



**WHAT IS  
EXECUTIVE  
FUNCTION  
AND WHY IS  
IT SO  
IMPORTANT?**

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The development of solid executive function is one of the key learning tasks of early childhood, and a significant contributor to later success in life.

The brain's executive function is like an internal "air traffic control system".

Just like an air traffic controller manages multiple aircraft in various stages of their flights – taking off, changing altitude, altering direction, landing etc - our brain's executive function helps us 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.

There are three interrelated skills which comprise executive function:

- Working memory
- Inhibitory control
- Cognitive/mental flexibility

These three skills help us keep information in mind, master our impulses, and remain flexible in the face of change - and are crucial building blocks for the development of both cognitive and social interaction skills in young children.

Parents should take an interest in helping their children develop sound executive function skills in early childhood because:

### **Strong executive function skills provide the best possible foundation for school readiness**

In many ways, executive function skills could be called the "biological foundation" for school readiness. It has been shown that children with strong working memory, inhibitory control, and cognitive/mental flexibility skills make greater gains in academic areas than peers with weaker executive function skills.

For young children, coming to school with these foundational skills well-developed is just as important, if not more important, than fluency with letters and numbers.

## **Executive function skills begin at home**

These skills are built over time through practice, and can be observed in infants as early as 6 months. Even as early as 6 months some infants can understand and obey a simple directive such as "don't touch that plate."

What is happening for the child is they are using their receptive language skills (understanding what is said to them), plus their executive function which enables them to obey the instruction, rather than just impulsively touching the plate.

But executive function skills are not always developed automatically.

Parents can support (or "scaffold") the development of these skills from early childhood by teaching and reinforcing common concepts such as taking turns and using "inside" and "outside" voices.

In addition to the home, executive function skills continue to be developed in childcare programs, pre-schools, primary school classrooms, and other social settings.

## **Understanding executive function helps parents collaborate with educators**

Parents who are actively participating in the development of their child's executive function skills will have a richer understanding of the importance of all activities and expectations revolving around classroom life. They will understand the role their child's executive function has for tasks such as how they line up for lunch or the way they study for a spelling test.

Primary school teachers are keenly aware of the importance of executive function.

So this understanding by both parent and teacher has the potential for a dynamic, integrated educational experience for the student, teacher, and parent all working together to build a better brain for each child.

## **Executive function skills help lay the foundation for the kind of student, citizen, and social being a child will become**

Ultimately, the skills that combine into executive function are the skills we use to navigate family, school, and work settings for our entire lives.

Retaining and using information, filtering thoughts and impulses, focusing on a task at hand, recognizing errors, changing plans, and understanding how different rules apply in different settings are all skills that require stewardship from birth to adulthood.

Parents armed with this knowledge are more apt to take an active part in the development of these skills from an early age.

## **Understanding executive function gives parents a fuller understanding of a child who is struggling**

It is a mistake to immediately brand a child who struggles with things like inhibitory control as a "bad kid".

Understanding the concepts behind executive function gives parents a fuller picture of what is happening with their child when he or she is having difficulty controlling impulses, focusing on a given task, or understanding that different rules may apply at different times.

This will help parents decide if outside help may be needed to help their child (studies show there are interventions that support executive function development).