



STRENGTHENING EXECUTIVE SKILLS TO PROMOTE SCHOOL SUCCESS

Peg Dawson, Ed.D., NCSP

dawson.peg@gmail.com

<https://www.smartbutscatteredkids.com>



Complete the Executive Skills Questionnaire



ACTIVITY

Choose one of your executive skill strengths (higher score). Talk about how that helps you do your job.

Choose one of your executive skill challenges (lower score). Talk about how that affects your work.



Where do
these skills
come from?

Are we born with
them?

If not, how do we
acquire them?

Are we taught them?
By whom?

Where do these skills come from?

Do they just emerge gradually over time (the way vision does in infants)?



Are they learned through practice (the way infants learn to walk)?



Are they learned through modeling and shaping (the way language is learned)?



Or are they explicitly taught (the way reading is learned)?

Let's vote



Go to **www.menti.com** use the code



Use the code **7825 3062**

Introduction to the Field

Not a lot of consensus

- The name: executive functions vs. executive skills
- How many skills we're talking about:
 - range = 1 – 33
- What the specific skills are



3 Key Concepts about Executive Skills

- What they are: brain-based skills that take a minimum of 25 years to reach full maturation.
- Until these skills are fully mature, it's the job of parents and teachers (and adults who work with kids) to act as surrogate frontal lobes.
- It is also the job of parents, teachers, etc. to ensure that kids grow their own executive skills.





What's Executive Function—and Why Does It Matter?

The skills that make up executive function are better predictors of success than test scores, IQ, or socioeconomic status.

August 15, 2019

Edutopia

Published: September 15, 2008

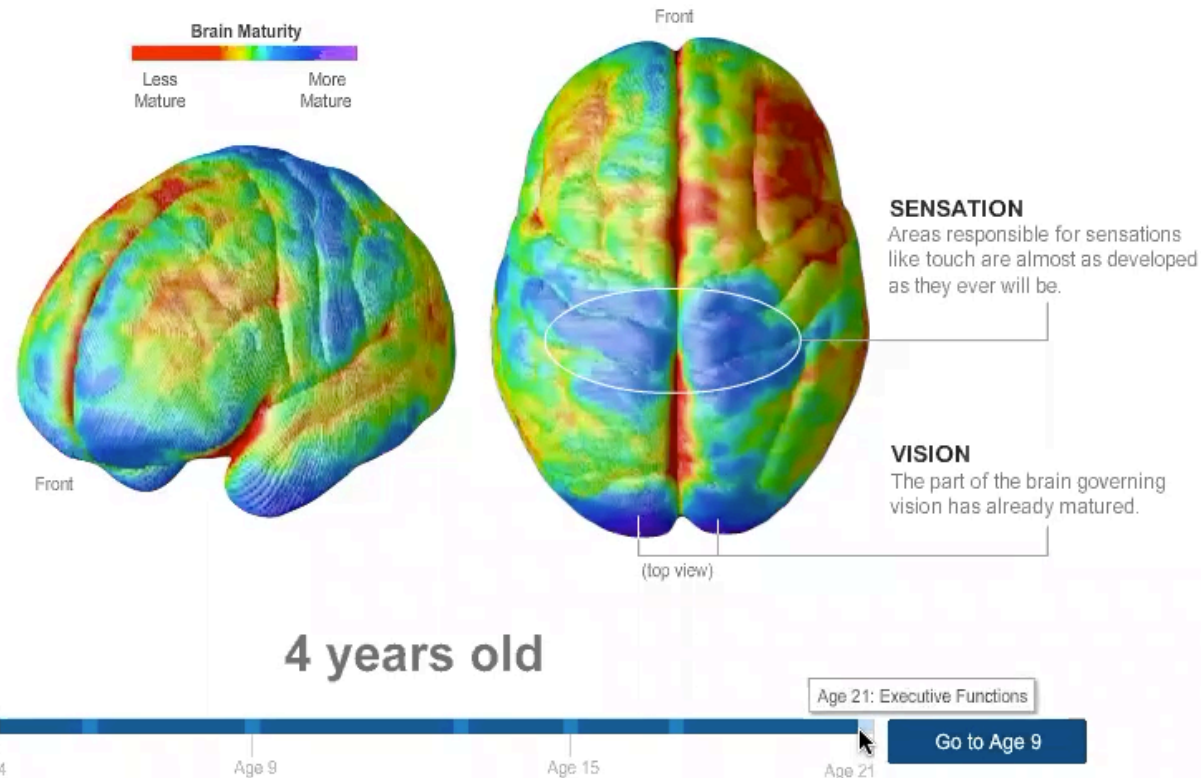
[f FACEBOOK](#) [TWITTER](#) [GOOGLE+](#) [EMAIL](#) [SHARE](#)

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 undeveloped brain tissue, while green, blue and purple indicate a maturing of the brain.

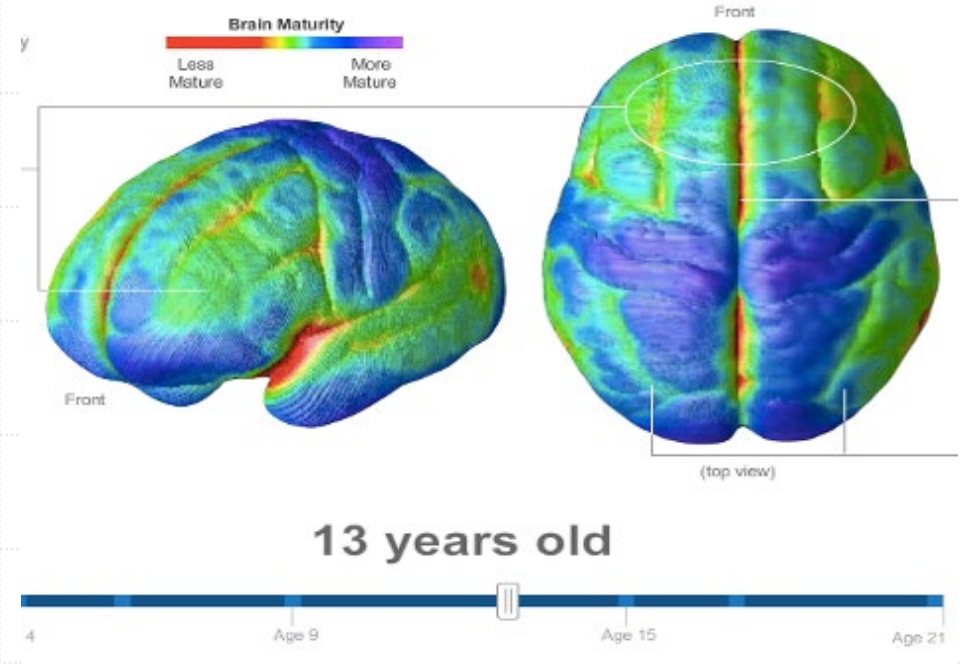
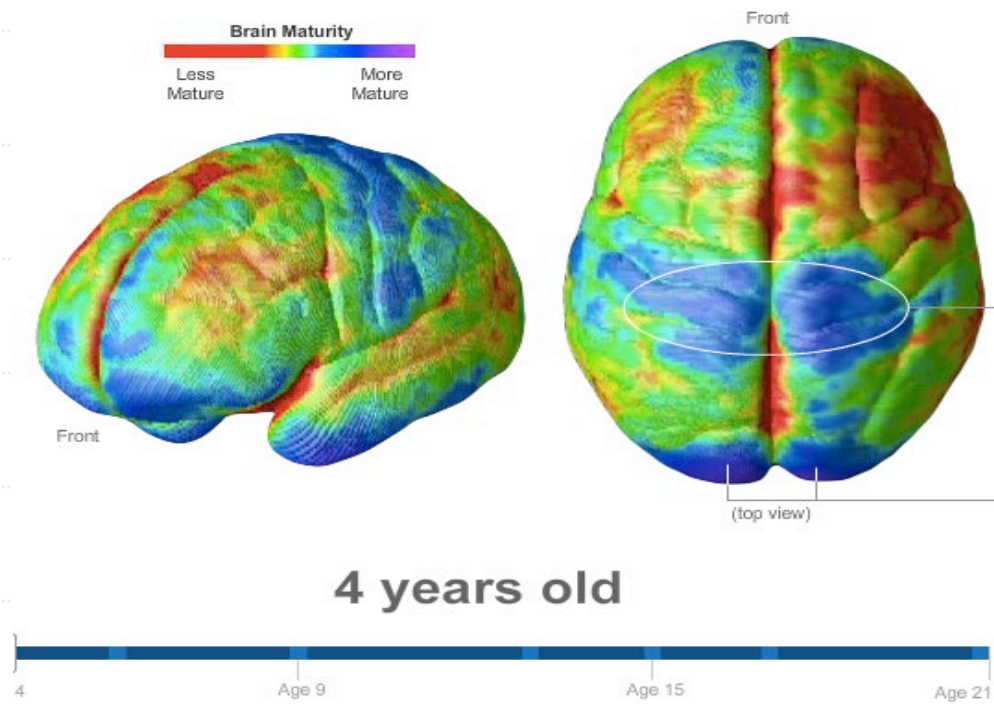
EARLY DEVELOPMENT

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

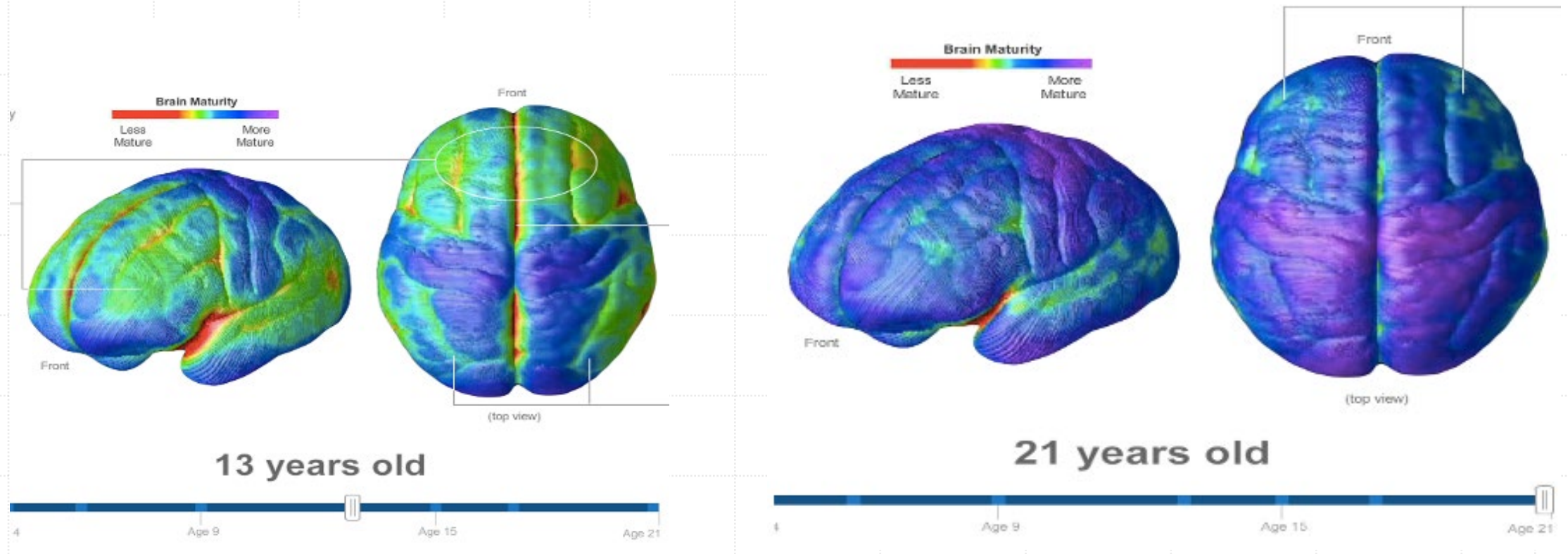


Brain images courtesy of Dr. Paul Thompson, University of California, Los Angeles. Source information provided by Dr. Jay Giedd, National Institutes of Mental Health. Produced by Tara Parker-Pope, Jon Huang, and Mike Mason/The New York Times

What can the 13-year-old brain do?



What can the 13-year-old brain do?





Executive Skills that Underlie School Success

Foundational Skills

- Response Inhibition
- Working Memory
- Emotional Control
- Flexibility
- Sustained Attention
- Task Initiation

Advanced Skills

- Planning/Prioritizing
- Organization
- Time Management
- Goal-Directed Persistence
- Metacognition

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.

<https://www.youtube.com/watch?v=9PnbKL3wuH4>

#CONTROLMESELF

SESAME STREET



SONGS



<https://www.youtube.com/watch?v=9PnbKL3wuH4>

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.



Limits of Working Memory

Working memory has a capacity of **about four chunks in young adults** (and fewer in children and old adults).

~Cowen, N. (2005). Working Memory Capacity.

Working Memory

- Do NOT rely on verbal instructions only—pair verbal instructions with visual cues whenever possible
- Talk with students about the strategies they use to remember things (explain *offloading*)
- When you do use verbal instructions,
 - ask a random student to repeat the instructions
 - cue students to write down their own reminders if they think they won't remember

Supports for students with weak working memory



Emotional Control



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



Ask Kids What They're Feeling (or identify their feelings for them)

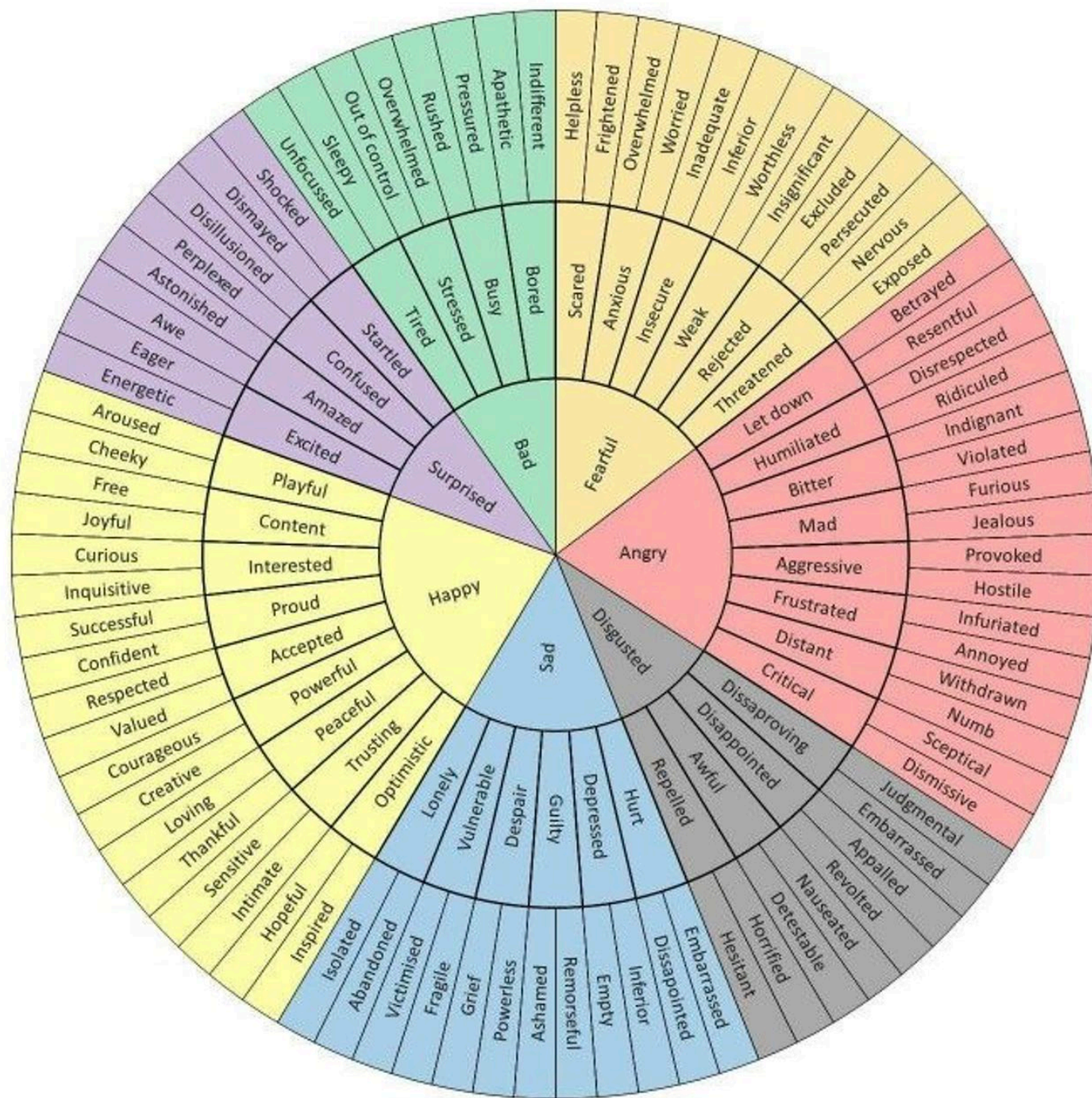
Putting Feelings Into Words Produces Therapeutic Effects In The Brain

Date: June 22, 2007

Source: University of California - Los Angeles

Summary: A new brain imaging study by psychologists reveals why verbalizing our feelings makes our sadness, anger and pain less intense. A second study combines modern neuroscience with ancient Buddhist teachings to provide the first neural evidence for why "mindfulness" -- the ability to live in the present moment, without distraction -- seems to produce a variety of health benefits.





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.



Sustained Attention

- Mindfulness exercises

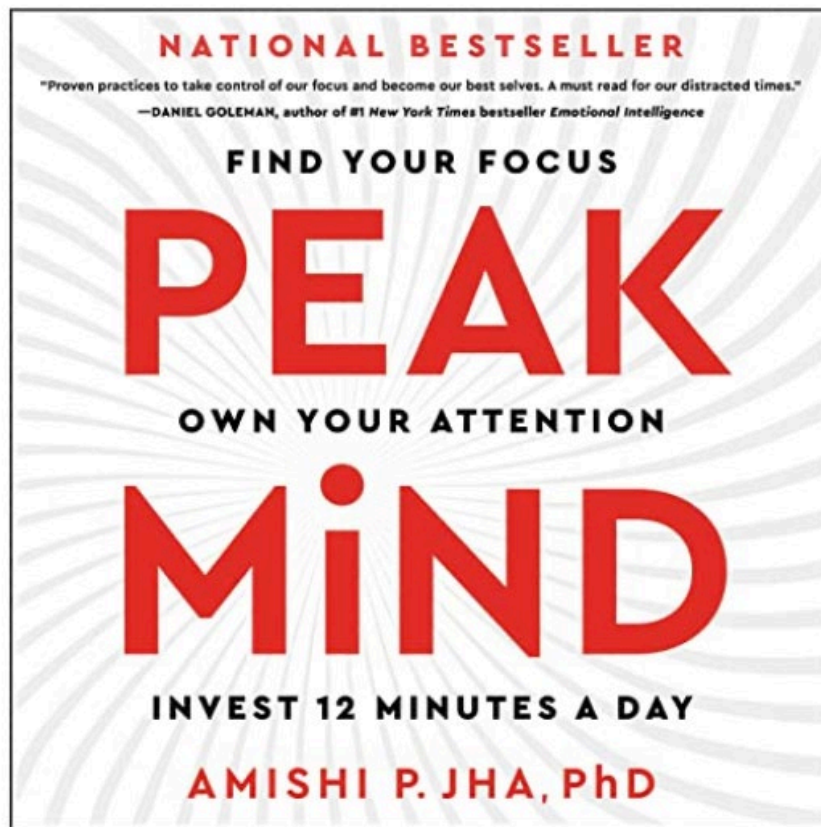
Mindfulness in the Classroom: Strengthen Students' Focus in 3 Minutes a Day

Mindfulness exercises are easy to teach and to learn

By Lisa Mazinas — August 22, 2023 ⌚ 4 min read

At the time, I taught 2nd grade. I decided to teach the same exercises (simplified) to my students during our morning meeting. Each day, we spent two to three minutes practicing mindfulness. The results were incredible. All 20-plus students sat on the rug, criss-cross, with their eyes closed (usually). Parents thanked me, mentioning the enthusiasm that their children shared at home. I remember a child who fidgeted and appeared disengaged, yet his mom told me that he spoke fondly about our mindfulness routine. Another child wrote a note to me, asking if we could add a session in the afternoon. “It feels crazy when we come back from lunch. Can we try some mindfulness?”

Where's the evidence that this works?



Our basic definition of mindfulness was this:

Paying attention to present-moment experience without conceptual elaboration or emotional reactivity.

...mindfulness training was the *only* brain-training tool that consistently worked to strengthen Attention across our studies.

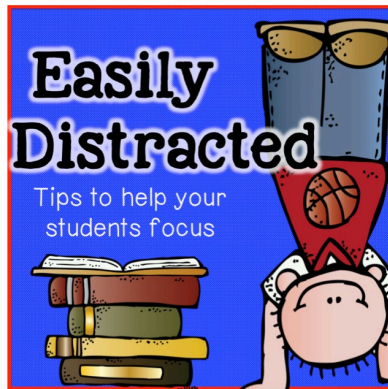


Sustained Attention

- Mindfulness exercises
- Movement breaks

Stampin g Station

EASILY DISTRACTED



3. If this is a student with extra energy, set up a stamping station (stamp and stamp pad). Give the student an egg timer. He or she works as many problems as he or she can until the sands run out of the egg timer. Then the student gets up, walks over to the stamping station with his/her assignment, he/she stamps the assignment next to the last problem that he/she finished. Then goes back to desk, turns over egg timer and begins working again. When time runs out, goes to stamping station, stamps last problem that he/she completed, goes back to desk and continues this until he/she completes the assignment. To modify this, you can tell them they need to turn over the egg timer once or twice before they stamp it or you can use a different type of timer to give a longer work period. This is a great documentation tool.





Sustained Attention

- Movement breaks
- Ask students to set incremental goals

Improving the Achievement, Motivation, and Engagement of Students With ADHD: The Role of Personal Best Goals and Other Growth-Based Approaches

Andrew J. Martin

Faculty of Education and Social Work, University of Sydney, Sydney, New South Wales, Australia

Australia Journal of Guidance and Counseling, 2013

Andrew J. Martin

Appendix A Personal Best (PB) Goal Work Sheet

(Reproduced with permission from Lifelong Achievement Group — visit www.lifelongachievement.com to download)

A PB is where you aim to match or better a previous best performance. It can be a mark you're aiming for or you can aim to do your schoolwork or study in a way that is an improvement on last time or the way you usually do it.

A. My PB is a mark in _____ What mark are you aiming for? _____

OR

B. My PB is a better way of doing my schoolwork or study in _____

The better way of doing things is: _____

Is this PB maintaining a previous best or improving on a previous best? YES / NO
If NO, you need to develop a PB that does.

Do you believe you can reach this PB? YES / NO
If NO, you need to develop a PB that you believe you can reach.

When do you plan to achieve this PB? _____

Describe the steps involved in reaching your PB	✓ when achieved
1. First, I will	
2. Next, I will	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	

☐ I believe I reached my PB

Evidence _____

☐ I think I just missed out

Because _____

☐ I didn't get close to my PB

Because _____

My next PB is: _____



Sustained Attention

- Movement breaks
- Ask students to set incremental goals
- Teach students to monitor whether they're paying attention

App Store Preview



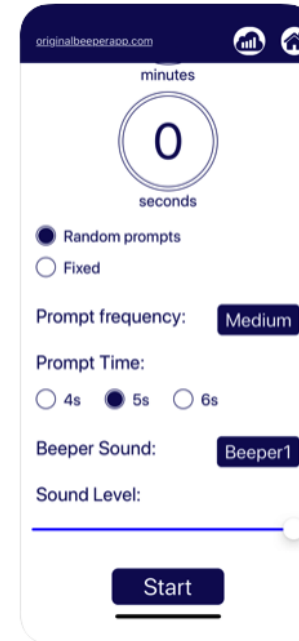
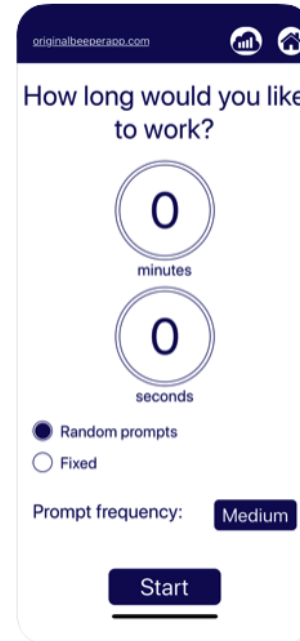
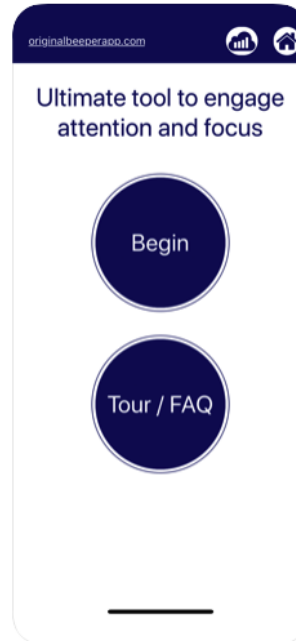
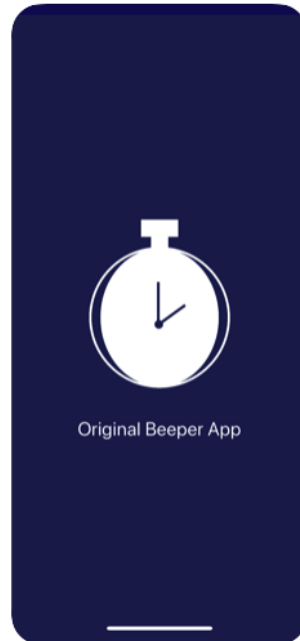
Original Beeper App 4+

Normarc

USD 1.99

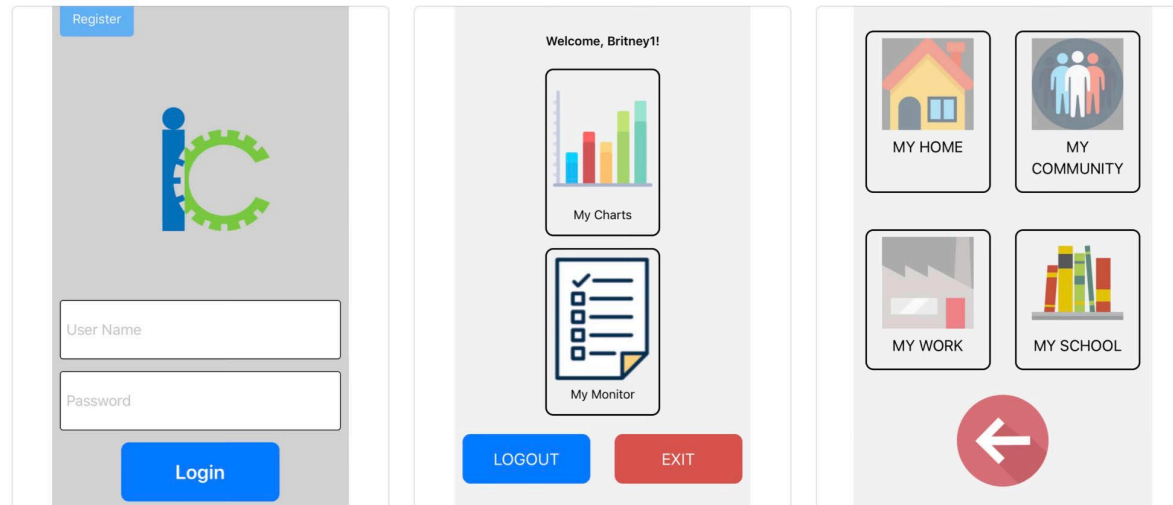
[View in Mac App Store ↗](#)

Screenshots iPad iPhone



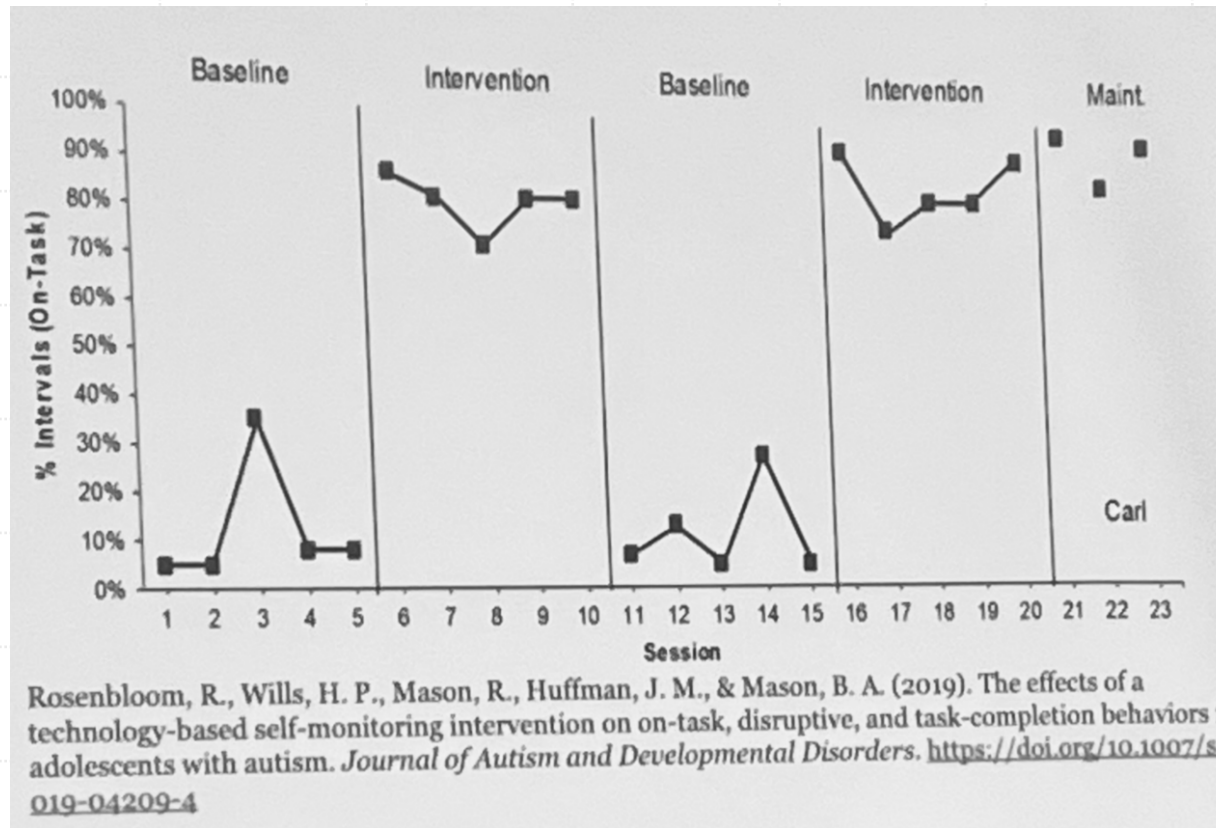
Another hi-tech option: iConnect

Preview

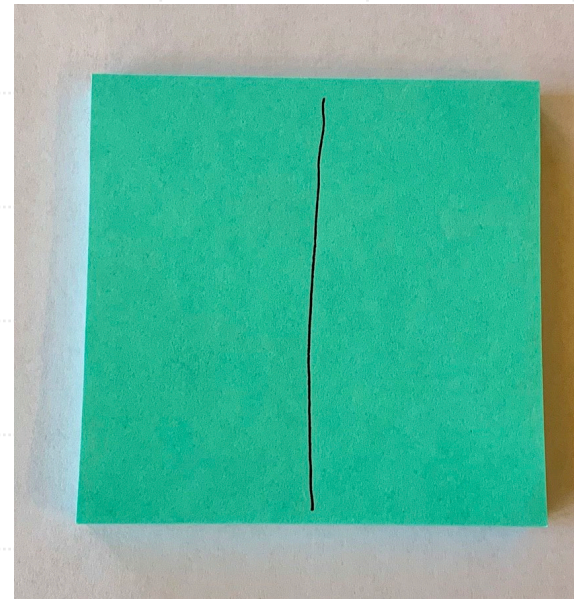
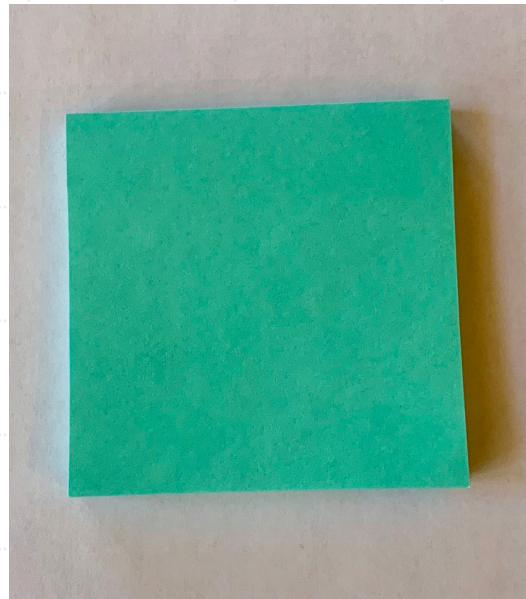


<https://iconnect.ku.edu>

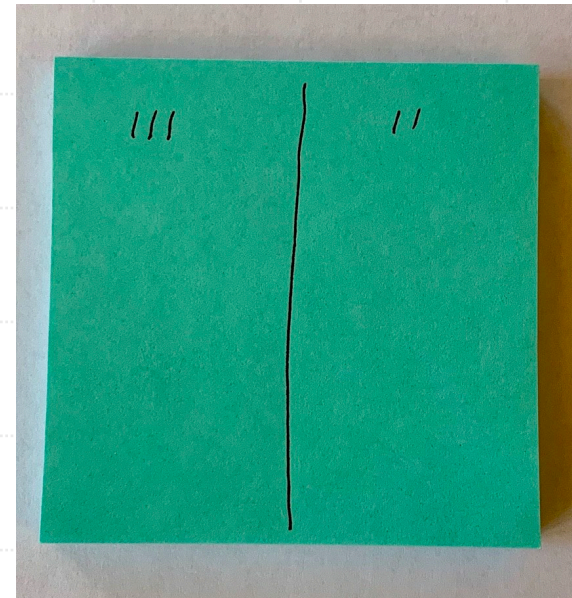
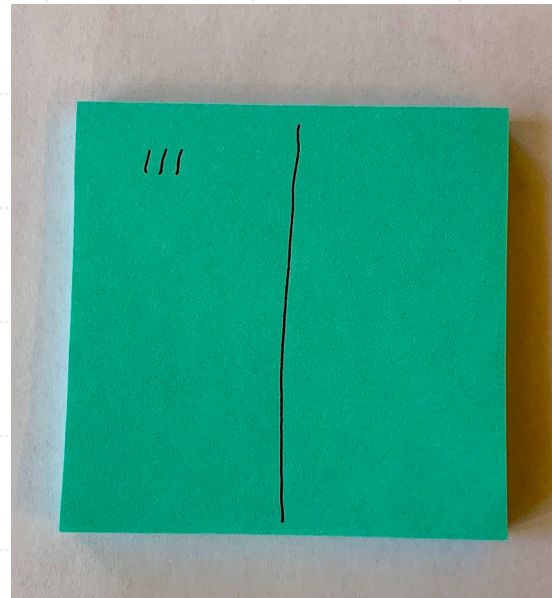
Efficacy of Attention Self- Monitorin g



Attention Self-Monitoring



Attention Self-Monitoring



Another Option

*Developed by Marcy
McIver*

marcylmciver@gmail.com

Focus Monitor	Checkmarks Monitor yourself in the space below.
I am not doing my work and doing something else.  5	
I am thinking about something else.   4	
I am drifting in and out of focus.  3	
I lost focus but quickly caught myself and refocused.  2	
I am totally focused.  1	

© Marcy McIver

Teach students to self-monitor

- Plan
- Monitor
- Reflect

Plan for Paying Attention

Before Starting

In the zone ☐ NOT in the zone ☐

What do I do to get in the zone?

How long am I going to work? _____ minutes

What's my goal for this work session (e.g., finish 10 math problems; write for 15 minutes, etc.)?

While I'm working I will reduce distractions by...

While I'm Working

Time I started working? ____: ____

How often am I getting off-task? Use tally marks to track (///)

After I'm Done Working

Time I finished working? ____: ____

I met my goal: Yes ☐ No ☐

What worked?	
What got in the way?	
What I'll try next time:	

Task Initiation



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

STUDY PLAN

Date: _____

[illegible]



Task Initiation

- Talk to students about the strategies they use to make themselves get started on things they don't want to do
- Help students figure out *why* they're procrastinating and come up with a strategy to overcome the barrier

Solving the Procrastination Problem

Task:	Date:
Obstacle	Strategy
I don't understand the assignment.	
I can't think of how to start the assignment.	
I could probably do the assignment but it will take a lot of work and just the thought of that hurts my brain.	
The task is way too boring for me even to contemplate doing it.	
This assignment is pointless. I would get nothing out of doing it.	
The conditions for working aren't perfect—when they are, I'll get started.	
I have way too many things to do and don't know how to prioritize my time.	
It's going to take way too long and I don't want to commit that amount of time.	
There are other things I'd rather be doing that are more fun or more important to me.	
Wait, what assignment? When I leave school at the end of the day I put school behind me (i.e., the cues that remind me to do schoolwork are missing).	
The assignment isn't going to affect my grade so why bother	
Perfectionism—I'm not going to start because I know I won't be able to do work that meets my (impossibly) high standard.	
I'm stressed out about other things (either internal or external) and can't focus because of these preoccupations. I'll do better if I wait until my life calms down.	
I'm too tired. I don't have the energy to do this now.	
I don't <i>think</i> I can do it—because I've always failed in the past—so why should I try?	
I'm so far behind now, I'll never catch up!	
I don't want to do this because if I accomplish this, I'm scared of what comes next.	

Consider this...

Scott has trouble getting seatwork done in the time he is given. Writing assignments are particularly challenging. He stares at his paper for a long time, and even after the teacher prompts him to get to work, he still struggles. When the writing period is over, he's lucky if he's got two sentences on his paper, when the rest of the class seem to write two paragraphs easily.

- What executive skills might be challenging for Scott?
- If you were working with Scott's teacher, what suggestions might you make?

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.

A Template for Planning Long-term Projects

Long-Term-Project Planning Form

Due Date: _____

Step 1: Select a Topic

What are possible topics?	What I like about this choice:	What I don't like:
1.		
2.		
3.		
4.		
5.		

Final topic choice:

--

Step 2: Identify Necessary Materials

What materials or resources do I need?	Where will I get them?	When will I get them?
1.		
2.		
3.		
4.		
5.		

Long-Term-Project Planning Form (cont.)

Step 3: Identify Project Tasks and Due Dates

What do I need to do? (List each step in order)	When will I do it?	Check off when done
Step 1:		
Step 2:		
Step 3:		
Step 4:		
Step 5:		
Step 6:		
Step 7:		
Step 8:		
Step 9:		
Step 10:		

Reminder List: Include here any additional tasks or details you need to keep in mind as you work on the project. Cross out or check each one off as you take care of it.

- ___ 1.
- ___ 2.
- ___ 3.
- ___ 4.
- ___ 5.
- ___ 6.
- ___ 7.
- ___ 8.
- ___ 9.
- ___ 10.

A Template for Studying for Tests

Studying for Tests

Test date: _____ Subject: _____

Check off the strategies you will use.

Passive strategies (use sparingly)	Active strategies (better)	Active strategies with feedback (best)
☐ 1. Reread text	☐ 7. Make study guide	☐ 13. Quiz myself with Quizlet/ study guide/flash cards
☐ 2. Reread notes	☐ 8. Make flashcards/Quizlet	☐ 14. Take practice test (check answers)
☐ 3. Highlight notes/text	☐ 9. Make concept maps	☐ 15. Redo old tests or homework (check answers)
☐ 4. Read study guide	☐ 10. Organize notes	☐ 16. Have someone else quiz me
☐ 5. Rewrite notes	☐ 11. Complete review packet (no answers)	☐ 17. Complete review packet (check answers)
☐ 6. Read/watch Spark Notes, Kahn Academy, etc.	☐ 12. Attend review session or study group	☐ 18. Meet 1:1 with teacher
☐ 19. Other: _____		

Study Plan

Date	Day	Which strategies will I use? (Write number)	How much time for each strategy?
	4 days before test	1. 2. 3.	1. 2. 3.
	3 days before test	1. 2. 3.	1. 2. 3.

From The Work-Smart Academic Planner, Revised Edition. Copyright 2017 by The Guilford Press.

Studying for Tests (cont.)

Date	Day	Which strategies will I use? (Write number)	How much time for each strategy?
	2 days before test	1. 2. 3.	1. 2. 3.
	1 day before test	1. 2. 3.	1. 2. 3.

Posttest Evaluation

How did your studying work out? Answer the following questions:

1. What strategies worked best?
2. What strategies were not so helpful?
3. Did you spend enough time studying? Yes No
4. If no, what more should you have done?
5. What will you do differently the next time?

Organization



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

Work with Students to Create a Cheat Sheet

Subject	Where are assignments posted?	Where can I find course materials?	How do I turn in assignments?	Who else in my class can I contact?	Teacher contact information	Teacher Office Hours
	[HOTLINK]	[HOTLINK]	[HOTLINK]	dawson.peg@gmail.com (603) 553-1735	dawson.peg@gmail.com	

Other important information or hotlinks:

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.



What do I need to do?	How long do I think it will take?	Check when done.	How long did it take?
Step 1 Decide your position (for or against being a Loyalist)	7.5 minutes		
Step 2 Plan (complete your organizer)	60 minutes (1.5 writing classes)		
Step 3 Write your introduction	20 minutes		
Step 4 Body Paragraphs (3--2 argument/1counter-argument)	80 minutes		
Step 5 Conclusion	20 minutes		
Step 6 Edit (peer edit/self -edit) and make corrections	40 minutes		
Step 7 Print and turn in	5 minutes		

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.



Classroom example: Focusing on goal-directed persistence

One teacher's experience with a challenging class:

- This class had multiple failures at the end of Semester 1, the lowest percentage of work turned in, and was consistently 1 day behind my other 5 classes. This class was off task constantly and my other class management strategies that work beautifully with everyone else completely fail for this group of students.
- Before you introduced me to goal-directed persistence, I was having a conversation with a team member on what to do with this class and that I had to do something, but didn't know what. I felt like a lost puppy thirsty for water while walking in the desert.

- It has now been 9 weeks since you introduced me to the idea of goal-directed persistence. The results I have seen in this class are phenomenal. **They are now the most on-task class with the highest percentage work completion rate and 90% of the students consistently come to class prepared. For Quarter 3, I had no failing grades in this class and 85% of that class achieved their grade goal on their summative.**
- Some of the things I am doing consistently to keep them aware of their behaviors and how they impact reaching or not reaching their goal, is **I have them write their grade goal on their desk with dry erase marker. It serves as a consistent reminder throughout our 1 hour 35 minute class period of what choices they need to make to achieve their goals. We also talk about things that could hinder them from reaching their goal and how they can overcome those things.** This has made a difference for these students; not only their learning environment, but their confidence in their own ability to succeed!

~Sandy Moldanado

6th grade teacher, Imagine International Academy of North Texas

End of year follow-up

- Students completed a short end of year reflection and one question I asked them was what learning strategy was the most helpful in achieving their goals, the response I received the most was writing their grade goal on their desk daily. How fantastic for educators to have a seemingly small task that makes such a positive impact!

I had 1 out of 22 students fail for this second semester, and it was because he didn't turn in work (he passed the first semester), and I had no repeat failures from the first semester. The first semester I had 4 out of 22 fail my class. One of my students that received a 50 in the first semester was able to achieve his grade goal of an 87 in second semester!!!! This is one of my students that has ADHD and dyslexia!! He tested at a 3.5 reading level first semester and brought it up to a 5.5 by our last benchmark. Whoo Hoo!!!

Setting Small Goals

Developed by Marcy McIver

marcylmciver@gmail.com



The **N**ext **T**ime I will

Consider this...

Mark is an 8th grader who is always in danger of failing at least one class each marking period (and the class may change from term to term). He plans to go to college but when his parents get on his case, his typical answer is, “8th grade doesn’t count. I’ll work harder next year when it matters.” His parents feel like they have to micro-manage him just to make sure he passes all his classes.

- What executive skills might be challenging for Mark?
- If you were working with Mark, what suggestions might you make to his parents—or how might you address this with Mark?

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?”).

Key Strategy: **Encourage self-reflection following successes**

How does “pruning” affect executive skill development?

CORE CONCEPTS IN THE SCIENCE OF EARLY CHILDHOOD DEVELOPMENT

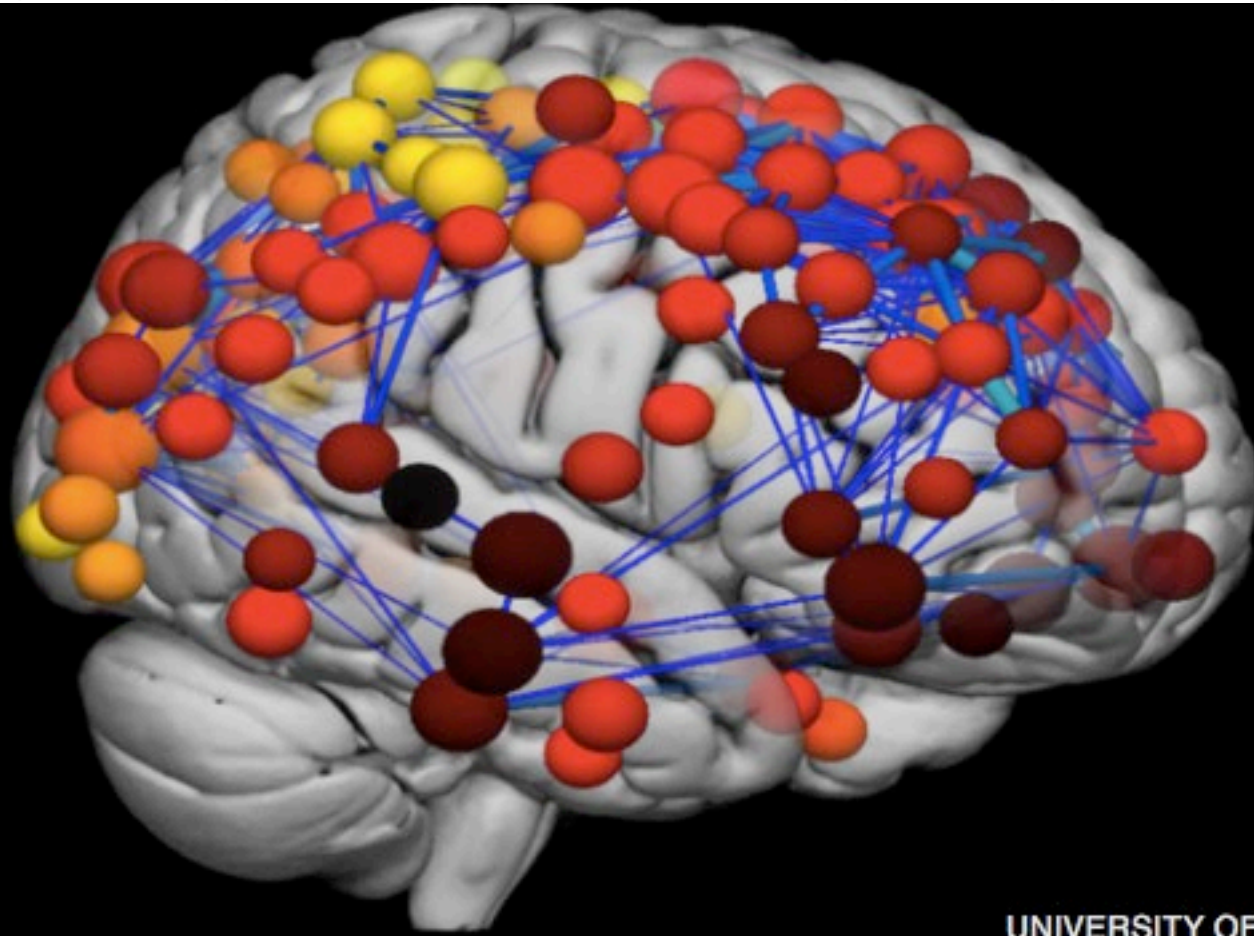
Experience Shapes Brain Architecture by Over-Production of Connections Followed by Pruning



2

Neural proliferation and pruning is a normal, healthy part of brain development: connections that are not used are pruned away.

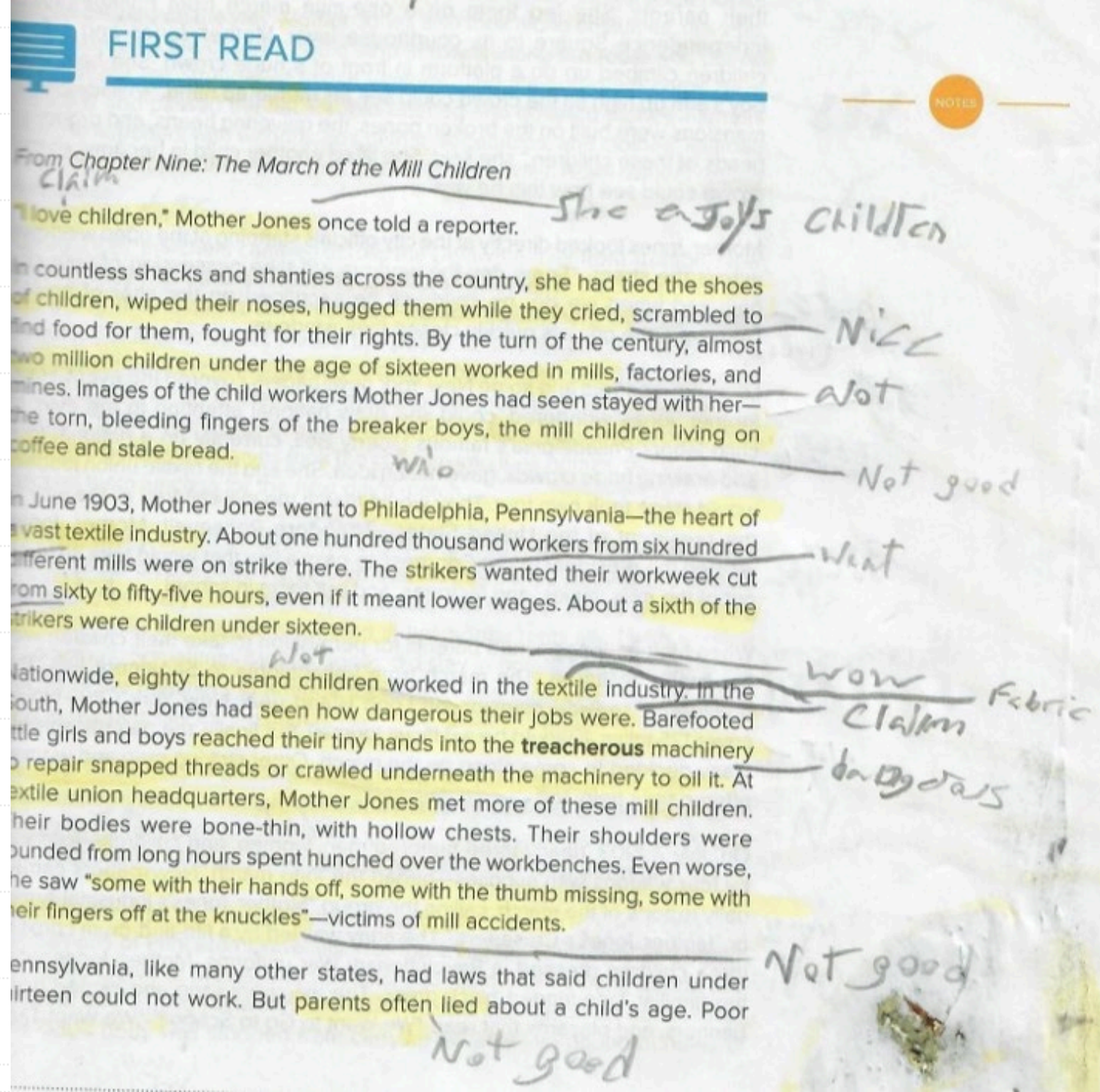
Brains are built over time, from the bottom up. The basic architecture of the brain is constructed through an ongoing process that begins before birth and continues into adulthood. Simpler neural connections and skills form first, followed by more complex circuits and skills. In the first few years of life, **more than 1 million new neural connections form every second.*** After this period of rapid proliferation, connections are reduced through a process called pruning, which allows brain circuits to become more efficient.



UNIVERSITY OF CAMBRIDGE

Areas with many attachments to other parts of the brain develop fast in teenagers

What happens when you ask students to annotate if their metacognitive skills are not well developed?



What happens when you ask students to annotate if their metacognitive skills are not well developed?

12 The temperature rose into the nineties. The roads were dusty, the children's shoes full of holes. Many of the young girls returned home. Some of the marchers walked only as far as the outskirts of Philadelphia. For the hundred or so marchers who remained, this trip was an adventure in spite of the heat. They bathed and swam in brooks and rivers. Each of them carried a knapsack with a knife, fork, tin cup, and plate inside. Mother Jones took a huge pot for cooking meals on the way. Mother Jones also took along costumes, makeup, and jewelry so the children could stop in towns along the route and put on plays about the struggle of textile workers. The fife-and-drum corps gave concerts and passed the hat. People listened and donated money. Farmers met the marchers with wagonloads of fruit, vegetables, and clothes. Railroad engineers stopped their trains and gave them free rides. Hotel owners served free meals.

3 On July 10th, marchers camped across the Delaware river from Trenton, New Jersey. They had traveled about forty miles in three days. At first, police told the group they couldn't enter the city. Trenton mill owners didn't want any trouble. But Mother Jones invited the police to stay for lunch. The children gathered around the cooking pot with their tin plates and cups. The policemen smiled, talked kindly to them, and then allowed them to cross the bridge into Trenton. There Mother Jones spoke to a crowd of five thousand people. That night, the policemen's wives took the children into their homes, fed them, and packed them lunches for the next day's march.

By now, many of the children were growing weak. More returned home. Some adults on the march grumbled that Mother Jones just wanted people to notice her. They complained to reporters that Mother Jones often stayed in hotels while the marchers camped in hot, soggy tents filled with whining mosquitoes. Sometimes Mother Jones did stay in hotels, because she went ahead of the marchers to arrange for lodging and food in upcoming towns and to get publicity for the march.

As the remaining marchers pushed on to Princeton, New Jersey, a thunderstorm struck. Mother Jones and her army camped on the grounds of former President Grover Cleveland's estate. The Clevelands were away, and the caretaker let Mother Jones use the big, cool barn for a dormitory.

Mother Jones got permission from the mayor of Princeton to speak opposite the campus of Princeton University. Her topic: higher education. She spoke to a large crowd of professors, students, and residents. Pointing to one ten-year-old boy, James Ashworth, she said, "Here's a textbook on economics." The boy's body was stooped from carrying seventy-five-pound bundles of

stew

\$\$\$

Food

Food

hot

A

describe

No

No

BY

Use Self-Reflections to Encourage Metacognition

Weekly Sustained Attention Work Report

Week 1:

Task:	Effort Rating (1- easiest task, 10- hardest task):	Sustained Attention Rating (1- very distracted, 10- totally focused):

If you were distracted during this task, what could you have done better to maintain focus?

If you were totally focused during this task, what did you do or why do you think you were so focused?

Another Way to Build Metacognition: Barriers/Strategies Protocol

Created by Laurie Faith

<http://activatedlearning.org>

Problem situation:	
Barriers	Strategies
Here's our plan:	

Using the Barriers/Strategies Form

- *Identify a problem situation that the class is dealing with (e.g., arguments at recess, kids not doing homework, not transitioning smoothly between activities).*
- *Tell the class, “We have a problem we need to solve. I could suggest a solution, but I think it would work better if you helped me with this, because you might understand the problem better than I do, or you might have better ideas than I have for how to solve the problem.”*
- *Briefly describe the problem and write it in the Problem Situation section of the chart.*

Problem situation:	
Barriers	Strategies
Here's our plan:	

Using the Barriers/Strategies Form

- *Ask kids to suggest what's getting in the way or why the problem keeps coming up. List all their answers on the Barriers side of the chart. If you want to credit individual students with their ideas, you can write their initials after you write each barrier down.*
- *Now ask kids to suggest solutions to overcoming the barriers. Write these down on Strategies side, again crediting individuals with their ideas if you want to.*
- *Look over all the proposed solutions and decide on which one(s) you want to try. Write down the plan for implementing the solution in the bottom box of the chart.*

Problem situation:	
Barriers	Strategies
Here's our plan:	

Using the Barriers/Strategies Form

This same approach can be used with individual students or with parents and kids to address an issue that's a source of conflict (e.g., homework schedules or when parents and kids don't agree on privileges or responsibilities).

Problem situation:	
Barriers	Strategies
Here's our plan:	

Examples of Problem Situations

- *Being distracted during math work*
- *Not hearing or remembering instructions*
- *Forgetting homework*
- *Being late for school*
- *Not remembering to bring needed materials to class*
- *Slow to get ready for the class to begin*

Problem situation:	
Barriers	Strategies
Here's our plan:	



Example

Problem situation: Kids not getting the instructions the first time they're given	
Barriers	Strategies
Not paying attention Can't hear the instructions Can't remember the instructions Misunderstand instructions	
Here's our plan:	



Steps to Follow

1. Familiarize yourself with what executive skills are and how they impact learning.



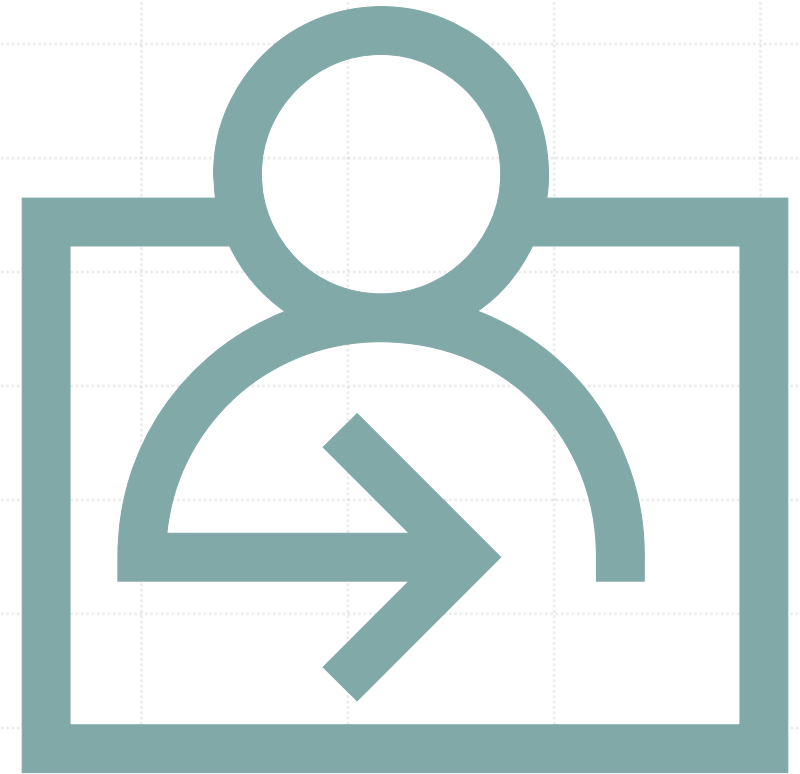
Steps to Follow

2. Learn to apply the executive skill terminology to student learning and behavior.

Activity:

MATCH SKILLS TO BEHAVIORAL DESCRIPTORS

ONE EXAMPLE OF A
STRENGTH AND ONE
EXAMPLE OF A CHALLENGE
FOR EACH OF THE 11
EXECUTIVE SKILLS





Response Inhibition

- Says rude or hurtful things to kids (20)
- Does work carefully and checks answers before handing in test/assignment (12)



Working Memory

- Writes down homework but doesn't check assignment book (13)
- Brings in gym clothes on days student has gym classes (1)



Emotional Control

- Shuts down when criticized by teacher (16)
- Able to do classroom presentations despite fear of public speaking (4)



Flexibility

- Struggles with creative writing assignment because can't think of anything to write about (11)
- Friend bails on an afterschool activity; student adjusts with back-up plan (19)



Sustained Attention

- Out of seat frequently during independent work time (8)
- Finishes an entire homework assignment before taking a break (15)



Task Initiation

- Sharpens pencil, chats with classmates or takes long bathroom break before getting down to work on in-class math assignment (3)
- Starts homework without prompting from an adult. (21)



Planning/Prioritizing

- Given 4 homework assignments on a given night, can't figure out what to do first (22)
- Figures out the steps to follow to get a summer job (6)



Organization

- Homework and worksheets may be placed in any number of notebooks, books, or folders (2)
- Student places documents in appropriately labeled files on her computer (17)



Time Management

- Chronically late for school (14)
- Builds in extra time to complete a given task knowing there could be an interruption (10)



Goal-Directed Persistence

- Wants to make the 1st string soccer team but can't bring himself to practice ball handling skills (5)
- Decides to improve math grade and increases study time for tests and quizzes (7)



Metacognition

- Frequently makes faulty assumptions about assignment directions and doesn't think to check in with teacher before starting the assignment (18)
- Takes notes in lecture class and asks relevant questions (9)

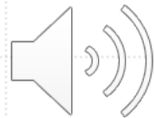




<https://www.youtube.com/watch?v=ziWKib658YI>

Can you spot the executive skills in this conversation?

- Response Inhibition
- Working Memory
- Emotional Control
- Flexibility
- Sustained Attention
- Task Initiation
- Planning/Prioritizing
- Organization
- Time Management
- Goal-Directed Persistence
- Metacognition



How we used to describe these kids...

Does this pupil have any illness or disability (either physical or mental)? ☐ No ☐ Yes— please describe:

What concerns you most about this pupil?

That he is lazy and not working to his potential.

Please describe the best things about this pupil:

He is sweet and has a good sense of humor.

... potential using extra pages if

A better way...

Instead of calling students this:

- Lazy
- Unmotivated
- Not working to potential
- Disruptive
- Oppositional
- Messy
- Tardy
- Forgetful
- Absent-minded
- Lacking a work ethic

Describe them as having challenges in this:

- Task initiation
- Sustained attention
- Response inhibition
- Emotional control
- Flexibility
- Organization
- Time management
- Working memory
- Goal-directed persistence

Steps to Follow

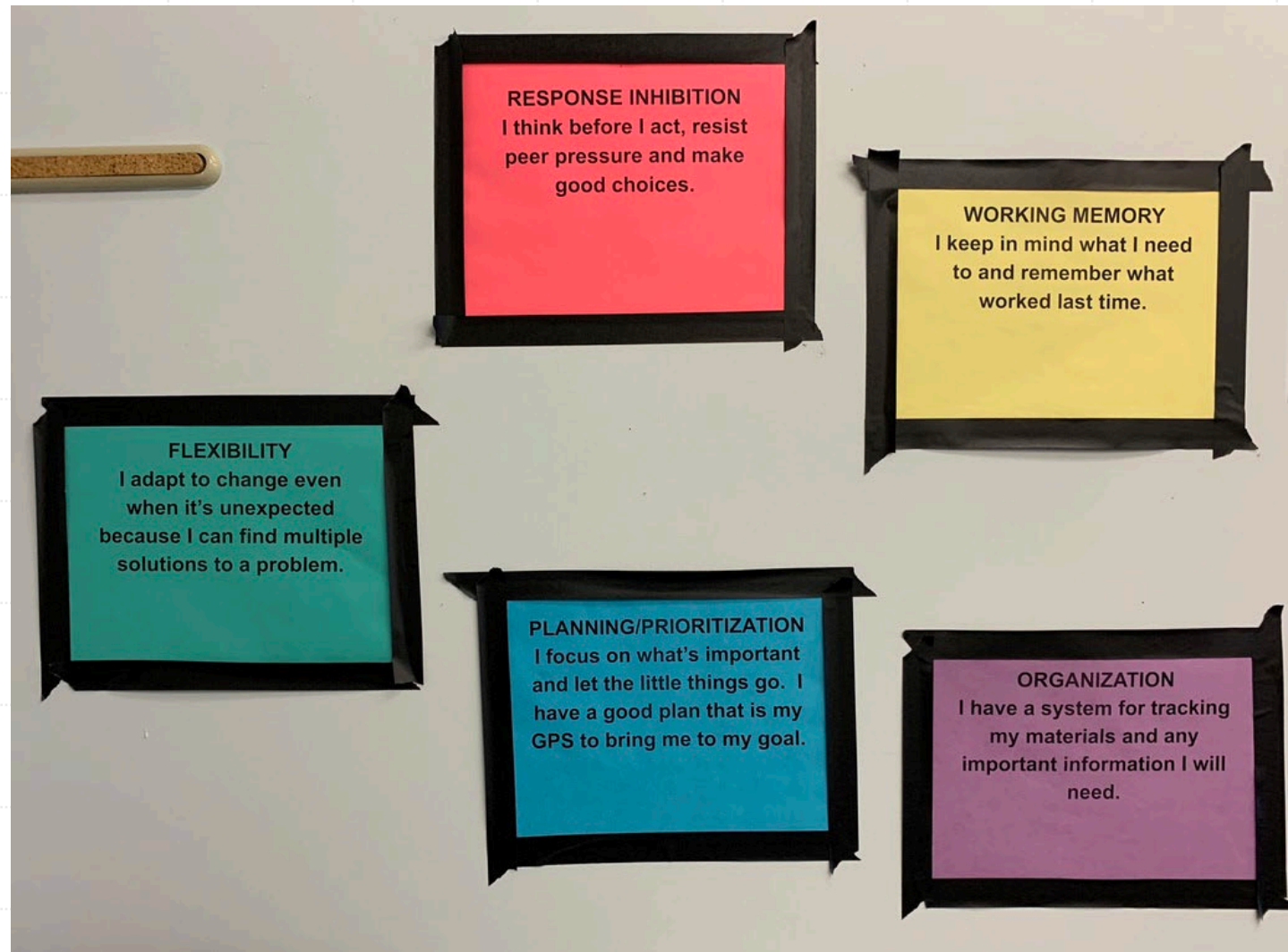
3. Introduce to students the vocabulary and concepts of executive skills.

- [TRAIN YOUR BRAIN](#) (Dropbox Folder)
- [My YouTube channel](#) (Rachael Ramsey)
- https://drive.google.com/drive/folders/0B4kId0327lZdb3NBaWlrSkxxejQ?resourcekey=0-AsEWT4RrqkD9LgAkr8i_jw&usp=sharing (Bedford ES materials)
- www.efintheclassroom.net (Mountain View)

Posters can spark conversations



Make the
concepts and
definitions
visible and
accessible



Desktop Strips with Terms and Definitions

- *Source: Laurie Faith*
- <http://activatedlearning.org>

PLANNING & PRIORITIZING The ability to create a roadmap to reach a goal, or to complete a task. Making decisions about what is important to focus on and what is not.	
EMOTIONAL CONTROL The ability to manage feelings so you can be productive and successful.	
TIME MANAGEMENT The ability to estimate how much time one has, how to use it and how to stay within time limits and deadlines. It also involves a sense that time is important.	
GOAL DIRECTED PERSISTENCE Following through to the completion of your goal without being distracted by competing interests.	
SUSTAINED ATTENTION Paying attention even if you're tired or bored.	
ORGANIZATION The ability to create and maintain a system to keep track of information or materials.	
RESPONSE INHIBITION Thinking before you act – to resist the urge to say or do things.	
FLEXIBILITY Being able to see many sides of an idea or situation. Being able to change and adapt.	
TASK INITIATION The ability to begin projects in a timely fashion.	
WORKING MEMORY Holding information in memory while performing complex tasks.	
METACOGNITION Noticing how you're doing and thinking about how you're thinking.	

Have students complete the ESQ and create a composite class profile

STRENGTHS (Low) | CHALLENGES (High)

Response Inhibition (Self Control)	★ ★ ★ ★ ★	
Working Memory	★ ★ ★ !	!
Emotional Control	★	★ ! ! !
Cognitive Flexibility	★ !	!
Sustained Attention	! ★	! ★ ★ !
Task Initiation		★ !
Planning/Prioritizing	! ★	! ! !
Organization	★ ★ ★ ★	! ! ! ! !
Time Management	★ ★ ! !	★
Goal-Directed Persistence	★ ★ ★ ★	★
Metacognition	★ ★	! !

Students, drag the icons! ★ ★ ! !

Pear Deck Interactive Slide
Do not remove this bar

Steps to Follow

4. Find ways to illuminate where in a student's life at home and at school executive skills present themselves and give students the opportunity to make these connections on their own.

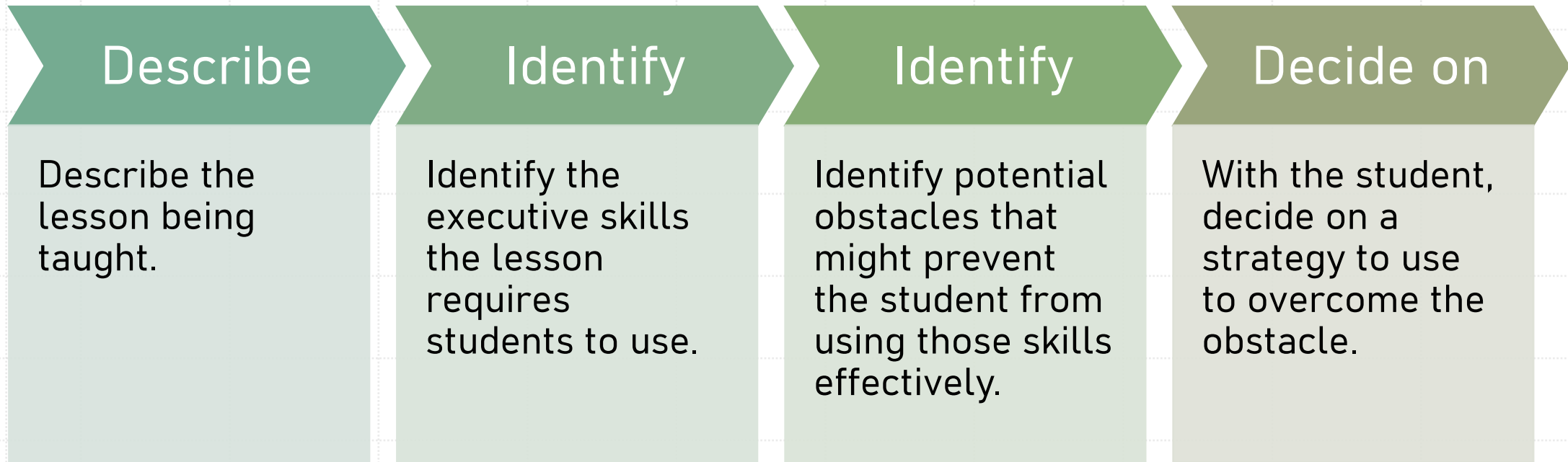
- Classroom lessons
- Independent seatwork
- In the cafeteria
- In the hallways
- On the school bus
- Playing sports
- With friends
- After-school or summer jobs
- Doing homework
- Other situations at home (e.g., chores, getting along with parents or siblings)



Steps to Follow

5. Incorporate executive skills into daily routines, lessons, classwork, and homework assignments. Be explicit with students about how the skill contributes to mastery of content and how they can identify strategies to overcome obstacles that may get in the way of using those skills effectively.

Embed Executive Skills in Classroom Lessons



Example 1

Lesson/ Assignment	Executive Skill(s)	Obstacle	Strategy
Factoring	• Organization • Working Memory • Flexibility • Metacognition • Response Inhibition	• Not knowing where to start • Prior knowledge • Messing up the signs	• Checklist • Give the pattern • Provide acronym • Use example—ask kids to substitute

Example 2

Lesson/ Assignment	Executive Skill	Obstacle	Strategy
Learning Latin Vocabulary	• Working Memory • Metacognition • Sustained Attention • Time Management	• Too much material • Procrastination • Go blank when the test is handed to them • Lack of familiarity • Harder to make connections	• Shorter tests • Brain dump before looking at test • 30-60 second controlled breathing/mindfulness • Emphasize the application/use

Embed Executive Skills in Classroom Routines: 2 examples



Making homework plans



Remembering to hand in homework

STUDY PLAN

Date: _____

[illegible]



If this is more
than you
want to do, try
this

Ask kids to write down what time
they're going to do the homework
assignment and where they will do it...

On the assignment itself, or

In their assignment book, or

As an alarm in their smart phone

Remembering to hand in homework

Problem situation	Executive Skill(s)	Routine	Est. time required
Students forgetting to hand in homework	Working memory	Stand by door at end of class and accept completed homework.	3-5 minutes

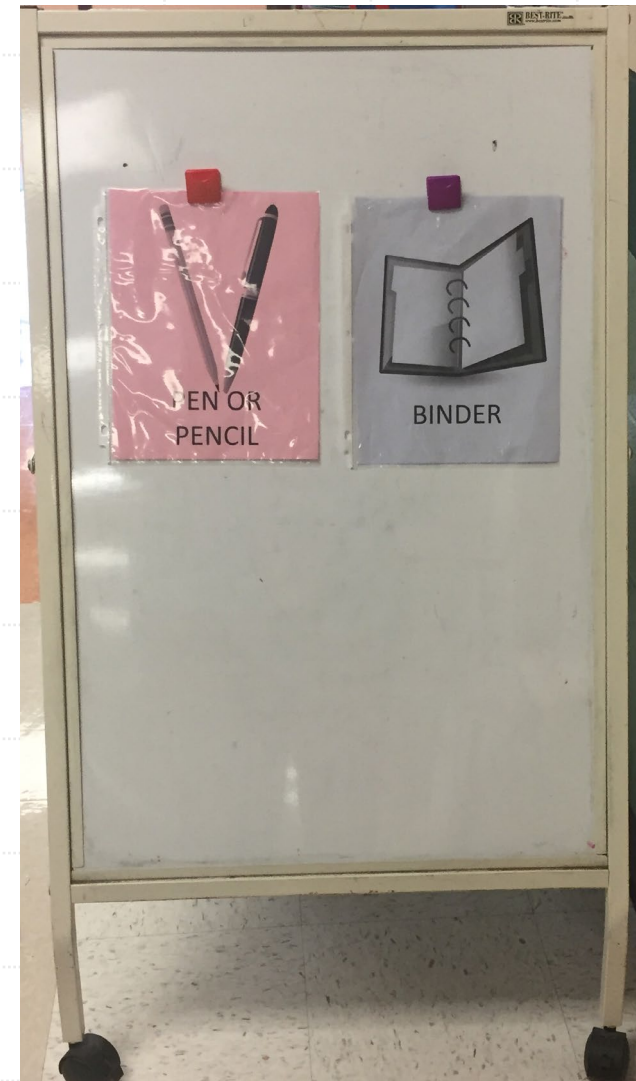
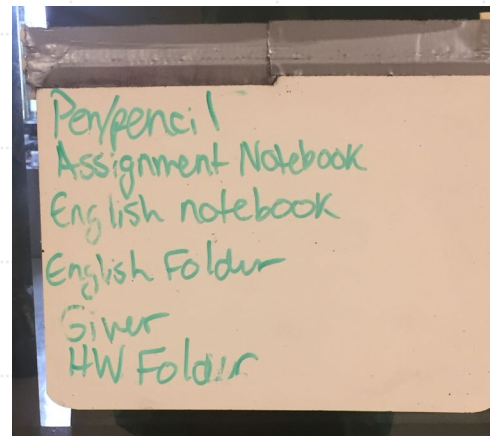


Peg's Take on the “Perfect” Intervention for Executive Skills

The perfect intervention to support executive skill development is one

- that takes no more than 5–10 minutes a day
- and that you're willing to do forever (or as long as it takes).

EXAMPLE: Post outside the classroom what kids will need for the class that day





ACTIVITY:

Design a classroom routine that takes no more than 5–10 minutes a day or 15 minutes once a week.



Additional Examples of Classroom Routines

- End class 5 minutes before the end of the period or day and make sure students write down homework assignments and put necessary materials in backpacks

EXECUTIVE SKILLS: **working memory, organization, planning**

- Begin the school day with a class check-in (How are you feeling on a scale of 1 to 5?)

EXECUTIVE SKILL: **emotional control**

- Have a homework collection routine

EXECUTIVE SKILLS: **working memory, organization**

- Write grade goal on desk with dry erase marker

EXECUTIVE SKILL: **goal-directed persistence**

Additional Examples of Classroom Routines

- Ask students to make a homework plan (what are you going to do, how long will each task take, where will you work?)

EXECUTIVE SKILLS: working memory, task initiation, planning, time management

- Ask students to make a "mini-plan" for what they will accomplish in class that day

EXECUTIVE SKILLS: task initiation, sustained attention, planning, time management, goal-directed persistence

- Ask students to evaluate how well they did on a test or assignment (what went well, what didn't go so well, what will they do differently the next time)

EXECUTIVE SKILLS: goal-directed persistence, metacognition



RESOURCES

[https://www.dropbox.com/sh/whlg4tmcusb1fle/
AACpXFuquCJZwkD2PjptABb9a?dl=0](https://www.dropbox.com/sh/whlg4tmcusb1fle/AACpXFuquCJZwkD2PjptABb9a?dl=0)
(ES Supplementary Materials)