15-Minute In-Service Suite: Differentiating Learning Opportunities in Early Math

Narrator: Welcome to this presentation of the 15-minute in-service Suite on differentiating learning opportunities in early math. This presentation highlights an important teaching strategy using ongoing assessment to plan individualized learning opportunities. "Individualized" doesn't mean developing a different lesson for each child. Rather, education staff observe and assess children to find out where they are now and learn where they need to make progress. Then staff provide intentional learning opportunities, including opportunities to explore hands-on materials and play with peers. Home visitors support parents as they observe their child and develop learning experiences at home. This strategy is called Differentiated Learning Opportunities or Formative Assessment. The Head Start Program Performance Standards prefer the term "individualization."

Differentiated learning opportunities provide challenging yet achievable math experiences. This means no child misses out on important cognitive building blocks and that children who already understand specific mathematical ideas can build on them and learn new skills. This presentation is one of several resources that education staff can use to support children's ideas, skills, and approaches to learning in the cognitive domain of the Early Learning Outcomes Framework, or ELOF. Specifically, it focuses on the subdomain emerging mathematical thinking.

Children's success depends on informal and intuitive mathematical ideas that build on one another. The framework for effective practice, or the House Framework, helps us think about the elements children need to be ready for school. These elements are the foundation, the pillars, and the roof. When connected, they form a single structure that surrounds the family in the center, because as we partner with families to implement each component of the house, we foster children's learning and development. Differentiating learning opportunities primarily involves the right pillar, ongoing assessment, and the left pillar, implementing research-based curriculum and teaching practices. It also involves the roof of the house, highly individualized teaching and learning. Education staff use ongoing assessment information to inform their curriculum planning, which includes intentional learning opportunities. Finally, the foundation represents the differentiated learning opportunities that happen informally with children throughout the day in engaging environments.

Knowledge of learning trajectories is the most powerful tool to use when individualizing learning. It answers three important questions adults must ask about their interactions with children. First, what is the learning objective for a child? Second, where is the child now? And third, what will support the child as they continue to learn? A learning trajectory's goal tells adults what children need to learn. The learning trajectory's developmental progression, similar to the ELOF's progressions, tell adults what the child knows and can do. It also outlines the next level of thinking, and the learning trajectory's suggestions for teaching and learning show adults how they can help children build to that next level. Knowing what a child knows and can do helps adults decide what supports a child needs to grow and develop. We hope you have new

ideas to expand on the ways you can support children's interest, engagement, and development in math. For more information, see the complete 15-Minute Suite on differentiating learning opportunities in early math, and take a look at our tips and tools and helpful resources.