

## Using Embedded Instruction to Support Young Children's Learning

by Tara McLaughlin, Patricia Snyder, and Mary Louise Hemmeter

Children with disabilities are increasingly being included in early learning and care settings because of recognized benefits for all children. Inclusive settings offer children with disabilities access to everyday learning experiences that support their development and learning. While access to inclusive early learning settings is important, some children need additional help to be engaged and to participate meaningfully in ongoing classroom activities and routines.

*Mrs. Jacobs has 12 children in her classroom who participate in class activities and play well with their peers. However, she's just not sure how to help Mia and Bryan learn, play, and be part of the group. Mia is 4 years old and has a developmental delay. She needs extra help to participate in classroom activities. Bryan is 3 years old. He does not talk much or play with his peers. Mrs. Jacobs is going to use embedded instruction to support Mia and Bryan in her classroom.*

### What is Embedded Instruction?

Embedded instruction is an approach used to support child engagement, learning, and social interactions in inclusive settings. Educators provide intentional, planned, and individualized learning opportunities in the context of ongoing classroom activities and routines for children who need additional help because of developmental delays, disabilities, or learning challenges. Intentional teaching is an important aspect of developmentally appropriate practice



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(Epstein, 2007). Embedded instruction is an extension of intentional teaching and is a recommended practice in early childhood special education (Wolery, 2005). If you are familiar with developmentally appropriate practice and intentional teaching, then using embedded instruction might be easier than you think.

### Key Components of Embedded Instruction

To use embedded instruction teachers think about:

- 1. What to teach:** What skills does the child need to participate in ongoing activities and routines of the classroom?
- 2. When to teach:** Which ongoing activities and routines provide opportunities to teach and practice the skills?
- 3. How to teach:** What strategies will support and encourage the child's learning during ongoing activities and routines?
- 4. How to evaluate:** How will I know if the child is learning?

**What to Teach:** What skills does the child need to participate in the ongoing activities and routines of the classroom?

Children use a variety of skills every day to engage and participate in ongoing activities and routines. In a painting activity, children might use their hands to hold the paintbrush, share paint with their peers, ask for different colored paint, talk about their picture, or try to write their name on the paper. Children with delays, disabilities, or other learning challenges might need additional supports to participate alongside their peers. They might need help to do a skill or they might need intentional instruction to learn a new skill that is part of the ongoing painting activity.

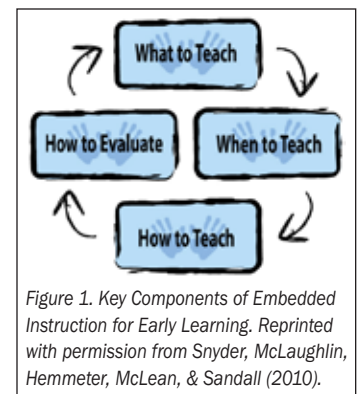


Figure 1. Key Components of Embedded Instruction for Early Learning. Reprinted with permission from Snyder, McLaughlin, Hemmeter, McLean, & Sandall (2010).

To identify what skills children need help with or need to learn to participate in ongoing activities and routines, think about what all children are doing during an activity or routine. Observe the child in each activity or routine to determine where the child is successful and where the child may need more help to support his or her engagement, learning, or social interactions in the activity (this is sometimes called activity-based assessment).

Once you identify a few parts of the activity or routine with which a child needs more help, think about what changes you might make to the activity or routine to make it easier for the child to participate and what skills the child needs to learn to participate more fully in the activity or routine. For example, you might get paintbrushes with handles that are easier to hold. You might identify a skill or skills that you want to teach the child. When you select skills, choose skills that are teachable within your existing activities and routines. We call these skills learning targets and recommend that teachers write down the learning targets they develop for each child to share with families and other team members.

*Mrs. Jacobs watched Mia and Bryan during classroom activities. She noticed Bryan did not join peers in play activities and avoided activities when a group of peers were gathered together (centers, morning arrival). He tended to stand back and watch from a few feet away. She suspected he was not sure how to approach the peers to join them in play. She wrote a learning target to teach Bryan how to approach a peer group: "Bryan will ask peers to play following a teacher or peer model."*

*While watching Mia, Mrs. Jacobs noticed Mia had trouble standing up from the floor or from chairs. She would often fall while trying to stand up and this seemed to be why she was often sitting on the floor. Mrs. Jacobs wrote a learning*

*target to teach Mia how to stand up without falling: "Mia will put her hands on the table when standing up from a chair or put her hands on the floor when standing up from the floor following an adult reminder to use her hands."*

**When to Teach:** Which ongoing activities and routines provide opportunities to teach and practice the learning target skills?

Children with disabilities do not need to go to places away from their peers to learn. You provide a high-quality program for all your children. Take advantage of your ongoing activities and routines. Provide extra support to help children with delays, disabilities, or learning challenges learn or master skills that will help them be more engaged, participate more independently, or interact more often with peers.

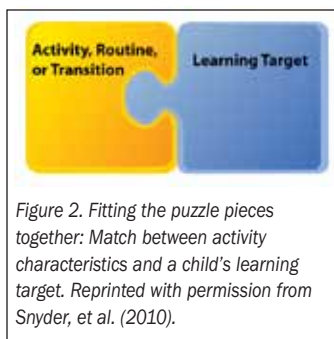


Figure 2. Fitting the puzzle pieces together: Match between activity characteristics and a child's learning target. Reprinted with permission from Snyder, et al. (2010).

Once you know what you are going to teach (the learning target), review your daily activity schedule to plan logical opportunities to teach or practice the skill during ongoing activities and routines. For example, if a child needs help pouring liquids into a cup, you might help the child practice pouring liquid during snack times or at the water table, but you might also have them practice pouring sand into a cup in the sandbox or paint into a bowl during a painting activity. Try to find natural opportunities where

the activity "matches" or "fits" with the skills that you have identified you want the child to learn.

*Mia and Bryan used to be pulled to the corner of the classroom for their 'special' instruction. It was strange because Mia and Bryan could do the skills in the corner of the classroom, but they never seemed to use them in the ongoing classroom activities and routines when needed. Mrs. Jacobs decided to look over her daily schedule to find times and activities when she could teach or provide practice on their learning targets as part of the ongoing activity or routine. To do this, she made an activity matrix. First, she*

### Tips for What to Teach

- Focus on skills that are one or two steps ahead of what the child can currently do (sometimes called the *zone of proximal development*).
- Start with 2 or 3 learning targets and update them as the child learns new skills.
- Write it down! When teachers write down learning targets they are more intentional about teaching them.
- Share the learning targets with your team members and the children's families.

### Tips for When to Teach

- Teach in the ongoing activities, routines, and transitions in your classroom.
- Provide multiple opportunities to practice skills — repeated practice leads to mastery.
- Use an activity matrix to write down your plan. (See the example activity matrix for Bryan and Mia.)

Mrs. Jacobs Plan for Creating Complete Learning Opportunities		
Parts of Learning Opportunity	Ongoing Activity	
	End of Circle Time	Play Time
A – Create an opportunity	Mrs. Jacobs says, “Mia, you get to go to the block area. Remember to put your hands on the floor as you stand up.”	Bryan sees his peers playing with his favorite trucks. Mrs. Jacobs says, “Ask Matt if you can play with a truck, too. Say ‘Can I play?’” (Mrs. Jacobs lets Matt know that Bryan likes the red truck best.)
B – Child does or tries the skill	Mia puts her hands on floor, pushes against the supporting surface, and stands to her feet.	Bryan says, “Can I play?”
C – Acknowledge or encourage the child	Mrs. Jacobs says, “I saw how you got up from the floor. You used your hands and did not fall.”	Matt says, “Sure! Here’s the red truck,” and Bryan smiles – likely because he gets to play with his favorite truck.

wrote her daily schedule down one side and Bryan’s and Mia’s names across the top. Then, she wrote their learning targets in the squares to remind her and her team about the ongoing opportunities to provide instruction in the context of classroom activities and routines.

**How to Teach:** What strategies will support and encourage the child’s learning during activities and routines?

Embedded instruction emphasizes making sure children try the skill that you want them to do (with or without your support) and providing acknowledgment or encouragement for children doing or trying the skill. We call this a complete learning opportunity. It’s as simple as A-B-C! A complete learning opportunity includes:

- **A cue:** Something you do or that happens in the environment to create an opportunity for the child to use the skill.
- **Behavior:** The child does or tries to do the skill.
- **Consequence:** Something you do or that happens in the environment to acknowledge the skill or to encourage the child to use the skill again.

When children are first learning a skill, you might need to provide additional help. After helping a few times, you often can fade your extra support.

You already provide these learning opportunities everyday. As part of embedded instruction, be intentional. Make sure each learning opportunity includes the ABC and happens as part of the ongoing activity or routine to support child learning and engagement.

**How to Evaluate:** How will I know if the child is learning?

To know if the child is learning the skill identified in the learning target, watch the child and see if the child is using

## Tips for How to Teach

- It’s as simple as A-B-C.
- Make a plan! Talk about or write down the A-B-C you might use to create an embedded learning opportunity.
- Provide help early so the child knows what to do, but remember to fade help so the child can learn to do the skill without your extra help.
- Invite peers to create opportunities or provide encouragement.
- If the child does not do the skill, show them or tell them immediately what to do for next time.

the skill to participate in ongoing activities. If the child is participating with your help, it might be time to fade your help and see if the child can do the skill independently. If the child is not using the skill in the way you planned, keep providing help and opportunities to practice. You might consider additional or different activities and routines for providing embedded instruction on the learning target. Alternatively, you might reevaluate whether the learning target skill is one or two steps ahead of what the child can currently do and, if not, adjust it.

*Mrs. Jacobs has been reminding Mia to use her hands to help her stand up and it seems to be working. One day she counted that Mia stood up without falling on 9 of the 10 learning opportunities that day. She decides to revise her learning target for Mia by fading the reminder for Mia to use her hands to see if Mia remembers to use her hands on her own. Bryan, on the other hand, does not seem to be asking peers to play more often. Mrs. Jacobs asks her assistant to count how many times they are creating opportunities and providing a model for him during the day. The assistant reports that the team created four opportunities*

during that day but only provided a model one time. Mrs. Jacobs realizes they are not following their plan. She posts a large activity matrix on the bulletin board with a note about providing a model to help remind her and the team to implement their plan for Bryan.

	Bryan	Mia
Arrival & Morning Activities	Ask peers to play	
Breakfast		Use hands to stand
Morning Circle		Use hands to stand
Free Play	Ask peers to play	
Story		Use hands to stand
Snack		Use hands to stand

Example Activity Matrix

## Conclusion

Embedded instruction is an approach that you can use with any child who needs extra help. Knowing what to teach, when to teach, how to teach, and how to evaluate can help you support children's engagement and participation in ongoing activities and routines in inclusive early learning settings.

### Tips for How to Evaluate

- Decide what you will observe and when you will watch the child.
- Write it down! Trying to remember what happens during the day is too hard; keep a notebook, use Post-It® notes, or make a form and put it on a clipboard.
- If the child is not making progress, change your plan or the child's learning target.

## References

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## Embedded Instruction for Early Learning Resources

Tools and Tips presented in this article were provided by the Embedded Instruction for Early Learning Project (Snyder, Hemmeter, Sandall, & McLean, 2007). Learn more at [www.embeddedinstruction.net](http://www.embeddedinstruction.net)

Embedded Instruction for Early Learning Project has provided *Exchange* with the following tools for you to use in your classroom. Check out:

- How to write a learning target guide
- Blank activity matrix
- Instructional planning form to plan your ABCs

## Professional Development Materials for Download

### CONNECT Module 1: Embedded Interventions

Each module contains web-based guided case stories and learning activities, handouts, supplemental materials and resources, and video. Materials available in English and Spanish. Available at <http://community.fpg.unc.edu/connect-modules/learners>

### Head Start Center for Inclusion: Embedded Learning Opportunities Module

Each module contains a presenter's guide, training scripts, handouts, and videos. Materials are available in English and Spanish. Available at <http://depts.washington.edu/hscenter/elo>

[Materials adapted from Embedded Instruction for Early Learning Project]

### SpecialQuest Multimedia Training Library: Early Childhood Inclusion Materials

Each module contains a presenter's guide, training scripts, handouts, and videos. Materials are available in English and Spanish. Available at <http://eclkc.ohs.acf.hhs.gov/hslc/ta-system/teaching/Disabilities/Staff%20Support%20and%20Supervision/Orientation/specialquest-training-library/specialquest-multimedia-training-library.html>

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