

# Lost, Late and Scattered: Helping a Child with Executive Functioning Difficulties.

Prepared by HWDSB Psychological Services based on current scientific research in psychology and child development.

### What is Executive Functioning (EF)?

Executive Functioning refers to brain-based skills that enable a person to manage, plan, organize and set goals to complete tasks in a timely fashion. They help to guide thinking, emotion, and behaviour.

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Executive Functioning has been compared to an air traffic control system. The air traffic control system at a busy airport is required to manage arrivals and departures of multiple planes on numerous runways. In the same way, EF allows us to focus on multiple streams of information at the same time and revise plans as necessary. EF is also involved in focusing, holding and working with information in mind, filtering distractions and shifting between tasks.

Executive Functioning has been found to be a better predictor of academic success than cognitive ability. Why? Because academic success is governed by the student's ability to "...plan, organize and prioritize tasks, materials and information, separate main ideas from details, think flexibly, memorize content and monitor their progress." (National Centre for Learning Disabilities, 2013).

### What causes Executive Functioning difficulties?

Basic EF skills emerge early and continue to develop through adolescence and into our mid-20s. Genetics and heredity likely play a part in their development. Children may inherit their parents' weaknesses, as well as their strengths. Differences in brain structure, as well as brain injury, disease or environmental factors may have an impact on the development of EF skills. Executive functioning difficulties are not necessarily a sign of low IQ. People with Attention Deficit Hyperactivity Disorder (ADHD) and learning disabilities often struggle with EF issues, as do individuals with mood disorders and Autism Spectrum Disorder (ASD).

### What do Executive Functioning difficulties look like?

Weakness in EF skills can affect all areas of an individual's life, including home, school, and work. Individuals with EF difficulties may be misconstrued as lazy, unmotivated or unco-operative when, in fact, they find the process of planning and completing tasks too overwhelming. Students with EF issues may also struggle to control impulses and emotions, think flexibly, and understand the impact of their behaviour on others. Social withdrawal, rejection, loneliness and difficulties with peer relationships may result.

People often speak of EF difficulties as if all individuals struggle in the same way. In fact, there are many different presentations of EF weaknesses. A person may have strong skills in one area, but struggle in others.

The following chart, adapted from the Behavioural Rating Inventory of Executive Function (BRIEF), identifies some EF areas of difficulty and what it may look like at home or school.

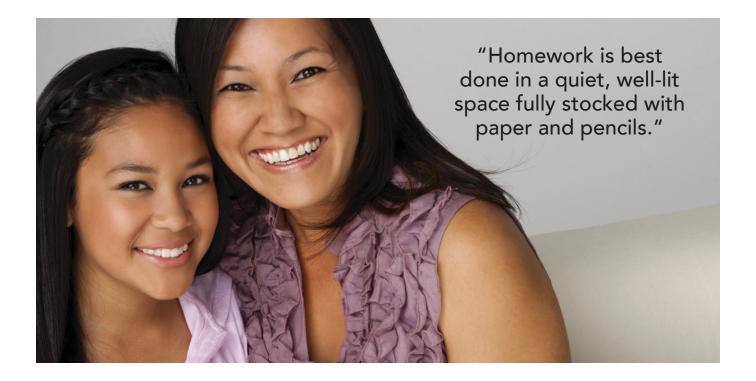
PROBLEMS WITH	MIGHT LOOK LIKE
Inhibit/Impulse Control	<ul> <li>Interrupting others or calling out</li> <li>Needing more adult supervision and structure</li> <li>Risk taking</li> <li>Comments such as, "I don't know why I threw it. I just did."</li> </ul>
Shift/Set Shifting/ Adaptability	<ul> <li>Difficulty tolerating transitions and changes to routine</li> <li>Difficulty with multitasking and shifting between tasks</li> <li>Comments such as, "I cannot stop this until it's done."</li> </ul>
Emotional Control	<ul> <li>Outbursts, sudden/frequent mood changes</li> <li>Easily angered, frustrated or brought to tears</li> <li>Comments such as, "I didn't mean to get so upset."</li> </ul>
Task Initiation/Goal Setting/Prioritizing	<ul> <li>Rarely takes initiative in chores or homework (does not know how to start)</li> <li>Gets caught up in minor details</li> <li>Comments such as, "I don't know what to do first."</li> </ul>
Working Memory/Task Persistence	<ul> <li>Trouble remembering things (phone numbers, instructions)</li> <li>Losing track of what one is doing</li> <li>Difficulty with mental math and aspects of reading comprehension</li> <li>Unfocussed and distractible</li> <li>Low task commitment</li> <li>Comments such as, "I forgot what I wanted to say."</li> </ul>
Plan and Organize/ Time Management	<ul> <li>Waiting until the last minute to begin a big project</li> <li>Losing track of homework assignments</li> <li>Difficulty predicting how long a task will take</li> <li>Difficulty developing a plan to complete tasks, projects, and essays</li> <li>Comments such as, "I had no idea it would take that long."</li> </ul>
Organization of Materials	<ul> <li>Trouble keeping belongings organized; frequently losing things</li> <li>Leaving things at home that should be at school, and vice- versa</li> <li>Messy desk, locker, bedroom</li> </ul>
Self-Monitoring	<ul> <li>Difficulty recognizing and keeping track of the impact of one's behaviours on others</li> <li>Not noticing mistakes in work</li> <li>Does not always learn from past mistakes</li> </ul>

## What can I do to help?

Executive Functioning skills continue to develop into adulthood. With your help, your child can build skills and learning strategies to cope with their EF difficulties.

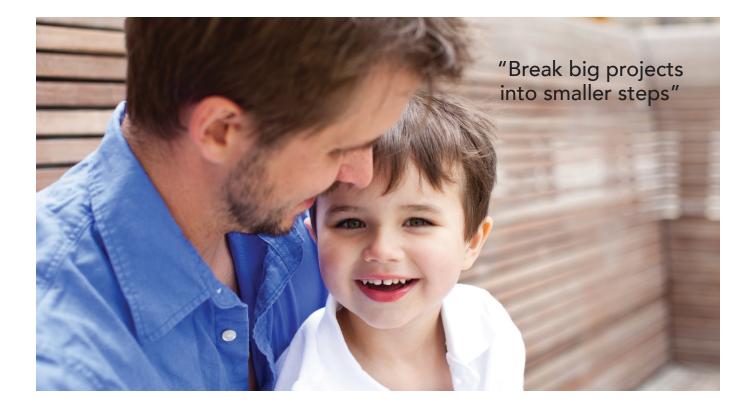
The following list is intended as a menu of recommendations to consider while working with your child. Their usefulness will vary depending on your child's developmental stage and preferred learning style.

- Establish open communication with your child's teacher. A team approach where everybody has similar expectations will make it easier for your child to meet task demands and develop independent work habits. Sharing observations of strengths and weaknesses can aid both the teacher and caregiver's understanding of a child's progress. Model self-advocacy skills to teach your child how to communicate his/her needs.
- Young children can benefit from playing games where they have to pay attention and follow simple rules, and where they are encouraged to imagine and be creative. Older children will benefit from opportunities to plan activities, solve problems, and resolve conflicts with caregiver support.
- Break big projects into smaller steps. For example, describe or draw what each finished step looks like and cut out each step. Paste each step onto a calendar to visualize the timeline. Using sticky notes allows for the movement of steps to subsequent days (if not completed) and the student can see when the work is piling up.
- A large, wall-sized calendar for all the family appointments, commitments and activities can help your child see that organization is a lifelong skill. Everyone—including your child—can see how they fit into the bigger picture of the household. Consider using a different color marker for each family member to help highlight different schedules.
- Be aware that students with executive functioning issues may have 'time blindness' or difficulty guessing how long it will take to complete tasks. To help children understand time increments, use an analog clock and ask children to predict how long tasks will take. Sketch pies of time on the clock to show the passage of time. It might be helpful to check in at the halfway point. Help identify "time robbers" such as hunger, and screen time (see: <a href="http://efpractice.com/images/tracknets.pdf">http://efpractice.com/images/tracknets.pdf</a> for a more detailed explanation of time tracking).



### What can I do to help? (CONTINUED)

- To assist your child in learning to stay on task and to build time management skills, technology such as a visual timer (e.g., time tracker) and/or a personal watch (e.g., watch minder) can be beneficial. These items allow adults to set the timer for the length of time they are expected to keep working. The amount of time can be slowly increased. Additionally, the watch minder can be set to signal to your child that they need to remain focused.
- Verbal checklists may not be as helpful to younger children as helping them create mental images of the task that needs to be done. When adults hand checklists to children that are already made, they have not used their own visual or imagery and that may be hard to create after the fact. Instead of asking "What do you have for homework?" it might be more helpful to ask, "When you walk in class tomorrow, what do you see yourself handing your science teacher?"
- A visual checklist may also help. Such a checklist may use pictures to lay out the steps to perform a certain task. For instance, the morning routine might have pictures of getting out of bed, brushing teeth, getting dressed, brushing hair and eating breakfast.
- For older students, the use of a systematic and premade proofreading checklist might be helpful when there are stories or reports to prepare. A self-talk strategy might also assist in improving self-monitoring (i.e., your child would "talk themself" through a task so that he or she is better able to "hear" when an error has been made).
- Create routines. For example, school supplies and backpacks could be stored in the same place as soon as your child gets home from school every day. Older students can benefit from an established, consistent time to do homework. Keep in mind that if they wait until they feel motivated, it may never happen.
- Homework is best done in a quiet, well-lit space fully stocked with paper and pencils. A search for supplies can quickly derail homework time. Any space with minimal distractions is good. Some families find doing homework on the kitchen table works best for their child, particularly if an adult is nearby to supervise and answer questions.



### What can I do to help? (CONTINUED)

- Instead of having homework supplies scattered all over the house, keep them all in a premade "toolbox" or cleaning supply caddy. Your child can organize supplies by function (e.g., pencils and markers, and scissors and glue).
- Set aside extra time to get ready before going out. A child with EF difficulties will generally need more time than their peers because they may be more easily distracted. Give a five-minute warning before leaving or shifting tasks.
- Colour code materials. Cover the textbook for one course in the same colour as the notebook or workbook for the course so the student learns to grab all green things for science, etc.
- Provide choices, but keep the number of options to a minimum. Try not to present too many options at once. Students with EF issues tend to be overwhelmed by too many options and then struggle to set priorities that take all the options and circumstances into account. Similarly, work on only one task at a time or students may become overloaded or lose track of what they are doing.
- Keep technology in balance. Reduce multitasking and distractions when focused attention is required. Choose high quality media that promotes problem solving and imagination. Encourage your child to engage in low-tech activities that they love and that naturally boost cognitive flexibility, persistence and focus. Activities can include games like Freeze Dance, Red Light/Green Light, Simon Says, imaginative play, and board games. Encourage your child to engage in sports, clubs, and other out-of-school activities they find interesting.
- Coach your child through difficult tasks, while modelling your own self-talk. Remember to embrace their mistakes and encourage experimentation and independence. Learn about the power of praise. Support, but be wary of coddling and continuous rescuing. Withdraw support gradually as your child gains confidence.

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### Further resources for parents:

- Sarah Ward Parent Connection <u>www.theparentconnection.org</u>
- No Mind Left Behind: Understanding and Fostering Executive Control the Eight Essential Brain Skills Every Child Needs to Thrive by Adam J. Cox provides a series of practical strategies to assist with EF difficulties.
- The Hidden Curriculum: Practical Solutions for Understanding Unstated Rules in Social Situations by Brenda Smith Myles, Melissa L. Trautman, and Ronda L. Schelvan is a book that describes explicit social skills that everyone knows, but no one is taught.
- Executive Function Skills in Children and Adolescents by Peg Dawson and Richard Guare provides a useful developmental list of EF skills.
- "Self-Reg" by Dr. Stuart Shanker helps parents understand the behaviours associated with Executive Functioning difficulties and guide them towards strategies for positive living.
- Websites with some general EF strategies: <u>www.understood.org</u> (search "executive functioning strategies" and <u>www.socialthinking.com</u>
- Websites to build time awareness skills: <u>www.timetimer.com</u>, <u>https://difflearn.com/collections/aba-tools-timers-and-counters</u>
- Websites to help with writing tasks: <u>www.shmoop.com/essay-lab/</u> and <u>www.rewordify.com/</u>
- Apps:
  - Google Drive organizes school files and allows them to be accessed from any location
  - Google Docs "Explore" function supports organizational thinking and task planning
  - Google Keep Can create checklists that visually show completed tasks
  - Explain Everything creates mind maps, project planning, integrates with Google Drive
  - Notability uses virtual binders to organize work
  - Visual timer displays the passage of time visually
  - Canplan task planning app with reminder-by-time options
  - First-Then Visual Schedule visual scheduler

#### Sources used for this information sheet:

- <u>www.ldonline.org</u>
- <u>www.smartbutscatteredkids.com</u>
- <u>www.understood.org</u>
- Gioia, G. Isquith P., Guy S., and Kenworthy, L. (2015). Behaviour Rating Inventory of Executive Function (BRIEF)
- Morin, A. (2014). Understanding Executive Functioning Issues.
- <u>www.developingchild.harvard.edu/resources</u>
- Executive Function Fact Sheet Information from the National Centre for Learning Disabilities