Cerebrate. Case Study

Challenges

Dakota's teachers started to notice he was experiencing challenges with impulsiveness and problem solving at school. He was evaluated using the Behavior Rating Inventory of Executive Function® (BRIEF2). The results showed elevated difficulties with executive functions including emotional control, self-monitoring, and flexibility. Reported concerns were associated with his ability to react in proportion to problem sizes and adjust well to changes in environment, people, plans, or demands. He was also reported to lack awareness of his strengths and weaknesses when evaluating

Emotional Control Solution

Dakota struggled to understand, identify and cope with his emotions. He shared that he often has many feelings at once and doesn't know what to do with them.

The Cerebrate lesson, **How I Feel**, helped Dakota identify times he experienced different emotions, like feeling loved when someone comforts him or feeling excited when he hears good news. Dakota was able to assign emotional roles to the important people in his life in the lesson, **My Support System**. For example, his father



Dakota- 4th grade

Dakota is a fourth grader who is active in soccer, swimming, and gymnastics. He loves going on trips to California with his brother and family.

himself and his work. With these key executive function challenges identified, Dakota was taught specific Cerebrate lessons to empower him with strategies for increased learning success.

Dakota has shown growth in his ability to manage himself when he is feeling anxious or upset. He recalls prior similar experiences and what he did to move through it. Dakota will go to his support system for validation and help and then retrieve helpful strategies such as replacing negative thoughts with positive ones." -Dakota's Teacher

is someone who helps cheer him up, while his mother listens when he needs to talk. With the lesson, **Helpful Thoughts**, Dakota took overwhelming thoughts and evaluated them logically to determine how they were affecting his fears and emotions.

Initially, Dakota had difficulty separating out his feelings to know how to handle them. By learning to label his feelings, find the best person for support, and work through the thoughts that were causing large emotions, Dakota is now able to communicate his emotions more effectively and rationalize his fears.



Self-Monitor Solution

Dakota had difficulty recognizing his strengths and abilities, and he explained that while he can give compliments to his friends, he is unable to do the same for himself.

With the Cerebrate lesson, **My Top Strengths**, Dakota explored possible areas of strength for himself, and he shared his strengths about being a good team player and acting boldly. He looked at times he expressed those traits, like trying new things or helping his soccer teammates. Dakota also examined possible learning strengths with the lesson, **Learning Styles**. He identified his strength with listening and learning auditorily. This allowed him to understand he does best when directions are read aloud since he is a strong listener.

Flexibility Solution

Dakota found it challenging to see perspectives different from his own. He described his frustration when classmates do things in a way that doesn't make sense to him.

The Cerebrate lesson, **Another Use**, helped Dakota consider various strategies for common problems to help think differently. He found multiple uses for household items like laundry baskets and articles of clothing. With the lesson, **Do Something Else**, Dakota broke down different. ways of looking at recent challenges at school.

While completing the **Flexible Perspectives** lesson, he brainstormed upsetting scenarios and practiced coming up with multiple ways of seeing the same situation, depending on perspective.



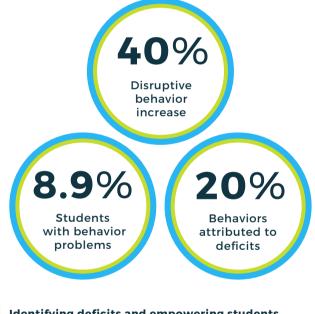
Cerebrate Lessons

My Top Strengths Learning Styles



In the beginning, Dakota was unable to identify his abilities and how to use them to his advantage. After learning about some of his strengths, he began to see how being bold and cooperative can help him in many learning situations. Additionally, Dakota's awareness of his listening skills helps him advocate for himself when he needs to hear information for understanding.

According to the Children's Hospital Association:



Identifying deficits and empowering students with self-regulation strategies provides them with opportunities to behave in ways that encourage learning.

Dakota struggled to consider other perspectives when dealing with classmates, which lead to increased social problems. He is now able to recognize other thoughts and ideas when interacting with peers. He uses his new strategies to reason rather than jumping to conclusions, getting frustrated, or having conflicts.



Impact of Change

Using Cerebrate lessons, Dakota learned strategies to help him cope with his emotions, recognize his abilities. strenaths and and see multiple perspectives. Dakota's new skill to identify his feelings and know whom to go to for support will help him manage his large emotions. His learned ability to think rationally about his fears will help him calm himself, even when he is not able to reach out to others for help. Knowing his strengths and learning styles will help him be more mindful of the traits he uses throughout the day to succeed with his work. Dakota's ability to consider new perspectives and ideas will aid him in conflict resolution and will help him come up with creative solutions to problems. The executive function skills Dakota has learned will help empower him to become a stronger, more confident learner.



Scientists who study executive function skills refer to them as the biological foundation for school readiness. They argue that strong working memory, cognitive selfcontrol, and attention skills provide the basis upon which children's abilities to learn to read, write, and do math can be built. In practice, these skills support the process of learning - focusing, remembering, planning - that enables children to effectively and efficiently master the content of learning - reading, writing, computation. They enable children to acquire knowledge and to participate in the school experience as actively engaged and competent learners.

National Scientific Council on the Developing Child. (2011, February). Building the Brain's "Air Traffic Control" System: How Early Experiences Shape the Development of Executive Function. developingchild.harvard.edu.

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.