

This resource was created by a multi-disciplinary team and is grounded in evidence-based research and theory. While there are diverse interpretations of Executive Function, this is our interpretation.

**What is Executive Function?** Executive Function is an umbrella term for brain-based functions that involve cognitive control and self-regulation, all having to do with managing our internal resources in order to achieve a goal. Essentially, Executive Function describes the ability to get things done.

**Video:**

[InBrief: Executive Function: Skills for Life and Learning](#) (Center on the Developing Child at Harvard University)

*Being able to focus, hold, and work with information in mind, filter distractions, and switch gears is like having an air traffic control system at a busy airport manage the arrivals and departures of dozens of planes on multiple runways. In the brain, this air traffic control mechanism is called Executive Function, a group of skills that help us focus on multiple streams of information at the same time and revise plans as necessary.*



**How does Executive Function develop? Can Executive Function skills be taught?**

Executive Function skills are not something people are born with; we have the potential to develop them. How do children develop these skills? Adults foster the development of children's Executive Function skills by establishing supportive relationships and providing opportunities for activities that encourage connection, communication, collaboration, and practice. These are skills that can and need to be taught! As children's Executive Function skills improve, their dependence on adult supervision, prompting, and support decreases; independence increases.

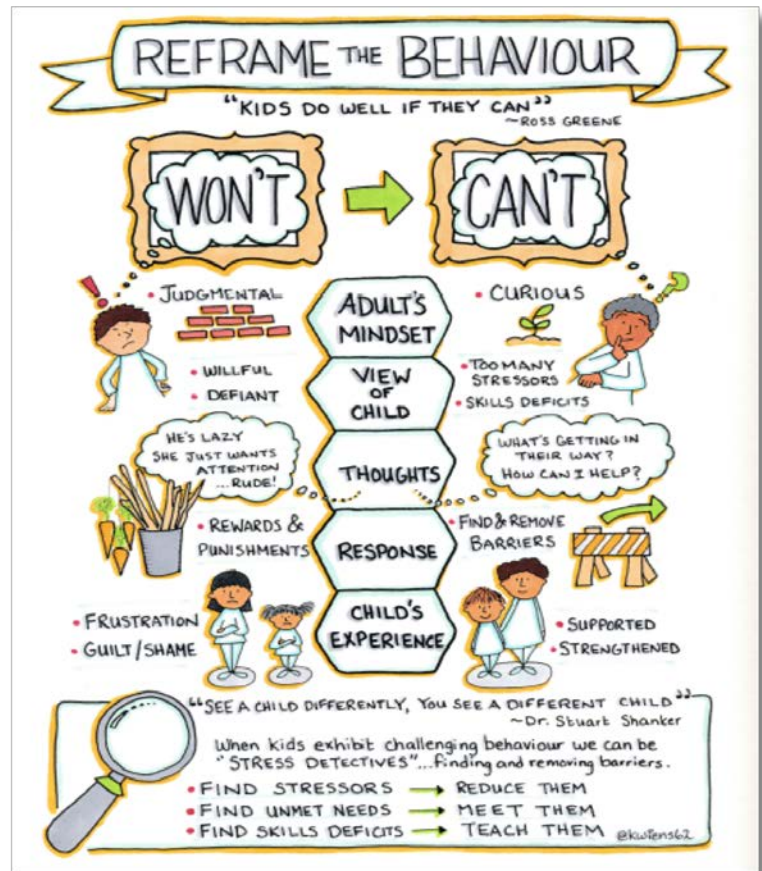
Executive Function skills typically develop throughout childhood and into a person's mid-twenties. However, there are many children (and adults) whose Executive Function skills may develop more gradually than their peers for a variety of reasons.

In every classroom, a wide range of Executive Function skills exists. As such, it can be worthwhile for teachers to explore class-wide strategies and resources to support the development of Executive Function skills for all students.

### Are our expectations in line with what our students CAN do?

When there are students who struggle with "getting things done" in the classroom, we sometimes interpret this as noncompliance. When students are under-performing or getting stuck, perhaps it's not that they *won't*, it's that they *can't*.

Are we considering and acknowledging the complexity of skills required to accomplish a task or goal? As adults, it is easy to overlook the time it takes to develop Executive Function skills. Children are still in the process of developing Executive Function. Adults play an important role in fostering, teaching, and modelling these skills.



<http://northstarpats.com/visuals/>



### **Why teach Executive Function skills?**

We want to prepare our students with skills and attitudes that help them face challenges at school and throughout their lives. Having well-developed Executive Function skills is critical to life success. Communicating effectively, organizing materials, regulating emotions, problem-solving, managing

multi-step tasks, and knowing how our behavior impacts others are skills we must nurture for life-long learning.

The BC curriculum has changed, so classroom practice must change too. This involves shifting from content-driven curriculum to competency-driven curriculum. Teaching Executive Function skills is part of this shift.

### **How do we create the conditions for nurturing Executive Function skills?**

“One of the most effective ways of building executive skills is by developing habits and routines that eventually become automatic. Building habits requires repetition, repetition, and more repetition.” (Cooper-Kahn and Dietzel, 2009, p. 18)

We can be proactive and use strategies and resources to address and support the diversity of Executive Function skills in our classrooms:

- Build a strong and positive climate that emphasizes the process of learning over academic performance.
- Begin with sharing the learning intention, and then work with students to establish goals to get there.
- Nurture collaborative, proactive skill-building, relationship-enhancing classrooms.
- Create opportunities for student voice and choice.
- Provide timely, specific, understandable and actionable feedback.
- Self-reflect and adjust practice. Be responsive to students' changing learning needs.
- Create opportunities for practice in a predictable, structured and supportive learning environment.



(Frey et. al., 2018)

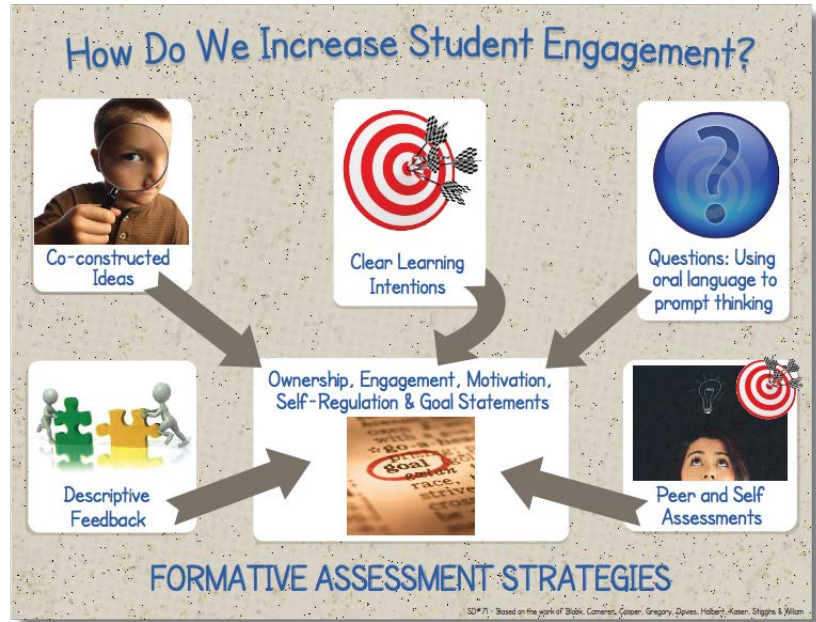

### **What is Assessment for Learning and how does it align with Executive Function skills?**

To understand how Assessment for Learning strategies align with teaching Executive Function skills, we must first understand what assessment for learning is. Assessment for Learning is the use of assessment practices to support learning. Leahy and colleagues (2005) outlined five strategies that encompass assessment for learning: clarifying and sharing learning intentions and success criteria (i.e. co-constructing ideas with students), engineering effective classroom discussions through questioning, providing descriptive feedback that moves learning forward, activating students as the owners of their own learning, and activating students as instructional resources for one another.

Imagine being coaxed onto an airplane to go on a journey without knowing where you are going, why you are going, and how long you will be gone. Being subjected to these uncertainties would naturally feel uncomfortable. Yet, this is likely what many students experience when faced with lessons that have been launched without explanation of the intent, direction, or destination. Moss, Brookhart, and Long (2011) stated, “[t]he first thing students need to learn is what they’re supposed to be learning” (p. 66). Providing students with a clear sense of purpose is one of the most important steps to supporting learning and is often overlooked in the urgency to get the learning journey started (Moss, Brookhart, & Long, 2011).



Students have an important role in the assessment environment and are better equipped to be successful when they know what success looks like (Stiggins, 2009). Including assessment for learning strategies in day to day instruction supports Executive Function skills.

**PERSONAL AWARENESS & RESPONSIBILITY CORE COMPETENCY**

The personal awareness and responsibility included the skills, strategies, and dispositions that help students to stay healthy and active, set goals, monitor progress, regulate emotions, respect their own rights and the rights of others, manage stress, and persevere in difficult situations. Students who demonstrate personal awareness and responsibility demonstrate self-respect and express a sense of personal well-being.

- 1. Self-determination**  
Sample "I" Statements
  - I can show a sense of accomplishment and joy.
  - I can celebrate my efforts and accomplishments.
  - I can advocate for myself and my ideas.
  - I can imagine and work toward change in myself and the world.
  - I take the initiative to inform myself about controversial issues.
- 2. Self-regulation**  
Sample "I" Statements
  - I can sometimes recognize emotions.
  - I can use strategies that help me manage my feelings and emotions.
  - I can persevere with challenging tasks.
  - I can implement, monitor, and adjust a plan and assess the results.
  - I can take ownership of my goals, learning, and behaviour.
- 3. Well-being**  
Sample "I" Statements
  - I can participate in activities that support my well-being, & tell/show how they help me.
  - I can take some responsibility for my physical and emotional well-being.
  - I can make choices that benefit my well-being and keep me safe in my community, including my online interactions.
  - I can use strategies to find peace in stressful times.
  - I can sustain a healthy and balanced lifestyle.

**The profiles emphasize the concept of growing and expanding. They are progressive and additive.**

**How do the core competencies align with Executive Function skills?**

The core competencies are sets of intellectual, personal, and social emotional proficiencies that every student needs to develop in order to engage in deep life-long learning. Executive Function skills and strategies align with the core competencies, particularly the Personal Awareness and Responsibility competency. This competency area includes the skills, strategies, and dispositions that help learners set goals, manage stress, stay healthy and active, regulate emotions, monitor progress, respect their own rights and the rights of others, and persevere in difficult situations.

<https://curriculum.gov.bc.ca/competencies/personal-awareness-responsibility>

This team has created a holistic (embedded) approach to teaching Executive Function skills as part of ongoing assessment practices and competency-driven curriculum.

## References

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