

PART I:

Command Central for the Brain

The Importance of “Connect-the-Dots” Lessons for Teaching Executive Functioning Skills

THE COMMAND CENTER FOR THE BRAIN

Executive functioning skills are the true command center of the brain. They consist of multiple mental skills, traveling through neural pathways, that help the brain organize and act on information to manage life tasks of all types. Executive functioning involves the ability to size up a problem; to come up with a plan to solve the problem; to reassess the plan over time as contingencies change; and to modify the plan, as needed, towards completion of the plan and resolution of the problem.

Executive functioning skills enable students to plan, organize, remember things, prioritize, pay attention and get started on tasks. In addition, they also help students use information and experiences from the past to solve current

problems. Simply put, this command center is in charge of making sure things get done - from the planning stages of any task to the final deadline. These “thinking,” or cognitive abilities, are essential for managing information and managing oneself.

CRUCIAL TO CLASSROOM SUCCESS

A number of executive skills are easily identifiable as being crucial to classroom success. For example, the executive skills of organization and planning help students to write down their homework, remember to do it and return it to class the next day.

Executive skills, such as sustained attention, task initiation and task persistence, are necessary for starting and completing long-term projects. Executive functions are also directly related to the

development of many academic skills, such as reading and math.

Students often feel failure and frustration in the classroom. When experiencing general executive functioning difficulties, these students often struggle with task initiation, work completion, organization and motivation for any academic or classroom task. These students then perceive assignments and tasks as challenging, frustrating or simply unpleasant.

Children with attention deficit hyperactivity disorder, learning disabilities and problems in social, emotional and behavioral functioning often display impairments in their use of executive functions. They may specifically show difficulties in getting started on tasks, sustaining attention and effort levels, following multi-step directions, staying organized and managing time effectively. Oftentimes,



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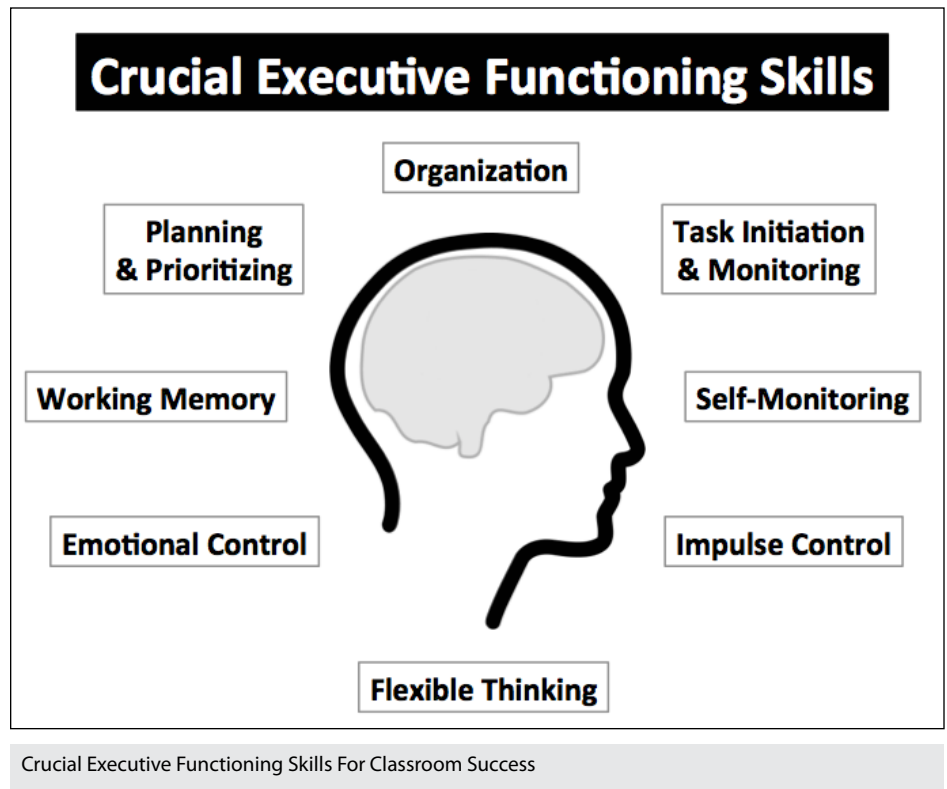


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children will display executive strengths in certain areas and dysfunctions in others.

Karen Woolsey, Director of Student Support Services in the Windsor Southeast Supervisory Union in Windsor, Vermont, points out that “students who struggle with executive functions require routine - the kind of routine that releases them from having to figure something different out each day related to teacher expectations and material organization. This structure should allow them to internalize the ability to create their own routines later in life, when planning or needing to learn something on their own, with the potential to even change or create neuropathways to improve their executive functioning.”

Improvement in this set of skills would help students reach their potential – their TRUE potential - in an inclusive classroom environment, **regardless of their ability.**



EIGHT KEY EXECUTIVE FUNCTIONS

Executive Function	What is it?	Student Challenges
Organization	The ability to bring order to information, such as key concepts or main ideas, or one’s environment and keep track of things physically and mentally	<ul style="list-style-type: none"> Constantly misplaces things or loses them Shows difficulty grouping items together or categorizing Cannot find a way to get organized
Planning & Prioritizing	The ability to create a roadmap to reach a goal or complete a task and being able to make decisions about what is important to focus on and what is not important	<ul style="list-style-type: none"> Easily gets overwhelmed Struggles with breaking down tasks and sequencing Has trouble seeing the main idea
Task Initiation and Monitoring	The ability to take action, get started; then check one’s performance during or shortly after; finishing a task to ensure that the goal has been reached satisfactorily	<ul style="list-style-type: none"> Usually freezes and has no idea where to begin May not act on something at all Does not know how to check their work
Working Memory	The ability to keep key information in one’s mind and use it to complete a task	<ul style="list-style-type: none"> Has trouble with multi-step directions Has a hard time remembering directions and understanding something just explained to them Struggles taking notes

Self-Monitoring	The ability to keep track and reflect on progress	<ul style="list-style-type: none"> • Often lacks self-awareness • Does not know if their strategies are working • Can be surprised by a poor grade
Flexible Thinking	The ability to adjust to the unexpected or “go with the flow”	<ul style="list-style-type: none"> • Has difficulty changing course • Cannot “roll with the punches” to come up with new ideas when a plan fails • Gets panicky or frustrated when asked to change
Impulse Control	The ability to stop and think before acting	<ul style="list-style-type: none"> • Blurts things out • Does unsafe things and cannot follow rules consistently • Rushes through assignments or homework without checking it
Emotional Control	The ability to keep feelings and emotions regulated	<ul style="list-style-type: none"> • Has trouble accepting feedback or constructive criticism • Often overreacts • Struggles to finish a task when something upsets them and has trouble regrouping after something goes wrong

THE COMMON MISTAKES

Year after year, teams wrestle with improving executive functioning skills for struggling students. As teachers, we cannot simply provide strategies that help our learners to develop executive function skills. We need to teach our students how the brain learns and the role of executive function in this process.

Educators spend a great deal of time outlining accommodations for students having poor executive functions, often yielding limited results. For example, students of varying abilities are given planners, checklists, calendars, prompting systems and accordion binders, all of which can be potentially useful tools. Other commonly listed accommodations to support students with executive functioning issues include using simplified directions, short verbal phrases, brain breaks or relaxation exercises. These solutions, however, are often ineffective if our students do not have basic foundational knowledge of the WHAT, WHY and HOW of executive functioning.

EMPOWERING STUDENTS WITH EXECUTIVE FUNCTIONING KNOWLEDGE

In order for students to be successful in the classroom and effectively use the tools we make available to them, they need to have fundamental word knowledge and word meaning of key executive functioning concepts. Students of any ability cannot express and demonstrate what they do not understand. If students do not have a full understanding of the concepts of organization, planning and time management, for example, it will be very difficult for them to improve in these areas – with or without the accommodations and tools that we provide.

It is impossible to overstate the importance of explicitly teaching these executive functioning skills to learners of any ability.

We have trained thousands of teachers to expand their depth of understanding of how executive function develops and the impact it has on learning using consistent lessons, tools and strategies that keep students on task and increase such crucial skills. In addition,

we have had significant success using the research-based methodology of T.H.E. P.A.C.T. framework to directly teach students of all abilities fundamental knowledge of executive functioning skills and increase their understanding of the tools we put into play to assist them in the classroom.

T.H.E. P.A.C.T. is a 4-step roadmap for teaching anything: Learn About, Read About, Write About and Talk About. As educators, we need to do these things in this order, based on the longstanding research of how the brain works: which is to teach an understanding of content before you test what was learned. This helps students succeed.

Regardless of subject or topic of study (in this article, the topic example is teaching executive functioning and support tools), teachers walk students through learning about it, reading about it, writing about it and talking about it. They do this in a way that the students feel anchored with the “how-to-do-it” part - by using consistent teaching activities and predictable instructional tools - so the students focus on “WHAT” they



are learning instead of “HOW” they are learning it.

Students with executive functioning issues respond very well to increased structure, routine and predictability in their lives. This has been proven time and time again. This directly aligns with the foundational principles of T.H.E. P.A.C.T., which are consistency and predictability. This is one of the primary reasons why the methodology of T.H.E. P.A.C.T. is so effective as a teaching framework for learners of all abilities.

Consistency and predictability provide the school day with a framework that orders a learner’s world. Children thrive on sameness and repetition. “Knowing what to expect from activities helps children become more confident,” says Dr. Peter Gorski, Assistant Professor of Pediatrics at Harvard Medical School in Cambridge, Massachusetts. In addition, when students know what to expect, it decreases cognitive load, increases their participation and improves their independence.

As Director of Student Support Services, Karen Woolsey goes on to say, “If a teacher leaves out a critical step in the learning process, students, who do not figure things out naturally, will fall behind. If the presentation of content is delivered in a predictable, routine way – that is also interesting and relevant – the students who are struggling to ‘stay with it’ in the classroom have less to overcome in the learning process. Here is where T.H.E. P.A.C.T. framework comes in because it anchors the students in the learning process and does not skip crucial pedagogical elements. In fact, T.H.E. P.A.C.T. simultaneously teaches executive functioning skills, while providing universal access to curriculum, so that our students in special education can fully participate in the classroom.”

T.H.E. P.A.C.T. assures solid comprehension of vocabulary, key concepts, main ideas and details. Using T.H.E. P.A.C.T. to increase a student’s understanding of executive functions, their impor-



Teaching Students Executive Functioning Using T.H.E. P.A.C.T.

The Research-Based Teaching Methodology of T.H.E. P.A.C.T.

tance, and the “what” and “why” behind the tools we select for them to use is a proven recipe for success. Because we are building a solid understanding of knowledge, students have decreased anxiety in the classroom when asked to complete their assignments. Students simply know what to do, how to do it and then how to share it or apply it.

Neil Haley, CEO and Producer of the Total Education Network, states, “T.H.E.

P.A.C.T. gives teachers the answers they’re looking for when needing to differentiate instruction in their classroom to literally teach anything – including executive functioning skills. It hones in on the standards, strategies and measurable objectives – regardless of the lesson. You take it and serve all students. T.H.E. P.A.C.T. gets teachers and special ed staff on the same page to serve all kids. Over the years, I’ve seen so many students struggling with



executive functions and T.H.E. P.A.C.T. is the proven method to get all students to succeed.”

“CONNECT-THE-DOTS” LESSONS FOR STUDENTS

In Part Two of this article series, we will walk you through a chain of vocabulary building lessons – using both print-based and interactive tools – for students to learn about the concepts of organization, planning, prioritizing, initiating and monitoring tasks and time management related to daily classroom assignments and long-term projects. Language lessons will also include learning about important executive functioning tools. Creative and engaging vocabulary lessons will include language-based games, reference tools and hands-on projects.

In addition, we will connect these vocabulary lessons to “reading-to-learn” lessons for students to expand their knowledge base and read about these executive functioning skills and tools. Real-life student examples of lessons will be outlined using talking concept maps, interactive sequence lists and timelines, along with accessible books and study guides. You will learn the importance of creating a library of executive functioning resources to complement explicit in-person instruction as it relates to independent learning opportunities for review and practice.

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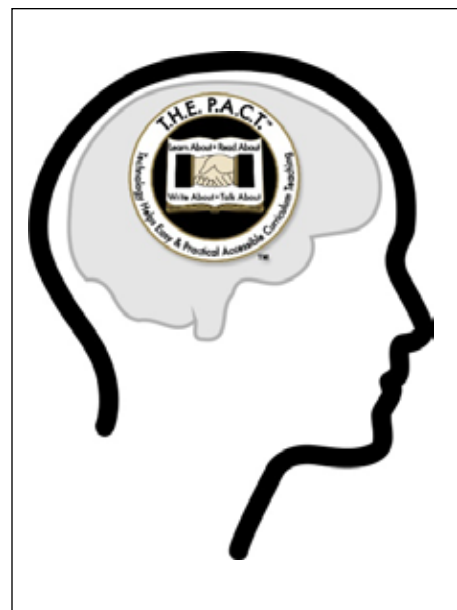
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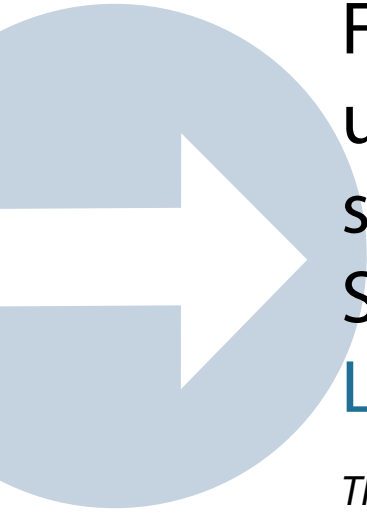
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