Embedded Instruction for Early Learning

Tools for Teachers

Module 1:
Overview

Version 3.0

Embedded Instruction for Early Learning

Tools for Teachers

About Our Project

Institute of Education Sciences
Project No. R324A070008, R324A150076

Embedded Instruction is an Evidence-Based Practice

Welcome to Our Team!

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Tools for Teachers Project Team

- University of Florida
  (Patricia Snyder, PI; Mary McLean, Co-PI; James Algina, Co-PI; Brian Reichow, Investigator; Crystal Bishop, Project Coordinator; Darbianne Shannon, Coach; Kathy Ward-Cameron, Coach; Jean Malverez, Coach; Kim Megrath, Coach)
- Vanderbilt University
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- Massey University New Zealand
  (Tara McLaughlin, Consultant and Web Design Team)
- Technology Consultant
  (Roland Riddell, Web Design Team)

And, of course, preschool teachers, children, and their families

Getting to Know You…..

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…

Evaluation of *Tools for Teachers*

■ **4 Workshops** • Module 1: Overview • Module 2: What to Teach & When to Teach • Module 3: How to Teach • Module 4: How to Evaluate ■ **Back-home workbook and practice guide**	■ **4 Workshops** • Module 1: Overview • Module 2: What to Teach & When to Teach • Module 3: How to Teach • Module 4: How to Evaluate ■ **Back-home workbook and practice guide**
■ **Coaching in classroom**	■ **Self-coaching via website**

Embedded Instruction for Early Learning

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Thoughts about Embedded Instruction

Moving Matthew Forward

Initial Questions

- What approach is the IEP team, including Cheryl, currently using with Matthew?
- Why might this approach not be working well for keeping Matthew on track?
- The occupational therapist suggests a “new” approach. What are several key features of this approach?
- What are your initial thoughts about this approach for helping move Matthew forward?
- What would Cheryl (and the team) need to do if they wanted to use this approach?

After completing Module 1, you will be able to:

- Identify reasons for using embedded instruction
- Define embedded instruction and identify its key features
- Describe What to Teach, When to Teach, How to Teach, and How to Evaluate embedded instruction practices
- Describe how embedded instruction supports children's access to and participation in the general preschool curriculum by focusing on intentional teaching and individualized priority learning targets
- Define and describe components of complete and incomplete learning trials

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Embedded Instruction in Early Learning Settings

Helping Children Learn

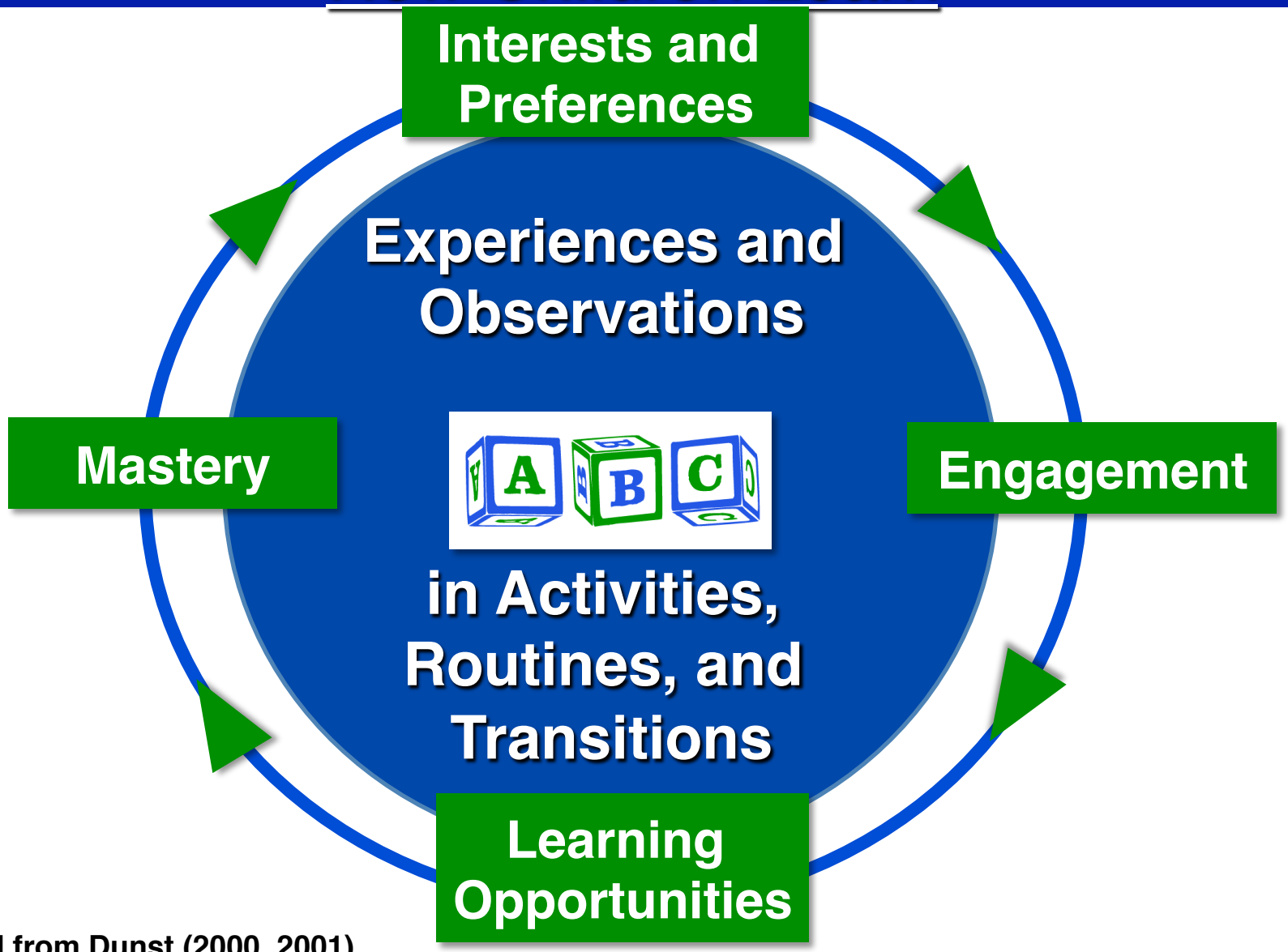
A Comment on Children's Experiences…

"We start with the assumption that each day, that every hour in every day, is of great importance to a child, and that when an hour is neglected, allowed to pass without reason and intent, teaching and learning go on nonetheless and the child may be the loser."

(Hobbs, 1967, Am. Psych., p. 1109)

Children will learn…
but maybe not what they need to learn

Foundation for Embedded Instruction: How Children Learn



Adapted from Dunst (2000, 2001)

Child-Guided Experience

+

Adult-Guided Experience

=

Optimal Learning

Epstein, A.S. (2014). *The intentional teacher: Choosing the best strategies for young children's learning* (2nd ed.). Washington, DC: NAEYC.

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

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

Key Words from the Definition

- ***intentional*** and ***systematic instruction***
- ***priority learning targets***
- ***activities, routines,*** and ***transitions***
- ***engagement*** and ***learning***

Key Features of Embedded Instruction

- Address priority skills
- Teach skills in context
- Teach within and across activities, routines, and transitions
- Use “authentic” activities and materials to support learning
- Use intentional and systematic instruction

Why Use Embedded Instruction?

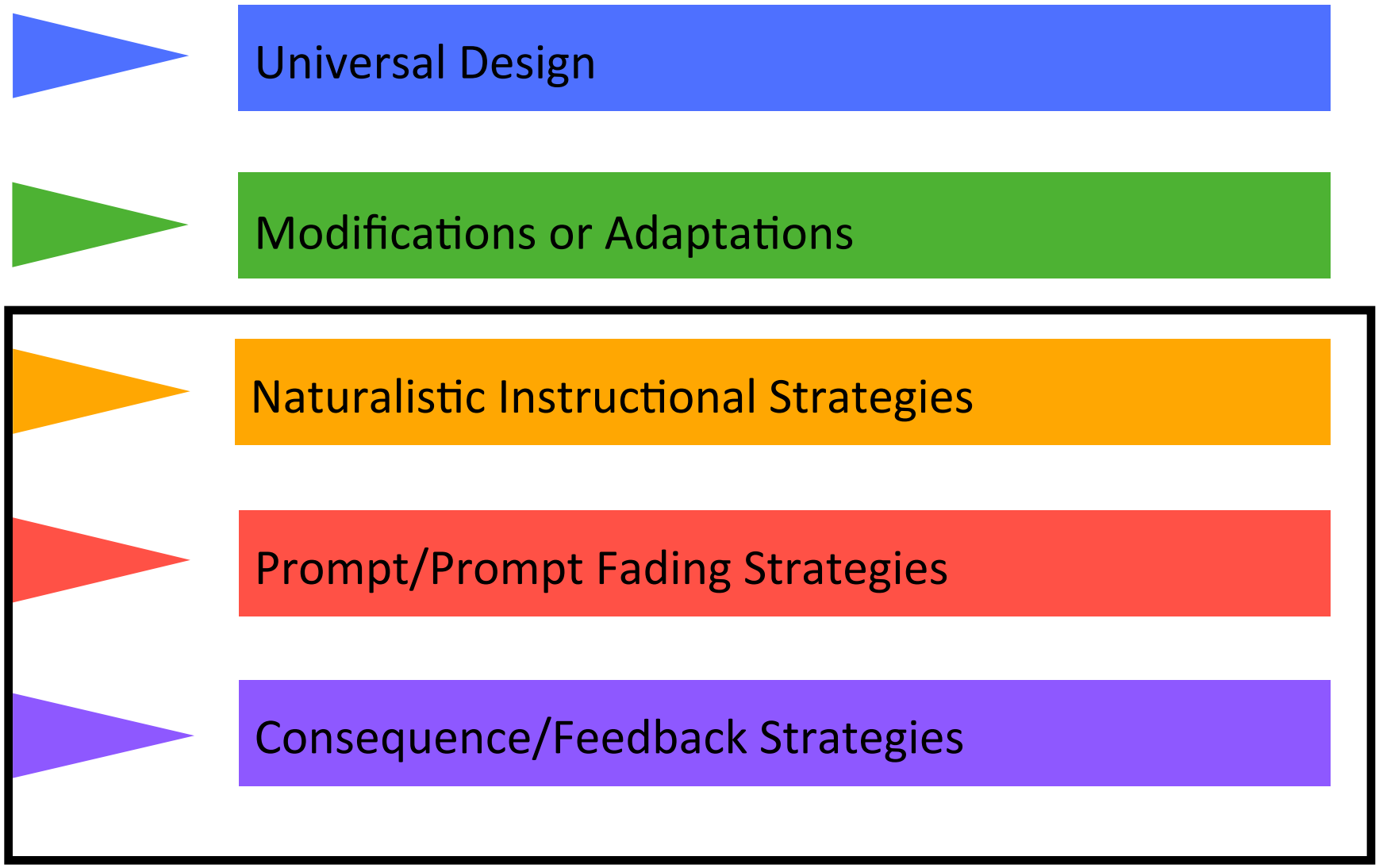
- Helps meet children's individualized learning needs by identifying priority learning targets
- Maximizes children's motivation by considering their interests and preferences
- Provides opportunities to learn and practice important skills in meaningful contexts
- Promotes learning
  - Acquisition
  - Fluency
- Promotes mastery
  - Generalization
  - Maintenance
  - Adaptation

Emphasis on ***Instruction***

- Emphasizes ***intentional, sufficient, and systematic learning opportunities*** during everyday activities, routines, and transitions

- Identifies ***instructional procedures*** to be used within or across activities, routines, and transitions

Building Blocks of Intentional Instruction



Think About It…

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Getting Started

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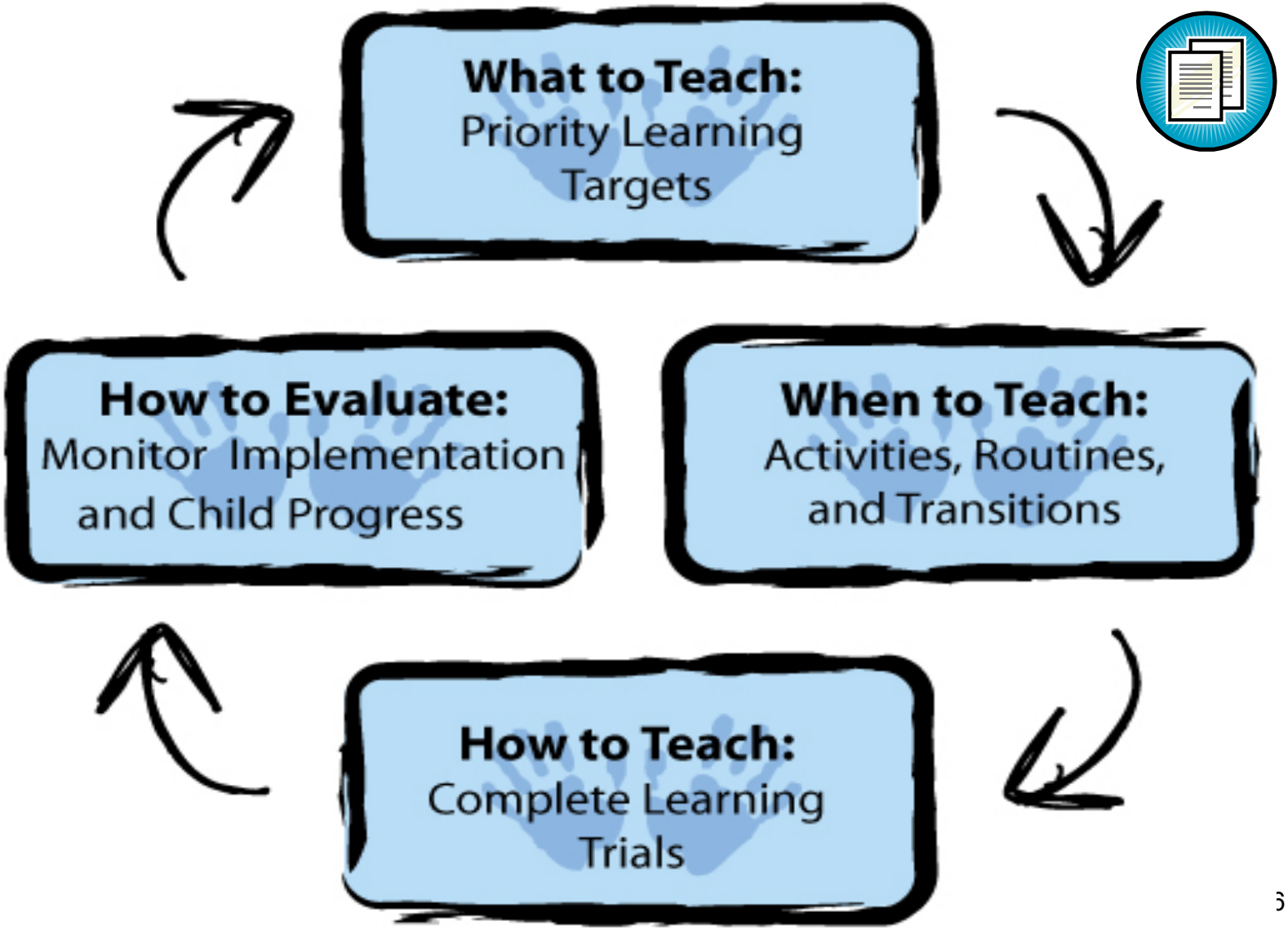
Key Components of Embedded Instruction



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

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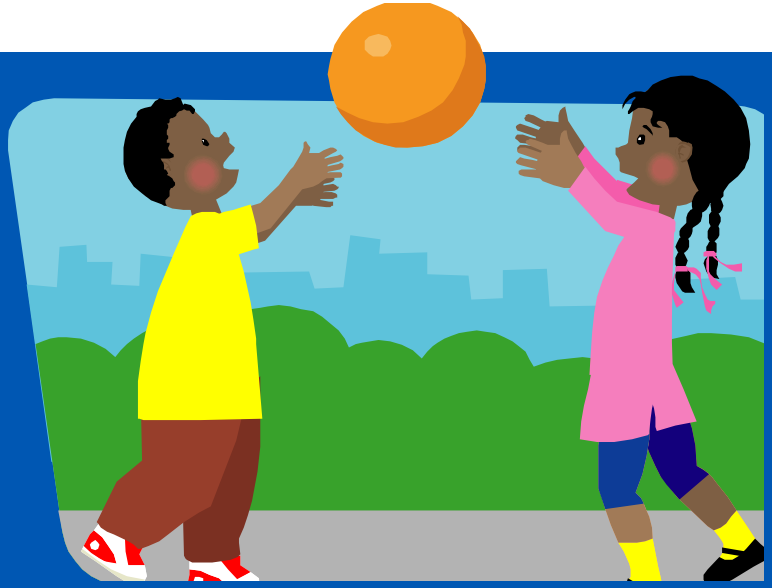


What to Teach

Developmentally appropriate; functional and aligned; generative; observable and measurable priority learning targets

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.

Defining a Term: Priority Learning Target

- 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

Practice 1: Everyday Experiences and Activities as the Foundation for Embedded Instruction

Practice 1: Defining the Curriculum for ALL Children

"An organized ***framework*** that delineates the ***content*** children are to learn, the ***processes*** through which children achieve the identified curricular goals, what teachers do to help children achieve these goals, the ***contexts*** in which teaching and learning occur, and the strategies used to ***measure progress and document outcomes.***"

National Association for the Education of Young Children (1991)

Practice 2: Activity-Focused Assessment

Activity Analysis

- Examine classroom activities to identify characteristics, expectations, and **learning opportunities for <u>all children</u>**

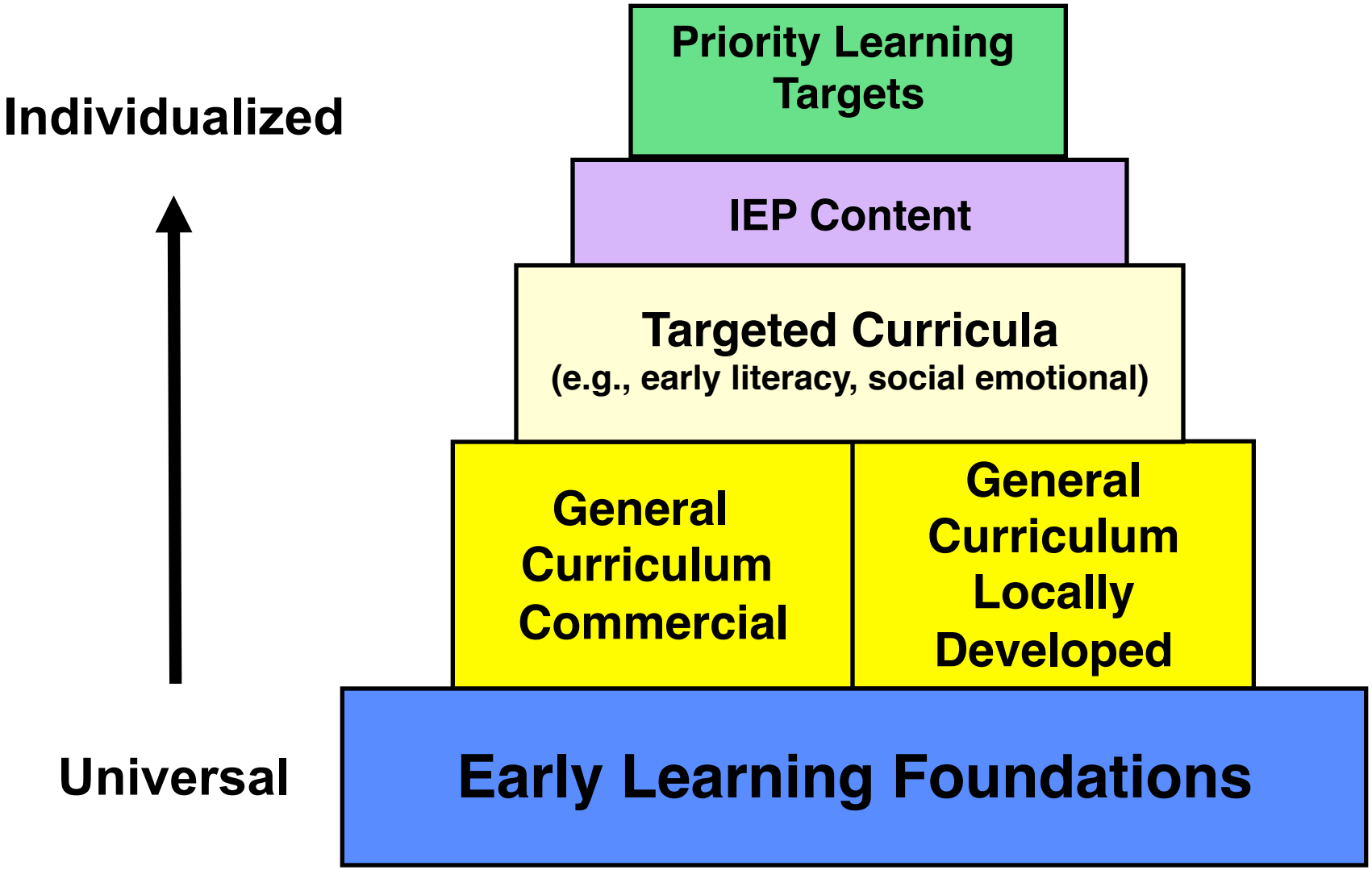
Child-Focused Activity Analysis

- Observe a child while engaged in an activity to help identify **priority skills**

Tools in Your Toolbox

IEP Goals and Objectives

Practice 3: Breaking Down Goals and Ensuring Alignment

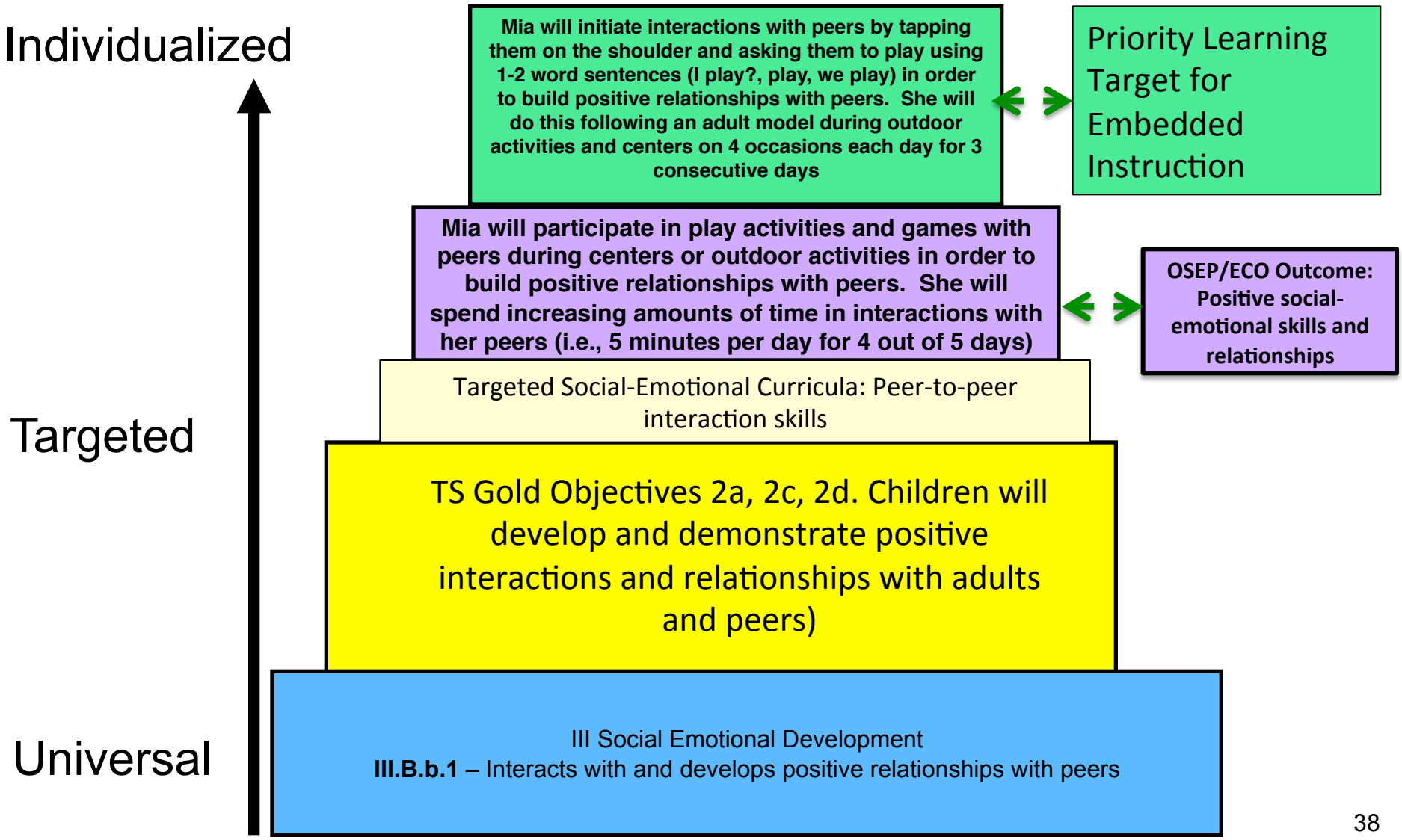


FL	FL Early Learning Standards Birth to 5	FL Voluntary Pre-Kindergarten Standards Age 4	TN	TN Early Learning and Dev. Standards Birth to 4	TN Early Learning and Dev. Standards Age 4
Physical development	Fine Motor	Fine Motor	Physical development	Fine Motor	Fine Motor
	Gross Motor	Gross Motor		Gross Motor	Gross Motor
	Self Help	Self Help		Self Help	Self Help
	Health	Health and Wellness		X	Personal Health and Safety
	X	X		X	Sensorimotor
Approaches to Learning	Eagerness and Curiosity	Eagerness and Curiosity	Approaches to Learning	Engages and Interacts	With eagerness and curiosity actively engage in play as a means of exploring and learning
	Persistence	Persistence		Persistence	Demonstrates Persistence
				Problem Solving	Actively engage in Problem Solving
	Creativity and Inventiveness	Creativity		Flexibility and Inventiveness	Approaches Tasks and Activities with Flexibility and Inventiveness
	X	Planning and Reflection		X	X
Social and Emotional Development	Trust and Emotional Security	Relationships (Self/Peer/Adult)	Social Emotional Development	X	Relationships with Adults and Peers
	Self-Concept	X		Self-Awareness (Self-Concept)	Self-Concept
	Self Regulation	Self Regulation (Affective/Life/Adaptive)		Self-Regulation (Self-Control)	Regulate own response to needs, feelings and events
	X	Social Problem Solving		X	X
	X	X		Cooperation	X
	X	X (*See civics ideals*)		X	Understand and follow rules and routines
Communication/ Language and Emergent Literacy	Listening and Understanding	Listening and Understanding	Language and Early Literacy	Receptive Language	Speaking and Listening
	Communicating and Speaking	Speaking		Speech	
		Vocabulary		Expressive Language	Language
		Sentences and Structure			X
		Conversation			X
	Early Reading	Emergent Reading		Reading Foundational Skills	Reading Informational Texts
					Reading Literature
					Reading Foundational Skills
	Early Writing	Emergent Writing		Writing Behaviors and Skills	Writing

Meet Mia

- Mia is 4 years old. She has Down syndrome.
- She attends an inclusive preschool 5 days a week
- Some of the goals on Mia's IEP focus on:
  - preparing and serving food
  - demonstrating understanding of concepts such as colors, shapes, and size
  - increasing social interactions with peers
  - using 2-word utterances to request, comment, or label

An Example: Alignment Universal to Individualized



Let's Look Further at Alignment: Another of 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.

Early Learning Standards:
FL IV.C.2: Shows increased vocabulary to describe many objects, actions, and events; TN LE.37-48.2: Use language for a variety of purposes

TS Gold Objectives:
9a: Uses an expanding expressive vocabulary

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.
  - Early Learning Standard(s)?
  - TS Gold Objective(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.
  - Early Learning Standard(s)?
  - TS Gold Objective(s)?

Practice 4: Writing Quality Learning Targets

- **Developmentally Appropriate**

  Target is age-appropriate, individually appropriate, and culturally relevant

- **Functional and Aligned**

  Child performance of the skill is needed for engagement in important aspects of daily activities, routines, and transitions (access, participation, and membership)

- **Generative**

  Child performance of the skill is useful, adaptable, and portable across settings, people, materials, and events

- **Observable and Measurable**

  Skill is observable, such that it can be counted, timed, or described; the conditions and the criteria for child performance are described

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Tools for Teachers

When to Teach

Ongoing activities, routines, and transitions

Key Practices: When to Teach

5. 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 activity matrix to record when you plan to embed instructional learning trials for individual children.

Practice 5: Activities, Routines, and Transitions from Daily Schedule

- Arrival
- Free Play
- Circle time
- Centers
- Snack
- Toileting
- Lunch
- Nap
- Outdoor play
- Story time
- Music/Art
- Departure

Practices 6 and 7: Making an Activity Matrix

Step 1: List a predictable, balanced classroom schedule of activities – list the activities and times of day in the left-hand column of the chart

Step 2: Create columns to the right for particular children

Step 3: Put the child's learning target in the appropriate activity or activities ("fit")

	Mia	Matthew
Arrival		
Free Play		
Circle	Responds when another child initiates an interaction	
Outside		
Snack		
Class Activity		
Departure		
Transitions	Responds when another child initiates an interaction	

Considering What to Teach and When to Teach

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Tools for Teachers

How to Teach

Instructional procedures that promote engagement, learning, and mastery

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.

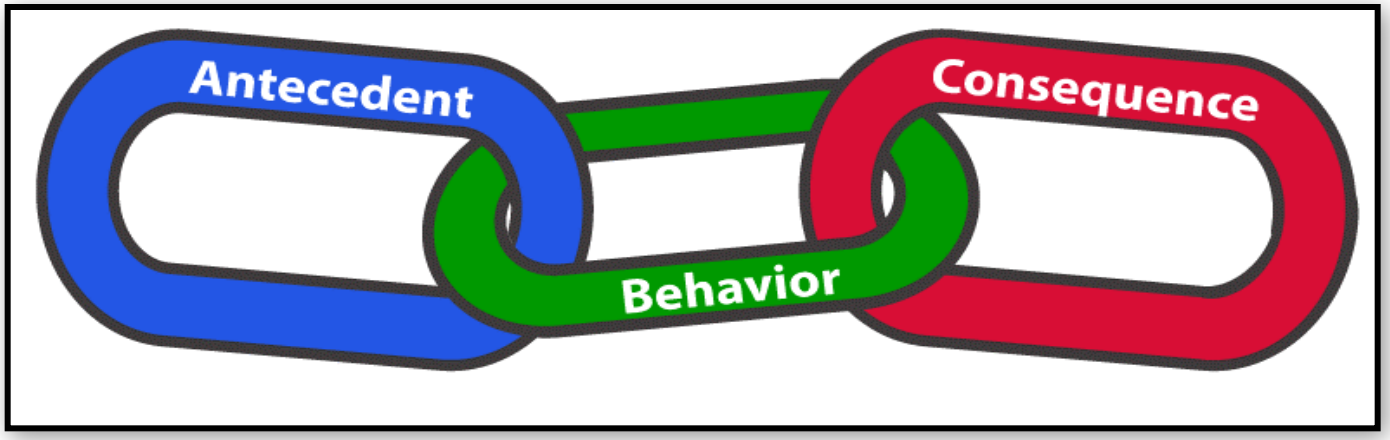
It's as simple as ABC!

Antecedent → **B**ehavior → **C**onsequence

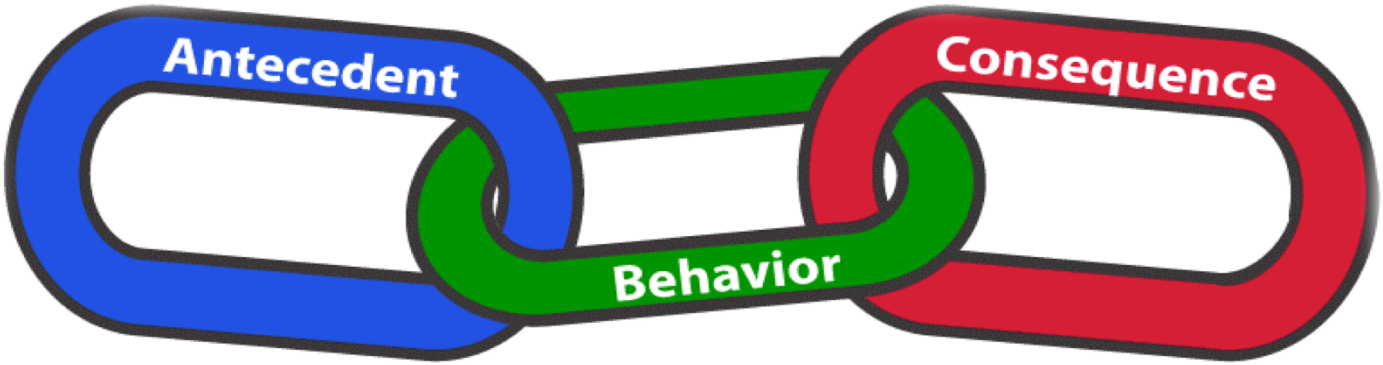
Complete Learning Trial (CLT)

A logically occurring or planned **A**ntecedent

- is followed by a **B**ehavior
  - that leads to a logically occurring or planned **C**onsequence

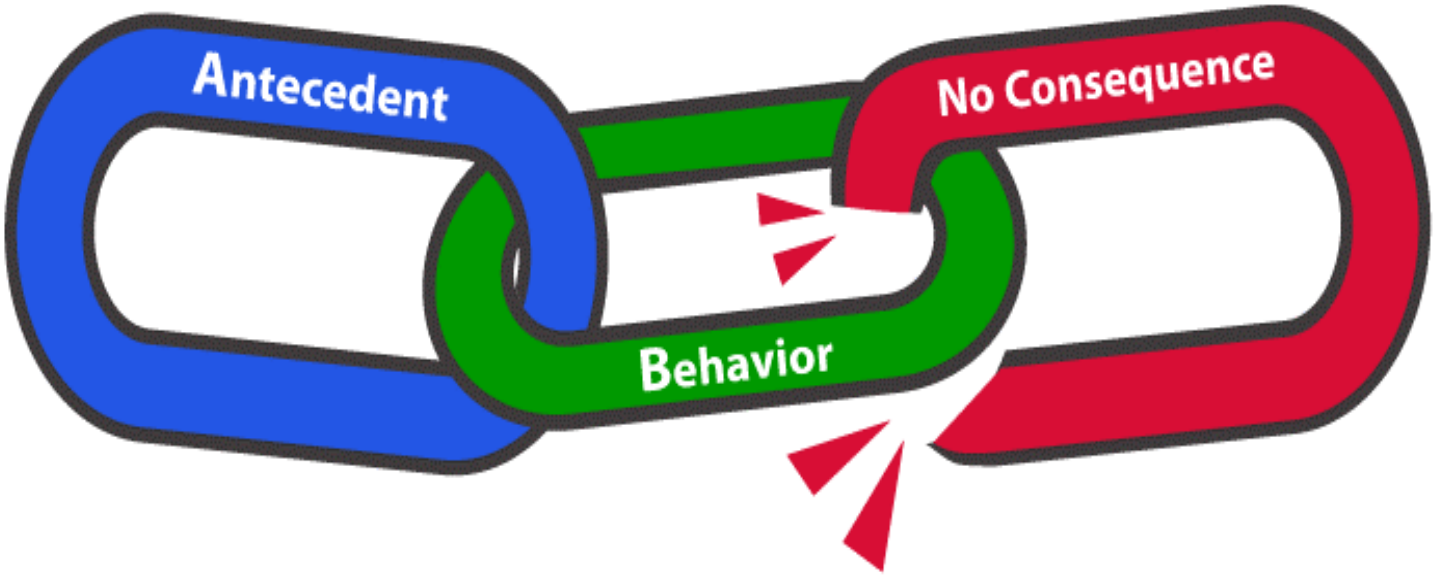


Complete Learning Trial



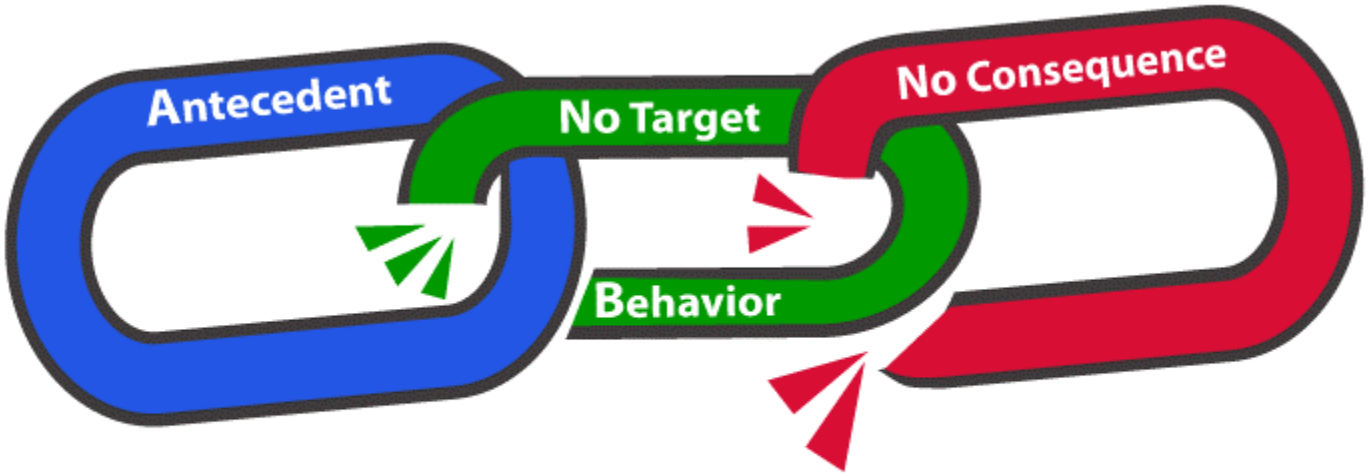
Let's Look at an Example

Incomplete Learning Trial



Let's Look at an Example

Another Incomplete Learning Trial

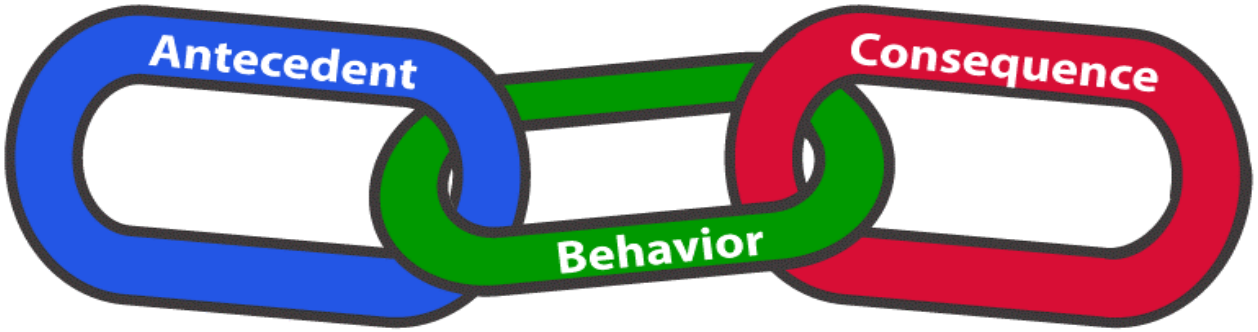


Let's Look at an Example

Another Complete Learning Trial

Let's Look at an Example

Complete Learning Trials



Why are Complete Learning Trials Important?

- Young children need sufficient learning opportunities
- Children should experience high quality environments, responsive interactions, and effective instruction
- Embedded instruction does not necessarily result in early learning if we do not consider A-B-C and ensure complete learning trials

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Tools for Teachers

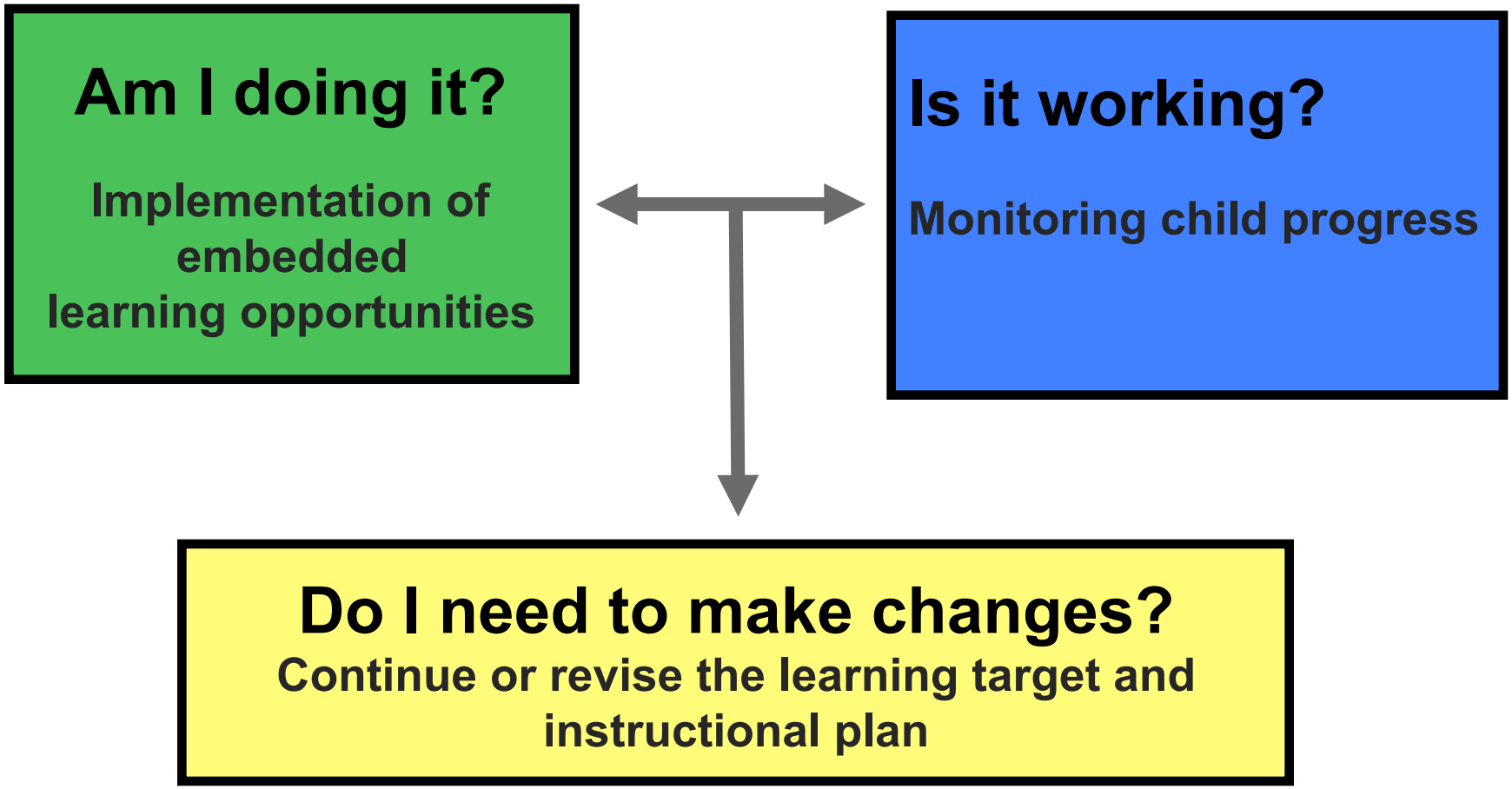
How to Evaluate

Gathering data to make informed decisions

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?*

Practices 12, 13, 14: Gathering Information to Make Informed Decisions



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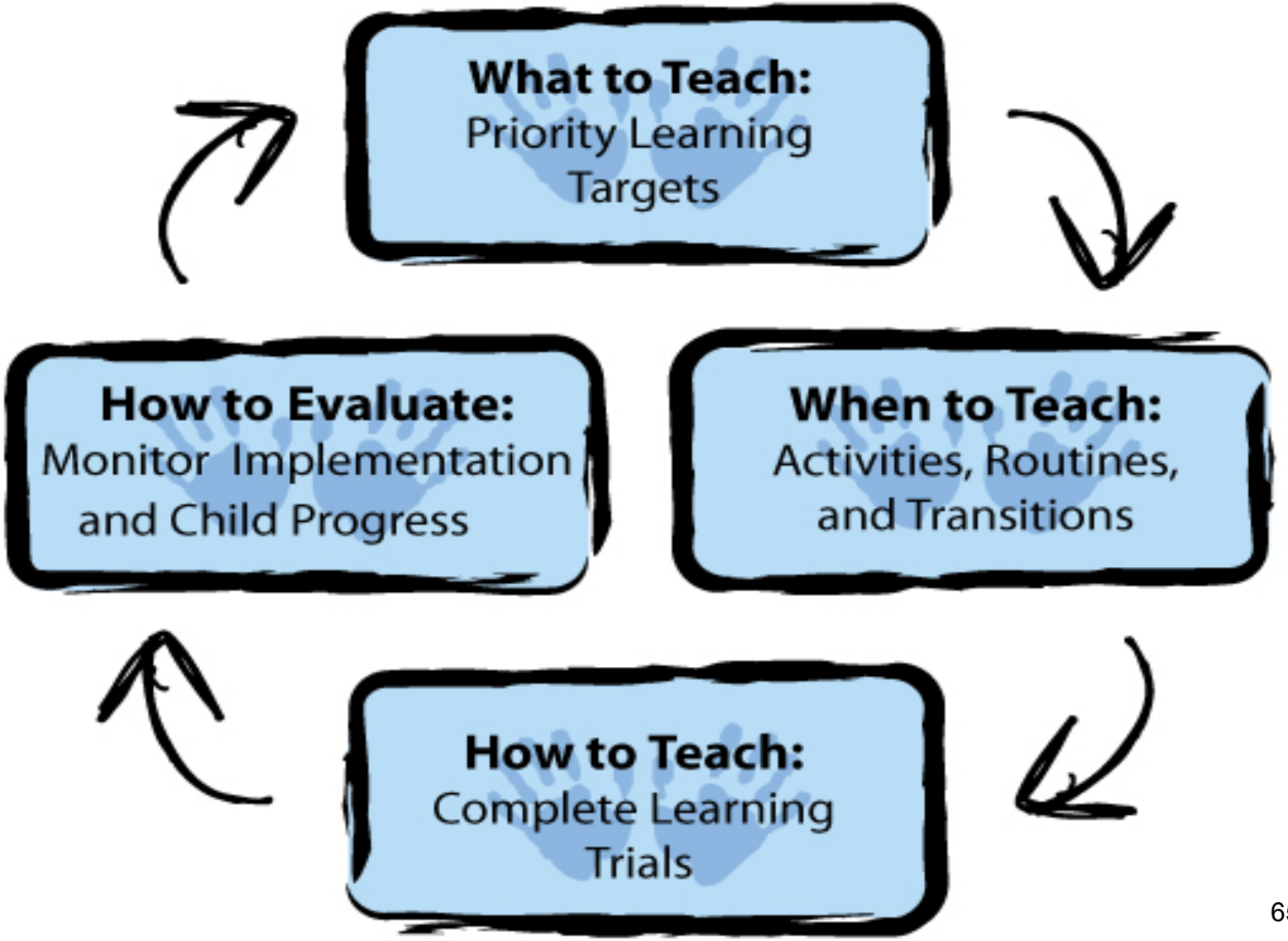
Wrap-Up

Key Components of Embedded Instruction



Let's watch…

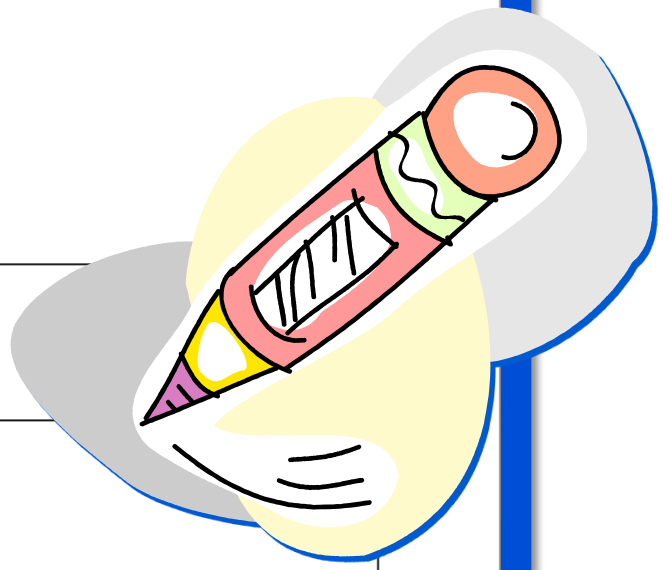
Needs Assessment

Embedded Instruction for Early Learning Practices

Before next time…..

Before next time…..

Write down or bring four priority learning targets.



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Thank you!

Next is
Module 2:
What to Teach &
When to Teach!