

## **Executive Function Remediation/Compensation Strategies**

In general:

Osmosis won't work; teach the skills

Keep in mind the concept of plasticity, the brain's ability, through effort, positive reinforcement, and coaching to form new connections and even generate new neurons to create abilities that are not currently present. A good example of what happens in any kind of therapy is the stroke patient who loses the ability to move half of her body due to damage in the brain. In physical therapy, she is encouraged to work and move and progresses from the wheelchair to a walker to a cane to walking unassisted. New parts of the brain can develop and assume functions with time and effort. (The Brain That Changes Itself, by Norman Doidge, MD, 2007).

Observation– Watch for situations and specific information about when they are successful and when they are not.

Modify tasks to match current abilities, for example, study for 15 minutes if that is about how long you can study before getting distracted.

Use incentives– set yourself up with first-then to gradually build skills, for example, first I will plan my homework schedule or study for 17 minutes, then I will call my friends for Frisbee in the park.

Set up practice trials

Provide only as much support as needed

Gradually remove supports– scaffolding

Be aware that the first skills to go when under stress are the weakest “links,” make a plan to manage stress, exercise often, sleep regular hours, take a brief nap in the day if you can, schedule fun and “down” time but avoid late night parties.

Modify the environment– Remember the ABC's

A– Antecedent, what comes before the behavior, for example, if you notice that when you stay up late the next morning you are more distracted, stop staying up late, if you notice you can focus after exercising, exercise before doing homework. Create

a regular time and place to plan and study. Set alarms or appointment reminders on phone or computer to support self-monitoring and staying on schedule. Notice if you study best sitting up, laying down, on the bed, the floor, with the TV on or off, in a public or private place, with natural or artificial lighting, with or without a snack.

B- Behavior, what you watch to determine if your plan is working

C- Consequence- manipulate what comes after successful efforts to reward

1. Inhibit- practice and reward not giving in to impulses such as interruptions or responding to provocations from siblings or peers. Build the skill. For young children, make them earn things so they learn to delay gratification, help them understand there are consequences (natural or supplied by you) for poor self-control, prepare them for situations requiring them to wait, practice in role play.
2. Working memory- make lists, activity schedule, text messages, picture board, practice digits backwards, take notes, draw pictures symbolizing intentions and concepts, teach rehearsal (subvocalizing) and memorization strategies, palm pilot, day planner, vibrating alarm. Have a child repeat over and over in a chant or sing-song as they are embarking on a task "Go to my room, find my shoes, put them on, come to the front door." Practice daily repeating digits, starting where they are fluent, like "I'm going to say some numbers, and I want you to say them back to me, 3, 4, 9." When they get good at repeating seven digits, start back at two or three but have them say the digits back to you backwards (9, 4, 3).
3. Emotional control- The Incredible 5-point Scale, by Buron and Curtis, 1993; to grade and build earlier awareness that an emotional response is occurring, relaxation strategies such as meditation, activity tools such as anything fun or exercise, social tools) talking to someone you trust), thinking tools- grade the size of the problem on a scale from 1-10, systematic desensitization by imagining the feared outcome and then practicing relaxation to train the body to relax in the face of stressful stimuli. Make a chart that includes triggers to mad or worried feelings, things you may want to do but can't, and good things to do with upset feelings, how to be mad the right way, what to do or think to help yourself

feel better, then practice daily in role-play. Remind and reward generously when triggers occur to encourage practice “in real life.”

4. Sustained attention– set up a visual time-timer [www.timetimer.com](http://www.timetimer.com), self monitoring tape [www.addwarehouse.com](http://www.addwarehouse.com), this site also has programmable vibrating alarms you can set at irregular intervals to remind you to check if you are on task, incentives, praise, reduce distractions, follow a schedule and create a space for homework, healthy breaks.
5. Task Initiation– just do the first problem (trick yourself into starting, then you may do one more), do it now instead of later, visual cues, make a schedule, reinforce for timeliness, set alarms, have child make schedule and define how cues will be given, make a list and prioritize, get a coach to IM several times a week to monitor progress.
6. Planning/Prioritization– Person Centered Plan, break into smaller steps, help child make a schedule, use things you/they really want as rewards when steps are completed, schedule planning time daily as well as times to check progress on plan and mark out completed tasks, get a buddy to talk it out with and take notes.
7. Organization– Put a system in place and monitor for fidelity, don’t put it down; put it away, make labels or pictures to show what goes where, make pictures of how it should look, make a space for everything that is clearly marked, schedule a time to organize, make a checklist for routines and for the steps of cleaning a room that the child can interact with by checking off steps or moving pictures of steps arranged in sequence from “Now” position to a “done” box.
8. Time management– use schedules, calendars, and alarms [www.watchminder.com](http://www.watchminder.com), write down estimates of how long each step in a task will take and record results to learn if you need to adjust how long things will take, schedule and plan for breaks, minimize distractions.
9. Flexibility– learn to watch out for absolute or extreme forms of thinking errors and correct the thoughts, keep an eye out for words in your self-talk such as never, always, have to, and can’t. Make a game with extreme statements (I always miss, I never get it right, you never let me do anything) made by a person when a

disappointing or unexpected event occurs. Have the child generate smarter and more accurate self-talk (I missed this time but if I keep trying I will get it.)

10. Metacognition– learn to ask yourself questions such as What am I thinking about, is what I am doing working, what is another way to do this, how do I know when I am finished, keep a journal of thoughts that distract you or occur when you are having an emotional response. Prompt a child to evaluate their own performance– “How do you think you did?” Ask them to predict how their actions may make others feel. Teach them to listen first and use comments to find out more about others rather than lecturing or correcting others, practice at the dinner table.
11. Goal-directed persistence– Start easy and build. Use tasks the child enjoys, like increasingly difficult lego building projects. Chart progress so they can see how they are getting better at working longer. Allow them to earn money for chores and set up a savings program for something big they really want.
12. Self-Other Awareness– Use video, play back to the student and help them identify all the things they did well in terms of prosocial behavior and effective communication, then help them pick one thing they would like to work on during the next video of interaction, which can be with peers or with a coach such as in Interpersonal Recall Therapy conducted by some speech pathologists. Use video and pause on frames that hold an expression on another’s face and ask what could this mean, what is this person thinking, who are they having these thoughts about, what could be the consequences for you if you continue this behavior. Develop a self-monitoring sheet with numerous boxes for different times during the day, have the student check if they are on task and “x” if they are not, provide graduated rewards based not on the number of times on task but number of times they noticed if they were or were not.

Keep in mind that if inhibition or working memory are poorly developed, these must be targeted first as subsequent organizational and self-control strategies are unlikely to take root until these are addressed.



