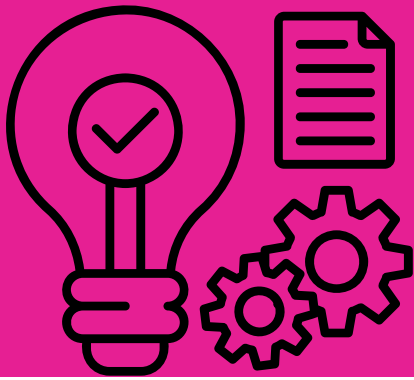




Executive Functioning

Executive functioning can be compared to the conductor of a band. Just as a conductor coordinates the various instruments and musicians to create a harmonious performance, executive functioning is the cognitive process that orchestrates and regulates our thoughts, behaviours, and emotions.

Planning and Organization



The conductor plans the musical score, determines the tempo, and coordinates the timing and entry of each instrument section. Similarly, executive functioning allows us to plan, organize, and prioritize our tasks and activities.

WHAT DO DEFICITS LOOK LIKE IN THE CLASSROOM?

Difficulty breaking down tasks: Student may struggle to break down larger assignments or projects into smaller, manageable steps. This can lead to feeling overwhelmed and difficulty getting started on the work.

Incomplete or missing assignments: Student may frequently forget to complete assignments or turn them in on time. They may have difficulty keeping track of due dates, materials needed, and the various steps required to complete the work.

Disorganized workspace: The student’s desk, locker, or backpack may appear cluttered and disorganized, making it difficult to find necessary materials and resources when needed.

Difficulty managing time: Struggling to allocate appropriate amounts of time for different tasks, leading to rushed work or missed deadlines.

Difficulty prioritizing: Student may have trouble determining which tasks or assignments should take precedence, leading to haphazard completion of work.

Difficulty following multi-step instructions: Breaking down and sequencing the steps required to complete a complex task or project can be challenging for these students, leading to confusion and mistakes.

Inconsistent academic performance: The student’s grades may fluctuate significantly, as they have difficulty maintaining a consistent approach to their schoolwork.

EVIDENCE-BASED STRATEGIES AND ACCOMMODATIONS

- Organizational strategies:
 - Provide structured routines and schedules
 - Use checklists, calendars, and visual organizers
 - Teach note-taking and study skills
 - Encourage the use of binders, folders, and colour-coding
- Time management strategies:
 - Break down assignments into smaller, manageable steps
 - Use timers or schedules to help with task completion
 - Provide extended time for tests and assignments
 - Teach time management and planning skills

Attention and Focus



The conductor maintains focus on the performance, cueing in each section at the appropriate time. Executive functioning enables us to focus our attention, ignore distractions, and stay on task.

WHAT DO DEFICITS LOOK LIKE IN THE CLASSROOM?

Frequent distractibility: The student may have difficulty maintaining focus on the teacher’s instruction or the task at hand, frequently shifting their attention to other stimuli in the environment, such as noises, movements, or their own thoughts.
Difficulty sustaining attention: The student may be able to focus initially, but their attention span is limited, causing them to lose focus and concentration over time, especially during longer or more complex tasks.
Fidgeting and restlessness: The student may exhibit physical signs of inattention, such as fidgeting, tapping their pencil, or frequently shifting their position in their seat.
Incomplete work: Due to their difficulty maintaining focus, the student may frequently fail to complete assignments or tasks, leaving them unfinished or only partially completed.
Careless mistakes: The student’s lack of sustained attention can lead to careless errors or oversights in their work, even on tasks they are capable of completing.
Difficulty following multi-step instructions: The student may struggle to remember and execute a series of instructions or steps, especially if the instructions are given verbally or if the task involves several components.
Difficulty transitioning between tasks: The student may have trouble shifting their attention and focus from one activity or subject to another, leading to delays or disruptions in the flow of the classroom.
Daydreaming or “zoning out”: The student may appear to be mentally absent, staring off into space or lost in their own thoughts, rather than actively engaged in the lesson or activity.

EVIDENCE-BASED STRATEGIES AND ACCOMMODATIONS

- Minimize distractions (e.g., seating near the front, use of noise-cancelling headphones)
- Provide frequent breaks and opportunities for movement
- Use visual aids, such as graphic organizers or PowerPoint presentations
- Encourage self-monitoring and self-regulation techniques

Flexibility and Adaptability



The conductor must be able to adjust the performance in response to unexpected changes or errors. Executive functioning allows us to be flexible, adapt to new situations, and problem-solve effectively.

WHAT DO DEFICITS LOOK LIKE IN THE CLASSROOM?

Resistance to change: The student may have difficulty adjusting to changes in routines, schedules, or classroom procedures. They may become upset or frustrated when their expectations are not met.

Difficulty with transitions: Transitioning between activities, subjects, or locations in the classroom can be challenging for the student, leading to disruptions, delays, or behavioral outbursts.

Rigid thinking patterns: The student may have trouble considering alternative solutions or approaches to problems, often insisting on a single, inflexible way of doing things.

Difficulty generating new ideas: When faced with open-ended tasks or creative assignments, the student may struggle to come up with novel ideas or solutions, relying instead on familiar, repetitive responses.

Perseveration: The student may become “stuck“ on a particular thought, idea, or behaviour, unable to shift their focus or approach, even when it is no longer appropriate or effective.

Difficulty with problem-solving: When encountering unexpected challenges or obstacles, the student may have trouble adapting their strategies or thinking flexibly to find a solution.

Emotional rigidity: The student may have difficulty regulating their emotions and responding appropriately to changes in their environment or social interactions.

Difficulty with group work: Collaborating with others and being open to different perspectives can be challenging for the student, as they may struggle to compromise or consider alternative viewpoints.

EVIDENCE-BASED STRATEGIES AND ACCOMMODATIONS

- Provide clear and consistent routines and expectations
- Offer opportunities for choice and decision-making
- Teach problem-solving and cognitive flexibility skills
- Gradually introduce changes and new tasks

Richelle Greek

Inhibition and Self-Control



The conductor must ensure that each musician plays their part at the right time, preventing them from jumping in too early or playing out of turn. Executive functioning helps us inhibit impulsive behaviours and exercise self-control.

WHAT DO DEFICITS LOOK LIKE IN THE CLASSROOM?

Impulsive behaviours: The student may act or speak without considering the consequences of their actions, interrupting the teacher, blurting out answers, or engaging in disruptive behaviours.
Difficulty waiting their turn: The student may have trouble waiting patiently for their turn to speak or participate, often interjecting or grabbing materials before it is their time.
Difficulty following rules and instructions: The student may struggle to inhibit their immediate impulses and follow the classroom rules or teacher’s instructions, leading to behavioural issues.
Emotional outbursts: The student may have difficulty regulating their emotions, leading to sudden and intense emotional reactions, such as tantrums, meltdowns, or aggressive behaviours.
Difficulty with self-monitoring: The student may have trouble recognizing and adjusting their behaviours, often unaware of how their actions are impacting others or the classroom environment.
Difficulty with delayed gratification: The student may have trouble resisting the temptation of immediate rewards or pleasures, even when it means sacrificing long-term goals or academic success.
Difficulty with organization and planning: The student’s poor inhibition and self-control can interfere with their ability to plan, organize, and complete tasks in a timely and efficient manner.
Difficulty with social interactions: The student’s impulsive behaviours or lack of self-control can lead to challenges in their social interactions with peers and teachers, potentially causing conflicts or social isolation.

EVIDENCE-BASED STRATEGIES AND ACCOMMODATIONS

- Establish clear rules and consequences
- Use positive reinforcement and behaviour management systems
- Teach self-regulation and emotional control techniques
- Provide opportunities for physical activity and sensory breaks

Working Memory



The conductor must hold the entire musical score in their mind, remembering the parts for each instrument and how they fit together. Executive functioning relies on working memory to hold information in mind and manipulate it as needed.

WHAT DO DEFICITS LOOK LIKE IN THE CLASSROOM?

Difficulty following multi-step instructions: The student may struggle to remember and execute a series of instructions or steps, especially if the instructions are given verbally or if the task involves several components.

Difficulty with note-taking: The student may have trouble keeping up with the pace of the lesson and recording important information, as they struggle to hold information in their mind while also writing it down.

Difficulty with mental calculations: The student may have trouble performing simple mental math or manipulating information in their head, such as adding, subtracting, or remembering a sequence of numbers.

Difficulty with reading comprehension: The student may have trouble remembering the key details, main ideas, or sequence of events in a reading passage, as they struggle to hold and manipulate the information in their working memory.

Difficulty with problem-solving: When faced with a complex problem or task, the student may have trouble keeping track of the various steps, pieces of information, and potential solutions in their mind, leading to confusion and difficulty finding a solution.

Difficulty with written expression: The student may struggle to organize their thoughts and maintain a coherent flow of ideas when writing, as they have difficulty holding and manipulating the information in their working memory.

Difficulty with classroom discussions: The student may have trouble actively participating in classroom discussions, as they struggle to remember the key points being made or formulate their own thoughts and responses in the moment.

Difficulty with task completion: The student may frequently forget the steps or components of a task, leading to incomplete or disorganized work, as they have trouble holding the necessary information in their working memory.

EVIDENCE-BASED STRATEGIES AND ACCOMMODATIONS

- Use mnemonic devices, visual aids, and verbal rehearsal
- Provide access to notes, reference materials, and checklists
- Encourage the use of technology, such as voice-to-text or digital organizers
- Offer opportunities for repetition and practice