



The Creative Curriculum® for Preschool
Executive Function

Children and adults use executive function skills every day.

Executive function skills are cognitive skills such as impulse control, multitasking, following multi-step directions, remaining focused, and avoiding distractions. These skills often require planning, problem solving, and self-regulation. While adults can usually call on these skills at will, children must develop them over time. *The Creative Curriculum® for Preschool* helps teachers understand that they play an important role in supporting children’s development of executive function skills.

Executive function skills are essential to school readiness. There are three components of executive functioning that are particularly important:

- *inhibitory memory*, which refers to the ability to remember to *not* do something (for example, not going out of turn when playing a game);
- *cognitive flexibility*, which is the ability to change actions and behaviors as the need arises (for example, adapting to a new dramatic play scenario); and
- *working memory*, which is the ability to keep information in mind in order to carry out a task (for example, following multiple steps of the cleanup routine).

In fact, research has shown that executive functioning and self-regulation are very strong predictors of school success—even stronger than IQ¹. Children who have strong executive function and self-regulation skills are more social and better liked by their peers, are more self-confident, can handle stress better, and perform better academically. For this reason, executive function skills are a part of everyday learning in *The Creative Curriculum®* classroom. The *Curriculum* helps teachers to support, rather than direct, children’s behavior, as this gives children the best chance to develop their own regulatory skills². The various components of the *Curriculum* help teachers answer the question, “How do we make children aware of what they’re doing?” During each part of every day, teachers are interacting with children intentionally to model executive function skills.

The Creative Curriculum® for Preschool takes into account that for children to acquire advanced thinking skills, they have to be helped by teachers and parents. Children use some executive skills spontaneously, but the National Research Council concludes that “children can be taught to monitor their thinking” and direct their behavior.³ The organization of *The Creative Curriculum®* classroom and the design of the daily schedule are pivotal to helping children develop these strategies. Teachers arrange the physical environment into interest areas that support executive function skills as children focus on and attend to activities and tasks. Children can plan and build models and structures in the Block area, follow multi-step directions in the Computer area, and apply their previous knowledge to their explorations in the Discovery area. There is also a quiet area where children can take a break when they are upset or need to get away from the action for a while. This promotes self-regulation by helping children manage emotions like frustration and anger appropriately.

One of the main tenets of *The Creative Curriculum*® is that children learn through play. Complex sociodramatic play is linked to the development of self-regulation and may be particularly beneficial for children who are impulsive or who are less advanced in self-regulatory development.⁴ Researchers have found that in addition to being linked to self-regulation skills, constructive, purposeful play is associated with other positive outcomes.⁵ For example, play can support memory development. As children act out real-life scenarios in their play, they discover meaningful connections among the information to be remembered. In particular, sociodramatic play is especially beneficial because it uses all of the executive skills simultaneously. When engaging in sociodramatic play, children must remember their own role as well as the roles of others (working memory). They have to stay in character during the play (inhibitory control). As the play unfolds, they make adjustments to what they do and say (cognitive flexibility). Teachers strengthen children's executive function skills by listening carefully, extending children's language, offering ideas and props, and challenging children to use their imaginations and problem-solving skills. When teachers enter children's play thoughtfully, they can scaffold children's learning and promote more advanced levels of cognition and language.⁶

How the Curriculum Components Promote Executive Functioning

The National Research Council recommends that preschool curricula encourage children to “reflect, question, and hypothesize.”⁷ *The Creative Curriculum*® for Preschool includes six *Teaching Guides* that accomplish this by way of studies, in-depth investigations of topics that are relevant to children and that begin with their questions. This type of investigative thinking enables children to think about what they already know, what they want to find out, and how they plan to research, experiment, and work together to learn more. Teachers model the investigative process by wondering aloud, talking about how to apply past experience to current investigations, and writing down children's ideas and plans—all of which are ways to support children's executive skills and behaviors. During large-group, shared writing experiences, teachers ask, “What do we know? What do we want to find out?” These questions help children hypothesize, make predictions, choose strategies, represent their ideas, and reflect on their learning. Additionally, opportunities for hands-on exploration give children the power to decide on approaches and monitor their effectiveness.

Book Discussion Cards™ describe repeated, interactive read-alouds that encourage children to think critically about characters and stories, make predictions about plot, and monitor their comprehension of story lines. These cards help teachers to model self-talk, or private speech, which plays an important role in active learning. Various comprehension strategies (e.g., “picture walks” before reading; predicting and

confirming; and questioning before, during, and after reading) create opportunities to use self-talk related to learning tasks. For example, a teacher can point to a picture and say aloud, “I wonder why the Little Red Hen is upset at the dog?” Children begin to internalize this learning method and employ it in the future.

Intentional Teaching Cards™ describe small-group activities that support social-emotional, physical, and language development, as well as development and learning in literacy and mathematics. Activities such as graphing, measuring, observational drawing, introducing new vocabulary, and using the computer for research are presented in a format that enables teachers to individualize learning experiences to meet the strengths, needs, and interests of each child in the classroom. *Intentional Teaching Cards*™ give teachers detailed instructions for making experiences exploratory and for encouraging children to think critically about the concepts presented. Additionally, the cards address self-regulation by helping children make a plan for play, interact with others, and express strong emotions appropriately.

Mighty Minutes™ can help signal to children that it is time to focus and listen. The short, engaging activities described on the cards support children’s executive functioning as children act out roles for a song or rhyme, or change their actions when encouraged to do so during a game or song. This type of daily practice helps children develop self-regulatory skills that they can then use at other times of the day.

Finally, the five foundational volumes of *The Creative Curriculum*® for *Preschool: Foundation* explain how children learn and how teachers can make the most of their interactions with children. These volumes model teacher–child interactions in interest areas, explain how to lead children through project-based investigations of study topics, and provide strategies for supporting children’s development of self-regulation skills.

General Information About The Creative Curriculum® for Preschool

The Creative Curriculum® for *Preschool* features the *Foundation* and *Daily Resources* that are fully aligned with the *Head Start Child Development* and *Early Learning Framework* and state early learning standards. It supports children’s development and learning relative to 38 objectives that include predictors of school success. Furthermore, it helps children develop confidence and lifelong critical thinking skills through encouraging exploration and discovery as a way of learning.

References

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- ³ Bowman, B. T., Donovan, M. S., & Burns, M. S. (Eds.). (2001). *Eager to learn: Educating our preschoolers*. Washington, DC: National Academy Press.
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- ⁷ Bowman, B. T., Donovan, M. S., & Burns, M. S. (Eds.). (2001). *Eager to learn: Educating our preschoolers*. Washington, DC: National Academy Press.

