

A DIFFERENT WAY OF LOOKING AT ADHD:

BUILDING SKILLS IN EXECUTIVE FUNCTION AND PROCESSING SPEED

Recent research, including brain imaging studies, has shown that some individuals with ADHD have weaknesses in executive functions, and a slow speed of information processing. Students with these weaknesses are more likely to exhibit academic and behaviour problems, but should not be seen as lazy or unmotivated. Executive functions include the following often inter-related skills:

- *Organization*
- *Metacognition*
- *Time Management*
- *Flexibility*
- *Self-regulation of Affect*
- *Response Inhibition*
- *Working Memory*
- *Task Initiation*
- *Planning*
- *Goal-directed Persistence*

Students with ADHD who have executive functioning and processing speed weaknesses need to acquire and internalize cognitive strategies to address these weaknesses. These students may require specific instruction in executive function skills and increasing or addressing slow processing speed. Coaching, monitoring and assistance in generalizing these skills to all settings are often required for a student to succeed.

Classroom Interventions for Executive Functioning Weaknesses

- Try to analyze academic tasks, and then help the student to learn how to analyze tasks. For example, determine task complexity, novelty, number of steps, types of skills required, familiar vs. unfamiliar context. Then break down these tasks, utilizing the students' strengths to assist with areas of weakness. Students may require specific instruction in some of these areas.
- Weaknesses in working memory may affect students' ability to hold events and/or information in mind to guide their actions. For example, they cannot recall and follow classroom rules during a difficulty moment, but can easily recite them afterwards. They may require structured external prompts at such times, with a plan to phase the prompts out as the student acquires and internalizes the skill(s) being taught.
- These students may have difficulty following directions and performing complex tasks that require sequential steps, such as homework and projects. External cues and action plans can help, with a plan to phase out these strategies as the student acquires and internalizes the skill(s) being taught.
- Difficulty in the ability to multi-task, reflect on their actions, monitor their progress, and exhibit self-awareness of strengths and weaknesses are common in these students. Specific and direct instruction, guidance, and self-monitoring may need to be taught, and phased out as the student acquires and internalizes these skills.

Classroom Interventions for Processing Speed Weaknesses

- These students may need more time to complete tasks, assignments and/or process new information. They should be taught how to goal set, monitoring the time required for specific tasks, and record progress visually (e.g., graphs).
- These students may require a longer time to answer oral questions in class, so teachers can mention that a particular question is coming up and give these students time to access their answer. This strategy avoids drawing attention to the students with processing speed difficulties.

For further information, please speak to your school psychology staff or contact the Chief Psychologist, Dr. Debra Lean, at debra.lean@dpcdsb.org

Adapted from www.teachadhd.ca