A Lancer Family Guide to Navigating Executive Function

In every classroom and in every setting, amongst children, adults, students and professionals alike - for each and for all - executive functioning skills are critical for success. These skills, when taught intentionally, pave the way for navigating the messy and demanding circumstances of all stages of life, through schooling and into adulthood. To equip your child with these essential skills, dig deeper here into the ins and outs of executive functioning, what it is and how we can foster a stronger foundation of executive functioning skills in ourselves and, then, for our children and students.

Executive functioning, simply put, is our ability to functionally execute - to practically, reasonably, and successfully do something. It's our overall ability to find ease and comfort in the "doing" of life. Executive skills, however, are not acquired through observation or osmosis. The development of executive skills takes place, and all learning, in fact, happens, through the "firing and wiring" of neurons in the brain. When these neurons fire together - through exposure, experiences, and intentional opportunities to learn and practice - they connect. In other words, they wire together. Over time, those connections rewire and reshape the brain according to what it's repeatedly exposed to. Dr. Dan Siegel, psychologist and author of *The Whole Brain Child* states, "Where attention goes, neural firing flows, and neural connection grows."

For a deeper dive into the science of learning and the neuroscience that informs it:

- Here the *New York Times* gives an interactive look at how the brain develops over the course of childhood and adolescence.
- Until the frontal lobes of the brain, responsible for judgment and long-term planning, fully develop well into a person's 20s, parents and teachers act as a "surrogate" prefrontal cortex in childhood and especially during adolescent years. With this in mind, the time is now to be present and persistent in teaching and guiding children through the practice the brain needs to develop executive functioning skills, and in doing so we set them up for success with a strong foundation of the critical skill of executive function that is so fundamental in all stages of life.
- This article from Harvard University's Center on the Developing Child reminds us that skill building and learning in general is much more effortful for the brain as we grow older. Once again, when it comes to fostering the development of executive functioning skills in children and adolescents, the time to teach is now.

What Skills Make Up Executive Function?

The "skill" of executive function is made up of several components, working in combination and apart to, again, facilitate the "doing" of life. They include:

Response Inhibition

Being able to control your impulses so you can think before you act, resist peer pressure, and make good choices (for example, choosing to study rather than being on social media.)

A weakness in this area can look like:

- acting without thinking;
  interrupting others;
- talking or playing too loudly, acting wild, or being out of control.

Emotional Control

Being able to manage your feelings so they don't get in the way of getting work done or meeting goals.

Challenges with this could look like:

- overreacting to small problems;
- getting overly upset about "little things;"
- having an overall low tolerance for frustration or challenge;
- having trouble calming down.

Flexibility

The ability to adapt to unexpected events and to come up with more than one solution to a problem.

A weakness in flexibility could present as:

- being upset by changes in plans;
- resisting changes of routine;
- not being able to come up with more than one way to solve a problem.

Working Memory

Being able to keep in mind everything you have to remember - and remembering what worked the last time.

For example, someone with challenges in working memory might:

- easily forget directions.

Sustained Attention

The capacity to maintain attention to a situation or task in spite of distractibility, fatigue, or boredom.

A weakness in this area could present as:

- being easily overstimulated.

Task Initiation

Being able to make yourself start a task. It's the opposite of procrastination and a challenging skill to learn.

Planning/Prioritizing

Planning is your road map. When you have a good plan, you know all the turns you have to make and how to get past the roadblocks along the way. You also can focus on what's important and let the little things go. Planning is a skill that takes time to develop.

Someone who has difficulty with task initiation and planning might:

- keep putting off work;
- be overwhelmed by and have difficulty starting and breaking down large or long-term assignments;
- get stuck on one topic or activity, or in doing nothing at all.

Organization

The ability to create and maintain systems to keep track of information or materials.

A difficulty in this area might look like:

- not writing down assignments;
- forgetting work, to turn in work, or to bring materials back and forth between home and school;
- loses or misplaces things (books, papers, notebooks, keys, lunch box, etc.);
- messy desk, locker or cubby area, or backpack (can't find things in backpack);
- leaves a trail of belongings where he/she goes;
- passive study methods (or doesn't study);
- sloppy work.

Time Management

Time management allows you to manage the tug of war between what you want to do, what you need to do, and what others ask you to do. A key piece of time management is the ability to estimate how long it takes you to do something.

Someone with a challenge in this area might:

- run out of steam before finishing work;
- leave long-term assignments or chores until the last minute.

Goal-Directed Persistence

This is a giant version of sustained attention (with some response inhibition thrown in there, too). This involves making a goal, being determined to get there, and keeping the goal in mind as you make decisions about how you spend your time.

A struggle in this area might include:

- choosing pleasurable activities over home or academic responsibilities.

Metacognition

This is your brain's life lesson machine. It allows you to reflect on past actions and behaviors and make informed decisions about how you will act in the future. The formula:

what did I do + why did I do it = what will I do the next time?

Having underdeveloped metacognitions can present as:

- Little to now awareness of the impact of behavior on others;
- Not seeing one's own behavior as a part of a problem or challenge.

At this point you may wonder, what are you and/or your child's strengths and weaknesses in these various areas of executive functioning and how do they manifest? Begin by having your child assess him/herself. You, also, are encouraged to get in on the action as well - either in assessing your child from your point of view (and seeing how that might differ from your child's perspective) or assessing yourself, or both.

Two self-assessment options, one online resource and one in print, can be found here:

- https://www.smartbutscatteredkids.com/resources/esq-r-self-report-assessment-tool/
- *Smart but Scattered Teens* by Dr. Peg Dawson, Dr. Richard Guare, and Colin Guare

Next, review your assessment results, both individually and together with your child. Use the information about the components of executive functioning highlighted above to dig deeper into your child's unique executive functioning profile.

Now what? What can I do to help my child develop executive functioning skills?

As parents and educators we can seek to support children with weak executive skills in the following ways:

- By changing the environment surrounding the child to reduce the impact of his/her weak executive skills.
- By teaching executive skills.
- By using incentives to encourage a child to use the skills that are hard for him/her.

Modifying the Environment

To adjust the environment surrounding a child we can:

- Change the physical and/or social environment. This might include…
    - Adding barriers to an environment that might be preventing a child from accomplishing a task or to reduce distraction.

      A study space, for example, at home where a child knows he/she goes to learn and focus on effortful tasks is important. Be mindful of minimizing distractions in this environment, including technology that may be highly distracting. A simple visual timer (that's not a phone!) and the child's basic supplies for school or the task at hand should be the only items kept here, in a neat and organized manner.

    - Providing structures to help organize the child's space. For example, a clean and distraction-free study space with folders and storage bins to house items.

    - Being present, teaching, and guiding as much and as often as is necessary.

- Use visuals and the environment as a teacher and guide as well.

  Creating a schedule, for example, and posting it so that it's visual for all to see and refer to. A sample evening routine schedule, for instance, could look like:

Task	Number of Reminders	Done ✔
Clean up room and play area.		
Make sure backpack is ready for school: ☐ water bottle ☐ agenda ☐ folders & notebooks ☐ library books ☐ other: _____		
Make a list of anything you have to remember to do tomorrow.		
Get clothes ready for next day.		
Bathe.		
Put on pajamas.		
Brush teeth.		

- Adjust the tasks that we expect children to perform. This could mean:

  - Making the task shorter in length by reducing the amount of work demanded or chunking the work into smaller pieces with breaks built in along the way.

    Consider breaking up study sessions using the Pomodoro technique, which includes alternating focused study sessions with frequent breaks. For example, set a visual timer up for a 20-minute focused working session, followed by a 5-minute break, then another 20-minute working session, followed by another 5-minute break, and so on and so forth.

  - Making the steps of a task more explicit. Use a checklist, for example, to clearly indicate a sequence of steps to take and encourage your child to check off the steps as they are completed.

    - Building in variety or choice either for the tasks to be done or the order in which they're to be done. One thing to keep in mind, however, is that while it can be empowering to offer choice, keeping those choices to a minimum is important. Rather than offering five or six options, focus on offering just two or three.

- Change the way adults interact with kids. Consider these ways that you can shift the way in which you approach your child:
    - Prepare your child for an upcoming event or happening. Rehearse with him/her what will happen and how he/she will handle it.
    - Use prompts (verbal or nonverbal), initially offering them as much and as often as possible, and over time fading the use of them as he/she gains confidence, skill, and independence.
    - Remind the child to check his/her list or schedule (and post lists and schedules for easy reference).
    - Praise the child for using executive skills, keeping in mind that positive reinforcement is key. Offer three positives for each corrective feedback.

Teaching Executive Functioning Skills & Using Incentives as Positive Reinforcement

As you approach the instruction and practice of building executive functioning skills, use incentives to enhance that instruction and give your child something to look forward to when an effortful task is done. Keep in mind that putting an incentive after a task, furthermore, teaches delayed gratification.

Simple incentives could be:

- Give the child something to look forward to doing when the hard work is completed. (This will look different for different children.)
- Alternate between preferred and non-preferred activities (use simple language: First…then, for example: First work, then play).
- Build in frequent, short breaks (depending on the child's attention span, breaks could come every 10 minutes and last 5 minutes).
- Use specific praise to reinforce the use of executive skills. Keep in mind specific tips for effective praise.

Effective praise is…

- Delivered immediately after the positive behavior.
- Specific about what in particular you appreciate about the accomplishment. ("I noticed that today you unloaded your backpack without my having to remind you to do it. Good work!")
- Communicative about the value of the accomplishment and how it may have helped or contributed to others. ("I know you really didn't want to go to the grocery store with me after school today, but it really helped me out to get the shopping done with your help. Thank you!")
- Affirming to the child that you saw him/her working hard to accomplish the task. ("You were getting frustrated with your math problems, and I saw you working hard to refer to your notes and persist.")
- Encouraging the child to appreciate her ability to problem solve or use other executive skills. ("I like the way you thought about that and figured out a good solution to the problem.")

Alongside teaching and modeling executive functioning skills, encourage your child to practice - practice makes progress! - the executive skills learned are critical. Things that you can do to help your child put their executive skill building into action include:

- Keep tasks brief, direct, and to-the-point. Build in breaks as often as necessary and possible.
- Use visuals whenever possible. Examples could include:
    - lists and checklists as reminders
    - a note left on the desk that you can point/refer to
    - visual schedules to encourage rhythms and routines
- Have your child help you problem solve and use brainstorming to find good solutions.
    - Together with the child, make a list of possible strategies. Ask the child to pick one, and then check back with the child later to see how it worked.
    - Ask your child to reflect on his/her own performance, especially when successful. (What worked for you today? Why do you think it worked?)
    - Use questions to get them to use their executive skills. (What's your plan? Do you have a strategy for that? What's your goal? How long do you think that will take?)

- Use minimal cues - if they need more support, model you might process a task in your mind so that they hear how you approached a solution.
- When problems arise, share your observations in a nonjudgmental way. (I saw that you… What can we do about that?)

- Offer praise, again, specifically in regards to effort, persistence, and risk-taking.

Finding it especially challenging working with your adolescent?

Tips for Working with Teenagers:

- Choose your battles.
  - Consider identifying the values and priorities that are most important to you and your family and use this as a means of guiding conversations with your child towards building the skills and character qualities that you value most.

- Use natural or logical consequences.
  - For example, if your child does not complete his/her school work…
    - Consequence: The child loses the opportunity for screen time or play until the homework is done.
    - Reasoning: The child learns that not completing their work responsibilities affects their opportunities for pleasure and play.
  - Consequences should:
    - be directly related to the behavior.
    - be delivered calmly and respectfully, not as a punishment.
    - proportionate to the behavior and understandable for the child.

- Make access to privileges contingent on performance.
  - For example, if your child has misused his/her technology (perhaps he/she used it inappropriately or for too long)...
    - Consequence: The child loses the use of electronics for the remainder of the day or the next day.
    - Reasoning: The child learns that overuse or misuse of privileges results in their temporary loss of that privilege.

- Be willing to negotiate and find compromise, as much and as often as possible.
  - If something is non-negotiable, ask your child: What will it take for you to go along with this decision/plan/choice?

- Seek help if you need it:
    - Involve and collaborate with others (teachers, counselors, coaches) whenever possible.
    - Therapists often act as 3rd party mediators that help parents and teenagers communicate better.
- Set goals that are realistic.
    - Sometimes the best you can do is to walk alongside your child, keeping him/her as active and "in the game" as possible until their frontal lobes mature enough for them to take over with gradual independence.
- Prioritize trust, accountability, a collaborative/team-centered mindset, and work, overall, on positive communication skills in your family and in your home environment:

If your family does this…	**Try this instead:**
Call each other names.	Express anger without hurt.
Put each other down.	"I am angry that you did _____."
Interrupt each other.	Take turns; keep it short.
Criticize too much.	Point out the good and bad.
Get defensive.	Listen, then calmly disagree.
Lecture.	Tell it straight and short.
Talk in a sarcastic tone.	Talk in a normal tone.
Focus on the past.	Stick to the present.
Read others' minds.	Ask others' opinions.
Command, order.	Request nicely.
Give the silent treatment.	Say what's bothering you.
Make light of something.	Take it seriously.

Robin, Arthur L. *ADHD in Adolescents: Diagnosis and Treatment*, The Guilford Press, 1998.

Seeking additional information to support executive functioning in more specific areas?

Here are a few more tips to keep in mind:

Working Memory: How to keep track of everything you need to keep track of? Help your child:

- Find a memory aid that works for him or her (assignment book, subject notebook, smartphone apps, post-its, writing on the back of your hand).
- Create a checklist of things he/she needs to remember to bring to school or bring home.
- Put stuff by the front door where the child will trip over it.
- Find someone or something to remind him/her of what needs to be remembered.

Time Management: To manage your time so that you get done everything that you need to get done, help your child:

- Make a written plan; decide when you plan to start each task on your plan.
- Estimate how long it will take you to do something (and then compare your estimate to the actual time).
- Take advantage of small periods of "down time."
- Figure out what the common distractions are and try to get away from them.

Task Initiation: Strategies to get started. Have your child:

- Make a plan; put it in writing and tell someone what your plan is.
- Stick to a routine - start your homework at the same time every day whenever you can.
- Start with the easiest task - or have him/her work on a hard task for only a short time before switching to someone else.
- Figure out when your child's high energy times are and work then.

Sustained Attention: Stick with something long enough to finish it. Help this along by:

- Give your child something to look forward to when you're done.
- If it takes more than 30 minutes to do, build in brief breaks to do something that is enjoyable for your child (for example, play 1 level on a video game).
- Switch off between several tasks so your child doesn't have time to get too bored with any one.
- Teach your child to use self-talk to motivate himself/herself. ("Keep going, practice makes progress.")

Goal-Directed Persistence: Help your child keep going, persevere, and persist by:

- Modeling this yourself - if your child sees you putting forth effort over time to achieve a goal, that can make an impression.

- Help him/her set and achieve little goals - they add up over time.
- Praise effort - "Wow, you stuck with it!" "You figured it out." "I can't believe how hard you worked for that!"
- Emphasize your child's goals, not yours.

"Brain Architecture." Center on the Developing Child, Harvard University, https://developingchild.harvard.edu/science/key-concepts/brain-architecture/. Access 21 November 2024.

Dawson, Peg. "Smart but Scattered: How Executive Skills Create Successful Students." Center for Learning and Attention Disorders, Portsmouth, NH, USA.

Dawson, Peg, Richard Guare and Colin Guare. *Smart but Scattered Kids*. www.smartbutscatteredkids.com

Siegel, Daniel J., M.D. and Tina Payne Bryson. *The Whole Brain Child*. New York, Delacorte Press, 2011.

"The Child's Developing Brain." *The New York Times*, https://archive.nytimes.com/www.nytimes.com/interactive/2008/09/15/health/20080915-brain-development.html?_r=0. Accessed 21 November 2024.