target behavior?  
 Give Davion what was requested \_\_\_\_\_

Behavior  
 Child does NOT demonstrate the target behavior

Consequence  
 What feedback do you provide to end the trial?  
 Adult says to Davion, "You should say. 'I want \_\_\_\_\_'"

Evaluation  
 Type of data: Frequency of opportunities presented with or without a model, frequency of target behavior  
 Data Collection Format: Tally # of opportunities presented with or without a model. For each opportunity indicate whether Davion demonstrated the target behavior or not.



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

Let's look at  
each component



19

**Notes:**



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

What is the target  
behavior?



20

**Notes:**

## Components of a Complete Learning Trial

What is the target behavior?

**Notes:**

21



## Let's look at some examples



22

**Notes:**



## A priority learning target for Davion

When asked, Davion will correctly count sets of 3 moveable objects (such as blocks, toy cars, crackers), without help from an adult, during free play, snack or clean-up time for 80% of the opportunities across a day for two consecutive days.

23

**Notes:**



## Priority Learning Target Behavior

When asked, Davion will correctly **count sets of 3 moveable objects** (such as blocks, toy cars, crackers), without help from an adult, during free play, snack or clean-up time for 80% of the opportunities across a day for two consecutive days.

24

**Notes:**

Instructional Plan

Child's Name: \_\_\_\_\_

Date: \_\_\_\_\_

Antecedent  
What do you do or say to elicit the target behavior?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Behavior  
Child demonstrates target behavior

**Davion says, "1-2-3" while moving each object**

Consequence  
How do you respond when the child demonstrates the target behavior?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Behavior  
Child demonstrates the target behavior

Consequence  
How do you respond when the child demonstrates the target behavior?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Child does NOT demonstrate the target behavior

What additional help (prompts) do you provide?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Behavior  
Child does NOT demonstrate the target behavior

Consequence  
What feedback do you provide to end the trial?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Evaluation  
Type of data: \_\_\_\_\_

Data Collection Format: \_\_\_\_\_



**Instructional Plan**    Child's Name: \_\_\_\_\_    Date: \_\_\_\_\_

**Antecedent**  
 What do you do or say to elicit the target behavior?  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Behavior**

Child demonstrates target behavior _____ _____ _____	Child does NOT demonstrate the target behavior
	What additional help (prompts) do you provide? _____ _____

**Consequence**

How do you respond when the child demonstrates the target behavior? _____ _____ _____	<b>Behavior</b> Child demonstrates the target behavior	<b>Behavior</b> Child does NOT demonstrate the target behavior
	How do you respond when the child demonstrates the target behavior? _____ _____	What feedback do you provide to end the trial? _____ _____

**Evaluation**  
 Type of data: \_\_\_\_\_  
 Data Collection Format: \_\_\_\_\_

**Notes:**



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

What do you say  
 or do to elicit the  
 target behavior?

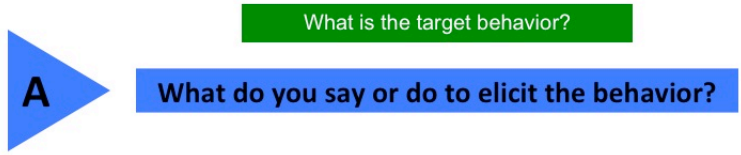
Antecedents



27

**Notes:**

## Components of a Complete Learning Trial



Notes:

28



## What are Antecedents?

Antecedents are objects, events, or behaviors that set the occasion for the occurrence of the targeted behavior

29

Notes:



## Types of Antecedents

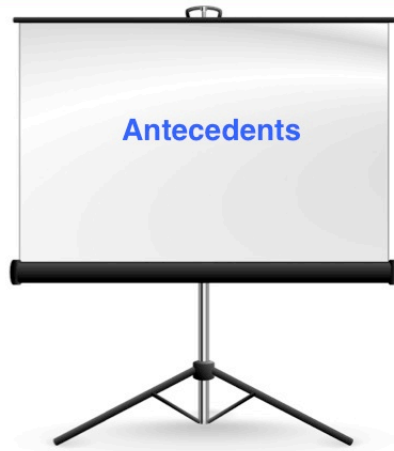
- A direction
  - Verbal (comments, directives or questions)
  - Non-verbal (communicative gestures or pictures)
- Materials or objects
- A situation or event
- A previous behavior in a chain or steps in a routine

30

**Notes:**



## Let's look at some examples



31

**Notes:**

**Instructional Plan** Child's Name: \_\_\_\_\_ Date: \_\_\_\_\_

What do you do or say to elicit the target behavior?

**Give Davion 3 objects and say "how many?" (Objects and the background are high contrast to support vision)**

**Antecedent**

Child demonstrates target behavior

**Davion says, "1-2-3" while moving each object**

**Behavior**

Child does NOT demonstrate the target behavior

What additional help (prompts) do you provide?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

How do you respond when the child demonstrates the target behavior?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Consequence**

**Behavior**

Child demonstrates the target behavior

How do you respond when the child demonstrates the target behavior?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Consequence**

**Behavior**

Child does NOT demonstrate the target behavior

What feedback do you provide to end the trial?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Consequence**

Type of data: \_\_\_\_\_

Data Collection Format: \_\_\_\_\_

**Evaluation**

**Instructional Plan** Child's Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Antecedent**  
 What do you do or say to elicit the target behavior?  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Behavior**

Child demonstrates target behavior _____ _____ _____	Child does NOT demonstrate the target behavior _____ What additional help (prompts) do you provide? _____ _____
---------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------

**Consequence**

How do you respond when the child demonstrates the target behavior? _____ _____ _____	<b>Behavior</b> Child demonstrates the target behavior _____ <b>Consequence</b> How do you respond when the child demonstrates the target behavior? _____ _____	<b>Behavior</b> Child does NOT demonstrate the target behavior _____ <b>Consequence</b> What feedback do you provide to end the trial? _____ _____
------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------

**Evaluation**  
 Type of data: \_\_\_\_\_  
 Data Collection Format: \_\_\_\_\_

**Notes:**



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

**Prompts**  
*In addition to natural cues*

34

**Notes:**

## Components of a Complete Learning Trial

A

What is the target behavior?

What do you say or do to elicit the behavior?

35

Notes:



## What is a prompt?

A **prompt** is something done in addition to the natural cue to increase the likelihood that the child will produce the target behavior....

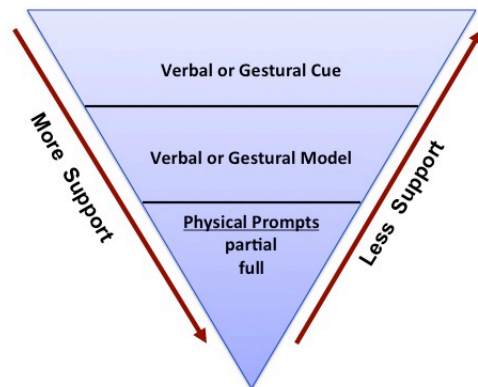
Prompts help to elicit a behavior

36

Notes:



## Levels of Prompts

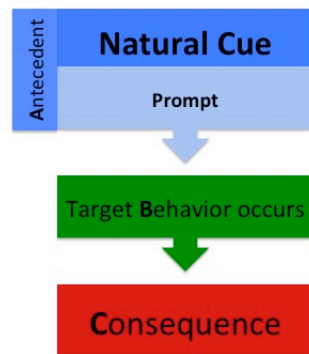


37

Notes:



## Antecedents



38

Notes:



Let's look at some examples



39

Notes:

### Example of an antecedent that includes an adult prompt for Davion

Davion uses 3-word phrases to make requests.

**A =** Children are taking turns stirring pudding;  
Teacher asks "who wants to go next?"  
Teacher says to Davion, "Davion say, I want to stir."

**B =** Davion says, "I want stir."

**C =** Give Davion bowl and spoon for stirring pudding.

40

Notes:



What do you do or say to elicit the target behavior?

Give Davion 3 objects and say "how many?" (Objects and the background are high contrast to support vision)

Point to and tap each item before Davion points to it

Child demonstrates target behavior

Davion says, "1-2-3" while moving each object

Child does NOT demonstrate the target behavior

What additional help (prompts) do you provide?

How do you respond when the child demonstrates the target behavior?

Behavior  
Child demonstrates the target behavior

Behavior  
Child does NOT demonstrate the target behavior

Consequence  
How do you respond when the child demonstrates the target behavior?

Consequence  
What feedback do you provide to end the trial?

Type of data:

Data Collection Format:





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

### The Importance of Fading Prompts



44

Notes:



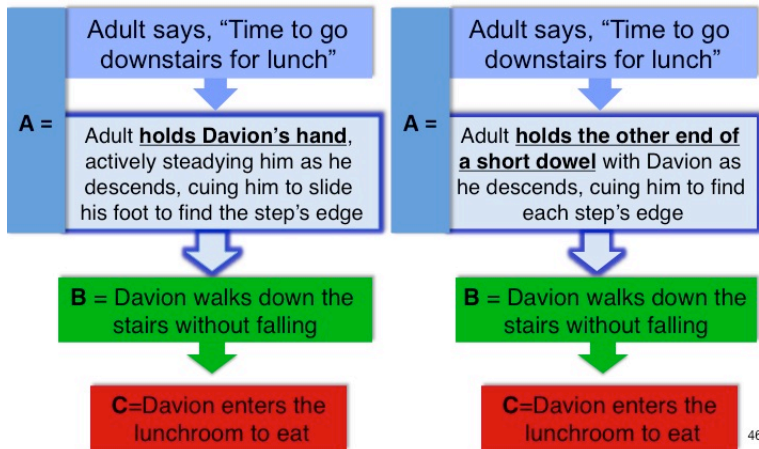
### Fading Prompts

Remember to “fade” any prompts that you provide by gradually diminishing prompts over time until the behavior occurs independently *in response to the natural cue (A)*

45

Notes:

## Fading Prompts for Davion



Notes:



## How will you fade the prompt?

1. Think of the learning target you are working on with a child—What type of prompt is usually required?
2. How could you fade the use of that prompt over time so that the child is producing the behavior independently?

47

Notes:



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

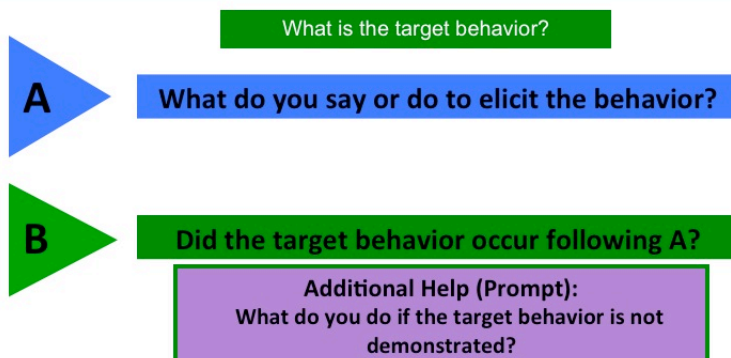
Additional Help:  
What do you do if the  
child does NOT  
demonstrate the target  
behavior?



48

Notes:

### Components of a Complete Learning Trial



49

Notes:



## Providing Additional Help (Prompts)

If the child does not demonstrate the target behavior, you might:

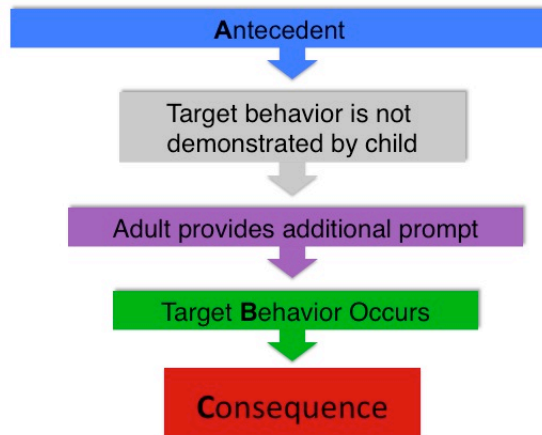
- Repeat the prompt (if a prompt was provided as part of the antecedent)
- Provide a different or more supportive prompt that will help the child perform the target behavior
- Provide a prompt in which you guide the child through the target behavior (physical prompt)

50

**Notes:**



## Providing a Prompt: Additional Help



51

**Notes:**



Let's look at some examples



52

Notes:

### Example of using a prompt as part of additional help for Davion

Walk up and down stairs holding onto the hand railing

A = Say, "it's time to go outside we are going to walk down the stairs"

Davion grabs the teachers hand and starts to step down

Say, "You hold onto the hand railing" and place Davion's hand on the hand railing

B = Davion holds the hand railing while he goes down the stairs

C = Say, "You walked down the stairs by yourself, good job, now we can play outside"

53

Notes:

Instructional Plan

Child's Name: \_\_\_\_\_

Date: \_\_\_\_\_

Antecedent  
What do you do or say to elicit the target behavior?

**Give Davion 3 objects and say "how many?" (Objects and the background are high contrast to support vision)**

**Point to and tap each item before Davion points to it**

Behavior  
Child demonstrates target behavior

**Davion says, "1-2-3" while moving each object**

Consequence

How do you respond when the child demonstrates the target behavior?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Behavior

Child demonstrates the target behavior

How do you respond when the child demonstrates the target behavior?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Behavior

Child does NOT demonstrate the target behavior

What feedback do you provide to end the trial?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

What additional help (prompts) do you provide?

**Take Davion's hand and help him point to each object one at a time. If Davion still does not count, say "say 1, say 2, ..."**

Evaluation

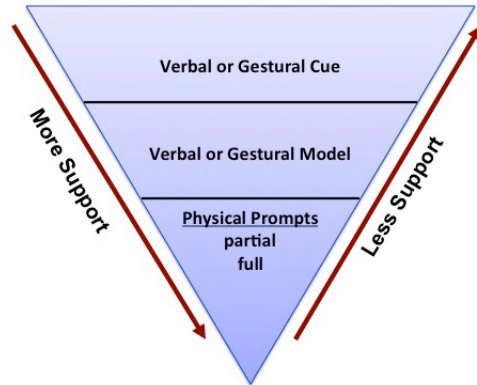
Type of data: \_\_\_\_\_

Data Collection Format: \_\_\_\_\_





# Remember Levels of Prompts



55

Notes:

**Instructional Plan** Child's Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Antecedent**  
What do you do or say to elicit the target behavior?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Behavior**

Child demonstrates target behavior _____ _____	Child does NOT demonstrate the target behavior What additional help (prompts) do you provide? _____ _____
------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------

**Consequence**

How do you respond when the child demonstrates the target behavior? _____ _____	<table border="1"> <tr> <td><b>Behavior</b> Child demonstrates the target behavior</td> <td><b>Behavior</b> Child does NOT demonstrate the target behavior</td> </tr> <tr> <td><b>Consequence</b> How do you respond when the child demonstrates the target behavior? _____ _____</td> <td><b>Consequence</b> What feedback do you provide to end the trial? _____ _____</td> </tr> </table>	<b>Behavior</b> Child demonstrates the target behavior	<b>Behavior</b> Child does NOT demonstrate the target behavior	<b>Consequence</b> How do you respond when the child demonstrates the target behavior? _____ _____	<b>Consequence</b> What feedback do you provide to end the trial? _____ _____
<b>Behavior</b> Child demonstrates the target behavior	<b>Behavior</b> Child does NOT demonstrate the target behavior				
<b>Consequence</b> How do you respond when the child demonstrates the target behavior? _____ _____	<b>Consequence</b> What feedback do you provide to end the trial? _____ _____				

**Evaluation**  
Type of data: \_\_\_\_\_  
Data Collection Format: \_\_\_\_\_

Notes:



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

What do you do  
when the target  
behavior occurs?

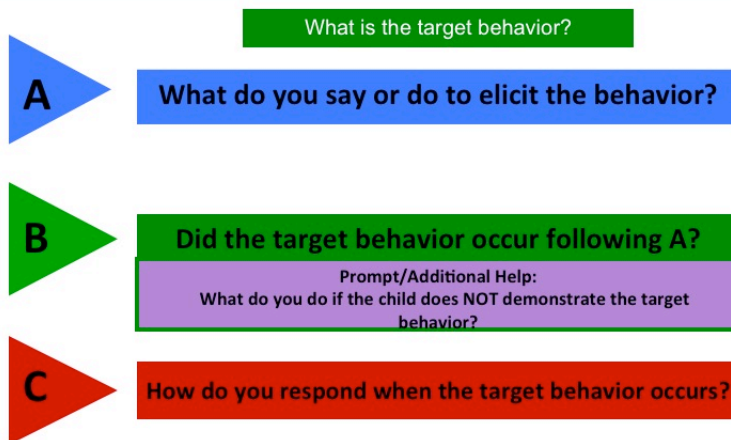
Consequences



57

Notes:

### Components of a Complete Learning Trial



58

Notes:



## How Consequences Work

	Positive Consequence	Negative Consequence
Presented	Increase in behavior	Decrease in behavior
Removed	Decrease in behavior	Increase in behavior

59

Notes:



## What are Positive Consequences?

A **positive consequence** is something that is presented in the child's environment *immediately* following his/her behavior that makes it more likely that the child will produce that same behavior again in the presence of the same antecedent

60

Notes:



## Types of Consequences

Naturally occurring consequences

Planned consequences

61

**Notes:**



## Naturally Occurring Consequences

- Access to desired toys, materials, activities
- Continues a social interaction
- Receives acknowledgement
- Understands learning or mastering (i.e., *I'm doing it!*)

62

**Notes:**



## Planned Consequences

---

- Token, food, preferred object, or activity
- Feedback
  - praise from a peer or adult
  - descriptive feedback
- It is important to fade planned consequences

63

**Notes:**



## Positive Consequences

---

- Consider either naturally occurring or planned consequences
- Consider how soon and how frequently to use
- Select consequences to fit the child and the learning target

64

**Notes:**



Let's look at some examples



65

**Notes:**

**Notes:**

Instructional Plan

Child's Name: \_\_\_\_\_

Date: \_\_\_\_\_

What do you do or say to elicit the target behavior?

**Give Davion 3 objects and say "how many?" (Objects and the background are high contrast to support vision)  
Point to and tap each item before Davion points to it**

Antecedent

Child demonstrates target behavior

**Davion says, "1-2-3" while moving each object**

Behavior

Child does NOT demonstrate the target behavior

What additional help (prompts) do you provide?

**Take Davion's hand and help him point to each object one at a time. If Davion still does not count, say "say 1, say 2, ..."**

Behavior

Child demonstrates the target behavior

How do you respond when the child demonstrates the target behavior?  
**Say "Great job, you counted three objects, 1,2,3," (point to each again)**

Consequence

Behavior

Child does NOT demonstrate the target behavior

What feedback do you provide to end the trial?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Consequence

How do you respond when the child demonstrates the target behavior?

**Say "Great job, you counted three objects, 1,2,3," (point to each again)**

Consequence

Type of data: \_\_\_\_\_

Data Collection Format: \_\_\_\_\_

Evaluation

**Instructional Plan**    Child's Name: \_\_\_\_\_    Date: \_\_\_\_\_

**Antecedent**  
 What do you do or say to elicit the target behavior?  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

↓

<p><b>Behavior</b>          Child demonstrates target behavior          _____          _____          _____</p>	<p style="text-align: center; background-color: #cccccc;">Child does NOT demonstrate the target behavior</p> <p style="text-align: center;">↓</p> <p>What additional help (prompts) do you provide?          _____          _____</p>
---------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

↓

<p><b>Consequence</b>          How do you respond when the child demonstrates the target behavior?          _____          _____          _____</p>	<p style="text-align: center; background-color: #cccccc;"><b>Behavior</b>          Child demonstrates the target behavior</p> <p style="text-align: center;">↓</p> <p><b>Consequence</b>          How do you respond when the child demonstrates the target behavior?          _____          _____</p>	<p style="text-align: center; background-color: #cccccc;"><b>Behavior</b>          Child does NOT demonstrate the target behavior</p> <p style="text-align: center;">↓</p> <p><b>Consequence</b>          What feedback do you provide to end the trial?          _____          _____</p>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------


**Evaluation**  
 Type of data: \_\_\_\_\_  
 Data Collection Format: \_\_\_\_\_

**Notes:**



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

Ending the Trial  
 if the Behavior  
 Does Not Occur

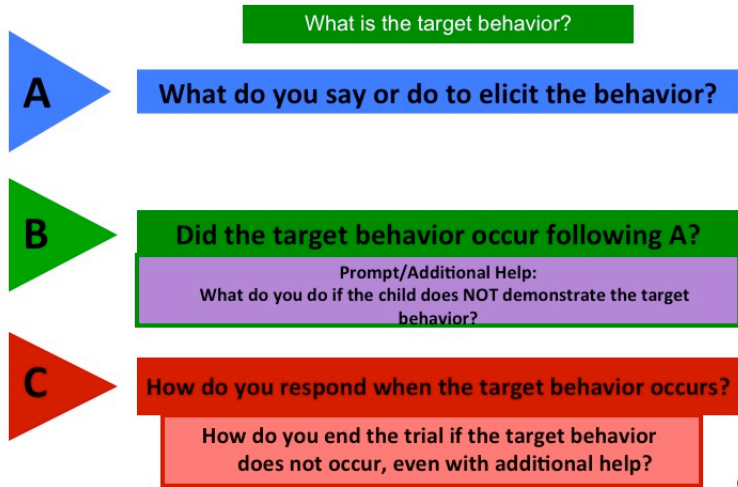


68

**Notes:**



## Components of a Complete Learning Trial



Notes:



## Two Possibilities

- 1) Target behavior occurs and consequence is provided: learning trial is complete
  - 2) Target behavior does not occur – even with additional help (prompts)
- 70

Notes:



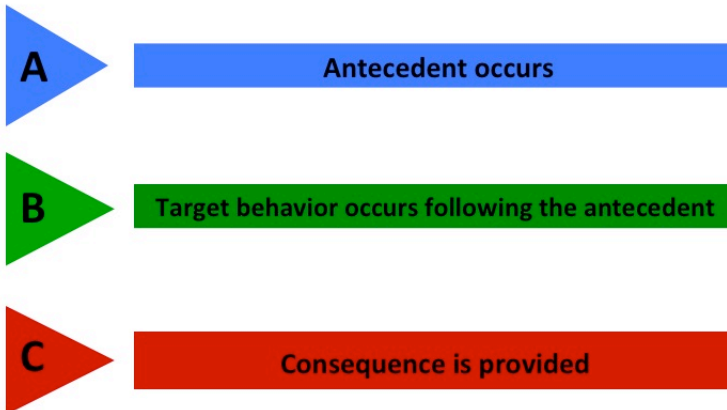
## Complete Learning Trial

A complete learning trial  
can occur in various ways

71

Notes:

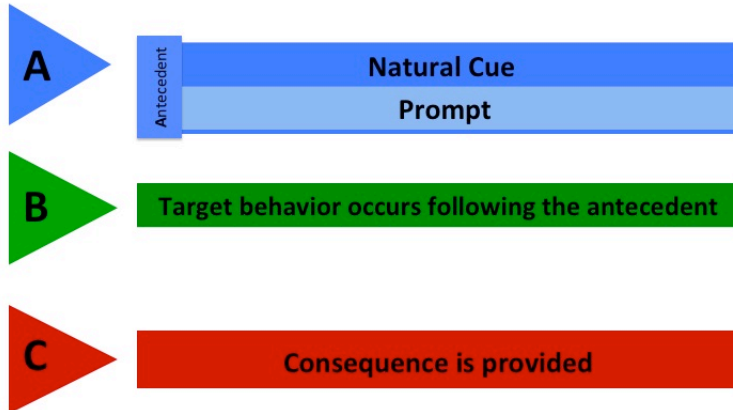
## Example of a Complete Learning Trial



72

Notes:

## Example of a Complete Learning Trial

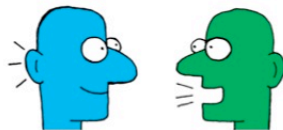
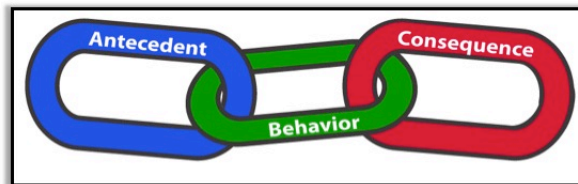


73

Notes:



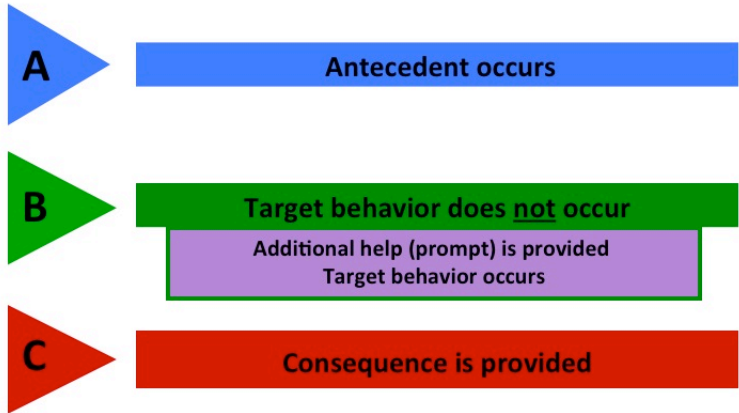
## Easy as A-B-C



74

Notes:

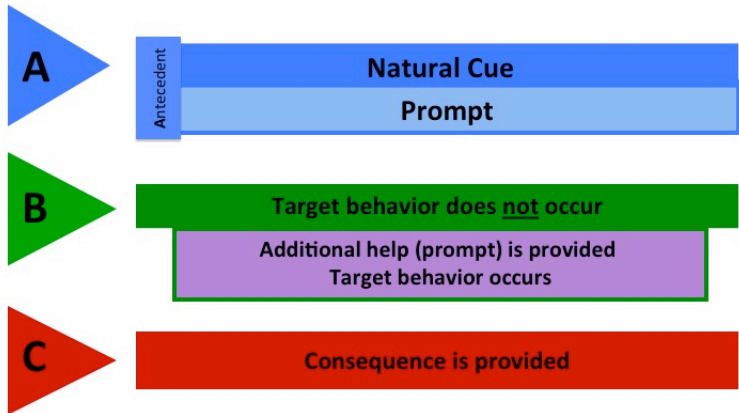
**Example of a Complete Learning Trial**



75

**Notes:**

**Example of a Complete Learning Trial**

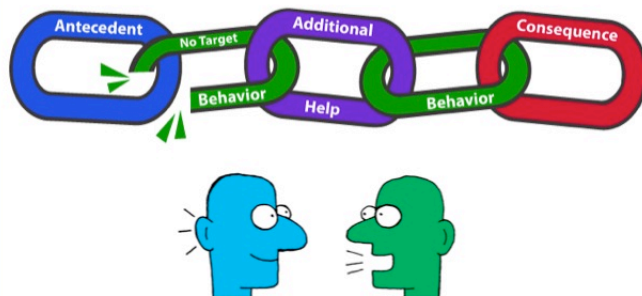


76

**Notes:**



## A-B-C with additional help



77

Notes:



## Learning Trial in Which the Target Behavior does not Occur

If the child does **not** perform the target behavior even with additional help

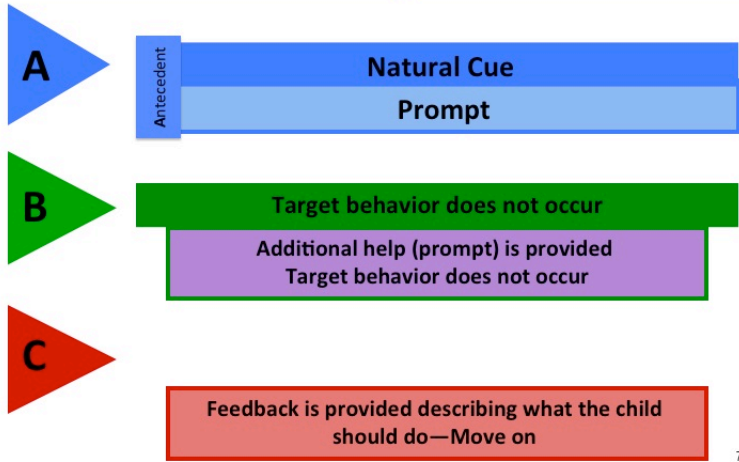
The adult decides to end the trial

The trial should end with **feedback**

78

Notes:

**Example of a Correct (But Incomplete) Learning Trial**

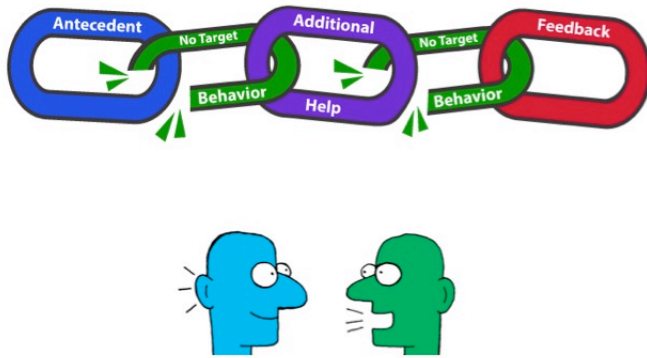


79

**Notes:**



**Target Behavior Does NOT Occur**



80

**Notes:**

**Instructional Plan**

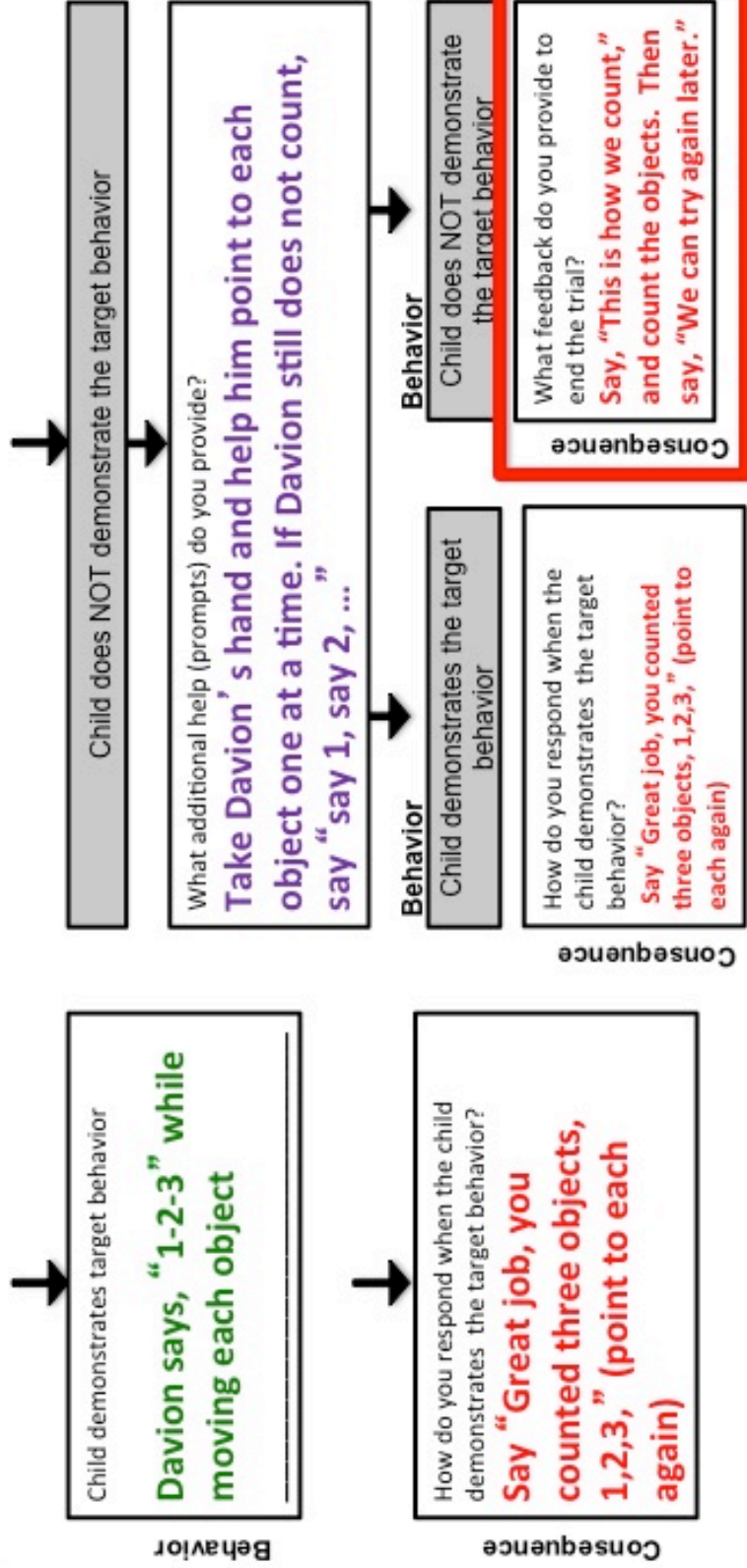
Child's Name: \_\_\_\_\_

Date: \_\_\_\_\_

What do you do or say to elicit the target behavior?

**Give Davion 3 objects and say "how many?" (Objects and the background are high contrast to support vision)**  
**Point to and tap each item before Davion points to it**

Antecedent



**Evaluation**

Type of data: \_\_\_\_\_

Data Collection Format: \_\_\_\_\_

**Instructional Plan**    Child's Name: \_\_\_\_\_    Date: \_\_\_\_\_

**Antecedent**  
 What do you do or say to elicit the target behavior?  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

↓

<p><b>Behavior</b>          Child demonstrates target behavior          _____          _____          _____</p>	<p style="background-color: #cccccc; text-align: center;">Child does NOT demonstrate the target behavior</p> <p style="text-align: center;">↓</p> <p>What additional help (prompts) do you provide?          _____          _____</p>
---------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

↓

<p><b>Consequence</b>          How do you respond when the child demonstrates the target behavior?          _____          _____          _____</p>	<p style="background-color: #cccccc; text-align: center;"><b>Behavior</b>          Child demonstrates the target behavior</p> <p style="text-align: center;">↓</p> <p><b>Consequence</b>          How do you respond when the child demonstrates the target behavior?          _____          _____</p>	<p style="background-color: #cccccc; text-align: center;"><b>Behavior</b>          Child does NOT demonstrate the target behavior</p> <p style="text-align: center;">↓</p> <p style="border: 2px solid red;"><b>Consequence</b>          What feedback do you provide to end the trial?          _____          _____</p>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

**Evaluation**  
 Type of data: \_\_\_\_\_  
 Data Collection Format: \_\_\_\_\_

**Notes:**



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

Building Complete  
 Learning Trials for  
 the Children you  
 Teach



83

**Notes:**





## Application Activity



Notes:

### The Class Activity Matrix

- Develop a **class activity matrix** that displays at least two targets for each child
- In each box of the matrix:
  - Identify the learning target(s) you plan to teach
  - Fill in the number of complete learning trials you estimate could be implemented

84

## Class Activity Matrix

	Child 1	Child 2	Child 3
Arrival	•Request Help (X2)		
Free Play	•Target behavior •Number of trials		
Circle			
Outside			
Snack			
Class Activity			
Departure			
Transitions			

85

Notes:

# ***Classroom Activity Matrix***

***(Three Children)***



## Application Activity



### The Instructional Plan

- Hold on to the instructional plan you created throughout today's workshop
- Select one learning target for each of the other two children in your classroom
- Complete two more Instructional Planning Sheets, one for each of the learning targets you have identified
- When you are finished you will have 3 complete instructional plans for 3 different children

86

Notes:



## Embedded Instruction for Early Learning

*Tools for Teachers*

How to Include  
Classroom Teaching  
Assistants  
in Delivering  
Embedded Instruction



87

Notes:



## Ideas for Including Others in Delivering Embedded Instruction

- Share selected materials from embedded instruction workshops with your assistant
- Watch a classroom video together and watch for embedded instruction examples
- Ask your assistant to collect data as you deliver embedded instruction
- Role play delivering embedded instruction
- Post an Activity Matrix for one activity and target behavior for your assistant to follow

88

**Notes:**



## Review and Wrap-Up

Today, you have learned how to develop instructional plans to guide the implementation of embedded instruction that includes the following components:

- How to identify the target behavior
- What to say or do to elicit the target behavior
  - If needed, what prompts to add to elicit
- How to respond when the target behavior occurs (consequence)
- What prompts (additional help) to provide if the child does NOT demonstrate the target behavior
  - What feedback to provide to end the trial if child still does not demonstrate the target behavior

89

**Notes:**



## Before next time...



- Video tape yourself implementing your instructional plan with at least one target child in your classroom
- Sharing your video will be voluntary, but we believe it is a valuable opportunity for reflection and to gain insight from our Embedded Instruction for Early Learning community
- Learning trials that are not complete can still be used as a learning opportunity

90

Notes:



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

***Thank you!***

See you at Module 4  
How to Evaluate!

91

Notes:





# Practice Guide Introduction

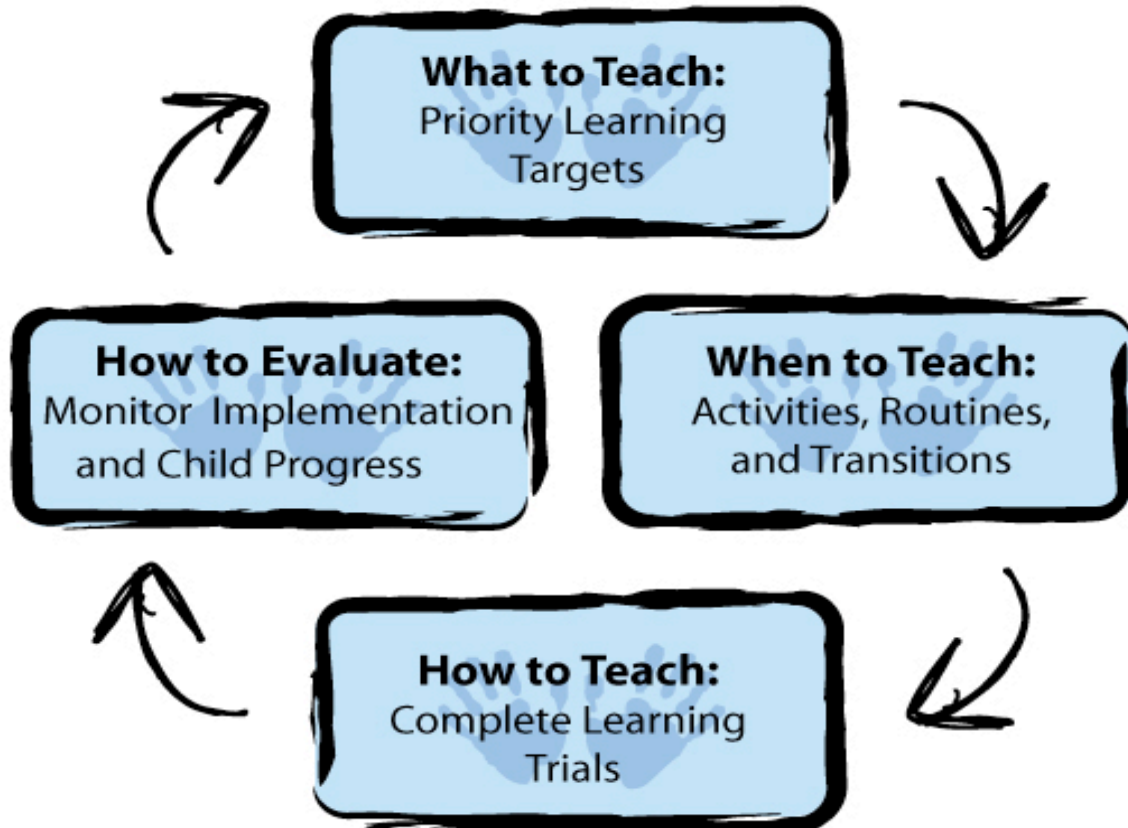




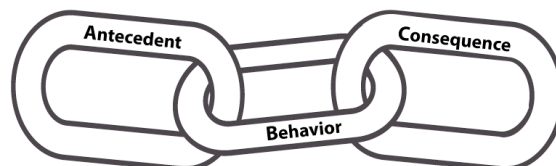
# Key Components of Embedded Instruction

Embedded instruction is an approach to instruction that promotes child engagement and learning in everyday activities, routines, and transitions. This is accomplished by identifying *times* and *activities* when *instructional procedures* for teaching a child's priority learning targets are *implemented* in *ongoing [naturally occurring] activities, routines, and transitions*.

Embedded Instruction focuses on:



**This guide will focus on 'How to Teach'.** The key element of the How to Teach in embedded instruction is the instructional procedures. Instructional procedures are used to create complete learning trials (ABC sequences).



This guide will help you identify and design the instructional procedures and elements of a complete learning trial that can be used as part of your daily instructional practice.





# How to Teach

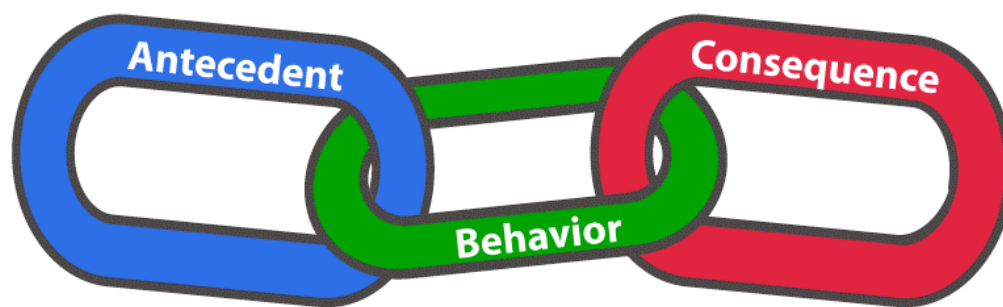


## How to Teach: Key Practices

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.

# Complete Learning Trials

Complete learning trials are used to embed intentional teaching into naturally occurring activities and routines (Barton, Bishop & Snyder, 2014). A basic complete learning trial occurs when there is a “complete” [or linked] A-B-C sequence.



One way a complete learning trial can occur is when a logically occurring or planned antecedent results in a behavior that leads to a logically occurring or planned consequence.

By logically occurring we mean something that occurs logically in the child's environment.

By planned, we mean something that the teacher or other adult has done to encourage a behavior that would not otherwise have occurred.

By **A**ntecedent, we mean something that sets the occasion for a child's behavior.

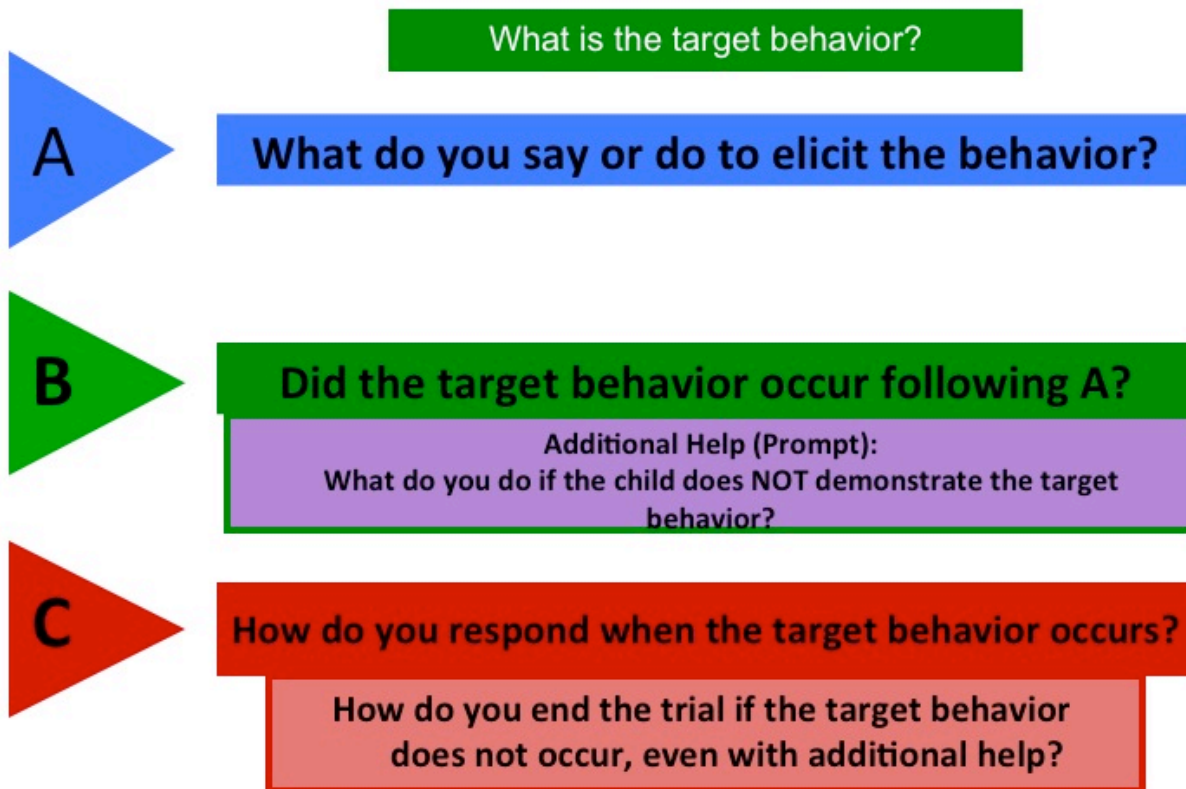
By **B**ehavior, we mean something the child does following the antecedent.

By **C**onsequence, we mean something that happens in the child's environment immediately following his/her behavior.

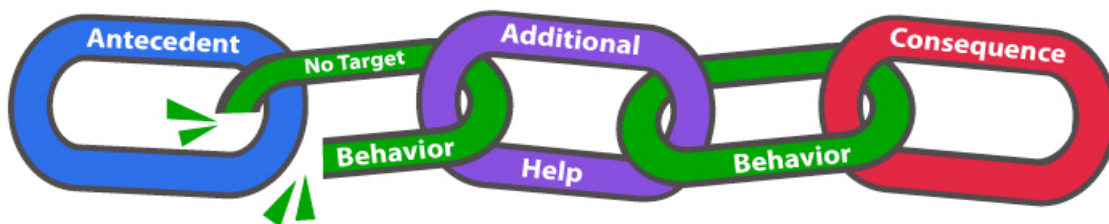
We can use complete learning trials to provide targeted, intentional, and systematic instruction on a child's priority learning targets in the on-going activities, routines, and transitions of preschool classrooms.

A teacher might provide assistance (prompts) or provide additional help (correction procedures) to make sure that each trial is a complete learning trial.

## Components of a Complete Learning Trial



### Complete Learning Trial with Additional Help



On the following pages we will look closer at the parts of complete learning trials:

- Antecedents
- Prompts
- Correction Procedures
- Consequences
- Feedback

# Antecedents

Antecedents are environmental objects, events, or behaviors of people that set the occasion for the targeted behavior. Antecedents are 'cues' for the child, indicating which behaviors are appropriate or desired at particular times or in particular settings.

Antecedents signal to the child  
that a particular behavior should be emitted  
and is likely to result in a desired consequence.

The antecedent is something that lets children know they should perform the behavior being targeted. The antecedent begins a trial for the adult and child. Antecedents always include **natural cues** to elicit the target behavior. Antecedents *might* include a **natural cue plus a prompt(s)** to elicit the target behavior.

## Natural Cues

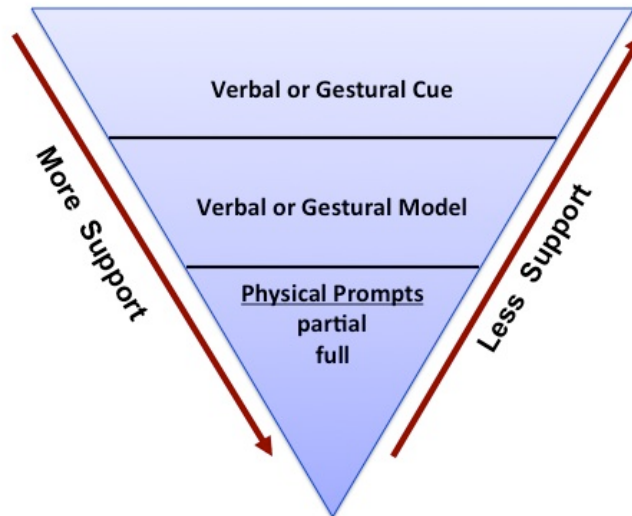
Natural cues are antecedents that might occur in the natural environment. Examples of natural cues include:

1. A direction (from either adults or other children)
  - **Verbal behaviors** include questions, directives, instructions, requests, comments and verbal models.
  - **Non-verbal behaviors** include visual or gestural models or providing an expectant look in context, as used in time delay.
2. Materials or objects including preferred or desired materials or objects needed for an activity or a play episode.
3. Situations or events in the environment including familiar social, self-help, or routine situations can set the occasion for a behavior.
4. Previous behavior in a chain or steps in a routine might set the occasion for another behavior. As a child becomes familiar with the sequence of behavior or steps of the routine the child should start the proceeding behavior after completing the preceding behavior.



# Prompts

Prompts can be thought of as a hierarchy ranging from the least supportive to the most supportive. Some or all levels of prompts may be needed to support a child in the process of learning or mastering a target behavior.



## **Examples:**

### **Verbal or gestural cues**

*Asking a question:* Asking Davion, “Where are the other toy cars?” while he sorts cars and blocks onto the correct shelves during clean-up time.

*Giving a direction:* Saying to Davion, “Put the small cars in the basket” during clean-up time.

*Gestural cue:* Pointing to the shelf for toy cars while Davion is putting away toy cars and blocks during clean-up time.

### **Verbal or gestural model**

*Verbal model:* Model counting three objects for Davion by touching each one and saying a number as you do – “one, two, three.”

*Gestural model:* Demonstrating for Davion how a car is placed on the correct shelf during clean-up time.

### **Physical Prompts**

*Partial physical prompt:* A light touch or nudge on Davion’s elbow when assisting Davion, who is putting cars on a shelf during clean-up time.

*Full Physical Prompt:* Hand over hand assistance given to Davion, who is putting cars on a shelf during clean-up time.

## Selecting Prompts

Prompts are useful when natural cues do not provide the support children need to produce target behaviors. In addition, there may be cultural considerations in selecting which prompt or prompts to use. You will want to select the prompt that will help to elicit the desired behavior for the particular child, but is also the least intrusive.

Verbal or gestural cues provide the least amount of support and are generally the most frequently used prompts. Providing a verbal or gestural model for a child to imitate provides a little more information for the child, making it more likely that the child will produce the desired behavior (that is, if the child can imitate).

It is also important to remember that in the prompt hierarchy physical prompts are listed in order of support provided. A full physical prompt provides more support than a partial physical prompt.



## Fading Prompts

Prompts might be necessary to elicit a desired behavior and can be part of a complete learning trial. It is important to remember that when you use prompts, you should be careful to fade them out so that the child is eventually using the target skill independently.

When fading, prompts are gradually diminished until behaviors occur with the natural cues. This is called transferring stimulus control from adult to a naturally occurring cue or stimulus in the environment. The instructional strategies of least-to-most prompting and most-to-least prompting are strategies for fading prompts, as they both lead to the child producing the desired behavior without any prompts.

Through fading, prompts are gradually diminished until behaviors occur without any prompts.

Strategies for fading prompts include:

- decreasing the number of prompts by implementing some complete learning trials that don't include a prompt.
- decreasing the intensity with which you give a prompt: a verbal prompt might be spoken more softly over time or a physical prompt may be less controlling over time.
- increasing the time between a naturally occurring antecedent and the delivery of a prompt. This procedure is called “**time delay**” because you pause to see if the target behavior will occur in response to the antecedent before you provide a prompt.

*Examples of fading prompts:*

- To help Davion learn to climb down stairs without falling, you might fade from a full physical prompt (most intrusive), to partial physical assistance, to possibly a verbal reminder to hold the rail, and then eventually independent use of the skill.
- To help Davion use language to request desired objects, you could use time delay to gradually lengthen the amount of time between the antecedent and the prompt until he could produce the behavior without your prompt.



# Providing Additional Help (Prompts)

If the child does not perform the target behavior following the antecedent or performs a different behavior, the teacher can provide additional help to increase the likelihood that the child will perform the target behavior.

Additional help increases the likelihood that the child will perform the target behavior and should be provided if the target behavior does not occur following the antecedent.

Providing additional help gives the teacher another chance to elicit the target behavior so that a consequence can be provided to result in a complete learning trial. There are several options to consider when selecting the additional help prompt:

1. Repeat the initial antecedent if you think the child did not see it or did not attend to it.
2. Provide a different or more supportive prompt that will help the child perform the target behavior.
3. Provide a prompt in which you guide the child through the target behavior (physical prompt). Remember this is not possible for all behaviors. In some cases, typically, verbal behaviors, you can only provide a model.

In some cases, you might use a successive combination of these options.

Your choices for prompts depend on the characteristics of the child, the behavior you want the child to perform, the child's phase of learning, and other circumstances in the activity (e.g., if peers are waiting for the child to do the behavior, it is important the child have quick success and praise).

Hopefully, the use of a prompt will result in eliciting the desired behavior so that a consequence can be provided. For example, Davion is asked to count the number of cups that are on the table for snack (5 cups). His teacher says, "Davion, how many cups do we have?" Davion touches the first cup and says "one" but as he touches the second cup, he says "three." His teacher then provides an additional help prompt to make sure that he counts the five cups correctly so that a positive consequence can be provided. She says "How many cups? Count them again." She guides his hand to move each cup and models counting each one for him so that he counts the five cups correctly.

# Consequences

A consequence is something that happens in the child's environment immediately following his/her behavior. A consequence can increase or decrease the likelihood that a behavior will occur again in the presence of the same antecedent. The embedded instruction approach uses positive consequences.

A positive consequence is something that is presented in the child's environment immediately following the behavior that **increases** the likelihood that the behavior will occur again in a similar situation.

It is important that consequences occur immediately after the target behavior. It is also important to pair the consequence with the behavior almost every time it occurs, especially when the child is initially acquiring or learning the behavior.

## Selecting Consequences

Consequences need to be individualized for children, because one child may not desire what another child desires. Also, for a particular child, desired consequences may change over time. It's important that the adult continually consider whether consequences provided for a particular child are desired by the child enough to increase their motivation to produce the targeted behavior.

## Types of Consequences

### Naturally Occurring Consequences:

1. *Access to desired object or activity.* This includes examples such as being allowed to play with a toy after requesting it with a 3-word phrase, listening to music after activating an adapted switch, sitting in a special chair after signing to request a turn, or playing with friends after using a comment to enter an ongoing play interaction.
2. *Continued social interaction.* An example would be an adult or peer who continues to engage in a desired activity with the child such as continuing to roll a ball back and forth after the child holds out his arms.
3. *Acknowledgment or praise from another.* This can be verbal or non-verbal recognition from an adult or child.
  - Verbal recognition examples would include phrases such as "I like the way you \_\_\_\_!" "Good job," "Awesome!" Praise is most effective if it is descriptive and

tells what the child did. As an example, saying “Good, you asked your friend for a block” is more effective than saying “Good job.” Acknowledgement should also attribute children’s success and improvement to their effort rather than to external factors such as luck.

→ Non-verbal recognition examples would include smiling enthusiastically, giving high-fives or thumbs up, a pat-on-the-back, hugs, or proximity to child.

4. *Understanding of learning or mastering.* The child understands that he or she is learning or mastering a skill and shows a sense of joy or excitement.

#### Planned Consequences:

1. *Token, food, or preferred object.* Child is given an object along with verbal recognition after the desired behavior occurs. For example, the child is given a piece of cereal each time she names a picture in a storybook. The cereal is unrelated to the target behavior of naming pictures. While arranged consequences such as the cereal may be less effective than natural consequences, they are sometimes necessary to motivate children when a natural consequence is not sufficient. It is important that the unrelated consequence be paired with a natural consequence such as verbal recognition (say “Good job naming the pictures” while giving the child the piece of cereal), and that the unrelated consequence is faded over time.
2. *Feedback.*
  - *Praise: Praise informs the child they have accomplished the desired behavior or performed the correct behavior (e.g., “Good job”, “You did it!”).*
3. *Descriptive Feedback.* Providing descriptive feedback gives the child information about his/her performance by making explicit for the child what was correct and what was not correct about the behavior. For example, saying “Good, you asked your friend for a block” is more effective than saying “Good job.” Descriptive feedback can also be used when the target behavior does NOT occur after additional help is provided. In this case, descriptive feedback is used to model or tell the child what the desired target behavior is. For example, saying, “If you want a block, you should say, ‘Can I have a block?’” provides specific feedback about what target behavior is expected.

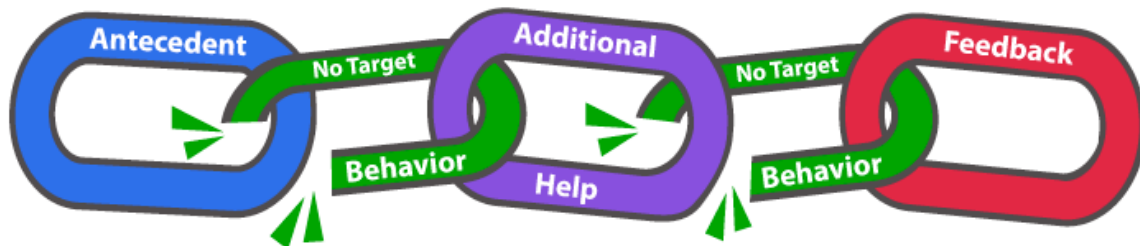
# Feedback

Sometimes the target behavior does not occur even after additional help is provided to the child. When this happens, it might be necessary to end the trial without the behavior occurring. Before moving on, it is important to end the trial by providing feedback.

Feedback is used to end a learning trial when the target behavior does not occur, even after additional help is provided.

Feedback should be a description of what the child did or what the child should have done. For example, if, despite several prompts to elicit a two-word request, the child does not produce 2 words, the teacher might decide to end the trial by saying, “You said ‘milk’ but I wanted you to say ‘more milk.’” The teacher would not give the child the positive consequence for only the one-word request, but would simply move on after providing the feedback and perhaps would come back to the child later and provide another opportunity for the child to elicit the target behavior (2 words).

When a trial ends with feedback, the trial is not complete, because the behavior did not occur; however, the trial has been implemented with fidelity (i.e., correct learning trial), because the teacher implemented all components of the trial correctly.



# Putting the Pieces Together for Complete Learning Trials

## Basic Complete Learning Trial

Antecedent	Behavior	Consequence
Teacher says: "Davion, put the red car <b>in</b> the garage" while she points in the garage.	Davion drives the car into the garage.	Teacher says, "good job you parked the car in the garage."

## Complete Learning Trial with Additional Help

Antecedent	Behavior	Additional Help	Behavior	Consequence
Teachers says "Davion give me two blocks" after she places two blocks in front of him.	Davion hands the teacher one block.	Teacher says "you gave me one block, try again, I want two blocks" Teacher takes Davion's hand and picks up two blocks "1, 2" and holds out her hand	Davion hands the teacher two blocks	Teacher says, "Great job. You gave me two blocks" and counts the blocks again "1, 2"

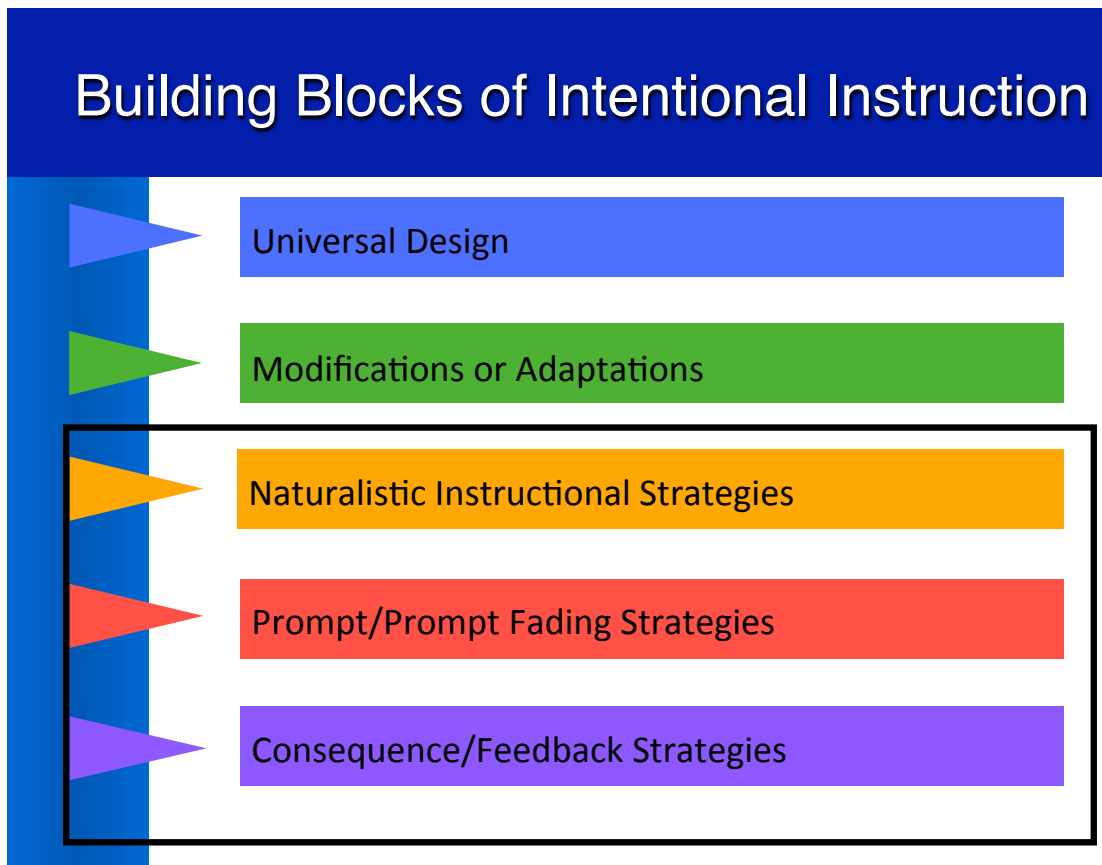
## Correct Learning Trial with Feedback

Antecedent	Behavior	Additional Help	Behavior	Feedback
Teachers says "Davion give me two blocks" after she places two blocks in front of him.	Davion hands the teacher one block.	Teacher says "you gave me one block, try again, I want two blocks." Teacher takes Davion's hand and picks up two blocks "1, 2" and holds out her hand	Davion hands the teacher one block	Teacher says, "You gave me one block. This is two blocks" and models counting the blocks "1, 2." We will try again later

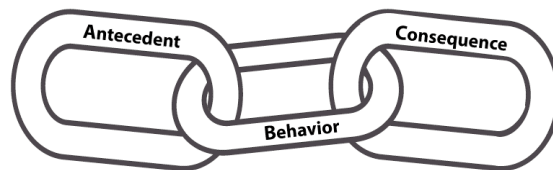


# Instructional Procedures

The following instructional procedures can be used to ensure complete learning trials. These procedures have been taken from a variety of sources emphasizing different aspects of instruction. Each procedure is unique in the way that it promotes complete learning trials. Procedures can be used together to ensure complete learning trials. Universal design and modifications or adaptations were discussed in Module 1. In this module, we will focus on naturalistic instructional strategies, prompt and prompt/fading strategies and consequence and feedback strategies.



**Remember:** instructional procedures are effective when they result in a



**Complete Learning Trial**



# Naturalistic Instructional Strategies

## Naturalistic Instructional Strategies

Naturalistic instructional strategies help children learn a new behavior or skill. They typically involve following the child's lead and helping the child to expand or elaborate on his/her behavior. We will look at two naturalistic strategies in detail.

Naturalistic strategies include, but are not limited to:

- ▶ Incidental Teaching
- ▶ Mand-Model
- ▶ Naturalistic Time Delay

### Incidental Teaching

Incidental teaching is a naturalistic strategy that is initiated by the child. The child initiates an interaction in response to something in the environment that he wants to obtain or wants to communicate about. The adult uses this initiation as an opportunity to elicit more elaborate behavior by prompting the child. When the child produces the more elaborate target behavior, the desired consequence or reinforcer is provided.

#### *When to use:*

The adult might arrange the environment to encourage the child's desire for interactions and might also use incidental teaching as it naturally occurs during the day. Incidental teaching is useful for priority learning targets focused on communication, but also can be used with other types of skills including social skills. Incidental teaching is more useful in naturally occurring routines and activities in which child initiations are likely to occur.

#### *Who to use it for:*

Incidental teaching is useful for children with a variety of disabilities who are able to initiate communication or engage with materials.

### Mand-Model

Mand-model is a naturalistic strategy initiated by the teacher. In this strategy, the teacher provides a mand to the child followed by a model of the target behavior. For example, the teacher might want the child to use single words to communicate. The teacher might say to the child "say juice" (mand-say; model-juice). After the child says "juice" the teacher provides descriptive feedback (e.g., "Good job you said juice and I gave you the juice box").

*When to use:*

Mand-model is useful when the child is unlikely to produce the target behavior without a model demonstration to imitate.

*Who to use it for:*

Mand-model is useful for children with a variety of disabilities who need to expand their communication skills. Children should be able to imitate for this strategy to be effective.

### Naturalistic Time Delay

Naturalistic time delay involves using a naturally occurring antecedent in the environment that sets the occasion for the child to: (a) request assistance, (b) ask for an object, or (c) request to engage in an activity.

The occasion is a naturally occurring activity for which the adult has identified a target behavior and prompt. Following a natural antecedent, the adult should: 1) establish joint attention, 2) look expectantly at the child, and 3) wait for about 5 seconds for the child to perform the targeted behavior. If the child performs the targeted behavior, a naturally occurring consequence will be obtained. If the child does not perform the targeted behavior, a prompt that will elicit the behavior should be given. If the targeted behavior occurs following the prompt, the consequence will be obtained. If the child produces a behavior that is not the target behavior, additional help (i.e., correction procedure) that will elicit the behavior should be used. If the targeted behavior occurs following additional help, the consequence will be obtained.

*When to use:*

Naturalistic time delay is easy to use in ongoing routines and activities. It can also be used across domains including self-help, social, pre-academic, and communication skills. Naturalistic time delay is useful when working with individual children or during group instruction. Also, it is useful when focusing on individual behaviors or sequences of behaviors.

*Who to use it for:*

Naturalistic time delay can be useful for children with mild or significant disabilities. It is also effective with children who are motivated to respond.



# Prompt/Prompt Fading Strategies

## Prompt/Prompt Fading Strategies

Prompt/prompt fading strategies provide explicit support to help children perform skills/behaviors. Prompt/prompt fading strategies are similar to naturalistic instructional procedures. However, these strategies typically are given specific names and have specific instructional steps that are followed.

Prompt/prompt fading strategies include but are not limited to:

- ▶ System of Least Prompts (SLP) (increasing assistance)
- ▶ Most-to-Least Prompts (MLP) (decreasing assistance)

### System of Least Prompts

In system of least prompting, the child is given increasing amounts of help until the ABC learning trial is complete. Two or more levels of help may be needed in a single complete learning trial. If the child only needs a little help, a verbal prompt may be enough. If more adult help is necessary, the adult would provide more and more helpful prompts until the desired behavior is elicited. All of the levels of prompts may be used or only selected levels from less intrusive to more intrusive.

#### *When to use:*

System of least prompting is very useful for skills that a child is able to perform, but not with accuracy or fluency. It also can be used to support generalization. This system provides the opportunity for the child to respond as independently as possible. However, using a system of least prompting may also allow the child to make errors. In some cases, the child may learn that help is coming if he waits, which can create prompt dependency.

#### *Who to use it for:*

System of least prompting is useful for children with a variety of disabilities.

### Most-to-Least Prompts

In most-to-least prompting, the adult only gives one level of assistance per complete learning trial. To prevent child errors or help a child learn a behavior not in his repertoire, the adult initially uses the most assistance needed to ensure a correct response. The help will be gradually decreased across future complete learning trials until the child performs the target behavior without help.

*When to use:*

Most-to-least prompting is useful when a child is acquiring a skill. It is also useful for teaching behaviors that are made up of a sequence or chain of behaviors such as dressing or grooming skills. The advantage of most-to-least prompting is that child errors are kept at a minimum with respect to the target behavior. However, teachers should probe to determine when support levels should be reduced.

*Who to use it for:*

Most-to-least prompting is particularly effective with children with significant disabilities.



## **Consequence/Feedback Strategies**

**Consequences and feedback strategies are used in conjunction with other instructional procedures to ensure a complete learning trial.**

### *Positive Consequences*

If the child responds to an antecedent with a correct behavior, a positive consequence should always be provided. A positive consequence makes it more likely that the child will produce the behavior again in relation to the antecedent. Positive consequences can occur naturally as a result of the situation or they can be planned and delivered by the adult. For information about positive consequences see the consequences section of this guide (p. 84).

### *Feedback*

Descriptive feedback can be paired with a positive consequence. Descriptive feedback provides the child with more information about the situation. For example, a teacher might ask a child, “Where is the red car?” The child hopefully will respond by pointing to the red car. The teacher might say, “Yes, you found the red car. Good pointing. In this situation the teacher has described for the child what they did that is resulting in praise.

Feedback can also be provided to end a trial when the target behavior does not occur, even with additional help. In this case, it is important to provide feedback to the child to model the expected target behavior. Using the example above, if the child does not find the red car after additional help, the teacher might point to the red car and say, “This is the red car. We can try again later.”

# Instructional Procedures Reference Chart

Instructional Procedures	Specific Strategies	Example
<p><b>Naturalistic instructional strategies</b> help children learn a new behavior or skill. They typically involve following the child's lead and helping the child to expand or elaborate on his/her behavior.</p>	<ul style="list-style-type: none"> <li>• Naturalistic Time Delay</li> <li>• Mand-Model</li> <li>• Incidental Teaching</li> </ul>	<ul style="list-style-type: none"> <li>• A child's learning target involves using a finger to push buttons to activate toys. The child is pushing with her fist on the toy. The adult joins the child's play, imitates the child's pushing action and then uses a finger to point to the button on the toy and says, "Use your finger to push the button." If the child does not respond within a certain time period (e.g., 5 seconds), the adult might prompt the child again to push the button.</li> </ul> <p>-----</p> <ul style="list-style-type: none"> <li>• The teacher shows the child that the ball is available for use during play (the child really likes soccer balls). The teacher waits 5 seconds for the child to request the ball. If the child does not request the ball, the teacher models asking for the ball. The child gets to play with the ball after asking for it following the adult model.</li> </ul>
<p><b>Prompt/prompt fading</b> strategies are something the teacher does in order to increase the probability that the child will respond. Many types of prompting strategies are available and should always help teach the skill and be faded as soon as possible.</p>	<ul style="list-style-type: none"> <li>• System of least prompting</li> </ul>	<ul style="list-style-type: none"> <li>• Sara is working on labeling pictures in books. The teacher gestures to a picture, waits for her to respond, and Sara does not. The teacher then says, "Oh I see a ____" and waits for Sara to respond, if Sara does not, the teacher will continue to provide more intrusive prompts (i.e., prompt hierarchy).</li> </ul> <p>-----</p>

	<ul style="list-style-type: none"> <li>• Most to least prompting</li> </ul>	<ul style="list-style-type: none"> <li>• Sam is learning to imitate adult actions. His teacher starts by providing a full physical prompt to show him how to perform the action. After Sam can imitate in a full physical prompt the teacher will provide partial help to perform the actions. Periodically the teacher will check to see if Sam can perform the action with a gesture rather than a partial physical prompt and will continue to fade back the level of prompting over time.</li> </ul>
<p><b>Consequence/Feedback</b> strategies are used in conjunction with other instructional procedures. They should always be used after a child has demonstrated a targeted behavior so that a complete learning trial is obtained.</p>	<ul style="list-style-type: none"> <li>• Providing a positive consequence - a consequence for a behavior that increases the likelihood that the behavior will occur again, with more intensity, or for longer duration</li> </ul> <p>-----</p> <ul style="list-style-type: none"> <li>• Providing descriptive feedback- Praise is most effective if it describes what it was the child did that was targeted. Descriptive feedback is used to let the child know what they did that was correct.</li> </ul> <p>-----</p> <ul style="list-style-type: none"> <li>• Providing feedback to end a trial when the target behavior does not occur-If the target behavior does not occur even after additional help is provided, it is important to provide feedback to tell or show the child the expected behavior.</li> </ul>	<ul style="list-style-type: none"> <li>• After a child counts to 5, the teacher says, "Wow, way to go counting to 5." "</li> <li>• After a child asks for his favorite book, the teacher gives the book to the child (naturally occurring consequence)</li> </ul> <p>-----</p> <ul style="list-style-type: none"> <li>• If a child wants a toy truck that is out of reach and asks their peer if they can have the toy, the teacher might say "Good job using your words to ask Benji for the truck."</li> </ul> <p>-----</p> <ul style="list-style-type: none"> <li>• If a child's target behavior is to use a 3-word phrase to request, and she does not use a 3-word phrase to request a ball after additional help is provided, the teacher might say, "If you want the ball, you should say, 'I want ball.'"</li> </ul>

# Using the Instructional Plan to Design the Instructional Procedures for your Classroom

Use the instructional planning sheet in the appendix to design individualized instructional plans:

- Identify the target behavior
- Identify the antecedents, including the natural cues to elicit the target behavior and what, if any, prompts will be used
- Identify what additional help (prompts) will be provided if the target behavior does not occur
- Identify the consequences if the target behavior occurs
- Identify what feedback you will provide if the target behavior does not occur, even with additional help

Selecting and individualizing the right instructional procedure for a particular child or a particular learning target is a problem-solving process. With practice and experience, teachers get faster at making these selections.

Remember to consider:

- Learning characteristics of the child (including preferences and interests)
- Type of skill or behavior
- Child's stage of learning (acquisition, fluency, maintenance, generalization, adaptation)
- Procedure that is least intrusive and most effective

Adjust the instructional plan as child learning progresses.





# Wrap-Up

## Wrap-up

With the information from this and previous modules you should be able to implement complete learning trials in your classroom today!

Remember to develop an instructional plan to guide the implementation of complete learning trials that will include the following components:

- What is the target behavior?
- What to say or do to elicit the target behavior?
  - What prompts to provide, if any?
- What additional help to provide if the target behavior does not occur or is only an approximation to the target behavior?
- How to respond when the target behavior occurs?
- What you will do to end the trial if the target behavior does not occur after additional help?

Remember to include the whole team in implementing embedded instruction by:

- Sharing selected materials from this and other embedded instruction workshops
- Watching a video of your own classroom and look for examples of embedded instruction
- Asking others adult to collect data while you provide complete learning trials
- Practicing together by role playing delivery of embedded instruction trials
- Posting an activity matrix for an activity and target behavior for the other team members to follow

# References

Barton, E. E., Bishop, C. C., & Snyder, P. 2014. Quality instruction through complete learning trials: Blending intentional teaching with embedded instruction. *Young Exceptional Children Monograph Series No. 16: Blending practices for all children*, 73-96.





# Appendix

# Instructional Plan

Instructional Plan      Child's Name: \_\_\_\_\_      Date: \_\_\_\_\_

**Antecedent**

What do you do or say to elicit the target behavior?

---

---

---

---

**Behavior**

Child demonstrates target behavior

↓

Child does NOT demonstrate the target behavior

↓

What additional help (prompts) do you provide?

---

---

---

**Consequence**

How do you respond when the child demonstrates the target behavior?

---

---

---

---

↓

**Behavior**

Child demonstrates the target behavior

↓

**Behavior**

Child does NOT demonstrate the target behavior

↓

**Consequence**

How do you respond when the child demonstrates the target behavior?

---

---

---

---

↓

**Consequence**

What feedback do you provide to end the trial?

---

---

---

**Evaluation**

Type of data: \_\_\_\_\_

Data Collection Format: \_\_\_\_\_

## Classroom Activity Matrix (Three Children)

## Classroom Activity Matrix (Five Children)