

## EXECUTIVE FUNCTIONS WITH A GIFTED PROSPECTIVE

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Executive functioning skills are qualitatively different for gifted students when compared to their neuro-typical peers. The interconnected nature of executive functions along with a child's intensities and learning differences are part of a uniquely complex profile that colors their view of themselves and their abilities.<sup>1</sup> The following are definitions of several clusters of executive functions followed by the nuances from a gifted prospective.

- **Attending & Sustaining Attention:** Choosing to focus even when a task is non-preferred, and maintaining that focus through task completion.  
*Often gifted students demand novelty which may require increased sensory input in order to maintain focus on routine tasks. Those with attention deficits have difficulty maintaining purpose on non-preferred projects as well as areas of high interest. Exhaustion comes quickly with the stress of attending to routine tasks.*
- **Working Memory:** Holding onto information in short-term memory while manipulating it to complete a task or organizing it for long-term storage.  
*Gifted students with poor working memory have difficulty holding onto information bites, directions, or sequenced tasks which have little connection to their interests or their divergent processing style slows their data intake increasing the probability that valuable information is not processed.*
- **Time Management:** Using time in service of a goal and internally conceptualizing the passage of time.  
*Time seems flexible for students who feel that time spent working on passionate topics slips by in seconds while homework takes hours, even when the clock shows the reverse is true. Gifted students don't realize that their hours spent procrastinating and complaining to delay non-preferred tasks adds to the feeling of wasted hours.*
- **Planning & Task Initiation:** Being able to begin a task in a timely manner after setting goals, creating a plan of action, organizing materials, and incorporating the time needed in order to complete a task.  
*Many of our high ability students have extravagant plans which could be attainable because of their abilities. However, their success is hindered by a future that is distant and huge, part of a fantasy, an automatic leap, and not understood as a step-by-step process. Initiation is also stalled when students have a poor concept of the time it actually takes to complete tasks. .*
- **Flexibility:** Mental and emotional flexibility including the ability to shift from one task to the next and to seek connections between novel tasks, situations, and learning.  
*Gifted students tend to combine their early learning with their imagination and may become attached to their incorrect conclusions. Mental flexibility includes being open to multiple ways to confront a problem, willingness to confront the unknown, openness to admit to mistakes, and the ability to re-calibrate conclusions based on new evidence. Emotional flexibility includes being adaptive to social, emotional, and environmental shifts.*
- **Metacognition:** Thinking about thinking that leads to self-awareness and self-monitoring of executive functions.  
*For highly gifted and 2e students, empathy and social awareness may be strong, but relating those strengths to learning, self-correction, and the need for self-advocacy may be underdeveloped.*
- **Emotional Control & Inhibition:** Utilizing self-monitoring and awareness to modulate intensities, emotions and actions.  
*The intensities of a high-ability child may make it difficult for that child to move beyond the desire to give up, to overcome frustration, to regulate impulsivity and to find hope.*

<sup>1</sup> Hansen, C. "When LaZy Doesn't Make Sense: How Executive Functions Affect our Brightest Students." Association of Educational Therapists 2013 National Convention, October 25-27, San Mateo, CA