

NEWS YOU CAN USE

News for Head Start, Early Head Start, & Migrant/Seasonal Programs

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FOUNDATIONS OF SCHOOL READINESS: APPROACHES TOWARD LEARNING, PART 3 OF 3

Welcome to Part 3, the final installment of this *News You Can Use* on approaches toward learning. To recap: Part 1 introduced the **approaches toward learning** domain and its relationship to school readiness. Approaches toward learning refer to learning styles, habits, motivation, and attitudes that reflect the many ways children involve themselves in learning—how they develop new skills and concepts across all of the essential domains. Part 1 identified key aspects of approaches toward learning—attention, curiosity, information gathering, memory persistence, problem solving—and talked about self-regulation, an important skill that helps infants and toddlers use different learning approaches more effectively. It also stressed the importance of working in partnership with families to understand and support children’s approaches toward learning in a culturally responsive manner. Part 2 provided a more in-depth look at attention, curiosity, and information gathering. Part 3 focuses on memory, persistence, and problem solving.



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In This News You Can Use, we explore some vignettes about approaches toward learning as they relate to school readiness goals. (See School Readiness Goals for Infants and Toddlers in Head Start and Early Head Start Programs.)

Memory

Just after morning snack, 30-month-old Lauren looks at the simple picture schedule on the wall. She points to the photo of children playing outside and says to her teacher, Adam, “Outside?” Adam answers her, “Yes, we will be going outside next. What would you like to do outside? Do you remember what you had so much fun doing yesterday?” Lauren looks at him and scrunches her face. After a few moments of silence, Adam prompts, “We used cups and spoons . . . ?” Lauren smiles and says, “Water!”

For some adults, the idea of doing the same thing in the same order every day might seem boring. For infants and toddlers, however, the daily routines and experiences that occur in a similar order every day offer a sense of predictability and comfort. Lauren knows that after snack,

her friends and teachers go outside because that is what they do every day. Her teacher, Adam, knows that offering predictability (and a simple picture schedule) helps Lauren strengthen her ability to remember “what comes next.” He also knows that this same kind of predictability helps her remember things that have already happened (“what comes before”), especially when he asks her questions to help her recall and provides the same experience more than once. When Lauren sees the water table, cups, and spoons, she may simply begin play right where she left off!

Memory—remembering what is seen and heard—has several components. One is remembering people and objects even if they can’t be seen; in other words, object permanence. Infants demonstrate **object permanence** when they watch and follow an object that moves out of sight; look for a toy they just dropped; search for a toy that’s partially hidden; and start to cry when someone they don’t know approaches. Another component is **working memory**. Working memory is the ability to hold some information in mind and use that information to accomplish something (e.g., follow verbal directions). It is also the ability to hold some information in mind while paying attention to something else.¹ A toddler who sings her favorite nursery rhyme to herself while she stacks blocks is using working memory. A third component is recalling things from the past, or **long-term memory**. Anticipating routines, acting out familiar routines (e.g., eating, sleeping) in pretend play, saying repetitive words or phrases during finger plays, and telling a parent at pick-up time about something that happened that morning are all examples of young children using their long-term memory skills.

Like attention (see Part 2 for more information), children’s ability to remember what they see and hear is critical for success in school and in life. After all, learning doesn’t happen if you can’t remember what you learned! Here are some ways to help infants and toddlers improve their memory skills:

- Play simple games from home and school, such as peek-a-boo and hide-and-seek with partially hidden favorite toys. For older toddlers, try “hide Teddy” (hiding a teddy bear in predictable places around the room and inviting the child to find it) and the Memory Game, using a few sets of matching pictures.²
- Talk about events that happened earlier in the day, the day before, or even “a long time ago.” Infants and toddlers may not have a concrete sense of time but are often surprisingly good at remembering what happened before. Use photos of children, their families, and familiar objects to talk about children’s past experiences. This will help them create and keep memories.
- Keep materials in the home, classroom, or family child care home consistent. While it is always a good idea to rotate out materials as children lose interest in them, it is also helpful to offer the same materials in the same location for an extended period of time. For example, a block area might always have the same set of wooden blocks, people, and vehicles. For variety, you might add animals, balls, or empty boxes but still keep the usual items on the shelf.



- Have you ever had a child request the same book over and over? She isn't doing it to drive you crazy! Infants and toddlers enjoy repetition and hearing a favorite story many times. So take a deep breath, smile . . . and read the story again because it helps children remember, and then predict, what happens. Some two-year-olds may even "read" a story to you because they have memorized the words.
- Reading and rereading books is just one way to offer repetition; daily rituals are another. Create rituals around routines such as eating, diapering/toileting, and sleep. For example, when diapering includes some of the same rituals each time (e.g., a quick game of peek-a-boo behind a clean diaper), it can help children remember what will happen next.
- Create and maintain a daily schedule for older infants and toddlers. Make sure that each day follows a similar pattern. The same things do not need to happen at the same **time** every day, but if they happen in the same **order**, children will soon remember what came before and what happens next. A very simple picture schedule helps as a visual reminder of the daily routines.



■ Persistence

Four-month-old Cole is lying on his back and crying. He wants to roll over but can't quite tuck his arm under so that he can get onto his stomach. His family child care provider, Anita, sits near him on the floor and offers encouragement: "You are working so hard! You can do it; I've seen you do it. Come on, you just tuck your arm and over you'll go!" Cole looks at her and continues to cry but he still tries. He rocks a bit on his back, but still cannot manage to get over. Anita gives him a little help by tucking his right arm under his tummy. This time when Cole tries, he rolls over onto his stomach. He looks up, his eyes wide with surprise, and then pushes himself onto his

back. Cole continues to roll back and forth from his back to his tummy for the next several minutes.

Cole, like most babies his age, has a natural desire to use his strengthening muscles to roll from his back to his front and his front to his back. Anyone who has watched a baby master this skill knows that, for some, it is not easy to learn. Remembering to tuck the arm at the right moment, getting enough strength for the move, and coordinating muscles in the body take practice. Practice takes **persistence**, and persistence means working toward a specific goal despite obstacles or failures.

In learning to roll over, as in life, there will be successes and failures. Young children can learn that failing, and the accompanying feeling of frustration, is part of learning.

(Again, this view varies among families and cultures.) Getting frustrated does not mean that you cannot learn to do something. When adults understand and provide just enough help for children to keep going, they offer opportunities to learn persistence. Adults can support infants and toddlers in learning how to persist through difficulties in the following ways:

- Offer emotional support to children. Use simple statements to let children know that you see how they feel; for example, “I can see how frustrating that is for you.” You might add, “You are really working hard to figure that out.” Even very young children can understand and benefit from knowing that someone recognizes they are trying. Children who are trying are still learning something—even if they don’t reach their goal!
- Give “just enough” help. Just as Anita helped Cole by tucking his arm rather than turning him over all the way, adults can provide just enough help to get children past where they are stuck.
- Recognize that children have different levels of tolerance for frustration. Some children are frustrated with one failed attempt, while others seem able to persist no matter what. When you offer help, individualize your response and how much help you offer so that you are meeting children’s needs and helping them get just a bit further.



■ Problem Solving

During a home visit, 13-month-old Ezra plays with his toy car. His mother, Celeah, and home visitor, Elaine, watch him. He drops the car into a basket of toys on the floor and immediately takes it out. He then drops it into an empty tissue box, takes it back out, and drops it into his mother’s tall rubber rain boot. When he tries to retrieve the car from the rain boot, he finds that his arm is not long enough to reach it. He looks up at his mother and says, “Uh oh.” “Uh oh,” she repeats, “how will you get your car?” She moves to help him, but Elaine gently stops her and says, “Let’s see if he

can figure this out.” As they watch, Ezra reaches into the boot again and then tries pushing it onto its side, shaking it, and finally turning it upside down. When he does that, the car falls out. He picks it up and proudly shows it to his mom and home visitor. He then drops it back into the boot!

Infants and toddlers are problem solvers. This does not mean that adults need to come up with problems to present to them! On the contrary, young children’s curiosity and motivation to figure out how things work often lead them to discover or create their own “problems” to solve. Ezra “created” a problem when he dropped his car into the rubber boot and could not easily get it out. Adults often want to step in and offer help when they see children begin to struggle. Ezra’s mom, Celeah, wants to do just that. However, because Elaine and Celeah have developed a trusting relationship, Elaine gently stops her and suggests they both watch to see what Ezra might do. Ezra experiments with some possible solutions before finding one that works. He solves his own problem. It’s not easy to watch a child struggle to figure something out, especially a child who does not tolerate frustration very well.



But, as long as the child is not in danger or emotionally falling apart, you can be most supportive just by being nearby and watching! This lets the child know that you trust him to figure things out, but that you are there in case it gets too hard. Here are some additional ways to help infants and toddlers develop their problem-solving skills:

- Remember that persistence and problem solving go hand in hand! The strategies for helping children learn how to persist through challenges also help them solve problems.
- If children need help coming up with solutions, offer some guiding questions, such as, “How can you get your toy car out of the boot? You tried reaching into the boot, shaking it, and laying it on its side. What else can you do?” You can also make suggestions without giving the whole solution. For example, if children are trying to build a tall tower of blocks but it keeps falling over, encourage them to start with a large block instead of a small one, and let them take it from there. Once children have figured out a solution, describe the strategy or strategies they used; for example, “You kept turning the square block until you got it to fit into the puzzle!” This highlights and reinforces children’s problem-solving strategies, and is an example of **scaffolding** (supporting and connecting what children already know to something new) children’s learning.
- Point out problems and how they get solved in stories and real life. When reading books, pose questions about the characters such as, “How do you think the bunny will get to that yummy carrot?” When real-life problems come up, describe the problems and invite verbal toddlers suggest solutions. You can also talk through your own discovery of a solution so that to children become aware of how to think through problems and solutions. For example, if you have more children than crackers for snack time, you might say, “Oh no, we have eight children and only seven crackers left. That’s not enough crackers! What can we do? Maybe instead of crackers for snack today, we can have sliced cucumbers.”

■ Conclusion

Young children’s ability to remember what they see and hear, to relate what they remember to previous experiences, and to use what they know to meet challenges and solve problems are examples of using learning approaches. How do the infants and toddlers in your care demonstrate memory, persistence, and problem solving? Do families see this the same way you do? What support strategies do you already use? Which new ones might you try? How will you support families in fostering their children’s memory, persistence, and problem-solving abilities?

This *News You Can Use* edition completes the three-part series on approaches toward learning. As you continue helping infants and toddlers develop effective learning approaches, remember that each child approaches learning in his or her own ways. And how young children develop, practice, and use these learning approaches depends on many things, including temperament, family culture, and community expectations. As infants and toddlers develop and use learning approaches within the context of trusting relationships with caring adults, they are building a powerful foundation for school readiness!





- i. Ronald Lally, "School Readiness Begins in Infancy: Social Interactions During the First Two Years of Life Provide the Foundation for Learning," *Phi Delta Kappan* 92, no.3 (November 2010): 18, accessed July 19, 2012,
- ii. Massachusetts Association for the Education of Young Children and Massachusetts Department of Early Education and Care, *Massachusetts Early Learning Guidelines for Infants and Toddlers* (May 2011), 127, accessed July 19, 2012, http://www.eec.state.ma.us/docs1/curriculum/20110519_infant_toddler_early_learning_guidelines.pdf.



STUDY GUIDE

for

NEWS YOU CAN USE

FOUNDATIONS OF SCHOOL READINESS: MEMORY, PERSISTENCE, AND PROBLEM SOLVING

SUMMARY:

This *News You Can Use* (NYCU) is the third in a three-part series on approaches toward learning. Part 3 looks more closely at the skills of memory, persistence, and problem solving.



Key Messages:

- The several components of memory each require different abilities: the ability to hold objects and people in mind even when they cannot be seen (object permanence), to keep recent information in mind in order to perform a task (working memory), and to remember events from the past (long-term memory).
- Persistence is the ability to work toward a specific goal despite challenges or feelings of frustration.
- Problem solving is how we figure things out. Remember that infants and toddlers usually create their own “problems” to solve with the goals they have in mind.



Think:

- Persistence and problem-solving skills can vary widely from child to child depending on temperament. How do you support children who have different natural abilities in these areas?
- How do memory, persistence, and problem solving support learning and school readiness?



Reflect:

- Remember a time when you learned something new. How did memory, persistence, and problem solving help you learn?
- Think about your family of origin. Were these traits nurtured? If so, how? If not, why not?



Discuss:

- Some of the approaches toward learning depend on a child’s temperament. How might temperament affect “persistence through frustration”? How might that, in turn, affect a child’s approach to learning in general?
- Look at the approaches toward learning goals in *School Readiness Goals for Infants and Toddlers in Head Start and Early Head Start Programs*. Have you observed infant and toddler learning as described by these goals? What have you noticed?
- What approaches toward learning goals does your program identify? How do they link to the ideas in this NYCU?



Next Steps:

- Read “Rituals and Routines: Supporting Infants and Toddlers and Their Families”: http://www.naeyc.org/yc/files/yc/file/201209/Rock-n-Roll_YC0912.pdf.
- Have parents share some of their home rituals around daily routines, and incorporate these rituals into each child’s day.