One service provided by an early childhood intervention (ECI) program is training that addresses the “design of learning environments and activities that promote the child’s acquisition of skills in a variety of developmental areas, including cognitive processes and social interaction.” (IDEA Part C, 34 CFR §303.13 (b)(14)(i))

Promoting a child’s cognitive processes during the first three years can have lifelong effects. Research demonstrates that the brain is the most plastic or malleable during the infant and toddler years. During this period, the brain undergoes tremendous growth and development.

The cognitive domain includes four components that describe how young children develop and demonstrate abilities: exploring the world around them, solving problems, remembering and retaining information, and pretending and using their imagination. In other words, cognitive development refers to growth in children’s thinking, reasoning, and understanding. Positive early experiences that support the development of such abilities contribute to lifelong traits, such as curiosity and persistence.

**Cognitive process and executive function**

The components of the cognitive domain are part of the cognitive process called executive function. Executive function “refers to a group of skills that helps us to focus on multiple streams of information at the same time, monitor errors, make decisions in light of available information, revise plans as necessary, and resist the urge to let frustration lead to hasty actions.” (The Center on the Developing Child at Harvard University, Working Paper 11).

**COGNITIVE DEVELOPMENT REFERS TO GROWTH IN CHILDREN’S THINKING, REASONING, AND UNDERSTANDING.**

For an explanation of executive function and how cognitive skills work together, watch the five-minute video Executive Function: Skills for Life and Learning (2012). The video at www.youtube.com/watch?v=efCq_vHUMqs identifies three key skills:

- working memory that facilitates following multiple-step instructions and taking turns in group activities;
- inhibitory control that makes possible selective, focused, divided, and sustained attention; and
- mental flexibility that makes it easier to switch gears and adjust to changed demands.

The skills that comprise executive function are
developed over time, starting as early as the first year of life. Because these skills can begin developing so early, it’s important that parents and early childhood educators know how to support the child’s development of them.

**Specialized skills training**

Parents can learn how to support their child’s development of cognitive processes by receiving specialized skills training from an early intervention specialist (EIS). An EIS, credentialed by the Department of Assistive and Rehabilitative Services (DARS), specializes in an array of developmental issues including the following:

- infant and toddler development, both typical and atypical patterns,
- early childhood cognition, motivation, and how infants and toddlers learn,
- typical infant and toddler behavior and challenging behaviors (biting, tantrums, and nutrition and sleep issues),
- infant and toddler social interactions, and
- the interconnection of developmental areas.

**Next time: Social interaction**

In the spring issue this column will address social interaction in infant and toddler behaviors and the close relationship between the development of those social/emotional skills and the development of cognitive functions in young children. One key point about brain development is the necessity of a positive relationship with primary caregivers.

The column will also explore ways an EIS can help you promote the development of these skills in young children.