

Cerebrate.

| Case Study

Challenges

Mason is a very bright student. However, he struggled with several school tasks that were impacting his academic success. He was evaluated using the Behavior Rating Inventory of Executive Function®(BRIEF2). The results showed elevated difficulties in the areas of self-monitoring, working memory, and planning. Mason's teacher had a high level of concern with his self-monitoring which included his work being sloppy, poorly organized, and not checking work for mistakes. Other high concern areas were his short attention span and

Self-Monitor Solutions

Mason had difficulty monitoring his work and understanding where he needs to improve. He shared that because he has a hard time asking for help, he doesn't always know what he needs to do better.

The Cerebrate lessons **Quality Control** and **Weekly Review** helped Mason learn to determine which work was getting full credit and which work was losing points. He looked to find patterns and identify the reasons he was turning in work that was below average. He decided to use his strengths to keep motivated, and he created a quality control checklist for reviewing his completed work. Mason discovered that the list kept him accountable and consistent. He liked the independence that came from checking his own work.

Cerebrate Lessons

Quality Control
Weekly Review



Mason- 5th grade

Mason is in fifth grade and excels at math. He is athletic and is working to find a sport that he can enjoy. Mason has a twin brother that he considers his number one support.

struggles to complete his work. Mason was taught specific Cerebrate lessons to empower him with strategies for increased learning success.



Mason has gained an understanding of the way his brain works and why he has certain struggles. Because of this understanding, Mason is open and receptive to approaching executive functioning impacts in a solution-oriented way. He is an active participant in identifying concerns, creating plans, learning skills and evaluating plans for effectiveness."

-Mason's Teacher

Initially, Mason struggled to see where he needed to improve. By learning to look closely at the quality of his work, he is now able to understand what causes him to lose points and how to ensure he turns in his best work. Using these simple strategies is helping him complete his work with less guidance.

Working Memory Solution

Mason found it challenging to manage distractions around him. He expressed that he often cannot stay focused on a task to finish it on time, and his work is often late.

The Cerebrate lesson **My Distractions** helped Mason identify his biggest distractions. He created a list of distractions at school and at home and then created a top 5 list. He looked at how each of the top distractions kept him from completing his work, and he brainstormed possible solutions. The lesson **Distraction Solutions** gave Mason strategies to manage his distractions and helped him put together a plan when he recognized his distractions were getting him off track. Mason

Planning Solution

Mason struggled to plan and start his tasks with enough time to finish. He expressed how he gets overwhelmed and upset when he doesn't have enough time to complete assignments.

The Cerebrate lesson **Estimating Time** helped Mason compare how much time he thought he needed to complete his work with how much time he actually needed. He used the lesson **Assignment Tracker** to help manage his workload and keep track of due dates of what needed to be completed, so he could start his work with enough time to finish. The lesson **Task Chunking** gave Mason the strategy of breaking down his larger assignments into more manageable pieces to reduce the feelings of overwhelm.

When Mason began, he struggled to plan his assignments and due dates which caused him to

Cerebrate Lessons

My Distractions
Distraction Solutions



shared how frustrating it is for him to turn in late work, and he used that as a motivation to try his new distraction solutions.

At the beginning, Mason had a hard time staying focused on his work and keeping on task long enough to finish his assignments. After completing the lessons, he is aware of the distractions that affect his ability to focus, and he uses the solutions he developed to manage the distractions and pay attention to what he needs to finish.

Who is struggling?

Students diagnosed with
Learning Disabilities 20%

Students diagnosed with
ADHD 9.8%

Students diagnosed with
Anxiety 8.9%

Students diagnosed with
Autism 2.2%

These diagnoses have a high comorbidity with executive dysfunction, which leaves many students at a strong disadvantage in the classroom. Direct instruction of executive function strategies has been shown to improve academic performance and increase learning.

Cerebrate Lessons

Estimating Time
Assignment Tracker
Task Chunking



rush to complete work on time. By learning to estimate time more accurately, track assignments, and chunk larger tasks, Mason can manage multiple assignments and get them completed on time. He feels more confident that he will be able to keep up with his work and continue to find ways to improve his planning skills.



Impact of Change

Using Cerebrate lessons, Mason learned strategies to help him monitor his work, manage his distractions, and make plans with enough time to finish. Being able to recognize what is causing him to lose points on his work helps Mason understand where his work needs improvement and how to make it better. It will allow him to work to his full potential and complete his work more independently. The new skill of identifying and solving distractions will aid Mason in his goal to turn in his work on time by giving him the tools to stay focused and finish when he needs to. Additionally, learning to estimate how long he needs to complete his work and making a plan to track his progress will help him continue to manage a large amount of work. The executive function skills Mason has learned will help him feel less overwhelmed so he can become a more confident lifelong learner.



Research on academic achievement has repeatedly confirmed EF, and particularly working memory, as important prerequisites for the general ability to acquire knowledge and new skills. EF are not only related to higher-level cognitive abilities contributing to academic success, such as problem solving, but also to performance in the classroom. In fact, EF have been shown to explain at least as much variance in academic achievement as intelligence, which is usually considered the most powerful predictor of academic success.

Karbach, J., & Unger, K. (2014). Executive control training from middle childhood to adolescence. *Frontiers in Psychology*, 5. <https://doi.org/10.3389/fpsyg.2014.00390>

Cerebrate

Cerebrate is an executive function system that combines an evaluation tool with a customized curriculum to target instruction for students' needs. The evaluation measures the frequency of 64 observable behaviors that point to executive function deficiencies, and it can be administered as needed to monitor progress towards defined goals. The curriculum is comprehensive and provides instruction for the development of behavioral, emotional, and cognitive executive functions, including self-control, self-monitor, flexibility, emotional control, task initiation, working memory, planning, and organization. The lessons incorporate the best practices of executive function instruction, according to the leading research in the field. To learn more, go to www.cerebrate.education for additional information regarding the Cerebrate program.