



Embedded Learning Opportunities

Materials Needed

- Presenter's PowerPoint
- Projector and audio equipment
- Participant handouts/Notes pages

Presenter Notes

Slide 1: Embedded Learning Opportunities

Hello and thanks for joining us today for Head Start Center for Inclusion's training on embedded learning opportunities. This is one of the in-service suites in our series. *(Give participants background information on yourself, and poll the audience to see who is attending—if it is a small group, you can ask them a question related to inclusion as you have them introduce themselves. Also get any housekeeping items out of the way, such as bathroom locations and when you will be taking a break).*

Slide 2: Today's Objectives

In this presentation, you will meet Mia and see how her team plans for embedded learning opportunities, or ELOs for short, to support her learning. After the presentation is over, we hope you know what embedded learning opportunities look like and understand how they can be used to take advantage of teachable moments.

Slide 3: How do we create embedded learning opportunities?

First, what are embedded learning opportunities? When we create embedded learning opportunities, we provide targeted instruction, or specialized instruction, to a child who needs support. Creating embedded learning opportunities involves planning to teach in a way that promotes child learning and engagement during everyday learning opportunities, such as during activities, routines, and transitions.

To use this approach, educators, other team members, and families work together to identify what the child knows or can do, and what the child needs to learn to be able to participate meaningfully throughout the day. Team members and families who plan for targeted instruction, help a child learn within specific activities, routines, and transitions.

Slide 4: Key Features of Embedded Learning Opportunities

There are key features of embedded learning opportunities. Practitioners who implement embedded learning opportunities:

- Address skills that are important to everyday activities. Educators use an embedded learning opportunities approach to teach skills young children need to participate in an early learning environment.
- Teach targeted skills to a child in activities alongside all children and in the contexts in which they are needed.
- Use "authentic" activities and materials to support learning.
- Use intentional and targeted short teaching interactions in addition to "discovery" learning.

Let's watch a few examples of educators providing embedded learning opportunities during everyday activities and routines.

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Slide 5

Slide 5: Video – Let’s Take a Look

What Instructional Procedures Do You See?

Let’s watch this video.

As you watch, consider how this approach to instruction is helping children learn in their natural environment alongside their peers. Think about what activity is occurring and what the educator is doing that has been planned ahead of time.



Video 1

Play Video

In the video, you might have noticed that educators were able to provide learning opportunities to individual children within the context of their everyday activities and routines.

Now that I’ve introduced embedded learning opportunities and you’ve seen examples of what they might look like in the learning environment, let’s meet a little girl named Mia. We will follow along with Mia’s team as they try out this approach.

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Slide 6: Meet Mia

Mia is a 4-year-old who attends her local Head Start program. Her educator is Ms. Mary. Most of Ms. Mary’s children are making good progress toward mastering Head Start’s performance standards. Ms. Mary is very pleased with the growth they have demonstrated so far this year. Mia is the one exception. Ms. Mary has tried everything she can think of to help move Mia forward. Mia’s parents also feel “stuck” and are interested in finding out what they can do to support Mia at home. Ms. Mary decides to have a meeting with Mia’s Individualized Education Program, or IEP, team and hopes they can come up with ideas for helping Mia make progress.

At the team meeting, Ms. Mary shares that currently she sets aside 10 to 15 minutes each day to work individually with Mia on her IEP objectives. In addition, Clara, the speech-language therapist, noted that she works one-on-one with Mia for 30 minutes two times per week in her therapy room just down the hall. Despite this time set aside for instruction, Mia has not made progress on many of her IEP objectives. In fact, Mia does not seem to prefer the one-on-one time. For example, she often pushes away the blocks that Ms. Mary asks her to play with or refuses to name the picture cards Clara shows her during speech therapy. Mia’s parents’ comment that she seems happiest and most engaged when she spends time with her cousins and friends.

Gloria, the occupational therapist, encourages the team to try a new approach to supporting Mia’s development. She suggests that they try to increase Mia’s learning opportunities within the learning environment with her peers. Gloria starts by asking the team, including Mia’s family, to identify what skills Mia needs to learn to participate and engage in everyday activities. She also points out the importance of planning when and how Mia will be given the opportunity to practice these skills throughout the day. The team likes this idea and wants to learn more. They decide to try this approach to see if making the best of her everyday learning opportunities gives Mia more success in her learning environment and at home. As they prepare to provide embedded learning opportunities, they discuss and determine what to teach, when to teach, and how to teach Mia.

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Slide 7: 3 Steps

As we follow along with Mia’s team, we will see that providing embedded learning opportunities involves three interrelated steps: (1) planning, (2) implementing, and (3) evaluating. You will learn how to plan for embedded learning opportunities, how to implement embedded learning opportunities in your learning environment, and how to evaluate if the teaching is working.

Slide 8

Slide 8: Understanding Embedded Learning Opportunities

As we learn about planning, implementing, and evaluating embedded instruction, we will follow along with Mia's team as they consider **what to teach, when to teach, and how to teach**.

First, they consider **what** to teach. The team begins working together to decide what skills are important for Mia to learn right now that will help her be more engaged, independent, and able to participate in daily activities and routines. They think about the skills that are most important for them to target for learning. To do this they look to Mia's IEP goals and use what they know from observing her. They call these short-term objectives or right-now targets "Mia's learning targets."

Next, they consider **when** during the day provides the best opportunity to teach these skills.

Last, they think about **how** to structure Mia's learning opportunities to make sure teaching happens.

Slide 9

Slide 9: What to Teach: Identifying Learning Objectives

Let's begin with what to teach. Mia's team works together to develop learning objects focused on what is most important for Mia to learn "right now."

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Slide 10: Learning Objectives

What is a learning objective? We use the term learning objective because we want you to think about what you want to teach right now (and consequently what you want the child to learn). Learning objectives are based on content that will help children participate in everyday activities. When we develop learning objectives, we include information that will help plan for embedded learning opportunities. Learning objectives focus on skills that the child needs to learn "right now" to make progress on larger goals or objectives.

Finally, a learning objective is a behavioral objective that states how the child will respond, or what behavior we want the child to do.

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Slide 11: Identifying Learning Objectives

We can use a variety of resources to help us develop learning objectives. We might look at the child's IEP, their Individualized Learning Program, the curricula used, state standards, or developmental benchmarks. It's important to include family input, our own knowledge of child development and learning, and what we observe of the child's behavior in our learning environment.

Slide 12

Slide 12: Mia's IEP Goal

The team decides to start off their conversation about what to teach by looking at Mia's IEP goals. Here you see one of Mia's goals as it is written in her IEP, but the team realizes this goal does not match where Mia is right now. Sometimes IEP goals are written as longer term goals that they are not immediately teachable. At first an IEP goal might be "too big" and needs to be broken down into smaller, teachable parts.

Let's look at this goal: "During routine daily activities, **Mia will produce three-word phrases**. Mia will use three-word phrases on six occasions during a language sample collected over two data collection days." The team considers that, right now, Mia has a vocabulary of about 100 words. She is just beginning to use single words and rarely uses two-word phrases. They know that Mia's IEP goal does not reflect where her language use is "right now."

The team decides to break down this larger IEP goal of using three words to meet Mia at her current skill level. By breaking down a larger goal into steps that are smaller and more manageable for Mia to learn and build on. Let's see how Mia's team creates a teachable "right now" learning objective.

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Slide 13: Identifying a Learning Objective for Mia

To support Mia where she is right now, they decide to start by supporting her **use of one to two words** to express her needs or wants. After Mia meets this learning objective, the team will plan for the next learning objective that will get her even closer to accomplishing her larger IEP goal.

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Slide 14: When to Teach: Activities, Routines, and Transitions

Mia's team has decided what to teach so she can participate, engage, and be more independent. Now they think about when to teach Mia by discussing logical times during the day to provide instruction.

For example, for the learning objective we just looked at, Mia's team asks: During which activities throughout the day is Mia most likely to use her words to express her needs or wants? They think about logical and authentic teaching opportunities.

The team also thinks about the time of day when there will be enough adults available to support embedded learning opportunities. Ms. Mary suggests that free-choice time with playdough — a preferred activity of Mia's — might be one good time during the day to teach Mia to use her words. They decide to keep looking at Mia's schedule to find additional times when she can practice using words to get her needs met.

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Slide 15: Helping Children Learn in Everyday Activities

Ms. Mary has already set up a daily schedule that provides the framework for all the activities, routines, and transitions that occur throughout the day. She knows that children learn best when they know what to expect each day and there is some predictability.

Note:

It is best when the schedule is visible for children and staff to see. The scheduled activities should demonstrate a balance between structured and unstructured activities and sitting and moving.

For example, the day can start with an arrival routine, followed by circle time that brings the whole class together as a group for a few minutes. This might lead to center time or free play, where the children are able to make more choices and manage their own time, sometimes with help from adults, such as when adults help children choose centers or free-play activities.

Each activity on Ms. Mary's schedule, can provide opportunities to provide instruction focused on children's learning objectives. Mia's team looks at her daily schedule and thinks about which activities would offer the best learning opportunities based on her learning priorities.

To support Mia's use of one or two words, for example, the team decides that free play, outside, snack, and small group time present natural teaching opportunities.

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Slide 16: When to Teach

This puzzle piece represents the importance of the fit between the learning objective and the activity, routine, or transition. As the team plans **when** to teach Mia's learning objectives, they consider what activities, routines, and transitions will be the most natural and logical times for teaching. It is important that the learning objective fits with the characteristics and demands of the activity. When thinking about activity characteristics or demands, think about what **all** children need to be able to participate.

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Slide 17: Selecting Times and Activities

Now that Mia's team has considered natural and logical times to create embedded learning opportunities, they need to figure out how they will be sure sufficient learning trials occur for Mia throughout a typical, and often busy day. As educators and program staff, they are trying to plan for individual children, track the learning of other children in the group, and think about the adults and resources that are available at different times of the day.

In the next series of slides, you'll learn how to use an activity matrix. A matrix is a tool that helps you think about and document when and where you will create embedded learning opportunities for important learning objectives. It also makes the plan visible for all members of the teaching team.

An activity matrix is helpful because it reminds the educators of:

- The planned activities.
- Individualized learning objectives for children who need targeted and intentional learning opportunities.
- Times of day to embed learning opportunities.

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Slide 18: Making an Activity Matrix

To make a useful activity matrix, it's important to begin with a predictable, balanced daily schedule.

Once you have your schedule, you can then turn it into an activity matrix.

In its simplest format, an activity matrix has the activities listed in the left column, and the children's names across the top. In this example, you see the daily schedule listed in the left-hand column of the matrix. Then there are two columns on the right for the children who need intentional and targeted embedded learning opportunities, Mia and Matthew.

You might notice that transitions are included on this activity matrix. There are many transitions throughout a typical day. For planning purposes, this is the spot where educators can insert their planned transition-based instruction.

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Slide 19: Activity Matrix for Mia

Here you see the matrix the team developed for Mia using her learning objectives. They have Mia's name at the top and the schedule of activities down the left column. The individual learning objectives for instruction are placed inside the boxes. We see that Mia has several opportunities throughout the day for instruction on her learning objectives. The team has created a plan for embedding learning opportunities on the same learning objective across different activities or routines.

Slide 20

Slide 20: Group Activity Matrix

You can tailor an activity matrix to meet the needs of your learning environment. Here is another example of an activity matrix an educator is using in her class to plan for three children. As you saw with Mia's matrix, the activities go in the left column. Then all the names of the children in the classroom or group (at least all the children with IEPs or individual needs) go across the top. This educator is using sticky notes to show how she plans to provide embedded learning opportunities for each child during the activity, as well as how many opportunities she plans to provide at that time. The activity matrix is a working document that can change as the needs of the children and staff change.

Remember, when creating an activity matrix, it is important to match or ensure the "fit" of the learning objective to the activity. Educators should also notice natural occasions in which the behavior occurs, think about the number of staff available, and consider how many opportunities the child will need for practice.

An activity matrix is an important tool for the team to use when planning for embedded learning opportunities. Try out the activity matrix handouts that accompany this in-service suite.

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Slide 21: A Well-planned Activity Matrix

Filling out a matrix can be challenging because there are many factors to consider, like each child's learning objectives, adult support available, available learning materials, social dynamics, and child interest. One of the nice things about a matrix, though, is that it's a working document that can, and should, be fluid. As the needs of the children and staff change, so can the activity matrix.

Remember, when you are creating your activity matrix:

- Match the child's learning objective to the activities — What is the most logical activity for embedding? For example, if a child has a learning objective to put on their coat, the most natural or logical activity would be preparing to go outside or preparing to go home [departure].
- Consider natural locations in which behavior occurs — Where are you most likely to see this behavior occur? If the child has a learning objective to request preferred items from an adult, requesting behaviors might be likely to occur during snack, center activities, and outdoor play.
- Evaluate available staff during activities on the daily schedule.
- Some activities demand more adult support than others. Consider the availability of staff during each activity to provide instruction, not just supervision.
- Identify the number of opportunities needed for practice — Consider the child and their history of learning. How many opportunities do you need to provide for the child to have adequate practice with the learning objective? Also, think about how you will provide learning opportunities across the day.

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Slide 22: How to Teach: Planned Instructional Sequences

We've talked about **what** to teach (learning objectives that match where the child is right now), and **when** to teach (during activities that provide logical and authentic learning opportunities). Now we will talk about **how** to teach.

Earlier you heard that embedded learning opportunities involve targeted instructional support for a child's learning objective. Now we will think about how educators provide this support by thinking about planned instructional sequences, or PInS.

NOTE: There is an in-service suite on the Office of Head Start's national website about planned instructional sequences that provides many examples of **how** educators can create and use PInS. For the purposes of this suite, we will only go over this teaching strategy briefly, but if you are interested in knowing more about PInS, please reference the full suite.

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Slide 23: Planned Instructional Sequence (PInS)

What is a planned instructional sequence, or PInS? PInS is a short teaching interaction that uses research-proven techniques to provide instruction. PInS can be used to teach any skill, including communication, cognitive, motor, and social skills. PInS involves a specific sequence to initiate and follow up on teaching interactions.

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Slide 24: 4-step PInS Process

PInS is a four-step process. When using PInS, the educator plans ahead to teach a specific skill, carefully identifying and planning for each of the following steps.

1. First, some type of cue (or what is sometimes called an "antecedent") is provided to get the process started. These are often verbal cues (or something the educator says), but children can also be cued by the environment, an activity, or even peers.
2. Next, the educator provides some sort of help if the child needs it. This is the teaching part and is extremely important, especially in the beginning stages of learning a new skill.
3. The third step is the child response or behavior. The educator will provide enough time for the child to respond after either the cue or after the help.
4. Lastly, the educator will provide feedback (or a consequence) depending on the child's response. Correct and incorrect responses will elicit different feedback.

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Slide 25: PInS for Mia

Let's think of what a planned instructional sequence for Mia might look like focused on her learning objective that "Mia will use one to two words to express her needs and wants."

Mia's team planned for her instruction on this learning objective to happen during a small group activity.

- Ms. Mary wants Mia to ask for help, so she provides something in the environment that would set the occasion that would cue Mia to ask for help. As a cue, Mia's educator gives her a Play-Doh container with the lid still on.
- The behavior or desired child response is that Mia will say "help", so the educator pauses and looks at Mia with a gesture that indicates she doesn't know what Mia wants. The educator models for Mia by saying, "You can say, 'help!'"
- Ms. Mary pauses and waits for Mia to respond.
- Mia says "Help," and Ms. Mary quickly helps her to open the play dough container, with the feedback, "You said 'help' Mia!"

Slide 26

Slide 26: Video – Let's Take a Look

Mia's Everyday Learning Opportunities

Notice what Mia's educators do to provide Mia with learning opportunities throughout the day. Think about Mia's activity matrix and the planning that went into each of these teaching and learning interactions. Notice that within each interaction the educator moves through the steps of a planned instructional sequence.



Video 2

Play Video

What are your reflections?

Remember, you can dig deeper into the PInS instructional approach in our Planned Instructional Sequences in-service suite on the Office of Head Start's national website.

Slide 27

Slide 27: Three Key Questions for Evaluating Embedded Learning Opportunities

In this in-service suite, we discussed that creating embedded learning opportunities involves three interrelated steps: (1) planning, (2) implementing, and (3) evaluating. Let's focus on three key questions to ask when evaluating embedded learning opportunities. When evaluating, we ask: (a) Am I doing it? (b) Is it working? and (c) Do I need to make changes?

Taken together, these questions provide a framework for data-based decision making. Let's start with "**Am I doing it?**" This is an initial question to ask. Ms.

Mary will need to provide Mia with embedded learning opportunities if she wants her to make progress on her learning objectives. Ms. Mary will want to keep track of how many embedded learning opportunities she is providing to Mia.

Ms. Mary can answer the question "**Is it working?**" by monitoring whether Mia is making progress on her learning objectives. She will want to collect data on how many times Mia is correctly using the behavior that is tied to the learning objective. One way to collect data is to use the same format as an activity matrix. There is a handout that accompanies this suite that you can use to collect data on how many complete trials of PInS you provide, as well as how many times the child uses the correct behavior.

In the third step of evaluating, you decide if you need to make changes to your plan based on the data you collected from answering "**Am I doing it?**" and "**Is it working?**"

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Slide 28: Supporting Mia's Learning

Let's review Mia's story and how her team used embedded learning opportunities to help her make progress. In the past, Ms. Mary provided Mia with 10 to 15 minutes of daily one-on-one instruction, and Mia left the group twice a week for thirty minutes to work with the speech language educator. Mia was not making progress on her goals, and she did not seem to prefer the one-on-one time.

As you saw, the team decided to try a new approach and use embedded learning opportunities. They focused on identifying the skills Mia needs to participate, be engaged, and be independent in everyday activities. They considered what to teach, also called priority learning objectives. We saw an example of how they used one of Mia's IEP goals and broke it down into a smaller, teachable step.

They then considered when to teach during Mia's everyday learning opportunities. They looked at her daily schedule and thought about activities, routines, and transitions that would be best for embedding opportunities to learn and practice.

The team also began to think about how to teach, using intentional and targeted instructional procedures. They began to use planned instructional sequences (or PINs for short).

After just a few weeks of trying this new approach, Ms. Mary is pleased with the growth she is seeing in Mia.

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Slide 29: Reviewing Embedded Learning Opportunities

To wrap up today, let's review why it might be important to provide embedded learning opportunities in early learning settings for young children with disabilities.

Embedded learning opportunities help to meet a child's individualized learning needs within their everyday routines and activities.

Embedded learning opportunities maximize children's motivation by considering their interests and preferences. Educators, parents, and other team members work together to identify the child's interests and preferences.

Embedded learning opportunities provide opportunities for children to learn and practice important skills in meaningful contexts. Children learn and master skills in contexts where these skills are needed.

Research has shown that all young children benefit from high-quality learning opportunities. For children with disabilities, it is particularly important to provide sufficient learning opportunities to promote and advance their learning and development.

Today we also saw Mia's team learn about what to teach—learning objectives; when to teach—in everyday learning activities, routines, and transitions; and how to teach—using intentional and targeted instruction.

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Slide 30: Acknowledgements

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Slide 31

Slide 31: Thank you!

Thank you for your participation. Please check out the materials that accompany this presentation for more tips, ideas, and checklists that can be helpful in planning, implementing, and evaluating embedded learning opportunities.