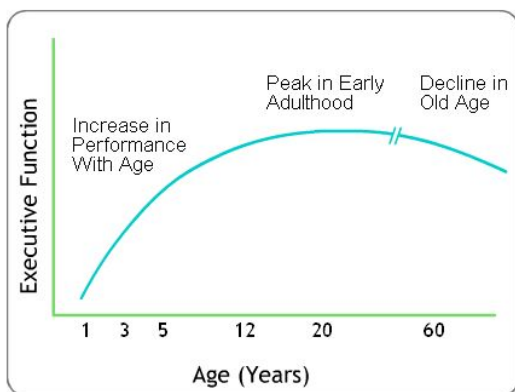


# AYM Programs Affect **Behavior** by Improving “Executive Function”.

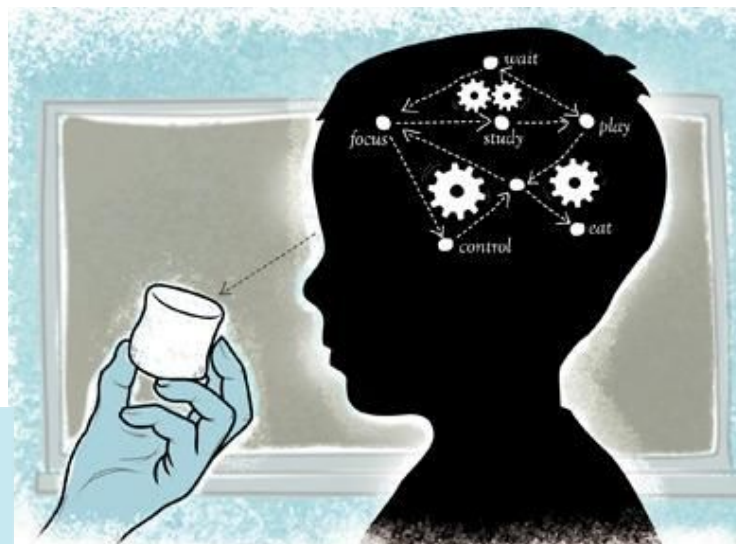
Students with behavior issues, for the most part, can differentiate between right and wrong but continue to act out because either they do not experience success in the classroom and/or because they have self-regulation issues. Both these problems can stem from poor development of “executive function”. The term executive function (EF) describes a set of cognitive abilities that control and regulate other abilities and behaviors. Executive functions are necessary for goal-directed behavior. They include the ability to initiate and stop actions, to monitor and change behavior as needed, and to plan future behavior when faced with novel tasks and situations. Executive functions allow us to anticipate outcomes and adapt to changing situations. The ability to form concepts and to think abstractly are often considered components of executive function. In addition, executive function determines how we react to our own emotions, that is, our self-regulation behavior.



Early impairments in executive function may have cascading consequences for many aspects of children's development. The typical development of executive function in childhood may be crucial not only for cognitive function, but also for social, emotional and moral development. Therefore, programs like [Accelerating Young Minds \(AYM\)](#) that are able to train executive function can have far reaching benefits for the child's behaviors and emotions. A growing body of research demonstrates that healthy development of executive function can be fostered. The results of this research has been extremely promising and suggest that training may have direct, beneficial effects on the way in which children's brains are developing. Neural adaptation may be gradual and cumulative, however, and improvement is usually seen after frequent, repetitive skills training but the benefits have shown to be long lasting.



The part of the brain involved in executive planning is the pre-frontal cortex. This brain region develops rapidly in early childhood but continues to develop well into adulthood becoming more efficient along the way.



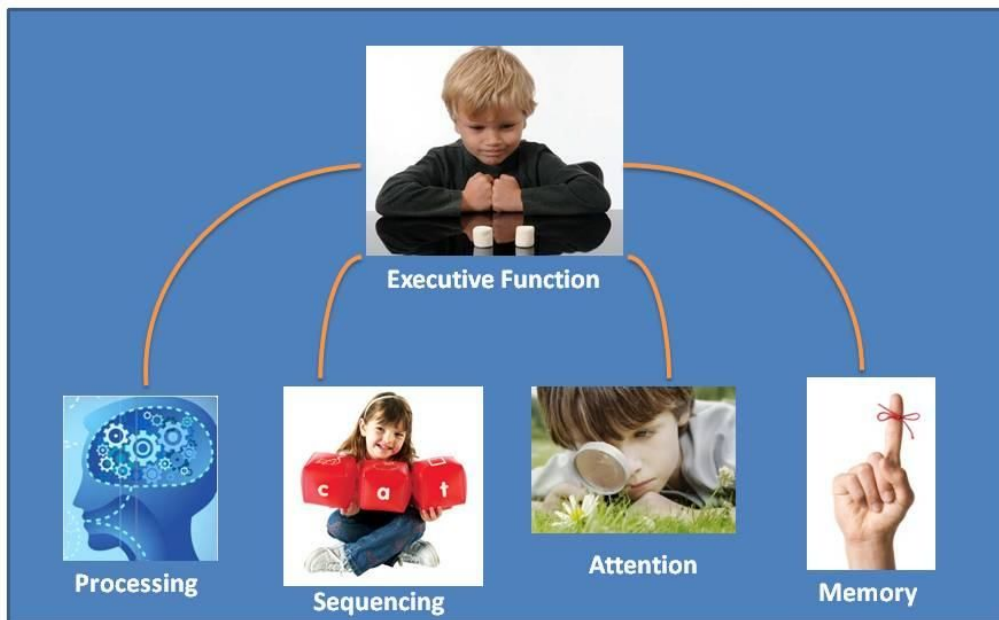
# How does AYM develop and assess EF?

1. AYM programs have many, many activities that build and develop the following EF skills:

- Goal - directed
- Plan
- Sequence
- Prioritize
- Organize
- Strategize
- Initiate
- Inhibit
- Pace
- Predict
- Shift attention
- Self-monitor
- Emotional control
- Complete tasks
- Perceive
- Focus
- Modulate
- Sustain
- Decide
- Judge
- Anticipate
- Deal with novel stimuli
- Adapt
- Rule follow
- Mental imaging
- Social cognition
- Consequences
- Evaluate
- Reward
- Hold
- Manipulate
- Generate
- Associate
- Balance
- Store
- Retrieve
- Time management
- Execute
- Correct

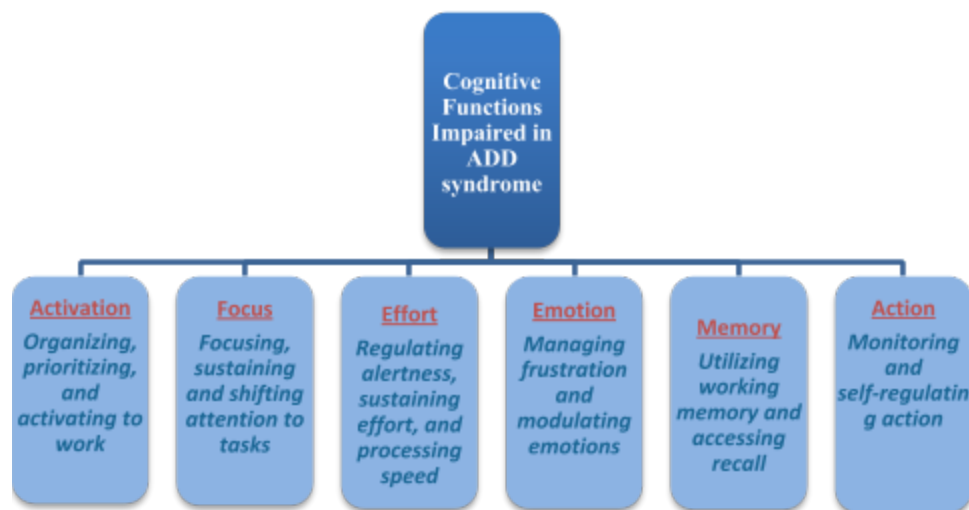
2. All [Accelerating Young Minds](#) programs measure Executive Function for each child. You can find a read-out of this EF measurement in the AYM student report. You can also see how their EF score improves during the course of the school year as they move through AYM programs.

3. All students experience success with AYM programs and very positive, motivational verbal feedback is delivered in response to each task. This kind of feedback has a huge impact on students, increasing confidence, providing immediate rewards, boosting motivation and improving self image.



# Executive Dysfunction and Behavior Management

Executive dysfunction results in poor academic performance as well as poor conduct behaviors. More specifically showing up as problems with (a) initiating, completing, and turning in their homework and classwork, or (b) a lack of time sense, to (c) organization problems such as, difficulty in organizing time, materials, belongings, thoughts, tasks, (d) difficulty in switching flexibly between tasks, (e) difficulty in sustaining focus on the relevant aspects of a task, or any combination of these skills. Some of these deficits are evident in students with Attention deficit disorder or ADD and other disorders.



But problems with executive functioning can also lead to an inability to self-regulate behavior and that gives rise to disruptive behavior in the class, conduct problems, antisocial behaviors, loss of impulse control, loss of moral compass and loss of empathy. This is an area where intervention is needed more than punishments and consequences. The cognitive training activities in [Accelerating Young Minds](#) programs do improve rational judgment, decision making, emotion management and self-regulation abilities. So we ask teachers to closely monitor for changes in a student's behaviors with use of our programs. Many parents and teachers have noted increased confidence, more focus, calmness and better classroom and social experiences for their child as a result of their success on our programs. Here is an example:

*"I teach first graders and it is always interesting to figure out how to control the impulse behaviors of some students. One of my first grade boys struggled with impulse behaviors since the beginning of the school year. He had to be separated from most of the class because he was a distraction to others. He spoke out of turn often, picked fights with others at recess and was not focused on his school work. A few months ago my school began using the program to help strengthen student's right brain function. I decided to have this student spend 30 minutes a day on the program.. Right away, I began to see a marked difference in his behavior and academic focus. This student is now a pleasure to have in the classroom. He is now sitting with the rest of the class and has drastically reduced his impulse behaviors. It is so exciting to see this huge transformation in such a short time."*

*--Tiana Waterbrook, Covington Elementary*