Retooling Strategies for *Greater Success*



STUDENTS COME TO US—parents, teachers, academic coaches, and therapists—with a range of executive functioning (EF) skills which they use to manage their academic day successfully. Whether they experience challenges managing a planner, addressing long-term assignments, social skills, or "just" getting through the day, we are there to help them with a variety of skills and strategies to help them grow and flourish. When those highly useful strategies fail to provide effective results, it's time to dig deeper, engage more fully in terms of their "problem of practice" and together discover the very, very specific tripping points in their day.

Current research about executive training compels us to "rethink... individual differences, relevance, and engagement from a contextual framework" (see Niebaum JC and Munakata Y). These researchers have gone so far as to ask in one of their most recent titles: Why doesn't executive function training improve academic achievement?

That's a scary question. I love scary questions.

One of my favorite exercises is to take these kinds of questions posed by new research, understand their component parts and theories, and create or remodel my strategies to realign with them. I have done just that in this series and have added a few more supporting studies to support each protocol.

But, back to Why doesn't executive function training improve academic achievement?

Niebaum and Munakata's research shows that training discrete executive functions in isolation (in games and exercises that are not embedded in the context of their school subjects or routines) do not, in fact, generalize to school success. Their report does demonstrate, however, that broader success is achieved when EF training is embedded in relevance, deeper engagement, and in a context that is unique to the student.

Specifically, they emphasized:

- Executive functions are inherently goal-driven cognitive processes.
- Goals, and an individual's motivation to achieve them, are... driven by personal, historical, social, and cultural contexts.
- Even if interventions aimed at improving specific executive functions [in isolation] were successful, children's decisions to engage executive functions could remain unchanged, preventing transfer to outcomes in the classroom or the real world.

In addition, Ashby and Crossley (2012) describe this as building both episodic memory and procedural memory, which builds strength and automaticity over time.

Most students want to succeed in school, they want to please their teachers as well as their parents, consequently many of our usual interventions can and do succeed with simple instruction. But what if they don't? What if the problems are more complex or too persistent? How do we reach in and help that student re-engage and find success?

There are many ways practitioners address this, but this brief series will address three fluid strategies, or protocols, that tap into these persistent fluid problems of executive functioning and engage students. In part one, we will examine Think Alouds, a simple protocol that encourages us to step back and share an exploration of the persistent problem with the student. Part two, the 4-Quadrant Sort, clarifies and prioritizes which executive functioning challenge needs to be addressed next. Part three, Finding Flow, is a protocol that focuses on creating a flow chart to represent the steps, sequences and decisions of a process like a longterm assignment.

Keep in mind that each of these short, simple protocols paired with redesigned graphic organizers have a few things in common: They will immerse us even more deeply in the student's perception and context of their unique school life, they can untangle the most persistent problems, and most importantly, they are shared.

What do we do next?

As practitioners we are trained and experienced in providing a range of strategies that are well-supported by research and tailored to the very specific needs and profiles of our clients. We understand the concepts of executive functioning, individualized plans, patience, persistence, and care. And yet, there are times when we find ourselves facing a lack of progress in spite of everyone's best intentions and best implementation.



What do we do next?

It's time to dig deeper into our "problem of practice" and find new solutions. Technically, a "problem of practice" in the educational field is defined as:

A problem [that is] persistent, contextualized, and specific... embedded in the work of a professional practitioner, the addressing of which has the potential to result in improved understanding, experience, and outcomes.

Sometimes a problem of practice appears obvious, as in "they STILL aren't using their planner during the day." Or "they know what the project requires, but they STILL aren't doing it." But, is that a shared understanding or a one-sided expectation? We can't really know until we target it as a "problem of practice." Sometimes a simple conversation will suffice to target the persistent problem. But sometimes it takes more. In either case, it's not enough to think it through as a practitioner or parent; instead we need to engage the student—and ask.

But how do we structure that conversation? Among the many protocols available to practitioners, the Think Aloud method, when applied to EF challenges, helps us examine "cognitive processes and decision-making strategies by having people voice their thoughts while performing a task or solving a problem" (Ericsson and Simon). It is specific, contextual, and helps us understand the student's executive functioning demands in context and in flow. Ericsson and Simon suggest we engage the following features when using this method:

- **1.** Sample purposefully.
- Ensure a quiet and controlled task setting.
- **3.** Provide *limited* but precise instructions to the participant.

An example of a Think Aloud strategy

An eighth-grade student has gone through years of struggle with very low fine motor skills and/or handwriting; some problems with attention, written expression, low self-esteem, and low frustration tolerance. These have manifested themselves over the years as looking distracted, having low initiation, producing "sloppy" work, and some mild resistance. With instruction, guided practice, and repetition, most of these attributes have waned over the years. However, missing homework assignments due to planner-use were persistent problems. Sound familiar?

EVERYONE wanted it to work, EVERY-ONE understood the need for it, we tried EVERY approach I knew, but my young friend just could not pull it off. Teachers offered to check, but often forgot. Parents offered rewards, stern reminders,

patience... but it just didn't happen. We were slowly becoming weighted down by increased frustration and hopelessness from parents, teachers, and the student.

It was becoming obvious that this student, who was just entering the preteen years, wanted to own their own problems—and solutions. So, we sat down and used a Think Aloud strategy; in this case, a Think Aloud.

Targeting purpose, and limited but precise instructions, I cleared our session for a singular conversation. We had both already agreed that the very specific "problem of practice" was planner use.

I led with: "Walk me through your day, classroom by classroom with your back-pack on your back, and talk to me about every opportunity and hurdle you find in writing down your work."

My student's response was: "Let's just skip most classes and go to the one that's a real problem..."

"Okay, yeah, let's do that," I replied.

"So, there's one teacher that makes it impossible to write down my assignments at the end of class..."

"Okay, tell me more."

"Actually, it's because of two teachers, now that I think about it." Me, nodding enthusiastically. "Well, the first teacher reminds us to write down the assignments, but I never have time."

"Because..." and now I'm thinking: disorganized backpack? Fine motor skills? Missing the original prompt due to attention?

"Because she tells us right at the end of class... after the bell rings."

"Oh!" Still wondering about fine motor, organization, attention?

"And the next teacher is *really really strict* about getting to class on time!"

Oh...no...it's fear! It's been fear all along.

[Insert quick murmurings back-andforths about what to do next, when, how, why...]

Then: "I know...I'll write down the assignments when I *first walk into my classrooms*!"

"Yeah!" and "How will you remember to do that..." still wondering about attention.

"I'll just always keep my planner in my hand!" He already knew where I was going with that.

"Do you have a planner that you like?" I asked.

"No, but I'm sure my mom will buy me one."

And she did, and he used it, and it worked on day one and every day after that. This, after a solid year of trying everything else.

Think Alouds don't have this effect every time I engage in one, but it always brings me closer to a shared understanding and an eventual solution. In addition, it deepens my already fluid understanding of executive functioning and its powerful need for context—in this case a very, very specific context. Think Alouds, when used to engage in EF challenges, bring a greater understanding of the fluidity and complexity of the student's unique executives, and highlights the specific and unexpected school demands my students face every day.

Sometimes the best way to understand a persistent "problem of practice" in context is to take a step back, give it some space... and Think Aloud, together. 4



Margaret Foster, MAEd, is a learning specialist and leading consultant in the areas of executive functioning, special needs, and program development. An educational coach, former classroom teacher, and speaker at national and international conferences such as The Council

for Exceptional Children, CHADD, Project Zero, and Learning and the Brain, she has trained parents, educators, and school leaders around the globe. In addition, Foster has produced numerous articles, including a special column for MedCentral and has coauthored a book, Boosting Executive Skills in the Classroom: A Practical Guide for Educators. She is a member of CHADD's professional advisory board.

ADDITIONAL READING

Cooper-Kahn J. and Foster M. (2013) Boosting Executive Skills in the Classroom: A Practical Guide for Educators. San Francisco, CA: Jossey Bass.

Niebaum JC and Munakata Y. Why doesn't executive function training improve academic achievement? Rethinking individual differences, relevance, and engagement from a contextual framework. Journal of Cognition and Development. 2023;24(2):241-259. Epub 2022 Dec 30. https:// www.tandfonline.com/doi/full/10.1080/15248372.2022.2160723

Pottier P, Hardouin J-B, Hodges BD, Pistorius M-A, Connault J, Durant C, Clairand R, Sebille V, Barrier J-H. and Planchon B. (2010), Exploring how students think: a new method combining think-aloud and concept mapping protocols. Medical Education, 44: 926-935. https://doi. org/10.1111/j.1365-2923.2010.03748.x

