Helping Children and Teens Strengthen Executive Skills to Reach Their Full Potential

smartbutscatteredkids.com

Peg Dawson, Ed.D.
Center for Learning and Attention Disorders
Portsmouth, NH

dawson.peg@gmail.com
## Executive Skills that Underlie School Success

<table>
<thead>
<tr>
<th>Foundational Skills</th>
<th>Advanced Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Response Inhibition</td>
<td>• Planning/Prioritizing</td>
</tr>
<tr>
<td>• Working Memory</td>
<td>• Organization</td>
</tr>
<tr>
<td>• Emotional Control</td>
<td>• Time Management</td>
</tr>
<tr>
<td>• Flexibility</td>
<td>• Goal-Directed Persistence</td>
</tr>
<tr>
<td>• Sustained Attention</td>
<td>• Metacognition</td>
</tr>
<tr>
<td>• Task Initiation</td>
<td></td>
</tr>
</tbody>
</table>
Response inhibition

The capacity to think before you act – this ability to resist the urge to say or do something allows us the time to evaluate a situation and how our behavior might impact it.
Working Memory

The ability to hold information in memory while performing complex tasks. It incorporates the ability to draw on past learning or experience to apply to the situation at hand or to project into the future.
Emotional Control

The ability to manage emotions in order to achieve goals, complete tasks, or control and direct behavior.
Flexibility

The ability to revise plans in the face of obstacles, setbacks, new information or mistakes. It relates to an adaptability to changing conditions.
Sustained Attention

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

The ability to begin projects without undue procrastination, in an efficient or timely fashion.
Planning/Prioritizing

The ability to create a roadmap to reach a goal or to complete a task. It also involves being able to make decisions about what’s important to focus on and what’s not important.
Planning is a skill that takes time to develop.
Organization

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

The capacity to estimate how much time one has, how to allocate it, and how to stay within time limits and deadlines. It also involves a sense that time is important.
Goal-Directed Persistence

The capacity to have a goal, follow through to the completion of the goal and not be put off or distracted by competing interests.
Metacognition

The ability to stand back and take a birds-eye view of oneself in a situation. It is an ability to observe how you problem solve. It also includes self-monitoring and self-evaluative skills (e.g., asking yourself, “How am I doing? or How did I do?”).
Why is it important to help kids develop executive skills?
The Child’s Developing Brain

Different areas of the brain mature at different rates, which helps explain many of the intellectual and emotional changes seen in children, teens and young adults. While no two children develop in exactly the same way, scientists have been able to link certain developmental milestones to changes in brain tissue, observed by MRI scans taken repeatedly over years. Move the slider below to see how the brain matures. Red, yellow and orange patterns indicate underdeveloped brain tissue, while green, blue and purple indicate a maturing of the brain.

EARLY DEVELOPMENT
In the first few years of life, vast areas of the brain devoted to basic function change at a rapid pace. By age 4, primary sensory and motor skills are almost fully developed. The child can walk, hold a crayon and feed himself.

SENSATION
Areas responsible for sensations like touch are almost as developed as they will ever be.

VISION
The part of the brain governing vision has already matured.

4 years old

Brain images courtesy of Dr. Paul Thompson, University of California, Los Angeles. Source information provided by Dr. Jay Gogtay, National Institutes of Mental Health. Produced by Tessa Pollen-Pujol, Jon Huag, and Mike Wiseco/The New York Times

© 2011 The New York Times Company
What’s the population we’re talking about?

What concerns you most about this pupil?
That he is lazy and not working his potential.

Please describe the best things about this pupil:
He is sweet and has a good sense of humor.
A better way...

<table>
<thead>
<tr>
<th>Instead of calling students this:</th>
<th>Describe them as having challenges in this:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lazy</td>
<td>Task initiation</td>
</tr>
<tr>
<td>Unmotivated</td>
<td>Sustained attention</td>
</tr>
<tr>
<td>Not working to potential</td>
<td>Response inhibition</td>
</tr>
<tr>
<td>Disruptive</td>
<td>Emotional control</td>
</tr>
<tr>
<td>Oppositional</td>
<td>Flexibility</td>
</tr>
<tr>
<td>Messy</td>
<td>Organization</td>
</tr>
<tr>
<td>Tardy</td>
<td>Time management</td>
</tr>
<tr>
<td>Forgetful</td>
<td>Working memory</td>
</tr>
<tr>
<td>Absent-minded</td>
<td>Goal-directed persistence</td>
</tr>
<tr>
<td>Lacking a work ethic</td>
<td></td>
</tr>
</tbody>
</table>
There are 3 primary ways parents and teachers can help kids with weak executive skills:

1. Change the environment to reduce the impact of weak executive skills.

2. Teach the youngster executive skills.

3. Use incentives to get youngsters to use skills that are hard for them.
Ways to modify the environment

1. Change the physical or social environment
2. Modify the tasks we expect children to perform
3. Change the way adults interact with kids.
Examples of environmental modifications

- Manage distractions
- Modify tasks (shorten them, build in breaks, create a schedule, build in choice)
- Give advance warning when something changes
- Use visual cues (rather than verbal “nags”)
### Use Visual Cues

#### February 2019 Calendar

<table>
<thead>
<tr>
<th>Sunday</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>ELA Study Hall</td>
<td>ELA Study Hall</td>
<td>ELA Study Hall</td>
<td>ALGEBRA ART</td>
<td>Study Hall</td>
<td>Science</td>
</tr>
<tr>
<td>5</td>
<td>ELA Study Hall</td>
<td>ALGEBRA ART</td>
<td>P.E. HOMEWORK</td>
<td>ALGEBRA ART</td>
<td>Study Hall</td>
<td>Science</td>
</tr>
<tr>
<td>6</td>
<td>ALGEBRA ART</td>
<td>ELA Spanish</td>
<td>Aux P.E. HOMEWORK</td>
<td>ALGEBRA ART</td>
<td>Study Hall</td>
<td>Science</td>
</tr>
<tr>
<td>7</td>
<td>ELA Study Hall</td>
<td>ELA Study Hall</td>
<td>Science</td>
<td>Aux P.E.</td>
<td>HOMEWORK</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>ELA Study Hall</td>
<td>ELA Spanish</td>
<td>Aux P.E.</td>
<td>HOMEWORK</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>No School</td>
<td>No School</td>
<td>No School</td>
<td>No School</td>
<td>No School</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>No School</td>
<td>No School</td>
<td>No School</td>
<td>No School</td>
<td>No School</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>No School</td>
<td>No School</td>
<td>No School</td>
<td>No School</td>
<td>No School</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>No School</td>
<td>No School</td>
<td>No School</td>
<td>No School</td>
<td>No School</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>No School</td>
<td>No School</td>
<td>No School</td>
<td>No School</td>
<td>No School</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>No School</td>
<td>No School</td>
<td>No School</td>
<td>No School</td>
<td>No School</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>No School</td>
<td>No School</td>
<td>No School</td>
<td>No School</td>
<td>No School</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>No School</td>
<td>No School</td>
<td>No School</td>
<td>No School</td>
<td>No School</td>
<td></td>
</tr>
</tbody>
</table>

**Check:**
- [ ] EMAIL
- [ ] Google Classroom
- [ ] Teacher Website
- [ ] BACKPACK PAPERS
- [ ] Do Homework

**New Year**

<table>
<thead>
<tr>
<th>1 March</th>
<th>2 March</th>
</tr>
</thead>
</table>

**Gotham High School Midterm Exam Schedule**

**Exam Schedule:**
- **Tuesday, January 21:**
  - 9:15 a.m. - 11:15 a.m. Block 1
  - 11:30 a.m. - 1:30 p.m. Block 2
- **Monday, January 20:**
  - 9:15 a.m. - 11:15 a.m. Block 1
  - 11:30 a.m. - 1:30 p.m. Block 2

**Exam Schedule:**

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Block</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 25</td>
<td>9:15 a.m. - 11:15 a.m.</td>
<td>Block 1</td>
</tr>
<tr>
<td>Jan 25</td>
<td>11:30 a.m. - 1:30 p.m.</td>
<td>Block 2</td>
</tr>
<tr>
<td>Jan 26</td>
<td>9:15 a.m. - 11:15 a.m.</td>
<td>Block 1</td>
</tr>
<tr>
<td>Jan 26</td>
<td>11:30 a.m. - 1:30 p.m.</td>
<td>Block 2</td>
</tr>
</tbody>
</table>

**Exam Schedule:**

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Block</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 27</td>
<td>9:15 a.m. - 11:15 a.m.</td>
<td>Block 1</td>
</tr>
<tr>
<td>Jan 27</td>
<td>11:30 a.m. - 1:30 p.m.</td>
<td>Block 2</td>
</tr>
</tbody>
</table>
Effective Praise

1. Is delivered immediately after the positive behavior.
2. Specifies the particulars of the accomplishment (I appreciate you loading the dishwasher without my having to bug you about it).
3. Communicates the value of the accomplishment (I know you didn’t want to watch your sister after school, but it really got me out of a bind at work—thanks for helping out).
4. Lets the child know you saw him working hard to accomplish the task (Your brother was pushing your buttons, but you worked hard to keep your temper in check).
5. Oriens 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).
TEACH deficient skills

Don’t expect the child to acquire executive skills through observation or osmosis.
The formula for teaching executive skills

1. Embed the skill in a daily routine
2. List the steps in the routine
3. Walk the child through the steps repeatedly
4. Create a visual that outlines the routine
5. Fade the prompts by having the child use the visual to follow the routine
Jack’s Clean Room Checklist

My Clean Desk
- garbage is cleared and thrown away
- desk items are placed in the appropriate drawers

My Clean Bed
- bed is made (sheets and pillows in place, blanket spread evenly)

My Clean Shelves
- toiletries are put away
- clothes are folded and in correct place
- shirts are on hangers

My Clean Floor
- dirty laundry is picked up and in the hamper
- all other items have been put away
- garbage has been thrown out
- there is nothing on the floor
### STUDY PLAN

**Date:** ____________________

<table>
<thead>
<tr>
<th>Task</th>
<th>How long will it take?</th>
<th>When will you start?</th>
<th>Where will you work?</th>
<th>Actual start/stop times</th>
<th>Done (✓)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Use incentives to augment instruction.

Incentives make both the effort of learning a skill and the effort of performing a task less aversive.

Furthermore, putting an incentive after a task teaches delayed gratification.
Simple Incentives

- Give the child something to look forward to doing when the effortful task is done (we call that Grandma’s Law).
- Alternate between preferred and non-preferred activities (use simple language: First...then, e.g., *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.
Key Strategies for Parents to Use (the biggest bang for the buck)

- Keep tasks and chores brief or build in breaks.
- Give your child something to look forward to when the effortful task is done.
- Build in choice whenever possible.
- Use lists and checklists as reminders.
- Build in routines.
How can we work with kids to get them to use their own executive skills?

- Ask children to reflect on their own performance, especially when they are 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?)
How can we work with kids to get them to use their own executive skills?

- When problems arise, share your observations in a nonjudgmental way (I noticed you….What can we do about that?).
- Brainstorm strategies. Together with the child, make a list of possible strategies. Ask the child to pick one, and then make a game plan for trying it out.
Keep your eye on the biggest prize: building goal-directed persistence!

- Model this yourself—if your child sees you persisting 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.
Be Patient: Your Child at 15 Will NOT Look the Same at 25
I already used some of the tips you offered regarding emotional control with my daughter last night as we worked on her language assignment. We set the timer, took breaks, got a drink of water, and when she really started to freak out I asked her to "make a plan" and I thought of your daughter-in-law and smiled! Estimating how long it will take to do the assignment and then doing it in less time than she thought made my daughter feel sooo proud. When it was all done I praised her ability to self regulate and her effort to stick with it even when it wasn't going the way she wanted (especially when I too wanted to freak out, yell and quit - smile).

~Mary Haggerty, Guelph, Ontario
Just tonight my daughter needed help on an assignment. When she showed it to me it was obvious that she knew how to do it. She just didn’t like it, thought it would take too long and wasn’t sure how to get started. (Thank goodness, because I know way more about breaking down an assignment than I do about the agricultural revolution). I gave her a couple strategies
  ▪ work for 20 minutes, then take a break
  ▪ do what you know and skip the hard parts

About 15 minutes later she was done with all her work. Sometimes the strategies seem like stating the obvious, but they are powerful in their simplicity.

~Ingrid Conklin
“Human beings are happier, more cooperative and productive, and more likely to make positive changes in their behavior when those in positions of authority do things with them rather than to them or for them.”

~Ted Wachtel
International Institute for Restorative Practices
October 8-9, 2021
Vail

Reading in the Rockies
PRESENTED BY THE ROCKY MOUNTAIN BRANCH OF THE INTERNATIONAL DYSLEXIA ASSOCIATION
Promoting literacy through research, education and advocacy™
Q & A
Tips for working with teenagers

As a boy of 14, my father was so ignorant I could hardly stand to have the old man around. But when I got to be 21, I was astonished at how much he had learned in 7 years.

~Attributed to Mark Twain
Tips for working with teenagers

- Pick your battles.
- Use natural or logical consequences.
- Make access to privileges contingent on performance.
- Be willing to negotiate (make deals!)
- If something is non-negotiable, ask this question: What will it take for you to go along?
- Involve others when you can (tutors, teachers, guidance counselors, coaches).
- Build in verification.
Tips for working with teenagers

- Understand that everybody has to work harder (parents, teachers, student).

- Work on positive communication skills.
# Communication Strategies

<table>
<thead>
<tr>
<th>If your family does this...</th>
<th>Try to do this instead:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Call each other names.</td>
<td>Express anger without hurt.</td>
</tr>
<tr>
<td>Put each other down.</td>
<td>“I am angry that you did __________”</td>
</tr>
<tr>
<td>Interrupt each other.</td>
<td>Take turns; keep it short.</td>
</tr>
<tr>
<td>Criticize too much.</td>
<td>Point out the good and bad.</td>
</tr>
<tr>
<td>Get defensive</td>
<td>Listen, then calmly disagree.</td>
</tr>
<tr>
<td>Lecture.</td>
<td>Tell it straight and short.</td>
</tr>
<tr>
<td>Talk in sarcastic tone.</td>
<td>Talk in normal tone.</td>
</tr>
<tr>
<td>Dredge up the past.</td>
<td>Stick to the present.</td>
</tr>
<tr>
<td>Read others’ minds.</td>
<td>Ask others’ opinions.</td>
</tr>
<tr>
<td>Command, order.</td>
<td>Request nicely.</td>
</tr>
<tr>
<td>Give the silent treatment.</td>
<td>Say what’s bothering you.</td>
</tr>
<tr>
<td>Make light of something.</td>
<td>Take it seriously.</td>
</tr>
</tbody>
</table>

From *ADHD in Adolescents: Diagnosis and Treatment* by Arthur L. Robin. Copyright 1998 by The Guilford Press.
Tips for working with teenagers

- Seek help if you need it--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 keep your kids “in the game” until their frontal lobes mature enough for them to take over.
Strategies for Building Executive Skills

Task initiation (getting 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 something else.
- Figure out when your child’s high energy times are and work then.
Strategies for Building Executive Skills

*Sustained Attention* (sticking with something long enough to finish).

- 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 fun (e.g., 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 (“You can’t walk away from this”).
Strategies for Building Executive Skills

*Working memory (keeping 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, smart phone apps, post-its, writing on the back of your hand).
- Create a checklist of things he/she need 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.
Strategies for Building Executive Skills

*Time management (getting done everything that needs 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.