



Is There a Cure for the Teenage Brain?

Lazy? Unmotivated?
or is it
Executive Functioning?

Lori Boll

Today's Take-aways

- Define how we think about our students
- Learn about executive functioning skills
- Figure out how to support our students in the classroom

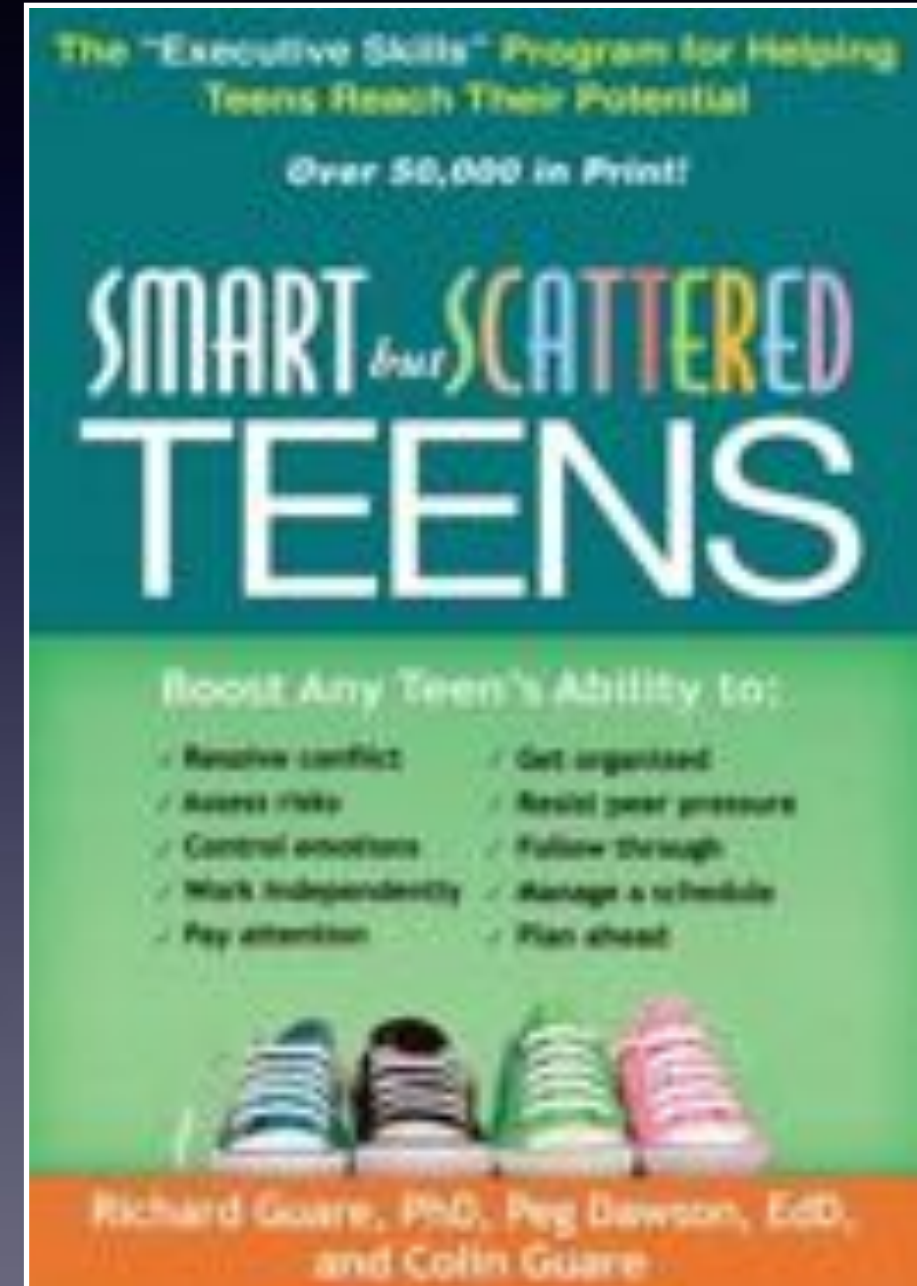
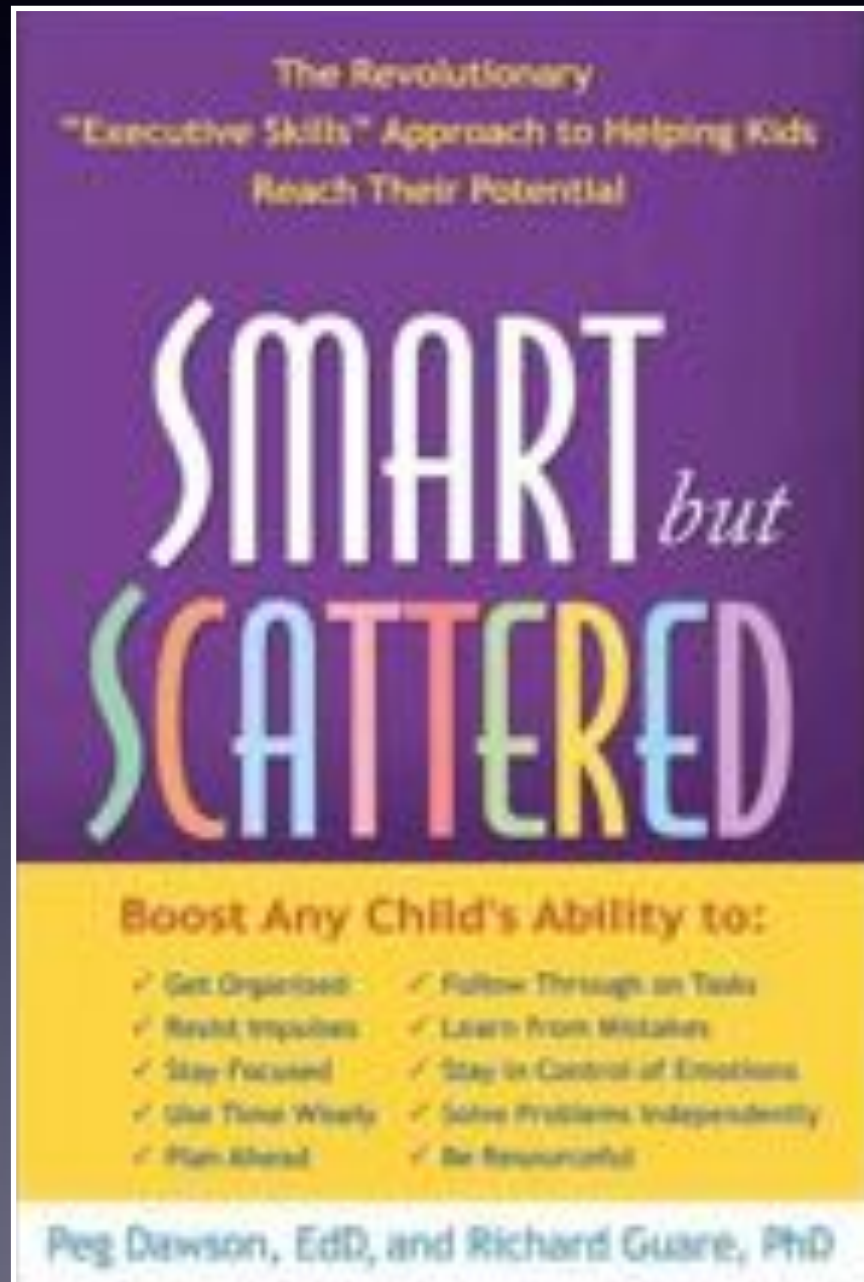


You can find this
presentation here:

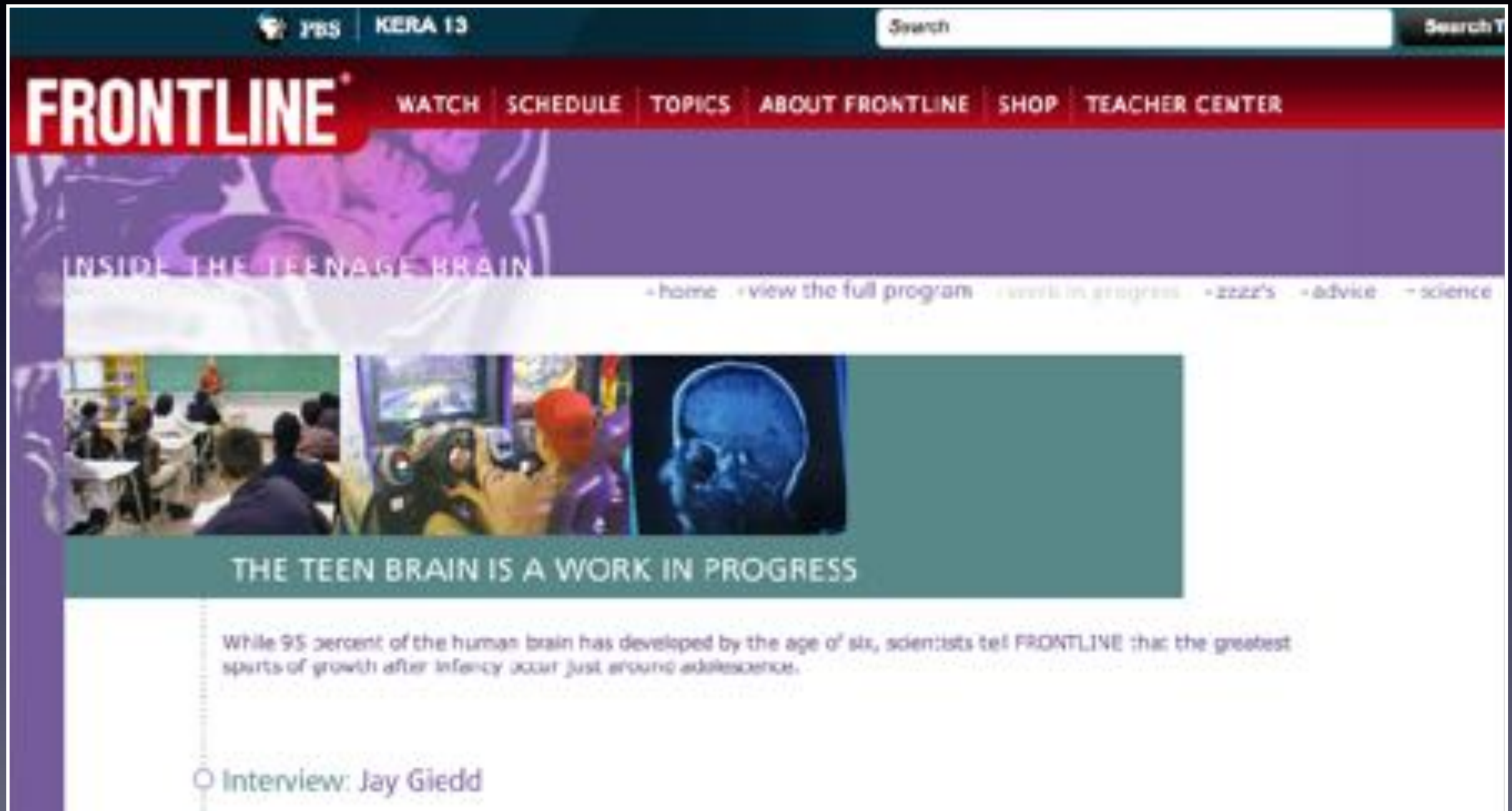
loriboll.me



Executive Functioning



Teenage Brain



"The Teen Brain Is A Work In Progress | Inside The Teenage Brain | FRONTLINE | PBS." PBS: Public Broadcasting Service. N.p., n.d. Web. 30 Apr. 2012. <<http://www.pbs.org/wgbh/pages/frontline/shows/teenbrain/work/>>.

“Kids do well if they can.”

OR

“Kids do well if they want to.”

The Classic Parenting Guide—More Than 500,000 Copies Sold

The Explosive Child

REVISED AND
UPDATED

"All parents should read this book, especially those with children who are out of control."
—Edward M. Hallowell, M.D., author of *Driven to Distraction*

A New Approach
for Understanding
and Parenting
Easily Frustrated,
Chronically
Inflexible Children



Ross W. Greene, Ph.D.

“Kids do well if they can.”

OR

~~“Kids do well if they want to.”~~





What emotion is this woman feeling?

"The Teen Brain Is A Work In Progress | Inside The Teenage Brain | FRONTLINE | PBS." *PBS: Public Broadcasting Service*. N.p., n.d. Web. 30 Apr. 2012. <<http://www.pbs.org/wgbh/pages/frontline/shows/teenbrain/work/>>.



put their head in the bucket

to be funny
no thought about what
in there

impulsive



How could such a smart kid
be so

scattered?

what are some other words you would
use to describe teenagers?

disorganized?

impulsive?

frustrating!?





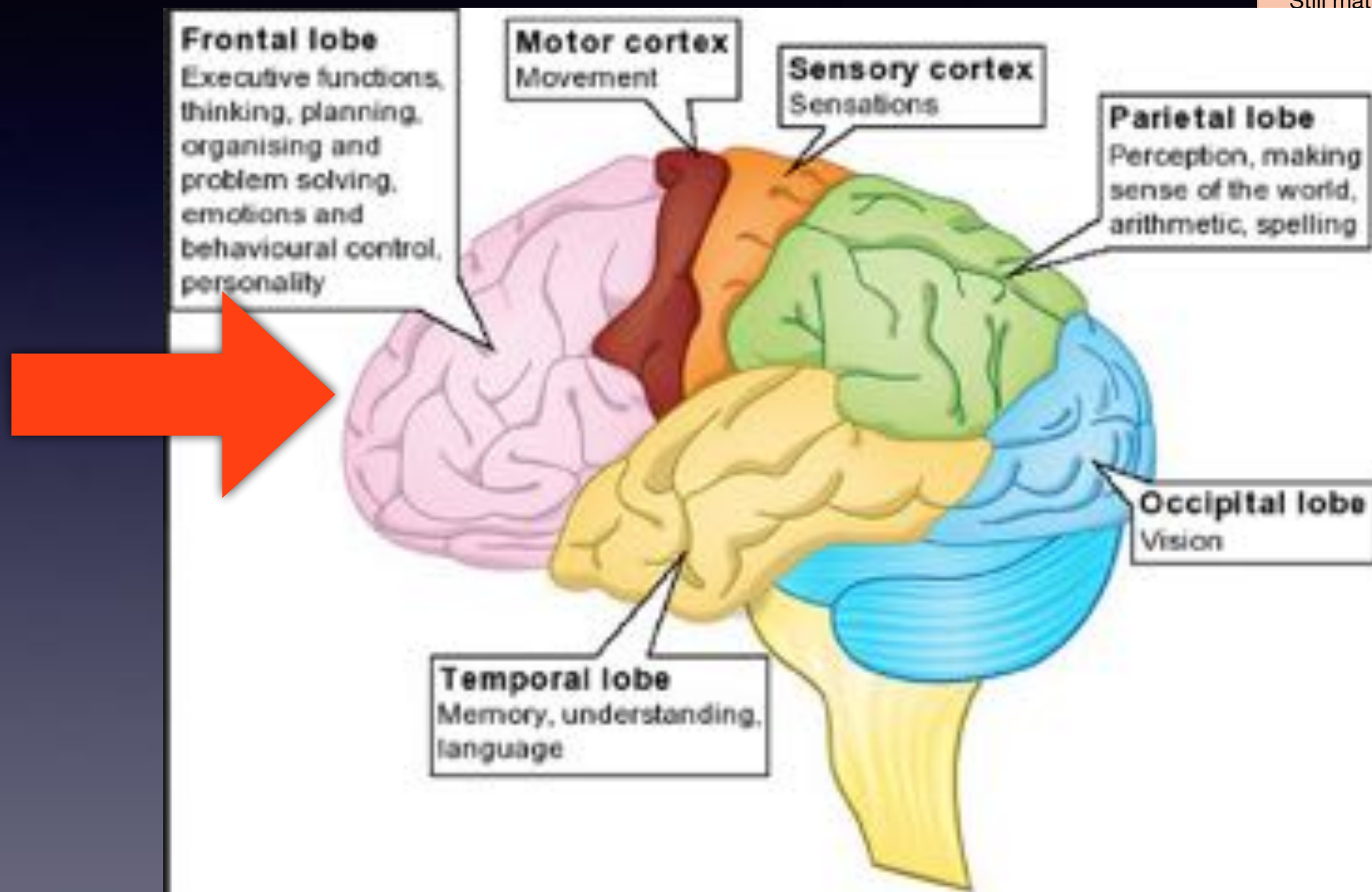
fresh air

from WHYY

“Talk amongst yourselves...”



Executive Skills: The brain-based skills that are required for humans to execute, or perform tasks.



The Brain's CEO

Still maturing

fully develop until age

your child's frontal lobes

bes

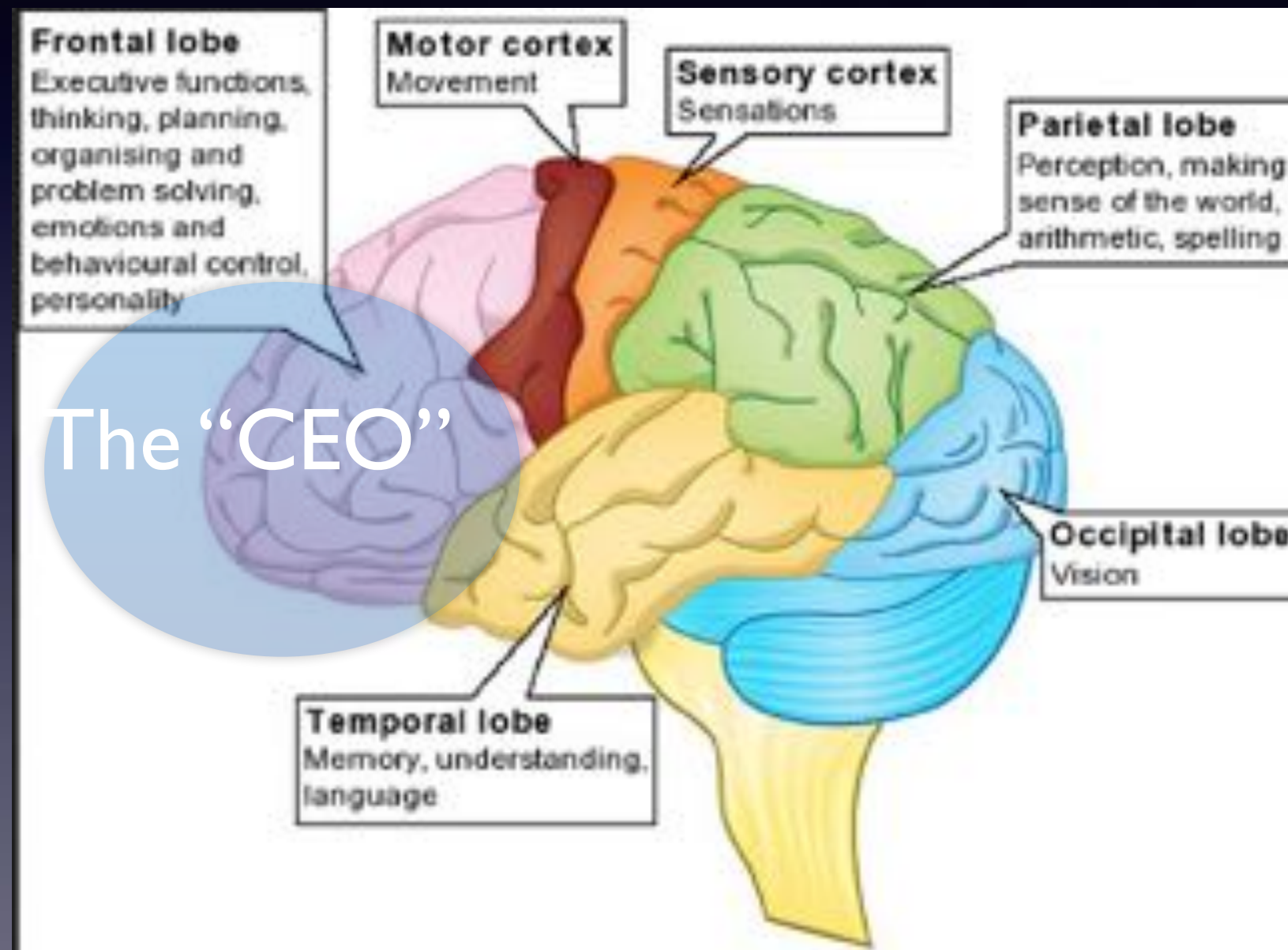
nature you expect them

Taylor, A. (2013). *Executive dysfunction after brain injury*. Retrieved from <https://www.headway.org.uk/executive-dysfunction-after-brain-injury.aspx>



"The Teen Brain Is A Work In Progress | Inside The Teenage Brain | FRONTLINE | PBS." *PBS: Public Broadcasting Service*. N.p., n.d. Web. 30 Apr. 2012. <<http://www.pbs.org/wgbh/pages/frontline/shows/teenbrain/work/>>.

Executive Skills: The brain-based skills that are required for humans to execute, or perform tasks.

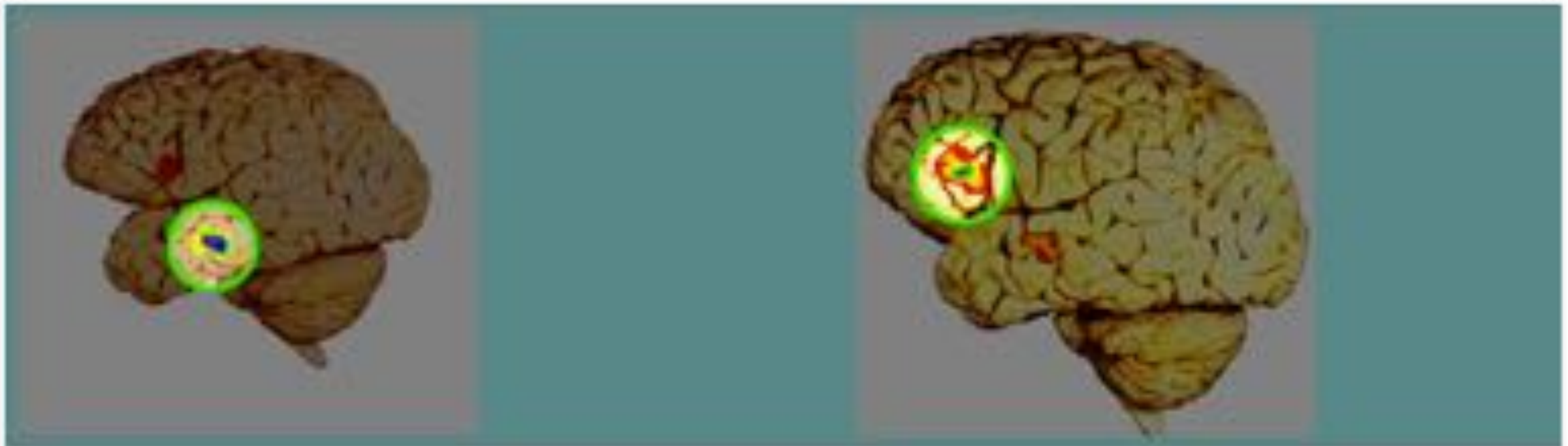


Taylor, A. (2013). *Executive dysfunction after brain injury*. Retrieved from <https://www.headway.org.uk/executive-dysfunction-after-brain-injury.aspx>



What emotion do you
think teens believe she
is showing?

"The Teen Brain Is A Work In Progress | Inside The Teenage Brain | FRONTLINE | PBS." *PBS: Public Broadcasting Service*. N.p., n.d. Web. 30 Apr. 2012. <<http://www.pbs.org/wgbh/pages/frontline/shows/teenbrain/work/>>.



Teens (left) used less of the prefrontal (upper) region than adults (right) when reading emotion.

"The Teen Brain Is A Work In Progress | Inside The Teenage Brain | FRONTLINE | PBS." *PBS: Public Broadcasting Service*. N.p., n.d. Web. 30 Apr. 2012. <<http://www.pbs.org/wgbh/pages/frontline/shows/teenbrain/work/>>.

Executive Skills

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

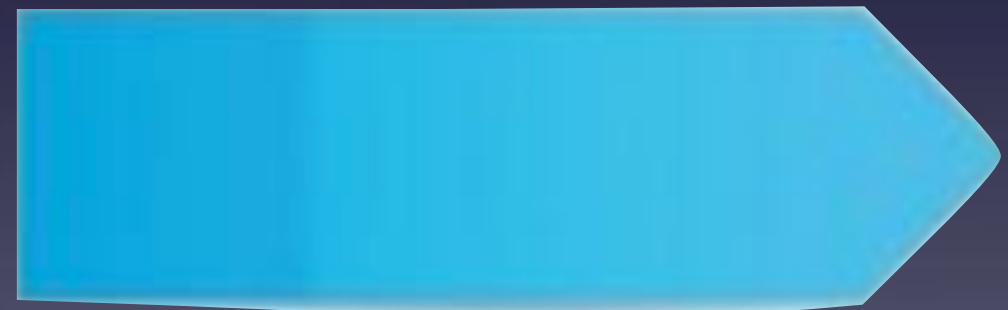
Executive Skills Involving Doing (behavior)

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

Executive Skills Involving Thinking (Cognition)

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

How Big is *YOUR* post-it note?



<https://goo.gl/iuas5V>



EXECUTIVE FUNCTION 101

Prepared by The National Center for Learning Disabilities

EXECUTIVE FUNCTION AROUND THE CLOCK



Meet Josh, a sixth grader who struggles with executive function.
This is a day in his life.

Meet Josh, a sixth grader who struggles with executive function. This is a day in his life.



7 AM Arggh! Josh knows that he's forgotten something. That's it—he's almost ready for today's game. He sprints back into the house to get them ... and loses his backpack in the kitchen, walks right past the checklist mom made to help him remember what he needs for school. But it's late. The bus is here and about to pull away! He's going to miss it again.

EF Area: ORGANIZATION

8 AM Josh's English teacher stands at the blackboard and asks, "Tell me how last night's ending relates to the words on the board." Every kid in the class goes ... except for Josh's. His mind sinks thinking about the steps answering this question takes.



EF Area: WORKING MEMORY

1 PM It's the last part of the school day. Josh is at a table with his friends, Josh checks at a table a minute and jumps in and out of his seat. He doesn't even notice that the lunch server is glaring at him and that his friends look annoyed.

2 PM Time for soccer! Josh's parents take the ball around Josh. His parents don't know, you do one thing—you kick that ball as hard as you can! That's what! He isn't really remembering, or he just knows. When Josh runs into the hallway into his own, he's late. After losing to his teammates' team in Josh's team, he's late again.

3 PM It is time for dinner ... but first, Josh has to see the table. Josh's dad explains the house and tries to remember exactly what goes at each place setting. He thinks he has got it right. His dad, but his little sister reminds him that he doesn't. Josh forgets the table up everything at home.

EF Area: FLEXIBILITY, WORKING MEMORY

EF Area: ORGANIZATION, EMOTIONAL CONTROL

4 PM After hours of coping from his team, Josh finally gets down to his homework. That's right, it's time to begin! He knows he has several projects and papers that need attention, but what's the what? What could have he forgotten? Overwhelmed, he puts his head down.

5 PM Delays and personal history mean that Josh is missing the end of the night of his homework, but his history paper is due tomorrow. But he just can't figure out a structure for his paper and the steps he needs to take to get it done.

6 PM Finally, the night is done and Josh can catch a few hours of Z's. But he can't seem to drift off to sleep—this worried that he didn't do his paper right. And then there's the problem: he'll have to wake up tomorrow morning. His organization has proven the best of him, and he hopes to get the finished paper in his backpack.

EF Area: TASK REGULATION

EF Area: PLANNING & SETTING PRIORITIES

EF Area: SELF-MONITORING, REMEDIATION

Let's figure out *your* EF
strengths/challenges

So what?

What do we do with kids
whose CEO's aren't
functioning like we want
them to?

We lend them ours.



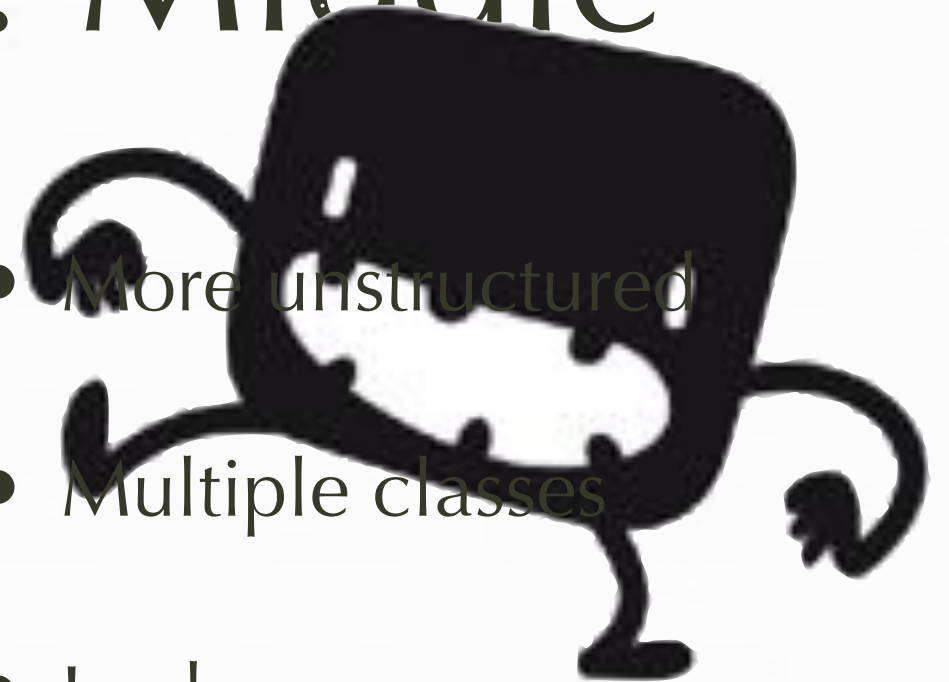
Why does
disorganization rear
its ugly head in
Middle School?



Elementary vs. Middle

- Organized
- One classroom
- Everything you need is inside the room
- Transition as a class
- Teacher manages your world

- More unstructured
- Multiple classes
- Locker
- Go places individually
- You manage your world
- Differing Expectations



A hand-drawn speech bubble with a thick, white, chalk-like border. The bubble is irregular in shape, with a small tail pointing towards the bottom left. Inside the bubble, the text "HOW CAN I HELP?" is written in a simple, white, hand-drawn font. The background is a dark, textured surface, resembling a chalkboard.

HOW CAN I
HELP?


FAIR ISN'T

everybody getting the
same thing.....


FAIR IS

everybody getting
what they need
In order to be

SUCCESSFUL.



Why do we
call them
soft skills?



Hmmm...
maybe they *are*
important

Survey: Employers Want 'Soft Skills' From Graduates

The companies found that the most in-demand talent among employers was listening skills -- 74 percent of employers indicated this was a skill they valued. This was followed by attention to detail (70 percent) and effective communication (69 percent).

About 73 percent of the employers said that finding qualified candidates was somewhat or very difficult. Roughly one-third of the employers (34 percent) indicated colleges and universities have not prepared students for jobs.

<https://www.insidehighered.com/quicktakes/2019/01/17/survey-employers-want-soft-skills-graduates>

LoriBoll.me | [@LoriBoll](https://twitter.com/LoriBoll)

- Whole school “buy-in”
- Make things visual
- Scaffold
- Use Planners
- Help with Locker/Cubby/Desk Organization
- Teach Organizational skills explicitly
- Use when necessary and useful



MAKE IT
VISUAL



Visual Daily Schedule

March 5-9, 2017

Agenda:








In your desk:

MNB
Measurement sheet
Snail
Tutor

Planner:

NA



	Monday	Tuesday	Wednesday	Thursday	Friday
Group Leader					
Assignment Book	Wkbbk. 10-5 O406.2.8	Wkbbk. 10-6 SPI O406.2.7	Wkbbk. 10-7 SPI O406.2.5	Wkbbk. 10-8 SPI O406.2.6	Wkbbk. 11-1 SPI O406.2.8
Today's SPI	Generate equivalent fraction and put them in simplest form.	Convert improper fractions to mixed numbers	Generate equivalent forms of fractions and compare their size.	Use $>$, $<$, or $=$ to compare fractions in increasing or decreasing order.	Add & Subtract fractions w/ like denominators.

Objective

Students will become familiar with classroom
Rules, Procedures, & Expectations.

Followwork

Welcome to 8th Grade
Physical Science!!
U

Today:

- Press and Syllabus:
 - Pages
 - Procedure
 - Explanations
- 1st Day Survey
- Press and Books: 1. On back, (if time)

Weekly

Agenda:

Monday

- Polymerization
- Low energy polymerization: One photon $\left(\frac{h\nu}{2}\right)$
- High energy polymerization: 2 photons $(2h\nu)$

Tax history

- Library Day / Consider driver license
- End year All things Done

Wednesday

- Computer doesn't store text
- Yes and - Exhaustive (if we didn't have the text)
- Haskell: Memory leak 5

Thursday

- Get up tomorrow: 7:00 AM
- Get up tomorrow: 7:00 AM
- Get up tomorrow: 7:00 AM

Secondary

- Lab Safety Introduction
- Safety Trip!
- Safety Handbook Due Mon (10/14)

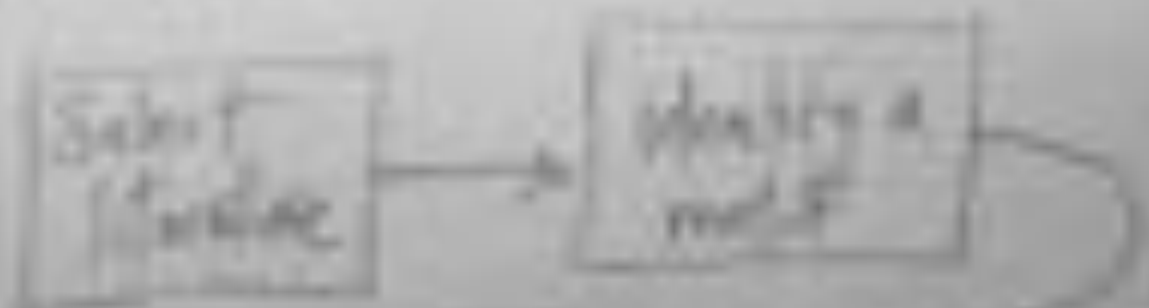
Scaffolding

Assignment:

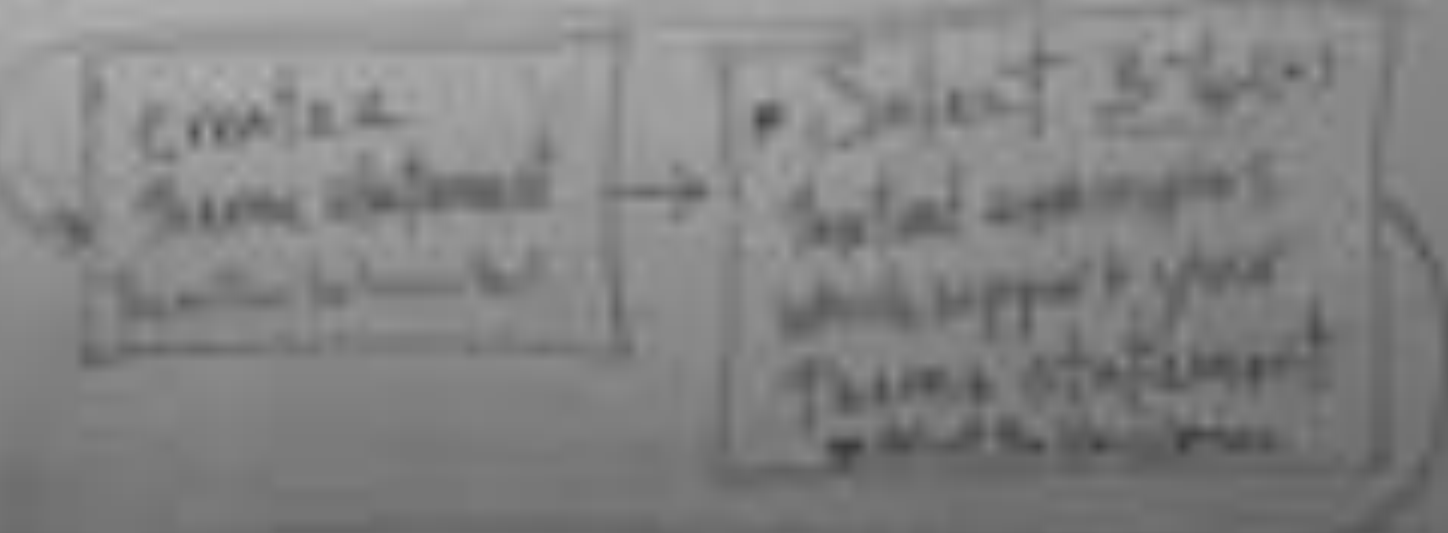
Craft a literary essay

WHAT is a major theme developed in your novel, and HOW is that theme developed throughout the piece of writing?

What could make this more manageable for children with difficulties with Executive Functioning?



Learning Target
 As writers, we will
 analyze texts in literature
 by asking a literary essay



Classroom Summary
 During the lesson,
 we will be
 analyzing texts
 and writing
 literary essays

Scaffolding

- Breaking up learning into chunks
- Then providing a tool or structure for each chunk
- Scaffolding is DIFFERENT than differentiation
- Scaffolding should be done for all children depending on the Zone of Proximal Development
- Take “*They should* be able to do this” out of your vocabulary.

Vygotsky's Two Developmental Levels



Champ, Birdie. "Zone of Proximal Development." *Birdie Champ: Thoughts on Education*. N.p., 1 Mar. 2010. Web. 6 May 2012. <birdiechamp.files.wordpress.com/2010/03/vygotsky-levels-flat-copy.jpg>.



The Migration Experience Summative Assessment

DUE: February 12th

SCRIPTS/SLIDES TO GOOGLE CLASSROOM (LINK TO VIDEO)

PRESENTATIONS: January February 12th

You are an internationally-renowned expert on the migrant and refugee experience. You have been invited to the United Nations High Commission for Refugees (UNHCR) conference on supporting migrants and refugees in the destination country.

During the conference, you will:

- Bring awareness to the migrant/refugee experience
- Note the successes and difficulties of assimilation.
- Note the positive impact of migrants on the country they moved to. How have they contributed in a impactful way?

Step 1- Choice: Select one a migrant/refugee person's story from the list.

PERSONAL CONNECTIONS

A family member or close personal connection of a successful immigrant or refugee (must have transcript from interview)

EVERYDAY PEOPLE

Frederick List - 48 are immigrants

SUCCESS STORIES

Success Story: Burmese migrant in Thailand creates mushroom business

6 Immigrant Stories that Make you Believe in the American Dream

Syrian Refugee: The Power of a Syrian Refugee Story

Chocolate Company in Canada Created by Syrian Refugees

- [This Family Just Opened a Successful Chocolate Factory in Canada](#)
- [Syrian Refugee Family a Sweet Success in New Home](#)

Italian Man's Success Story in Singapore

[It Changed my life: Turning omelet to owning own company](#)

WELL-KNOWN INDIVIDUALS

AMERICA'S TOP TEN IMMIGRANTS

Arnold Schwarzenegger

- [Biography: Arnold Schwarzenegger](#)
- [From Austrian Immigrant to Superstar](#)
- [Lessons from 65 years as a US Citizen](#)
- [Arnold Schwarzenegger: The successful immigrant](#)
- [Biography](#)

Elon Musk (Tesla)

- [Biography](#)
- [Biography](#)
- [Elon Musk Story](#)
- [https://total.globe.com/story/elon-musk-tesla-2018/07/15/17](#)
- [https://www.abcnews.com/11870/elon-musk-tesla-lifestyle/](#)
- [https://www.foxnews.com/2018/06/28/elon-musk-becoming-billionaire-17-billionaire-2000](#)

Sergei Bryn/Larry Page (Google)

- [Interview](#)
- [Sergei Bryn](#)
- [Larry Page](#)
- [Sergei Bryn](#)

K'naan

- [World Flag Song](#)
- [World Flag Song](#)
- [Music](#)
- [Biography](#)
- [Interview](#)

Reliable Resources

Step 2- Note taking: You should have note cards for each of the below questions--(10 min)

- How has their **life changed** since moving to the **destination country**?
- How did they **positively influenced/impact** the **destination culture**?
- How did they **assimilate** to the **destination culture**? (What made it easy and/or hard to adjust to the new place?)

Step 3- Final Product

Select any of the options. Create a video (iMovie/VoiceThread/Screenrasi) **presentation** or a live presentation (Slideshow). You need to compose a script first. Your presentation needs to be 5-7 minutes long. You also need visual information (charts, graphs, photographs, videos, or maps).



Step 4- Reflection

Consider the list of the Factors of Assimilation: Level of tolerance, social relationships, marriage among different groups, cultural similarities, education and equal social/economic opportunities.

Select **three** of the six factors. Compare (Or contrast) your person with that of another classmate's person.

REFLECTION	
Consider the list of the <u>Factors of Assimilation</u> : Level of tolerance, social relationships, marriage among different groups, cultural similarities, education and equal social/economic opportunities.	
Select three of the six factors. Compare (Or contrast) your person with that of another classmate's person.	
YOUR PERSON NAME:	OTHER PERSON NAME:



The Migration Experience Scoring Guide

Learning Target	Excelling	Meeting	Approaching	Developing
	Demonstrates creative, sophisticated and/or reflective understanding	Demonstrates thorough understanding	Demonstrates some understanding	Demonstrates limited understanding.
<i>Identity & Diversity:</i> <i>Analyze the ways in which a migrant culture or cultures</i>				
<i>changed the destination culture.</i> <i>(Note cards & Script)</i>				
<i>Identity & Diversity:</i> <i>Determine the factors which help or hinder migrant assimilation into a society, explaining how and why.</i> <i>(Note cards & Script)</i>				
<i>Communication:</i> <i>Cite specific textual evidence to support analysis of primary and secondary sources.</i> <i>(Notecards & Script)</i>				
<i>Communication</i> <i>Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts.</i> <i>(Visuals in Presentation)</i>				

How can students move from up to the next level?

Provide Exemplars

Planners



The Pen Is Mightier Than the Keyboard: Advantages of Longhand Over Laptop Note Taking



Pam A. Mueller¹ and **Daniel M. Oppenheimer²**

¹Princeton University and ²University of California, Los Angeles

Psychological Science

1-10

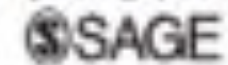
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DOI: 10.1177/0956797614524581

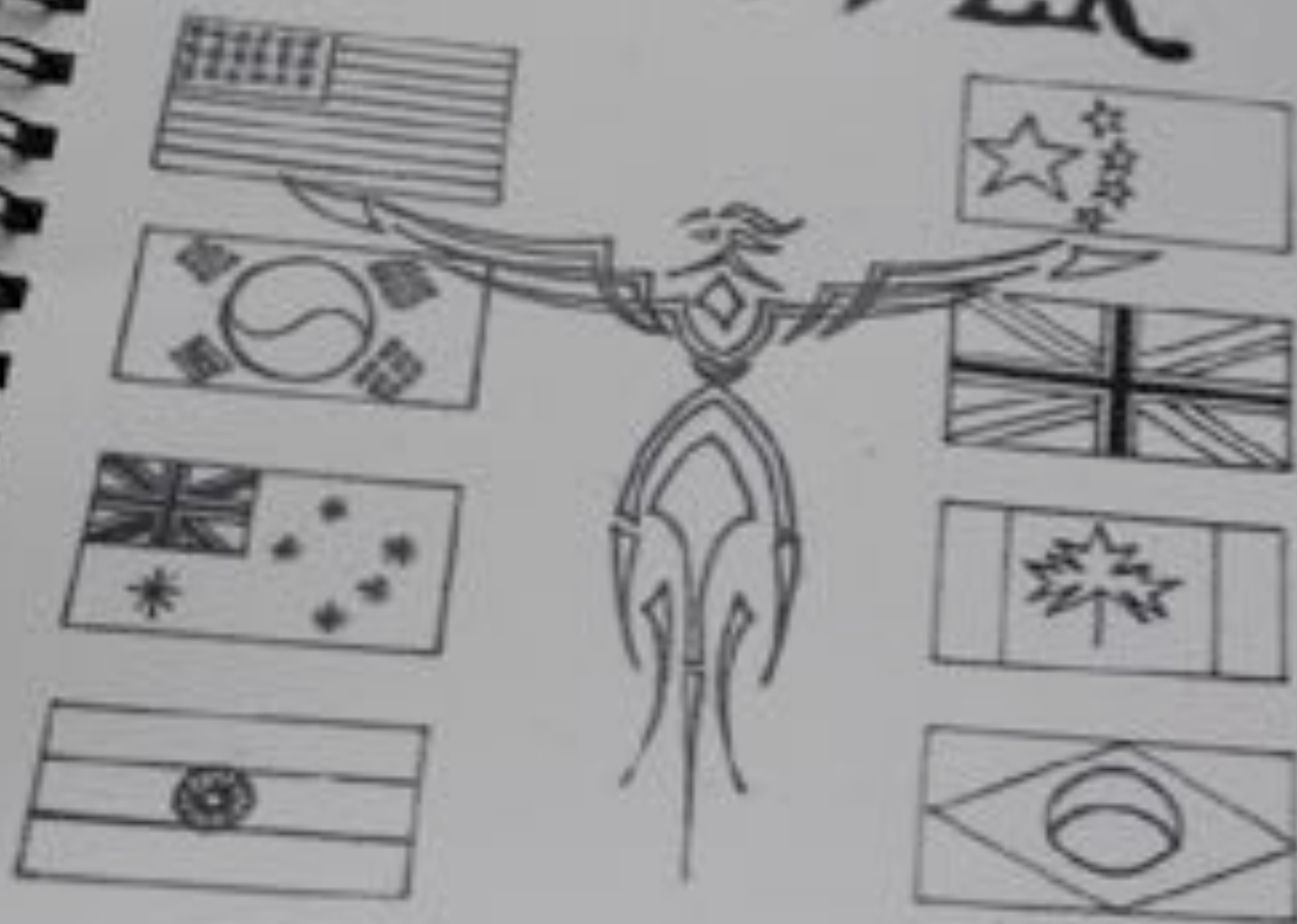
ps.sagepub.com



Abstract

Taking notes on laptops rather than in longhand is increasingly common. Many researchers have suggested that laptop note taking is less effective than longhand note taking for learning. Prior studies have primarily focused on students' capacity for multitasking and distraction when using laptops. The present research suggests that even when laptops are used solely to take notes, they may still be impairing learning because their use results in shallower processing. In three studies, we found that students who took notes on laptops performed worse on conceptual questions than students who took notes longhand. We show that whereas taking more notes can be beneficial, laptop note takers' tendency to transcribe lectures verbatim rather than processing information and reframing it in their own words is detrimental to learning.

DISCOVER





Locker Organization

**Color-code
by subject**

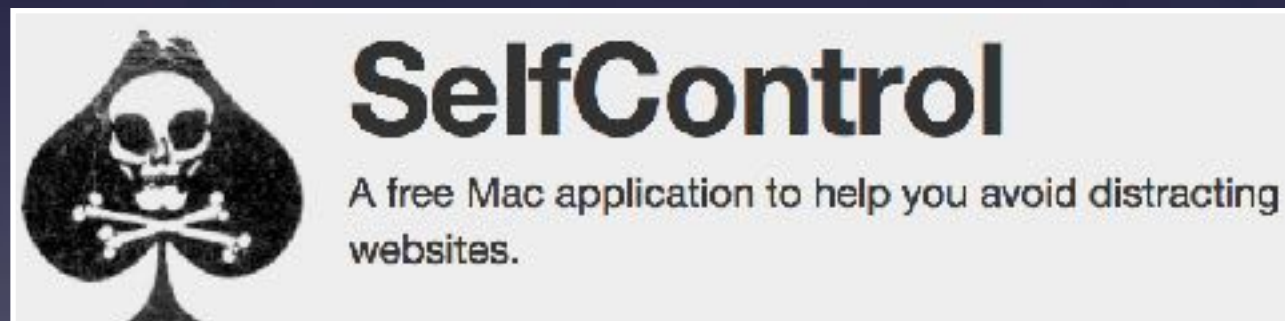
**Provide dividers or
shelves**

Periodic

- Language Arts- Black
- Math- Red
- Social Studies- Green
- Science- Blue
- Mandarin- Pink



Introduce the concept of work-sprints

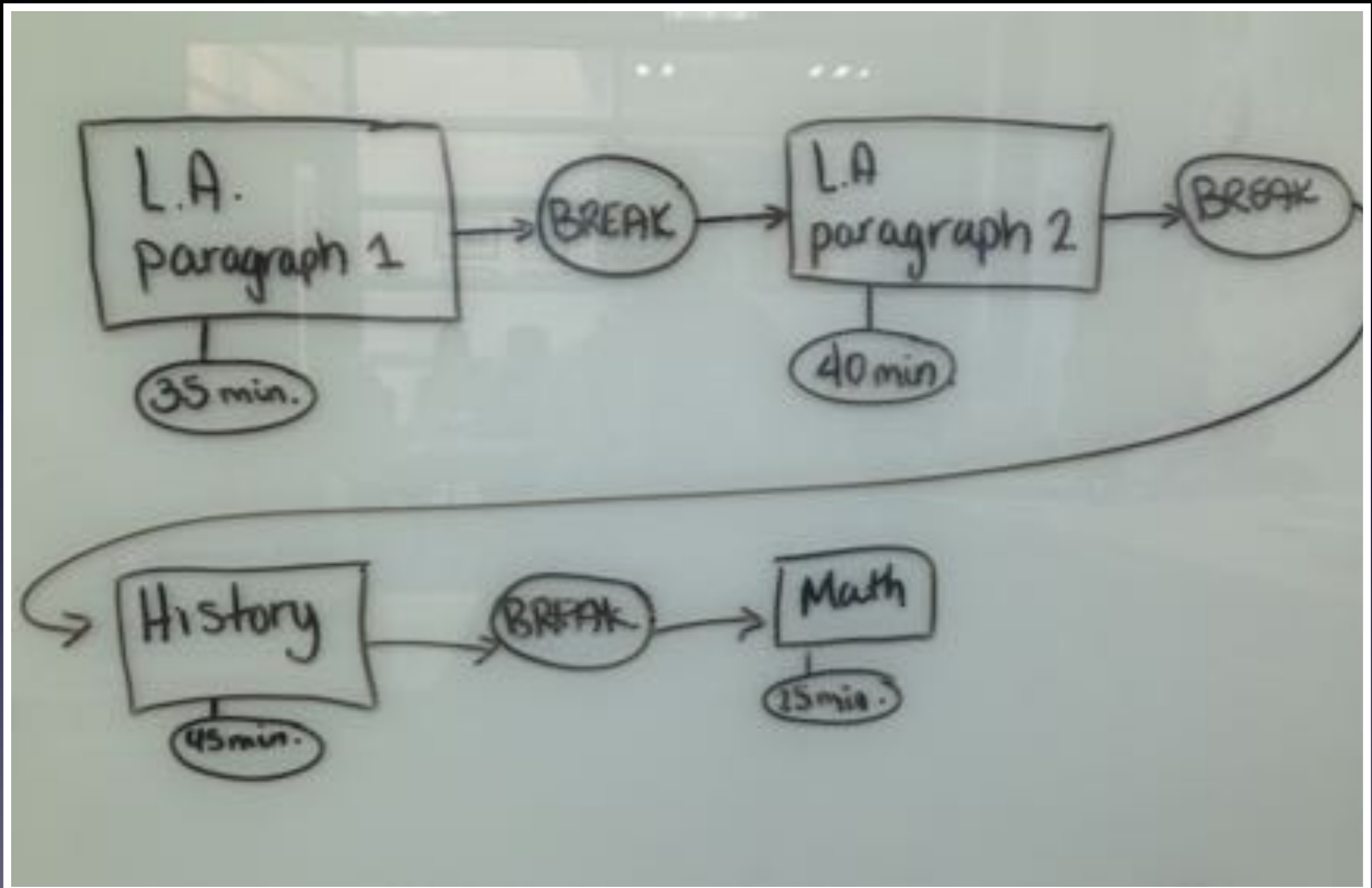


List

1. Math - page 14.7
2. History - read pgs. 16-32
and take notes
3. L.A. - write 2 paragraphs
reflecting on today's reading

List

1. Math - page 14.7 25 min.
2. History - read pgs. 16-32 45 min.
and take notes
3. L.A. - write 2 paragraphs
reflecting on today's reading 75 min





Bonnie Singer

TABLE 12.2 HOMEWORK PLANNING AND REVIEW SHEET

GOAL	To complete homework for: (Date) _____		
PLAN	Subject 1. _____	Assignment 1. _____ _____ _____	Material Needed 1. _____ _____ _____
	Subject 2. _____	Assignment 2. _____ _____ _____	Material Needed 2. _____ _____ _____
	Subject 3. _____	Assignment 3. _____ _____ _____	Material Needed 3. _____ _____ _____
	Subject 4. _____	Assignment 4. _____ _____ _____	Material Needed 4. _____ _____ _____
REVIEW	How I did (my rating):		
	Self-Rating: 1 2 3 4 5 6 7 8 9 10		
	Coach Rating (Parent, Teacher, or both):		
	Parent: 1 2 3 4 5 6 7 8 9 10		
	Teacher: 1 2 3 4 5 6 7 8 9 10		
	What helped, what worked? _____ _____ _____ _____	What was wrong or missing? _____ _____ _____ _____	
FUTURE SUGGESTIONS	Next time I should: _____ _____		

Homework Plan

Humanities

Check Haiku

Read 20 minutes

Modern Lang.

Check Haiku

Define 10 vocab words

Math

Check Haiku



7.3 problems
1-30 odds

Review for test on
Friday

Science

Check Haiku



Finish lab report
due Wed.

Grayson** has been doing really well with the Graphic Organizer! Thank you for introducing it! Homework seems to be getting done more efficiently. And he is not missing the many web page checks that were sabotaging his success... (He now has time to run before dinner if he doesn't have a sports practice (SUCH a bonus for him!)) He also seems more calm, somehow... Like now he feels like he has a way to keep things under control.

www.efintheclassroom.net

EF IN THE CLASSROOM

Home

Lesson Design

EF Skill Lessons

Student Comments

Contact Us

Executive Functioning in the Classroom



Peg Dawson



Resources

- www.understood.org
- www.ldonline.com
- Give the Kid a Pencil, Chad Donohue
- [Teaching with visuals in the science classroom](#)
- Smart But Scattered- Peg Dawson

Digital Images

- Make it visual <https://www.sticky.digital/19-great-reasons-to-include-visual-content-in-your-online-marketing/make-it-visual/>
- Visual Classroom schedule: <https://gradeschoolbrains.files.wordpress.com/2015/08/daily-schedule.jpg>



time for **questions**