

# Educational Psychology

## Overview Guide

## Executive Functioning

**What is Executive Functioning?** The term executive functioning describes a set of cognitive skills which help humans to regulate their behaviour, moderate their interactions with others, learn and generally 'function' during daily tasks. Three sub-skills are considered to come under the umbrella of executive functioning (Centre for the developing child, Harvard University);

- **Working memory**
- **Cognitive flexibility**
- **Impulse control**

Executive functioning skills are internal cognitive processes but play an important role in our external presentation in daily life. Research suggests that humans are not born with executive functioning skills, but are born with the ability to develop these skills.

**Executive functioning and learning:** Executive functioning acts as a control centre in daily life, but particularly when children enter educational environments. Executive functioning skills are in demand on a daily basis, but especially in the classroom. Any learning activity requires children to use their executive functioning skills. Examples of executive functioning during effective learning:

1. When given task instructions, children must focus on, hold in mind and work with that information (working memory skills) in order to complete a task.
2. When completing a task in a busy classroom, a child must use their executive functioning skills to filter out distractions and continue with their work when their classmates are off task, leave the room or talk around them (impulse control/ cognitive flexibility).
3. Children may have to use their executive functioning skills whenever they need to revise their own plans, manage their impulses or switch focus away from their current activity (cognitive flexibility/ impulse control). Cognitive flexibility skills are demanded whenever a child is asked to stop their current task and attend an out-of-class intervention, when their teacher is unexpectedly absent and replaced by a substitute teacher or when another children requires the teachers attention and the teacher pauses their input to the whole-class.

**Developing Executive Functioning Skills:** Practicing executive functioning skills is vital for children's development (remember, children are not born with these skills). Simple age-appropriate activities can be turned into opportunities to practice executive functioning skills regularly from infancy to adolescence, such as:

- Board games/ card games (particularly those that involve a strategy)
- Music, singing, dance and sports: Two-handed or rhythmic activities challenge young people to co-ordinate and use multiple executive functioning skills at once to hold music, choreography or instructions in mind whilst completing a physical action.
- Planning interventions: Such as 'planning alternative tomorrows with hope' help children to anticipate challenges, reflect on their actions and plan strategies to achieve their goals.
- Quiet/ reflective activities: (such as reading or completing puzzles) allow children to practice attention and impulse control in low-consequence settings.

**Further reading:** *Age-related activities for executive function development*

<https://developingchild.harvard.edu/resources/activities-guide-enhancing-and-practicing-executive-function-skills-with-children-from-infancy-to-adolescence/>