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Downloadable Resources and Templates**

Introduction

In the middle of difficulty lies opportunity.

Albert Einstein

Have you ever been expected to complete a task but didn't have the necessary skills to do so...yet?

For example, if I suddenly switched from writing in English to Spanish, it would be difficult for you to comprehend this book unless you already knew how to read Spanish.

Let's consider a different challenge.

Say I asked you to stop reading and juggle seven balls in the air.

That's right, juggle seven balls. How's it going so far?

Not so well? What's holding you back?

Maybe you're thinking, "I don't know how to start," "I can't juggle," or "This is too hard." Perhaps you're attempting to toss a few balls in the air, but they keep falling to the ground. You might feel frustrated, anxious, or overwhelmed. Unless, of course, you already know how to juggle.

You might wonder, "What a goofy challenge. What's the point?"

I hope it gives you a sense of what it feels like to lack the skills you need to begin a task, stick with it when it's hard, and complete it.

If you don't know how to juggle, expecting you to do so *on demand* with success and efficiency will be stressful and unrealistic.

Yet, we ask this daily of many students with neurodiversity or underdeveloped executive function.

Imagine needing to know how to juggle for most everything you do—at home, in school, relationships, and jobs. Picture being told you're smart and capable, yet you struggle with "keeping several balls in the air," "showing what you know," or "putting it all together." Feel the frustration, disappointment, and discouragement you'd likely experience. No wonder many kids consider school a stressful place where they don't feel successful.

What Led Me to Write This Book

By the time my sons reached 4th grade, the spark they once had for school was barely a flicker. When asked, “How was school?” “Boring” was the daily refrain. “What did you learn?” “Nothing” was the typical response. School seemed stressful for my kids, but I wasn’t sure why. I was particularly frustrated because *I was a teacher*—a special educator to boot. Yet, I felt unequipped to find the root of the problem and believed I had fallen short as an educator and parent. *Why* did my kids love learning but dislike school?

Over the years, **I discovered they were not alone.**

As I evolved into an anxiety/executive function coach and neuroeducation consultant, I was struck by what I observed in many classrooms across the county: an increase of students in stressful emotional states—anxiety, frustration, anger, boredom, and a lack of relevance to what they were learning—which caused them to act out or zone out.

I found myself in conversations with teachers, counselors, and parents who expressed concern that many kids lacked focus, motivation, resilience, self-regulation, and self-awareness.

What was going on?

It wasn’t until I attended a Learning and the Brain Conference that I started to get answers. A breakthrough moment was becoming aware of the impact of stress on learning. High states of stress can hijack **executive function (EF)**: brain functions that guide thinking and behavior for learning, achieving goals, juggling demands, and navigating life. When EF goes “offline,” we don’t focus, produce, or perform well. This pivotal discovery, along with an understanding of how the brain best learns and responds, was absent from my teacher training.

Armed with this new knowledge, I realized stress inhibited the learning, productivity, efficiency, and overall success of many students, my sons included, yet they (and most adults in their lives) were unaware of its impact. I also discovered that:

- Many aspiring teachers and counselors at the undergraduate level lack practical training in EF, behavioral principles, neurodivergence,

or mental health, yet they are expected to know how to intervene and respond to students with these challenges.

- Many students do not learn about EF, the brain, and how it develops and learns best, yet instructional practices often omit metacognitive, brain-appealing approaches.
- Employers seek candidates with strong EF, yet students receive little *explicit* instruction on how their brains work and react to stressors.

While some schools offer professional development in these areas, I believe these topics are grossly underrepresented, leaving many educators and parents to figure things out on their own. To date, teacher preparation doesn't adequately reflect exciting neuroscience discoveries and rapid changes in our world. Anxiety and depression were well on the rise before the pandemic, and today's classrooms include a substantial mix of students with neurodiversity and mental health challenges. Consequently, teachers, counselors, and parents need quick, effective tools to reduce stress, enhance instruction, boost EF, and help kids experience more success, connection, meaning, and fulfillment in school and life. Without this toolbox, I believe we're insufficiently equipped to address the needs of the kids in front of us and prepare them for life's challenges.

I'm not okay with that, and since you are reading this book, I suspect you aren't either.

My increased understanding of executive function compelled me to shift my career track...and to write this book. Employing a synthesis of research-based findings and strategies I use with kids and adults in my one-on-one and group coaching sessions, I aspire to deepen your understanding of EF by going beyond theories to provide real-time solutions to common challenges associated with executive dysfunction. Besides helping your students start tasks, complete homework, and develop organizational systems to succeed in school, I aim to empower you—and them—with key strategies, language frames, brain discoveries, and skills to function well *in life*. I've time-tested the principles and strategies in this book for transfer use in school, home, athletic, and work settings. While not a formal diagnostic tool, the chapters ahead can increase the quality of teacher preparation, classroom instruction, support services, parent education, and professional learning.

What Led You to This Book?

If you picked up this book, you're probably curious to learn more about EF and how to facilitate its development in your life or profession. Perhaps you see this as an opportunity to better teach and support neurodiverse learners. Whatever the case, thank you for your curiosity in these topics! It's quite a juggling act working with "all kinds of minds."

You might be dealing with individuals who:

- don't know how to start an assignment or can't find their assignment
- check out or freak out in class
- resist transitioning to the next task
- cave at the first sign of difficulty or think it's cooler to say "this is stupid" than ask for help
- are chronically late or unprepared yet seem unaware of the consequences of their decisions

Sound familiar? These are the students I work with the most. I believe their unproductive patterns reflect underdeveloped cognitive, social, and emotional skills, not an inability or unwillingness to learn. If you know students who procrastinate, struggle to pay attention, forget homework, miss appointments, or lack consistent effort, their behavior may lead you to conclude they don't care. I have found that's not the case.

My sons' boredom in school and the one-size-fits-all way they were taught led to increased stress and decreased learning, and their experience is only one of countless examples I could offer. We as educators must appreciate the uniqueness of each brain and its ability to think, process, learn, and interact with the world. We each possess strengths and challenges, and we all offer valuable variations in how our brains work, whether it's an ability to hyperfocus, see the "big picture," or think outside the box. Consequently, we must teach and support kids in ways that maximize their learning and EF. This book attempts to fulfill that aim, and I'm so glad you're joining me on this journey!

In the following chapters, you'll learn how to:

- build better brains and learning environments
- identify EF strengths, challenges, and the impact of stress

- use quick, practical tools to support goal setting, planning, organization, task initiation, transitions, routines, working memory, time management, self-regulation, and self-monitoring
- implement simple, metacognitive applications that decrease stress and behavior issues and boost learning, engagement, and a productive mindset for success in and beyond school.

Given the intent of this book, many strategies can be done in less than 15 minutes and are designed to seamlessly embed into any environment, strengthening *multiple* EF issues at the same time instead of targeting them in isolation. You can read the book and start implementing on the same day!











21st Century Skills

We rely on EF and a mix of cognitive, social, and emotional skills to succeed in school, relationships, careers, and life. Research supports that emotional intelligence (EQ), which includes an ability to identify and manage emotions and work well with others, are predictors of success. Daniel Goleman, author of *Emotional Intelligence*, discovered EQ accounts for 80% of career success and sets apart notable leaders from mediocre ones. Goleman’s study of approximately 200 executives found EQ doubly important than IQ and technical expertise in fueling performance. At top levels, EQ distinguished 90% of the “best from the rest.”¹

EF, social and emotional learning (SEL), and EQ comprise some of the most sought-after skills by employers, including many of the skills mentioned in the Top Skills of 2023 chart and those listed below:

- Critical thinking (decision making, analytical thinking, creativity)
- Task initiation
- Self-awareness
- Empathy
- Self-regulation
- Collaboration
- Effort/growth mindset (motivation, overcoming obstacles, feedback receptivity)
- Time management/organization
- Adaptability/flexible thinking
- Written/oral communication

Top 10 Skills of 2023

- | | | | |
|--|--------------------------------------|---|---------------------------------------|
| 1.  | Analytical Thinking | 6.  | Technological Literacy |
| 2.  | Creative Thinking | 7.  | Dependability and Attention to Detail |
| 3.  | Resilience, Flexibility, and Agility | 8.  | Empathy and Active Listening |
| 4.  | Motivation and Self-Awareness | 9.  | Leadership and Social Influence |
| 5.  | Curiosity and Lifelong Learning | 10.  | Quality Control |

Type of Skill

- | | | | | | | | | | |
|---|------------------|---|---------------|---|-------------------|---|-------------------|---|---------------------|
|  | Cognitive Skills |  | Self-Efficacy |  | Management Skills |  | Technology Skills |  | Working With Others |
|---|------------------|---|---------------|---|-------------------|---|-------------------|---|---------------------|

Source: World Economic Forum, Future of Jobs Report, 2023

Are you satisfied with the level of preparation students currently receive in these areas?

To be honest, I'm not. I believe we can do better.

I believe we have an opportunity to shape kids' brains in amazing ways. We can facilitate life-changing outcomes by helping them develop strong EF and productive habits within the context of their daily learning and responsibilities.

I believe *all* students want to learn and succeed.

I believe students' gaps in Executive Function, Social-Emotional Learning, and Emotional Intelligence *can* and *will* improve with proper skill-building. Many just aren't strong in these areas...*YET!*

I have seen firsthand how decreasing stress and bolstering EF can transform lives, elevating learning, motivation, confidence, self-worth, and students' ability to become efficient, self-directed, critical thinkers.

I'm excited to support you in your effort to do just that. I've got your back!

Noel

1 Getting to Know Executive Function, the Brain, and Yourself

The neurons that fire together, wire together.

Donald Hebb

What is Executive Function?

When someone mentions executive function (EF), what comes to mind? In my experience, many people are familiar with the term but aren't clear about its scope or impact on daily life. Some people with EF challenges have difficulty regulating emotions or impulses. Others have trouble setting goals, managing time, or remembering what they need to do. For some, all the above and more apply.

I admit, learning about EF can be tricky, starting with its definition. A quick internet search leads to multiple variations, including:

- ...a self-directed set of actions intended to alter a future outcome such as a goal. (Russell Barkley, Ph. D., leader in psychology and ADHD/ADD research)²
- "...a diverse group of cognitive processes that act in a coordinated way to direct perception, emotion, thought and action" and ... "are responsible for a person's ability to engage in purposeful, organized, strategic, self-regulated, goal-directed behavior." (George McCloskey, Ph.D., author of McCloskey Executive Function Scales MEFS)³
- "...executive skills allow us to organize our behavior over time

and override immediate demands in favor of longer-term goals.” (Peg Dawson and Richard Guare, authors of the *Smart But Scattered* series)⁴

While definitions, semantics, and models vary, most field experts agree that EF involves self-driven, goal-directed behavior that guides future direction and utilizes the highest aspects of brain functions to organize, prioritize, and manage daily life. Often associated with a set of skills that make a chief executive officer successful, EF allows us to juggle various responsibilities, interact with others, regulate emotions, make adjustments to achieve a desired result, and get stuff done. As psychologist and researcher Jack Naglieri says, “It’s the thinking a person uses to decide how to achieve any goal, which includes self-monitoring and self-corrections as needed.”⁵

To better understand how EF works in an integrated fashion, imagine how an orchestra conductor cues certain musicians to bring their instruments “online” at precise times throughout a song, coordinating them in a synced fashion and directing how to proceed with the wave of a baton. If the musicians don’t work together and play when signaled, the music may be a mix of discordant sounds rather than a cohesive piece. In the same way, we must learn how to be conductors of our own brains and teach kids how to do the same!

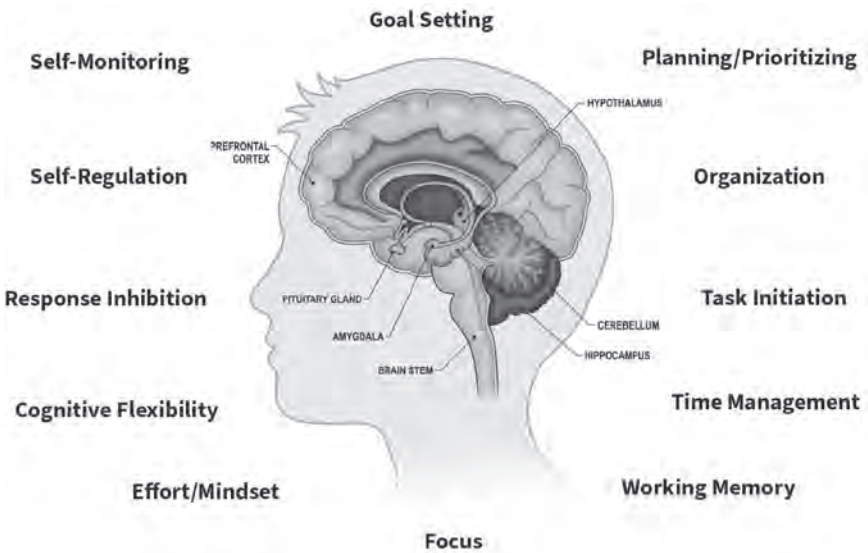


Your Role in Building Executive Function and Shaping Healthy Brains

EF development begins shortly after birth and is influenced by a child’s genes and environment. If a parent has ADHD or a child grows up in a home with trauma or lead exposure, the risk of EF challenges may be increased. With the first three years of life being the most rapid period of

brain development and adolescence being the second most significant, we as educators, parents, caregivers, support professionals, and coaches play critical roles in building EF and healthy brains.⁶

By preschool, students build EF by learning how to take turns, follow routines, remember directions, transition to new activities, keep emotions in check, and adjust their approach to a task if their current method isn't working. In elementary school, skill-building continues by doing simple chores, completing homework, and following classroom norms. During the middle school years, transitions become faster and more frequent, with students practicing self-regulation and developing systems for notetaking, homework, and long-term projects. By high school, students' demands increase to meet deadlines, manage time, set goals, and inhibit risky behaviors. If students receive regular practice in these areas, EF improves rapidly throughout their childhood and adolescent years. By late adolescence, "adult" networks are fairly formed but continue developing well into the twenties.



Judy Willis, a neurologist and former classroom teacher, reminds us, "Neural networks that control executive function develop in the pre-frontal cortex and do so most profoundly during school years." The pre-frontal cortex is prime real estate for executive function (though the last part of the brain to mature) and interacts with other brain regions to

control, direct, and manage behavior.⁸ For this part of the brain to develop sufficiently, students need consistent opportunities to develop these neural networks, which makes your job so important!

Executive Function and Social-Emotional Learning Go Hand-in-Hand

We as educators must intertwine EF, academic competencies, and Social and Emotional Learning (SEL) in kids' environments from the onset, helping them name and express emotions productively, learn constructive self-talk, and feel safe to make mistakes. Aspects of SEL include: self-awareness, social awareness, self-management, decision making, and relationship skills. These building blocks strengthen EF and develop emotional intelligence (EQ).⁹ Research supports a strong link between EF, SEL, and success in school, social interactions, jobs, and life. "SEL not only improves achievement by an average of 11 percentile points, but it also increases pro-social behaviors (such as kindness, sharing, and empathy), improves student attitudes toward school, and reduces depression and stress among students."¹⁰



Source: <http://secondaryguide.casel.org/casel>

Students with underdeveloped EF often need support with SEL. They might experience high stress and academic challenges, which can lead to doubting themselves as learners and viewing school in a negative light. This affects their self-talk, mindset, motivation, decision making, and approach to life. Kids may be sent to the principal more frequently when they struggle with impulsivity, distractibility, controlling emotions, interacting with peers, or sticking to routines. A trip to the main office can result in missed class time, falling behind, talking to themselves harshly, and acting out. A downward cycle can begin.

Some of my biggest pet peeves are when I hear students described as lazy, able to “turn it on when they want to,” or “will never change.” Kids take these damaging, unproductive labels to heart. Some students have missed pivotal opportunities to build EF, live with undiagnosed ADHD, or are dealing with trauma, learning challenges, mental health issues, or a mix of stressors. Executive dysfunction is not a measurement of character, nor does it mean someone isn’t intelligent or capable; it’s often quite the opposite! However, being smart is not enough. A student might be bright but a slow processor. They may comprehend a concept but not know how to start an essay, delay gratification, or work well in a group.

Emotions also impact learning—for better or worse. In the learning process, we experience emotions that lay the foundation for healthy or unhealthy narratives about ourselves. If students have repeated negative experiences, a stress chemical called cortisol increases, which can lead to behavior issues (i.e., avoiding challenges, reluctance to learning). What these kids might remember about being in school or a class is that it bored them or they couldn’t do the work. However, learning that elicits productive thoughts, emotions, and multi-sensory experiences develops efficient networks that boost the retrieval of information, and builds confidence and resilience. As Judy Willis reinforces, “The stimulation during the ages of their rapid development strongly influences social-emotional control and the highest thinking skill sets that today’s students will carry with them as they leave school and become adults.”¹¹





Your Turn!

Think about any students who have dealt with repeated negative learning experiences and tell themselves unhealthy narratives.

Throughout this book, you will learn ways to support these students and help them re-write “their story.”


Best and Worst Learning Experiences

To better understand the connection of emotion to learning, reflect on the questions in the **Best and Worst Learning Experiences Worksheet**, which is based on an activity from a Judy Willis workshop. Answer the questions yourself first and then ask your student(s) to do so. Let kids share their answers because you’ll hear some interesting insights.


NAME: _____ DATE: _____

Best and Worst Learning Experiences


1. Think of some of your worst learning experiences (i.e. academics, sports, or extra-curriculars). List 2-3.




2. How would you describe your emotions in these situations?



3. Think of some of your best learning experiences. List 2-3.



4. What were your emotions during these experiences?



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**QUESTIONS
to
CONSIDER**

1. How can you help the student(s) you identified earlier in this chapter develop healthier narratives about themselves as learners?

2. What school, home, and extra-curricular experiences helped or hindered the development of your EF? How does your neurodiversity affect your learning and life?

3. How would you rate the explicit instruction your students receive in EF to prepare them for success in school, relationships, jobs, and life? What needs changing?

4. Think of your students with neurodiversity and EF challenges. How do you typically respond to and explicitly support them? How do you view differently students who may have been misunderstood?



- Executive function involves self-driven, goal-directed behavior that guides future direction and utilizes the highest aspects of brain functions to organize, prioritize, and manage daily life.
- Students with underdeveloped EF often need SEL support.
- Emotions impact learning—for better or worse.
- Students with EF issues often experience high stress and academic challenges, which can lead to doubting themselves as learners and viewing school in a negative light.
- Students’ brains continue to develop and change based on how they’re used by a process called neuroplasticity.
- Genetics and environment affect executive function and neurodiversity.