



2016 NAEYC Annual Conference

Title: Enhancing Executive Function Skills in Young Children

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Background Information

- Executive functioning (EF) refers to a wide range of central control processes in the brain that link and categorize information that is discernible in the cognitive, motor, and behavioral responses of young children (Diamond, 2006). EF includes cognitive processes that motivate goal-directed behavior (Best & Miller, 2010).
- The beginnings of EF skills are evident within the first year of life (Diamond).
- A growing body of research indicates that EF abilities are important for children's success (Blair, 2016).
- To date, there is no multidimensional measure of EF for children ages 6 months to three.
- Improving outcomes by targeting EF skills in the infant, toddler and preschool years has the potential of buffering or ameliorating EF deficits before school age. Professionals and families would benefit from an understanding of EF strategies for all children of diverse abilities.
- It is hoped that with early practice and experience EF skills when presented in naturalistic opportunities, can be improved in young children.

Activities

- Interactions with adults and peers help young children focus attention, build working memory, and plan and organize while responding to everyday experiences.
- These age-appropriate activities can be implemented during the child's daily routine.
- It should be noted that there is no evidence-based studies that prove the effectiveness of these activities, however, a group of experts reviewed the activities and recommended using them to support EF skills.

Age group	Activities
Infants	<ul style="list-style-type: none"> • Peek-a-boo: Hide your face behind your hands or use a washcloth and then move your hands away while you say, “Peek-A-Boo!” <i>Tip:</i> Pause to see if the baby will remove the washcloth from his own face and smile. Use containers and hide small toys to make it more challenging. • See & Do: Follow the child’s lead. For example, if baby is vocalizing with “coos or vowel sounds”, imitate the sounds or when baby smiles, smile back. • Sing Songs: Regularly sing songs, nursery rhymes, and finger plays. Repeat several times. Sing in your native language. Sing slow, sing fast. Sing when baby is in the bath, when you are snuggling or riding in the car, or walking through the neighborhood. • Shifting: Engage the baby with a rattle and then shift his attention to another toy. • Talk to Your Baby: Talk to your baby while doing daily routines such as diapering by saying, “It’s time to change your diaper.”
Toddlers	<ul style="list-style-type: none"> • Where is your Nose? Say, “Where is your nose?” and gently touch your nose and then the baby’s nose as you say, “There is your nose.” <i>Tip:</i> Repeat with other body parts and favorite toys. Fun to do during diaper change or bath time routines. • Pop-up Toys: These toys introduce infants and toddlers to cause-and-effect play. You can extend it by asking them to remember the hidden toy. Say, “Where is the tiger?” and pause to see if they reach for the correct button. • Active Games: Toddlers enjoy simple imitation games, such as “Simon Says.” <i>Tip:</i> Play games such as stop-go-slow, musical statues, or red light-green light. • Story Time: Reading stories is an amazing way to build attention, working memory, and self-control, as well as to support listening and turn-taking skills. <i>Tip:</i> Encourage your toddler to point at pictures and find favorite characters/items. Repeating a favorite story will help your toddler to remember sequences. • Feelings: Encourage your toddler to label his feelings across time, setting, events. <i>Tip:</i> Use pictures and charts about feelings and ask, “How do you feel today?” or help them identify their feelings. • Puzzles: Enjoy age appropriate puzzles together! Ask your toddler “Where do you think the yellow circle goes?” • Matching & Sorting Games: Have fun with stacking cubes, blocks, nesting measuring cups, and socks. Sort by shape (square, circle, star), size (big, small), color (green, yellow, blue), and feature (farm animals, pets, sea creatures). <i>Tip:</i> Increase challenge by asking putting small shapes in a big container and big shapes in a small container.
Preschoolers	<ul style="list-style-type: none"> • Transitions: Child is giving a 2 minute reminder before it is time to clean up and move to the next routine. • Shifting (Cognitive Flexibility): Child claps hands to a specific time (e.g., 2 times), then change the number to 3 times. For older children, change from clap to pat and back to clap. • Games and Puzzles: Child starts a dot-to-dot picture. Child identifies the picture before connecting all the dots. • Planning and Organization: Child add name or picture to schedule to go into the block area. • Working Memory: Child places blocks back on the correct shelf that is labeled with item name and picture. • Goal Selection: Child sets goals getting all materials needed to build a block “road” in the block area.