

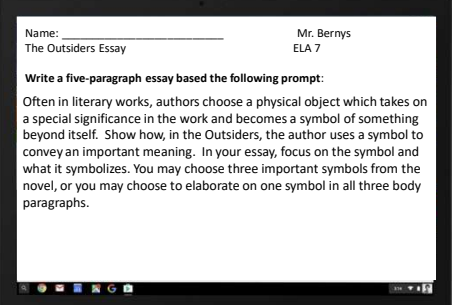
Executive Function Concepts



Fostering Independent Executive Function Skills

Sarah Ward, M.S., CCC/SLP
Speech and Language Pathologist

Cognitive Connections, LLP
747 Main Street, Suite 307
Concord, MA 01742
978-369-5200 | www.efpractice.com



Name: _____ Mr. Bernys
The Outsiders Essay ELA 7


Write a five-paragraph essay based the following prompt:

Often in literary works, authors choose a physical object which takes on a special significance in the work and becomes a symbol of something beyond itself. Show how, in the Outsiders, the author uses a symbol to convey an important meaning. In your essay, focus on the symbol and what it symbolizes. You may choose three important symbols from the novel, or you may choose to elaborate on one symbol in all three body paragraphs.




"I will get started on this 5 paragraph essay on The Outsiders now because I have music lessons and won't have enough time later tonight to do the whole thing. I *can probably* get through the intro and thesis. Let's see... sunsets are important..if I can find 3 quotes before I go, *then* it will be easier to get started on writing when I get back."

↔ If....Then ↔

"Wait..what are we supposed to write about? I have no idea what the teacher wants. I hate writing essays... I am a terrible writer. What symbols are there anyway?"




Order of Working Memory

Verbal Working Memory:
Self-Directed Talk
Stated Implementation Intentions
"I will, I am going to, Maybe I should, When I..."

IF...THEN


Nonverbal Working Memory



Order of Working Memory

Verbal Working Memory
(self-directed talk)

~~IF...THEN~~





Nonverbal Working Memory and Self Regulation

Working Memory: Holding information in your mind while mentally working with it or updating it

- Critical for anything that unfolds over time

Inhibitory/Self Control: Resisting the strong inclination to do one thing and instead do what is most appropriate

- Attention – resist distractions
- Emotion - resist giving up
- Behavior – resist impulse to do an action that is inappropriate

Planning: Use of cause and effect & means to an end reasoning needed: “if.....then.....” thinking.



Situational Awareness/Intelligence: STOP and Read the Room

Space	Time	Objects	People
Navigate the Room	Get on the Timeline	Organization/Objects	Read the Person: Self and Others ROLE
<ul style="list-style-type: none"> Kind of space? What's going on? Is it Expected or Unexpected? Pathways used to Navigate to different areas within the space? Is there a shift between wide angle lens of the space(Whole), the zones (parts) and the details? 	<ul style="list-style-type: none"> Time of day Kind of time? What is happening at this Moment in Time Sequence of actions Pace What is coming up? Predictable? 	<ul style="list-style-type: none"> Organization of The Space: Whole-Parts How is that part organized? Location of objects: In sight? Out of sight? Purpose/Priority of objects? Necessity & Relevancy 	<ul style="list-style-type: none"> Mood Pace Body Language Appearance

"I will get started on this... I am going to do this... I will get started on this... I am going to do this..."

Bedtime Routine

Space	<i>Downstairs – Living Room</i>	<i>"In My Bedroom! In my Bed"</i>
Time	<i>I'm watching a show</i>	<i>"Quick! After watching Blues Clues!"</i>
Objects	<i>Shirt & Shorts</i>	<i>Pajamas! Book! Bear!</i>
People	<i>TV Watcher</i>	<i>I'll brush my hair and teeth! Daddy will be a reader!</i>

The Situational Intelligence Shifts from Now to Next = Self Regulation

Specific Type of Regulation called: Locomotion Regulatory Mode – Locomotors

- Movement from state to state without distraction
- is a significant predictor of academic success
- Lower in individuals who are easily 'bored'

Situational Intelligence

- An early aspect of executive function skills is situational intelligence (reading the room) –
- This is recognizing zones in the room – space, time, objects, people – in a self directed way.
- It is self-directed, because the student is answering
 - What do I need to do?
 - What is expected of me in this setting?
- It involves self-directed observation
 - What's happening now?
 - What matters now?
- It is "IF ... then" thinking.
 - if this is what it looks like, then what do I need to do?

Situational Awareness/Intelligence: STOP and Read the Room

Space

Navigate the Room

- Kind of space?
- What's going on?
- Is it Expected or Unexpected?
- Pathways used to Navigate to different areas within the space?
- Is there a shift

between wide angle lens of the space (**Whole**), the zones (**parts**) and the **details**?



Time

Get on the Timeline

- Time** of day
- Kind** of time?
- What is happening at this Moment** in Time
- Sequence of actions
- Pace
- What is coming up?
- Predictable?

Objects

Organization/Objects

- Organization of The Space: **Whole-Parts**
- How is that part organized?
- Location of objects:** In sight? Out of sight?
- Purpose/Priority of objects?
- Necessity & Relevancy

People

Read the Person: **ROLE**

- Face
- Body
- Appearance
- Mood
- Pace
- Saying-Tone

Any action that allows students to  and direct themselves



Situational Awareness + Nonverbal Working Memory

Mimetic-Ideational Information Processing
(mental trial and error simulation)

"I will get started on this 5 paragraph essay on The Outsiders now because I have music lessons and won't have enough time later tonight to do the whole thing. I can probably get through the intro and thesis. Let's see, sunsets are important. If I can find 3 quotes before I go, then it will be easier to get started on writing when I get back."

If....Then

Mimetic Ideational Information Processing

- Being a "Mind Mime"- Mime the Idea in Your Head
- Mental Pre-Simulation of How the Future Will Play Out
- It is a Mental Dress Rehearsal...
- A Mental Trial and Error without the Risk of Error
- You can try it out and Pre- Experience the Emotion/Energy
- Without Risk You can Run Plan A and Plan B and Pre-Experience How Those Feel

Be a Future Thinker: "Mind **MIME** IT"

M Make an Image of the Future Situation: **STOP** Space | **T**ime | **O**bjects | **P**eople

I Episodic Future Thinking: What do I **L**ook like? **S**elf Projection into the Future -Role

M Mental Time Travel (Temporal - Spatial): How am I **M**oving to achieve this?

E The Future **E**motion: How will I **f**eel? Emotional/Physiological State

i If....then **I**mplementation **I**ntention

T Self **T**alk

It is 'experiencing the self in time' and talking yourself through that experience so you are efficient and successful

Honey it is 7:15. We have to be out the door by 7:30. Quick. Go Upstairs and finish getting ready for school!

Being a Mind MIMe

90% of the Time Task Planning Happens in a Different Space from Where you Execute the Plan

Situational Awareness + Nonverbal Working Memory = **MIMetic-Ideational Information Processing** (mental trial and error simulation)

Implementation Intentions
 "I will, I am going to, Maybe I should, When I..."
 Self-Talk

If...then

Make an Image – What will it look like?
 I – What will I look like?
 M – How am I Moving?
 Emotion – What will I feel like?

MIMetic Processing
 (situational awareness + Nonverbal working memory)
 Guides Planning

Room
 Mudroom
 Kitchen

Verbal Working Memory: Self Talk
 "I need to go upstairs. I will get..."

Mimetic-Ideational Information Processing (mental dress rehearsal)

Situational Awareness + Nonverbal Working Memory = **MIND MIME**

August 28-September 5

Science Chap 3 and Q's 1-6
 Spanish chap 5
 Math read chap 2
 Finish Poster

"Not Much"
 "I hate HW"

Left at Home
 Bring Right Back

Develop the Extended Time and Space Horizon
 How Far Into the Future Can You See?
 Both Time and Space

Temporal – Spatial Capacity/Window

Development of the Time Horizon
 How Far into the Future can they Anticipate?

2 Years Old: NOW
 3-5 Years Old: 5-20 Min
 K- 2nd Grade(6 to 8 years): Several Hours
 3rd -6th Grade(9-13 years): 8-12 Hours
 6th-12th Grade Years (14-18 years) : 2-3 Days
 17-23 Years Old : 2-3 Weeks
 23-35 Years Old: 3-5 Weeks

ADHD → EFDD: Executive Function Developmental Delay
 - Typically of the Spatial Temporal Window
 Average of a 3 to 3.5 year delay

Time Horizon for Assignments, Exams and Projects

Development of the Time Horizon
How Far into the Future can they Anticipate?

Grade	1	2	3	4	5	6	7	8	9	10	11	12
1	1	1	1	1	1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1	1	1	1	1	1
7	1	1	1	1	1	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1	1	1	1	1	1
9	1	1	1	1	1	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1	1	1	1	1	1
11	1	1	1	1	1	1	1	1	1	1	1	1
12	1	1	1	1	1	1	1	1	1	1	1	1

1. Mental Rehearsal -Task Planning:
Plan | Sequence | Prioritize | Organize

STOP and Self-Regulate

3. Self Monitoring:
Problem Solve | Control Emotions | Shift

2. Task Executing: Initiate | Inhibit | Pace | Complete

Spatio -Temporal Frame

Why is it Problematic to Start with Get Ready?

- It Starts At Task Executing and **Bypasses Planning**
- Does NOT Provide the Opportunity for Self Monitoring
- Provides the Task (homework) but NOT the Cue
 - "When I am at home tonight (**space & time**) I will get a protractor and the 'how to' worksheet (**objects**) from my backpack and review the video on google classroom the teacher posted (**people**)."
- Most Important: Does NOT Support Nonverbal Working Memory

Get Ready
What Materials will I need?

ADD: Difficulty with Attention over Time Towards the Future
(Persistence Towards a Future Goal)

We pay attention to future over immediate activities around us (they PAY ATTENTION to the CONTEXT and not to what is coming next)
How can you resist distractions not relevant to the goal?

Goal Reengagement is a Function of Working Memory
Remembering what we are doing is markedly inefficient in ADD

Anxiety

Working Memory

Executive Function Skills Checklist



Cleaning

Tidy a space (reading corner, playroom) (5-7years old)

Clean a Room (8-11years old)

Develop and maintain a system of organization/cleaning (12-14years old)

Manage Laundry, Keep Dorm/Apartment clean, deep clean at reasonable intervals

EF Age:

Errands

Simple: get your shoes from the bathroom (3-4 years)

2-3 step direction put the placement on the table and then get the napkins (5-7 years)

With a time delay – to and from school w/out reminders (8-11years)

Follow complex school schedule & multiple transitions with teachers and classrooms (12-14 years)

Independently plan and follow school/work and leisure activities, drive own car

EF Age:

Self-regulation

Inhibit unsafe or inappropriate behaviors (3-4 years)

Inhibit behaviors; follow safety rules, use appropriate language (e.g. not swearing or using bathroom language when not appropriate), raise hand before speaking in class, and keep hands to self (5-7 years)

Inhibit/self-regulate behaviors; maintain composure when teacher is out of the classroom; inhibit temper tantrums and bad manners(8-11 years)

Inhibit rule breaking in the absence of visible authority (12-14 years)

Avoid reckless or risky behaviors (e.g. use of illegal substances, sexual acting out, shoplifting, or vandalism) (high school on)

EF Age:

Executive Function Skills Checklist



Time

Understand sequence, past/present/future tense, causality (3-7 years)

Independently remember changes in daily schedule including different after school activities (8-11 years)

Follow complex school schedule involving multiple transitions with teachers and classrooms (12-14 years)

Plan time effectively, including after school activities, homework, family responsibilities (12-14 years)

Establish and refine a long-term goal and make plans for meeting that goal; collegiate or other vocational goals. Independently organize leisure time activities, including obtaining employment or pursuing recreational activities during the summer (high school)

EF Age:

Projects/Exams

Plan simple projects: e.g. book report: select book, read book, write report (8-11 years)

Plan and carry out long-term projects, including tasks to be accomplished and a reasonable timeline to follow (12-14 years)

Create, plan and follow timelines for long-term projects, tests, after school activities, family responsibilities

Study for tests, create and maintain learned material for midterms/finals (high school)

EF Age:

Papers

Bring papers to and from school (5-7 years)

Bring papers, books and assignments to and from school (8-11 years)

Track belongings when away from home

Appropriately use a system for organizing schoolwork (12-14 years and beyond)

EF Age:

Executive Function Skills Checklist



Homework

Complete -20 min max (5-7 years)

Complete – 1 hour max without assistance (8-11 years)

Manage schoolwork effectively on a day-to-day basis, including completing and handing in assignments on time – 2 hours (middle through high school)

Establish and refine a long-term goal and make plans for meeting that goal; collegiate or other vocational goals (high school)

EF Age:

Work

Simple chore – self care-brush teeth (3-4 years)

Simple chore/self help – make bed, make a bowl of cereal (5-7 years)

Chores 10-30 min in duration; set the table, vacuuming (8-11 years)

Help out with chores around the home, including both daily responsibilities and occasional tasks that may take 60-90 minutes to complete; emptying dishwasher, raking leaves, shoveling snow etc. (12-14 years)

Safely babysit younger siblings (12-14 years)

Part time work: house sit, dog walk, mow lawns Independently obtain employment and or work during the summer (late middle and high school)

EF Age:

Money

How to spend (5-7 years)

Save money for desired objects and plan how to earn money (8-11 years)

Save money to meet a financial obligation (college savings/spending money, car payment/insurance, etc.) (middle and high school)

EF Age:

Chronological Age

Average EF Age:

Teaching Students **HOW** to Independently Execute Tasks
Teach Students to be a **Mind MIME**

Repeatedly practice:
Self-monitoring, self-**STOP**ping, **see**ing the future, **say**ing the future, **feel**ing the future, and **play**ing with the future so as to effectively “plan and go” toward that future. (Barkley 2012)

Barkley, Russell A. Executive Functions: What They Are, How They Work, and Why They Evolved. New York: Guilford, 2012.

Start with the Done

Developing Independent Executive Function Skills

WHY DON'T WE START WITH GET READY?
"Get Ready for School!"

"Honey We need to leave for school at 7:30. Time to get ready!"

"I know!"

"Get Ready for School!"

- Wash hands
- Brush hair
- Wash shirt/Coat
- Snack
- Bag
- Homework/Notebook
- Shoes for Gym

Role/Order of Working Memory in Executive Function Skills

Nonverbal Working Memory (MIME)

If....Then

Verbal Working Memory (Self-Directed Talk)

- Wash Band
- Snack/shirt/Coat
- Snack
- Bag
- Homework/Notebook
- Shoes for Gym

Role/Order of Working Memory in Executive Function Skills

Get Ready Do Done

Ugh...it's 7:15 (time). I need to go upstairs(space) and quickly **brush** my hair and get dressed (time and pace). My **lunch** is on the kitchen counter (space). I need to remember to put my **book** in my **backpack**.

If....Then

? MIME

Be a Future Thinker: "Mind MIME IT"

M **M**ake an Image--What will it look like?

I **I**--What will I look like?

M **M**--How am I Moving?

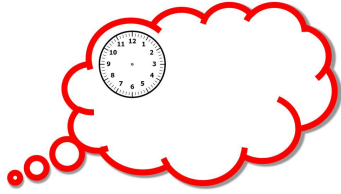
E **E**motion--What will I **FEEL** like?

i **I**f....then.... Implementation Intention.

T **T**ell Talk

90% of the Time Task Planning Happens in a Different Space from Where you Execute the Plan

Tell me About your Plans Tonight



Science
Healthy Habits

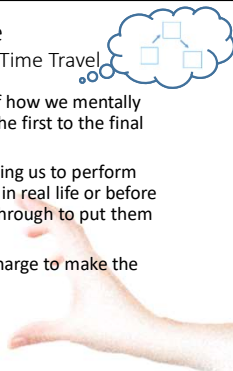
For your class project you will be making a poster on healthy habits. Your poster must include a **title** and **3 pictures** of healthy habits. For **each picture** have a **caption** and write a **small paragraph** describing how the habit keeps you healthy. Bonus points for **decorative** posters.

Representational Co-thought Gesture

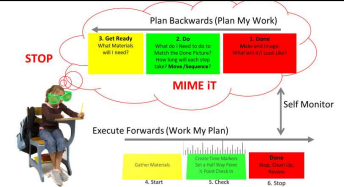
We Gesture to Pre- Experience Mental Spatial Time Travel

- Co thought gestures are really just an outgrowth of how we mentally simulate planning (performing actions to go from the first to the final step)
- Gestures give life to our mental scratch pads, allowing us to perform actions with our hands before we have to do them in real life or before we have even thought these activities all the way through to put them into words
- Gesture helps infuse planning with an emotional charge to make the memory for it more enduring

Gesture changes thought by introducing action into our mental representations



Developing Independent EF Skills



Repeatedly practice: Self-monitoring, self-STOPping, seeing the future, saying the future, feeling the future, and playing with the future so as to effectively “plan and go” toward that future. (Barkley 2012)

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Role/Order of Working Memory in Executive Function Skills

Get Ready

Do

Done

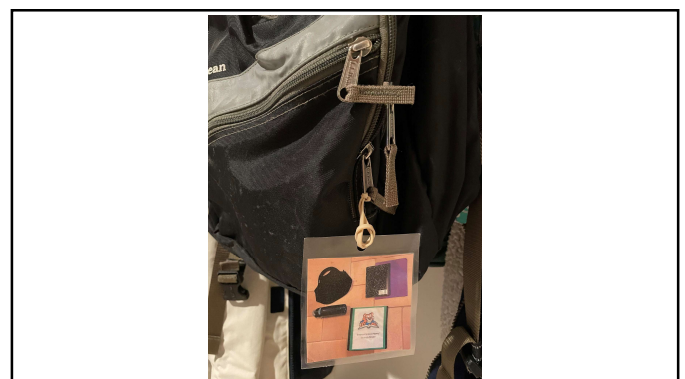
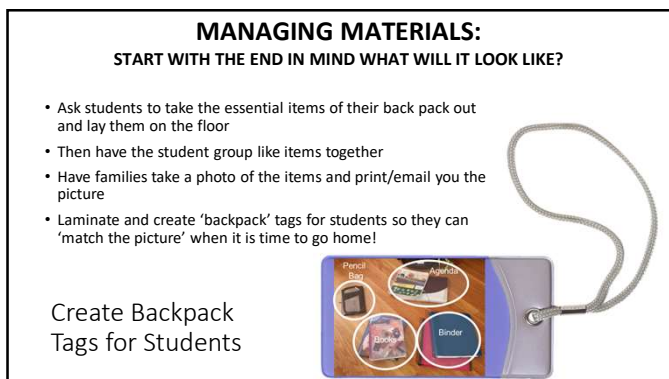
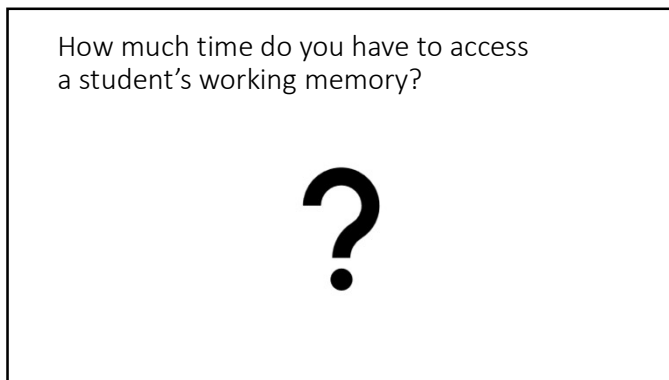
Ugh...it's 7:15 (time). I need to go upstairs(space) and quickly brush my hair and get dressed (time and pace). My lunch is on the kitchen counter (space). I need to remember to put my book in my backpack.

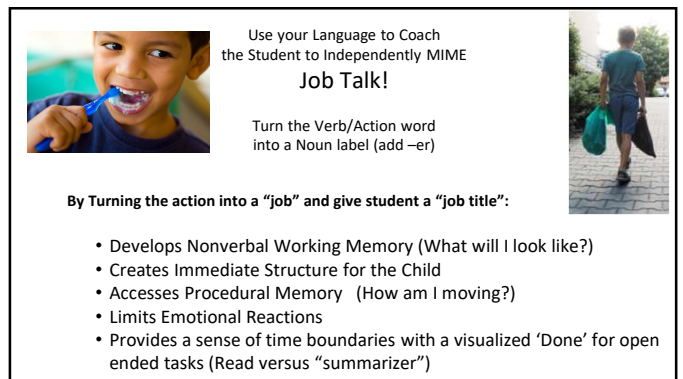
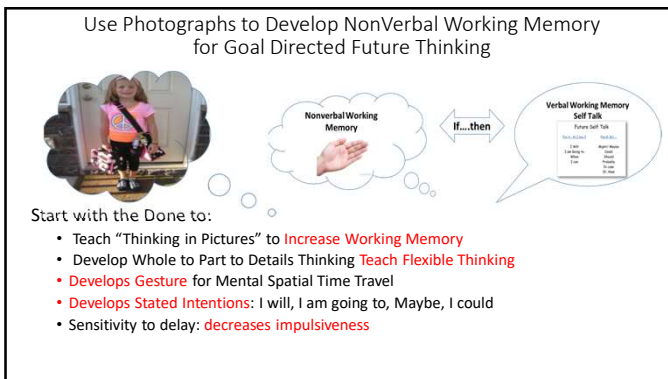
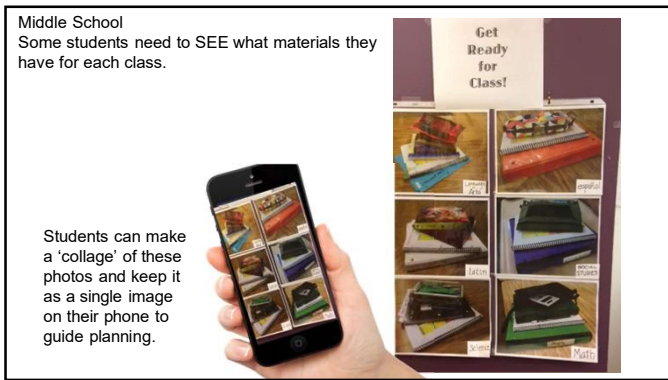
If.....
Then



Take a Photo of What “Ready” Looks Like







Job Talk:

Politicians wanted to increase voter turnout and turned to psychological research for help. It worked! Researchers framed voting as either a personal identity label (e.g. "be a voter") or as a simple behavior (e.g. "voting"). This change in phrasing to a personal identity label significantly increased interest in action and a substantially larger percentage of individuals voted! Research has shown that people want to feel like they are a part of something and take ownership of something rather than being told what to do.

Children are no different! Motivation to complete a task is increased by invoking one's sense of self. Subtly manipulating the *verb form* of a behavior ("Brush your teeth please") to feature a *noun label* (Annie is a toothbrusher!) creates an essential part of one's identity. In other words it creates confidence and a positive sense of self that this is "What I can do!" This subtle change in language can change an occasional behavior of helping around the house ("Please set the table.") into a child who has confidence in their permanent trait or skill (I am a tablesetter!).

When packing for a ski trip, being asked to be a 'packer' is a positive thing and requires the child to imagine in their mind "what does a packer do? What tools will a packer need?". On the other hand just asking a child to "Please pack the car with your warm clothing, boots and poles." Just asks the child to do something, does not invoke their reasoning of what is required and



likely does not fire them into action except perhaps to make excuses for why they can't! Using the declarative noun form (*clothes gatherer*) creates psychological essentialism and develops in children a positive attitude, a strong and stable sense of self and generalizes to how they perceive themselves and their essential role over time.



Sarah Ward, M.S., CCC/SLP and Kristen Jacobsen M.S., CCC/SLP have translated this research into a simple trick to help our children to take ownership of and participate in various tasks. They advise to turn the child's task into a "job" and add "er" to the action that you are asking the child to do which gives them the "job title" such as "Washer", "Wiper", "Tooth brusher", "Listener", etc. Give it a try, it's amazing!

Declarative Job Talk (Noun Form)	Imperative Verb Form
Please be a handwasher!	Wash your hands.
Be a counter wiper!	Wipe the counter off.
Time to be a toothbrusher!	It is now time to go upstairs and brush your teeth.
You are getting ready to be a mathematician!	Please take out your homework and start your math.

Resources:

Bryan, C. J., G. M. Walton, T. Rogers, and C. S. Dweck. "Motivating Voter Turnout by Invoking the Self." *Proceedings of the National Academy of Sciences* 108.31 (2011): 12653-2656.

Gelman, S. A., & Heyman, G. D. (1999). Carrot-eaters and creature-believers: The effects of lexicalization on children's inferences about social categories. *Psychological Science*, 10, 489-493

Heyman, G. "Talking about Success: Implications for Achievement Motivation." *Journal of Applied Developmental Psychology* 29.5 (2008): 361-70.

Verbal Mediators: The Language of Executive Function

Edited by: Kristen Jacobsen & Sarah Ward, MS CCC-SLP

Declarative Language

Authored by: Linda Murphy

Why is Declarative Language so important in fostering Executive Function Skills?

1. **Inner Voice:** Self-narratives help students develop an inner voice. After the initial language spark is ignited, most of us then go on to develop our own voice that we use to share our thoughts, recap experiences, talk about what we are doing, and talk about what we are thinking. Most of us also then go on to create our own inner voice. This is an important by-product of our language learning. We use our inner voice to problem solve and plan. We remember what we have learned or noticed in the past, and apply it to the here and now. For example, imagine you are getting ready to go to work and you can't find your keys. Your inner voice may say something like, 'Hmmm.... Now when did I last see my keys? Where do I usually put them down? What jacket did I have on yesterday?... Maybe they're in the pocket.' Your inner voice helps you think through the problem so you can get started on a plan of action to solve it. Children with Executive Functioning difficulties do not usually develop this inner voice to regulate their thoughts and actions on their own. Just as modeling was important when your child was learning to talk, thoughtful modeling now, in this regard, is equally important. So – talk out loud, think out loud, work through a problem, make predictions, ponder opportunities, consider possibilities, and reflect on past experiences when you are with your child. They will learn from your models, internalize the ideas, and begin to form their own inner voice.
2. **Perspective Taking:** Provide a window into another person's perspective. Some children with executive function challenges have difficulty taking perspective. Using declarative language to share your thoughts and feelings provides a student with a regular window into these communication exchanges in an inviting, nonthreatening way. We are providing them information that is critical in a social interaction that we know they may not pick up on their own. When we present declarative language in this way, we are not asking them to provide an answer that may be right or wrong. Rather, we are clueing them into social information and then allowing them to decide what to do with the information. By regularly using declarative language, we are also slowly building episodic memories and awareness that different people have different thoughts, opinions, perspectives and emotions. For example, you say something to your child but he is facing the other way, appearing not to listen. Rather than say to him "turn around!" or "look at me" (both imperatives) share your feelings and perspective with declarative language: "I notice you looking out the window", "What would help me know you are listening to me" or "I feel like you are not listening to me."
3. **Big Picture Thinking:** Students can better see the big picture in order to create multiple solutions to a problem. Declarative language can also help students create a visual image of the gestalt and how they would like to see the outcome of a situation in their "mind's eye". Often times when we focus on having students carry out specific detailed directions, we can all lose sight of the big picture. Because some children with executive

function challenges are strong when it comes to details, but weak when it comes to seeing the big picture, it is important to think about the big picture when we present information. Giving very specific directions or questions that have one right answer promotes that focus on details. For example, if we tell a child to “put the book in the book-box” or “line up at the door for music” we are zooming into the details and creating a situation where there’s one and only one right answer. However, if we use language instead to comment on what we see in the big picture: “I see a book on the floor” or “what do you look like if you are ready to go to music?” - we are instead encouraging our children to take a step back, notice the context and situation around them, and subsequently form a plan of action that makes sense to them. We are also leaving open the possibility that there may in fact be more than one solution –i.e., maybe the toy could go on a shelf or in the toy box, maybe the students could put away their work, line up by the door, or collect their music instruments and line up by the door.

4. **Problem Solving Skills:** Declaratives support students ability to develop problem solving skills rather than merely than just following direction skills. When we direct students as to what to do, ask them to follow directions, or ask them to answer questions with a definitive right/wrong answer, we are honing their receptive language skills. This is not a bad thing, but it may not be what the student with an executive function challenge needs most. In contrast, if we use declarative language to present information about the environment or situation at hand, we are instead inviting her to notice this information and develop a plan of action. We are inviting him or her to have an “aha!” moment where he or she figures out what to do with given information. We are giving students an opportunity to think more independently! Problem solving moments are critical for all students as they learn to see themselves as more independently functioning human beings in the world.
5. **Read the Room:** Help your child read what’s going on in his environment. We know that it can be difficult for some kids to tune into the social information that is going on around them. Rather than telling them exactly what to do and when to do it, use declarative language to help them notice what is important! For example, if it is time for a transition, instead of telling your child “go to the table for snack” or “put on your coat,” direct his attention toward the changes in the environment: “I notice all the kids are at the table” or “I notice all the kids are putting on their coats.” This will help internalize the importance of periodically checking in on one’s environment; there are visual clues available all the time, and they are important to pay attention to! We want our kids to learn that information is not always going to come to them - they have to become active information gatherers. In contrast, if we are using imperatives all the time with our kids, information is coming to them on a regular basis, and they don’t have the same need to look around or read the behaviors of others.



Situation: Student is Not Engaged in Packing for the 2 day Outdoor Adventure Camp

Action (Verb Label)	Job (Noun Label)
Find the clothes	Finder
Check off the list	List checker
Pack the bag, Fold the Clothes	Packer, Folder

Situation: Student is Not Engaged in Packing their backpack.

Jobs: Find Binders | Pack Bag | Make Lunch

Roles:

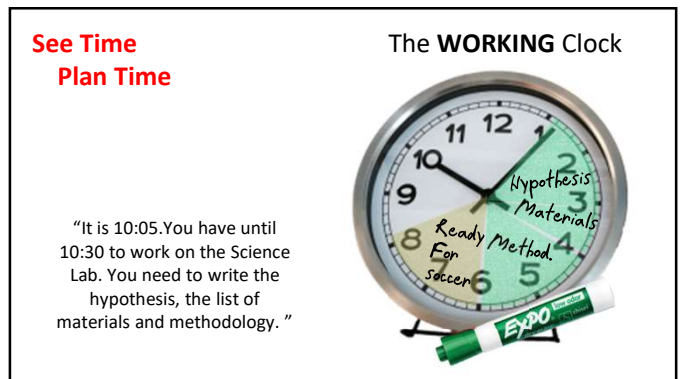
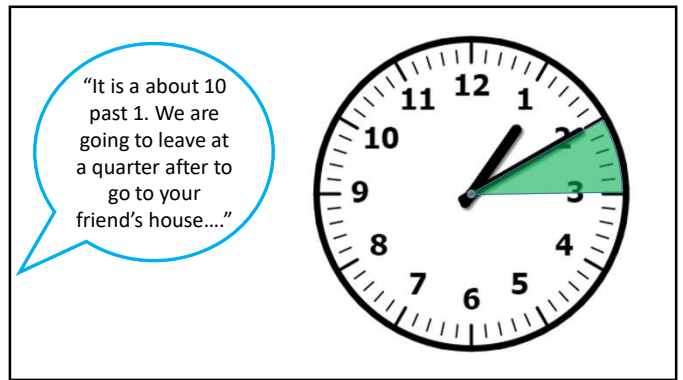
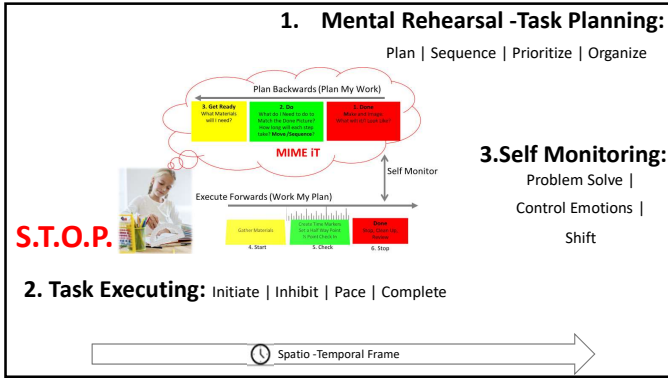
Give the Student Future Glasses!

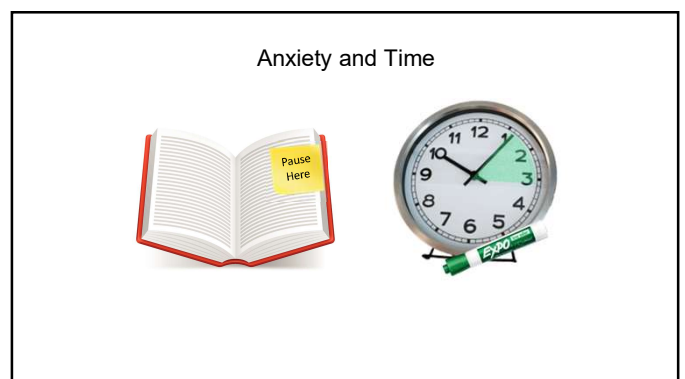
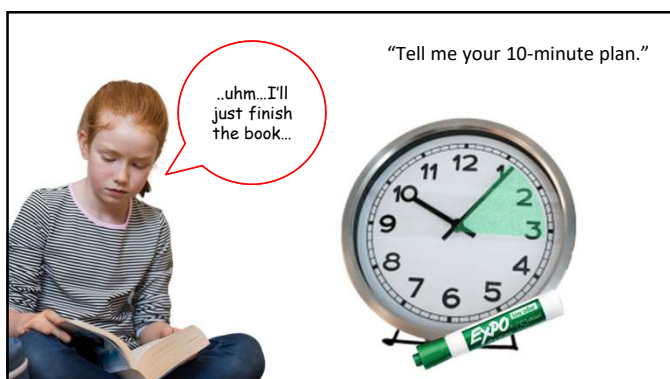
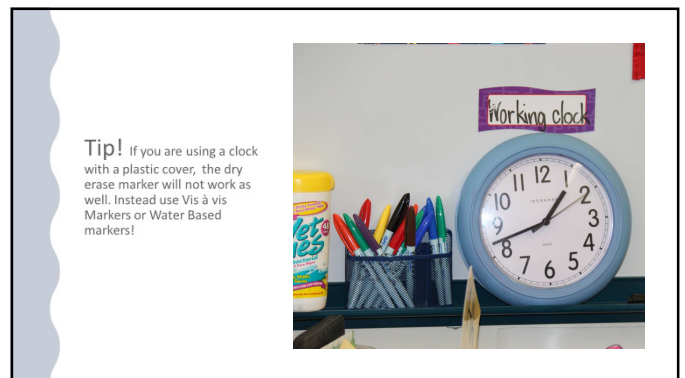
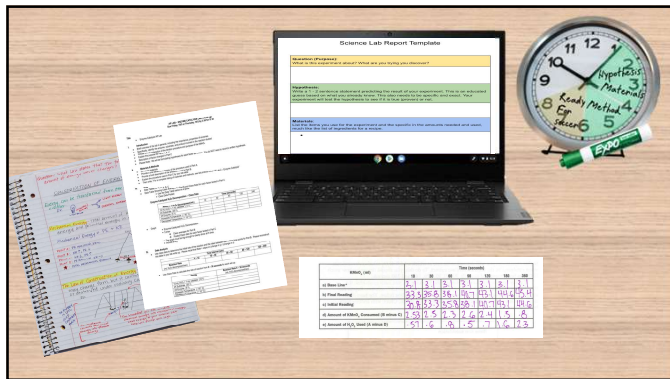
Be an Executive Coach: Use declarative language and be sure to include a visual word:
Look Like, See, Imagine, Picture, Visualize, Envision

MIME : See Yourself in a Future Space:
 Task Planning Happens in a Different Space than Where you Execute the Plan
Point Out Your Plan


MIME : See Yourself in a Future Space:
 Task Planning Happens in a Different Space than Where you Execute the Plan
Point Out Your Plan







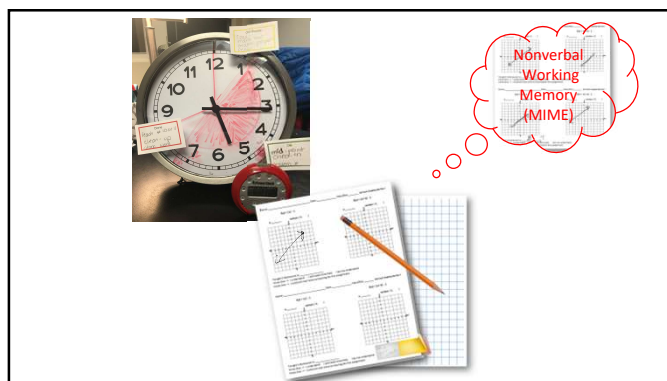
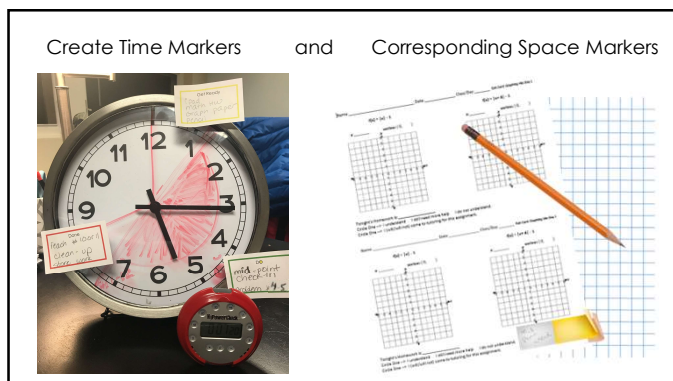


 The 360 Thinking Time Tracker Program
www.efpractice.com

TRACKNETS:
 Individual magnets with prompts for tracking start, check and stop times for up to 3 different tasks or parts of task in one hour. A Time Robber magnet to identify and remove distractions that might be "stealing" one's time from a task.

My Power Clock:
 An easy set count down timer. Can be set on music or vibrate modes to reduce sensory overload.

The Analog Clock:
 A magnetized, non-ticking analog clock to plan and self-monitor time to complete tasks



The **WORKING** Clock: See and Plan Time with Time and Space Markers

Division
2. Use the Partial Quotients

Use to find the quotient.

$4 \overline{) 272} = 67 \text{ R } 4$ $3 \overline{) 123} = 41 \text{ R } 0$ $2 \overline{) 84} = 42 \text{ R } 0$
 $5 \overline{) 150} = 30 \text{ R } 0$ $6 \overline{) 180} = 30 \text{ R } 0$ $7 \overline{) 210} = 30 \text{ R } 0$
 $8 \overline{) 240} = 30 \text{ R } 0$ $9 \overline{) 270} = 30 \text{ R } 0$ $1 \overline{) 100} = 100 \text{ R } 0$
 $2 \overline{) 200} = 100 \text{ R } 0$ $3 \overline{) 300} = 100 \text{ R } 0$ $4 \overline{) 400} = 100 \text{ R } 0$
 $5 \overline{) 500} = 100 \text{ R } 0$ $6 \overline{) 600} = 100 \text{ R } 0$ $7 \overline{) 700} = 100 \text{ R } 0$

Use a Timer and Set it to the Half Way Point of the Duration of Time Blocked to Work

At the “Mid Point Check In” the Student Can Self Monitor to See That They are Still on Track and If They are Not, Determine if They Have Any Time Robbers and How to Change their actions to Stay on Track

Students can mark checkpoints on their work that match their midway checkpoints on the clock. For example, this student shades in the 30 minutes on the clock that she plans to spend reading 5 pages in her text book. A post it note is placed on page 3 of the assignment to mark her mid point goal. She places a corresponding post it note at the 15-minute checkpoint on the clock. When the timer sounds at the 15-minute checkpoint, she can compare her mid point plan with her actual performance to self monitor her pace.

Cognitive Regulation

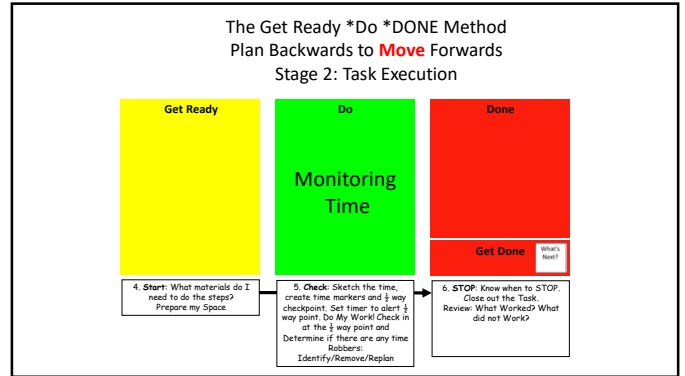
INDEPENDENT WORK

Chem slide
 Show
 Outsider essay
 outline
 Watch video and post reaction

Chemistry around us (Research project) - Accelerated Chemistry

- 1) Pick one commercial product that you would be interested in knowing information about
 - What is it used for?
 - What is it made up of?
 - How does it work? (Chemistry of the product): Be clear on the material that you present
 - Benefits of the product?
 - Similar products of that kind? Which one is better and why?
 - Any interesting statistics.
- 2) Give two ways the information ties to the chemistry themes or chemistry concepts that we learned in class.
- 3) Give two pieces of information about new research that is going with that product or that product line or related chemistry area.
- 4) Make a powerpoint presentation of about 10 to 15 slides per product. The presentation should be understandable to your classmates.
- 5) Print a copy with all slides on a sheet and put it into the portfolio under the category of research.

I'm just going to do it....



Just as We 'Get Ready' for a task we also 'Get Done' with a Task!!

<p>Get Ready</p> <ul style="list-style-type: none"> <input type="checkbox"/> Worksheet <input type="checkbox"/> Class Notes <input type="checkbox"/> Text Book <input type="checkbox"/> Colored Pencils 	<p>Do</p> <ul style="list-style-type: none"> <input type="checkbox"/> Identify the Parts of the Cell <input type="checkbox"/> Label <input type="checkbox"/> Color cell parts the same color 	<p>Done</p> <p>Animal and Plant Cells</p>
		<p>Get Done</p> <ul style="list-style-type: none"> <input type="checkbox"/> Turn in, Sci 11:10 <input type="checkbox"/> Clean up/store

Get Done

Clean Up Turn In/Submit Work Throw out Trash

Check Off as Complete in Planner

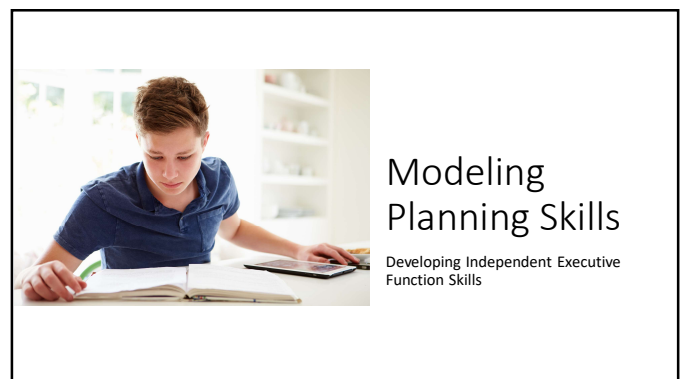
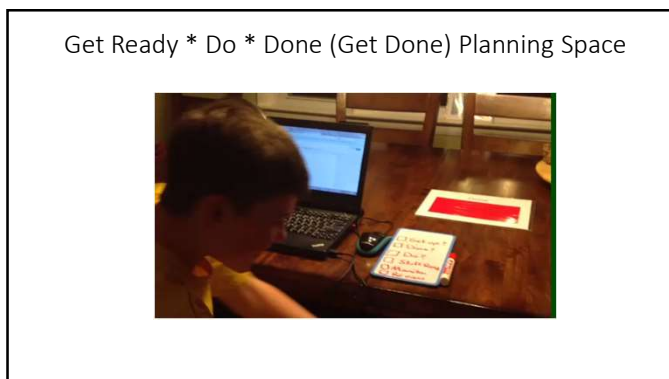
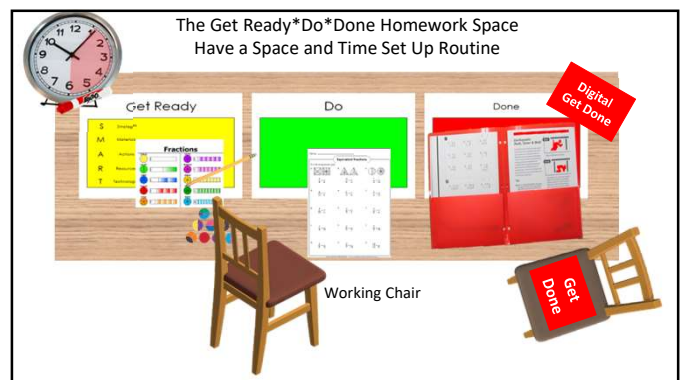
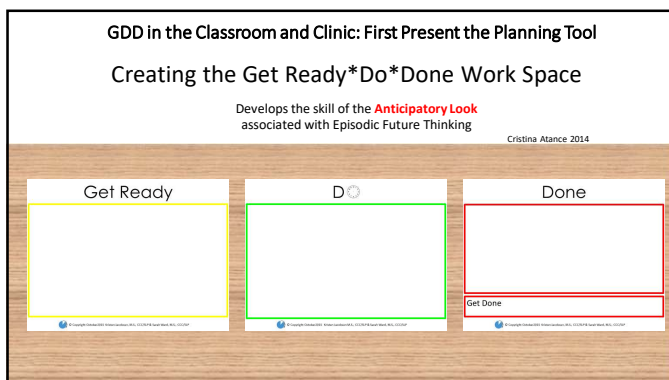
Charge Computer/Headphones/iPad

You are helping Rani on slide 17

GET DONE

Message Materials What do you need to do now?	Review How did the task go?	Next Expanded What's Next?
<ul style="list-style-type: none"> <input type="checkbox"/> Put materials away. <input type="checkbox"/> Clean up your workspace <input type="checkbox"/> Record the assignment as complete <input type="checkbox"/> Store, share, or submit the assignment <input type="checkbox"/> Plan tomorrow when the assignment will be turned in. 	<ul style="list-style-type: none"> <input type="checkbox"/> If needed, reschedule a future time to continue working on the task <input type="checkbox"/> Review how the task went <input type="checkbox"/> Were there Time Savers that worked for you? <input type="checkbox"/> Access resources if you need help to complete the work <input type="checkbox"/> Next time you do a similar task, what would you do the same? Would you use the same Time Savers? 	<ul style="list-style-type: none"> <input type="checkbox"/> How would you know what is coming up next? <input type="checkbox"/> Check the time and consider your pace <input type="checkbox"/> Mine your "what's next" strategy <input type="checkbox"/> Start planning now.

Cognitive Connections
Cognitive Connections Academic Planners for Students and Adults are Available at www.efpractice.com



Teach Planning Backwards

When we Plan our Work
What 3 Questions Do We Ask Ourselves?

Get Ready Do Done

Plan Backwards to Move Forwards

Teach Planning Backwards

Get Ready	Do	Done
Do I need to Gather or Organize any materials/resources/strategies to Get Ready for the task? Self Regulation Tools? Any Time Robbers I can Anticipate? What would be my Time Savers? Plan B?	What do I need to do to accomplish this task? How much time will it take? What is my time available?	What do I need to do to get Done ? What will it look like? How will I feel when I am done?
		Get Done How do I close out/ Get Done with the task? What's Next?

Assignment: Make flash cards for new vocabulary words in the article.

360 Thinking™ Cognitive Connections, LLP | www.efpractice.com | Copyright March 2020, Kristen Jacobsen, M.S., CCC/SLP & Sarah Ward, M.S., CCC/SLP.

Get Ready	Do	Done
		Get Done Put in H/W Folder What's Next? Spelling

Teach Students to Learn When and How Use of Strategies and Reference Tools

Get Ready	Do	Done
	<ul style="list-style-type: none"> Use formula to multiply: $l \times w = \text{Area}$ Label answer 	
		Get Done Store -> turn in 2 nd period

Make time Meta-Cognitive!
Set the timer for half the planned work time so the student can self monitor and check in at the midpoint to compare planned vs actual, identify time robbers and re-plan.

Get Ready	Do	Done
	Front of Card: <input type="checkbox"/> Term <input type="checkbox"/> Reminding Word Back of Card <input type="checkbox"/> Definition <input type="checkbox"/> Picture	
		Get Done

Get Ready

Gather Materials

Estimate Time

Time: Mark start, stop, mid way and end points

Review the Plan

Emotion now vs in the End

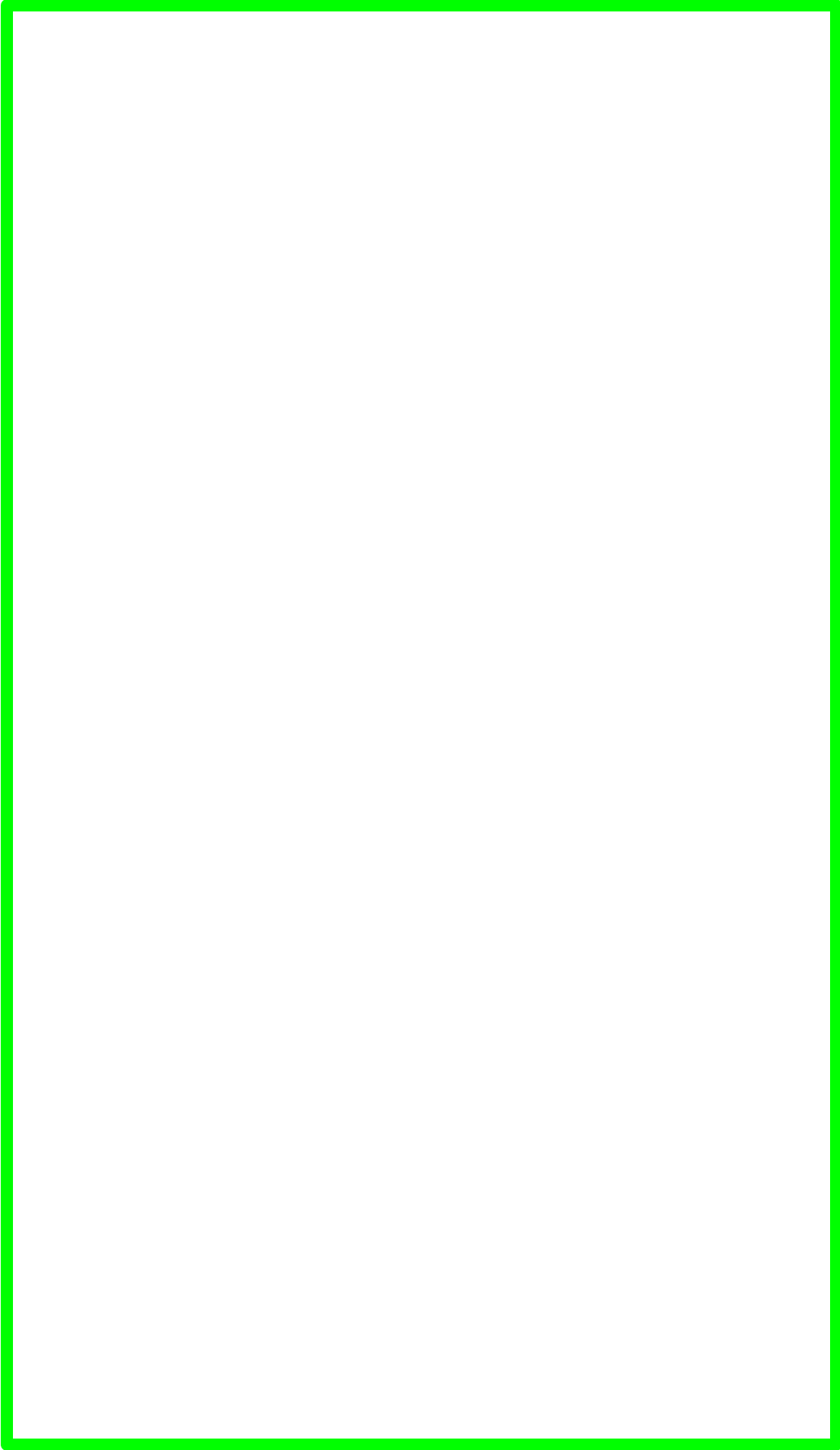
Add Resources, Strategies and Materials

Determine Obstacles, Distractions and

Time Savers You can do this!



D



Done

Get Done: Turn in? Store in Binder/Folder? Backpack? Put Materials Away? Clean up? Other?



3. **GET READY:** Materials | Resources | Create Time Plan Anticipate Obstacles | Mindset

Get Ready

2. **DO:** What are the steps? How long will each step take?

Do

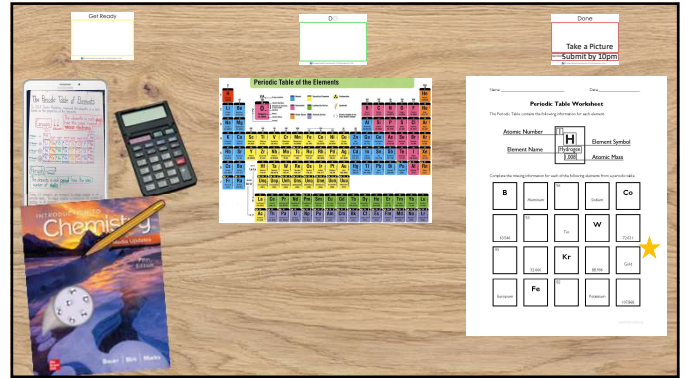
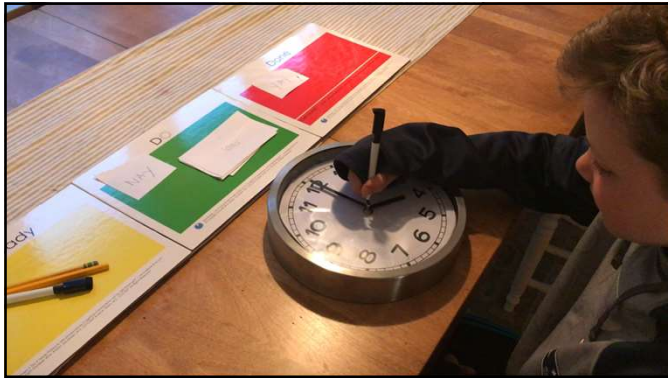
1. **DONE:** What will it Look Like When I am Done? Future Sketch/or Create a Template

Done

Turn in | Share | Store | Backpack | Clean up | Other

Get Done





Change your Language

If we leave the house and 5 and you are Done, what does Done look like? What do you need to do? Any Time Robbers?

BONUS
 Other uses of the Get Ready * Do *Done (Get Done) Method
 Promoting Independent Executive Function Skills

<p>Get Ready</p>	<p>Do</p>	<p>Done</p>
<p>Use Songs to Help Students Keep Pace Transition at the chorus Or "It is a 1 song shower" or a "2 Song Shower"</p>		<p>Get Done</p>

<p>Get Ready</p>	<p>Do</p>	<p>Done</p>
		<p>Get Done</p>

Get Ready

Do

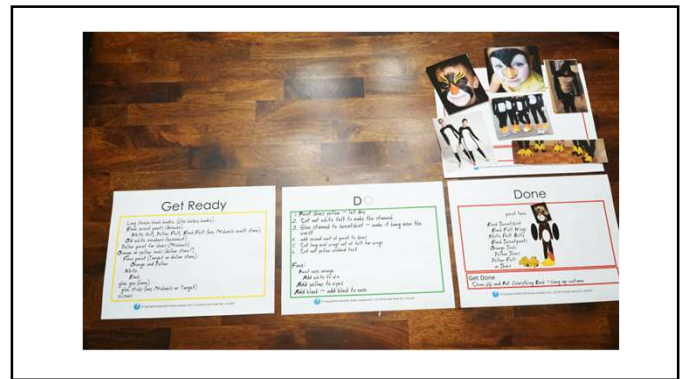
Done



Get Done



<p>Get Ready</p> <p>Clean the basement Get my sleeping bag and pillow Stuffed Animal</p> <p>Popcorn</p> <p>Sundaes: <input type="checkbox"/> Ice cream <input type="checkbox"/> Sprinkles <input type="checkbox"/> Whip cream <input type="checkbox"/> Cherries</p> <p>Nails: <input type="checkbox"/> Nail Polish Remover <input type="checkbox"/> Nail Polish <input type="checkbox"/> Pens <input type="checkbox"/> Paper Towels</p>	<p>Do</p> <p><input type="checkbox"/> Sleep in the Basement! <input type="checkbox"/> Watch a movie <input type="checkbox"/> Paint our Nails and do Nail Art <input type="checkbox"/> Make sundaes!</p>	<p>Done</p>  <p>Sleepover</p>
<p>Sleepover Host</p> <p>Get Ready * Do * Done © Copyright Sarah Ward, M.S., CCC/SLP and Kristen Jacobsen, M.S., CCC/SLP. All Rights reserved.</p>		<p>Get Done</p> <p>Clean Up the basement Put away sleeping bag</p>



Role/Order of Working Memory in Executive Function Skills

Verbal Working Memory (Self-Talk)

↔

If.....Then

Nonverbal Working Memory (MIME)

[Letter Writing Assignment: Born a Clown (Chapter 6)]

Tosco and his mother sometimes communicated through mime about issues Tosco was having. Pick **one** of these "issues" from chapter 6:

- getting ready for school
- trying to get in to the school
- changing the grass and trees and "backyard" (backyard from the school)
- using a measuring glass to make tea

A. Read the pages about that episode.

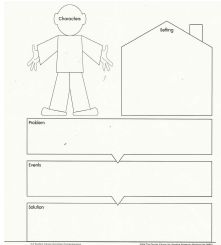
B. Write one letter from Tosco's mother to him. Describe what happened during the event (don't be descriptive and based on what she knows about the event). Then have her state her feelings about it. Why did she respond as she did? What lesson does she want him to learn? How does she want him to act in a future situation?

C. Write a second letter from Tosco to his mother. In this letter, have him respond to what she wrote. Explain why he reacted as he did. Provide the justification for his actions, only what he did is understandable or okay and why he should get in trouble for what he did. Be sure to thank about his personality as you write the letter.

Start each letter with a greeting and end with a closing. **Each letter should be about a half page long and written on lined paper.**

Collect B, print out a hard copy of your two letters. Collect A, make sure that your work is shared with my wife, children accounts so that I can print out your letters. Your work should be under "My Homework" in my ePortfolio.

Write a 1 paragraph summary of the book that includes all the parts of a story: type of story, main characters, setting, main conflict and a "cliff hanger question" that does not give away the ending of the book.



Write a 1 paragraph summary of the book that includes all the parts of a story: type of story, main characters, setting, main conflict and a "cliff hanger question" that does not give away the ending of the book.

Done

Book and Type of Story

main character

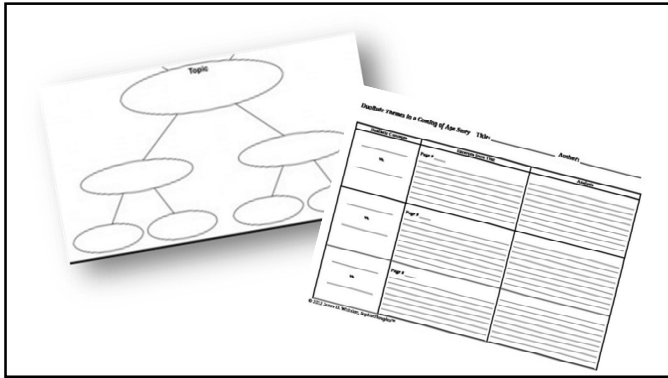
setting

conflict

Cliff Hanger question

Get Done

We have been learning about characters and conflicts. Write an essay about a character in the book. What conflict were they experiencing? How did the character change from the beginning of the book to the end of the book? Do you think it was a positive or a negative change? Why? Use evidence from the text to support your explanations.



Pre-Imagine the Space Before You Execute a Task

What will my Paper/Essay Look Like When I am **DONE**?

We have been learning about characters and conflicts. Write an essay about a character in the book. What conflict were they experiencing? How did the character change from the beginning of the book to the end of the book? Do you think it was a positive or a negative change? Why? Use evidence from the text to support your explanations.

Future Sketch: This is what it will look like...

<p>Introduction</p> <p>Who is the main character?</p> <p>Conflict:</p>	<p>Evidence:</p> <p>Do I think the change was Positive or Negative? Why?</p>
<p>What character was like in the beginning of the book?</p> <p>Evidence:</p>	<p>Evidence:</p>
<p>How character changed by the end of the book?</p>	<p>Conclusion</p>

WHAT DID YOU LEARN ABOUT YOUR ROLLER COASTER CHALLENGE #1 AND #2? (BUILDING PROCESS, ERRORS, SUCCESSSES, TRIALS, WHAT WOULD YOU DO NEXT IN YOUR DESIGN FOR CHALLENGE #3)?

Practice Sketching: Roller Coaster Homework Assignment

THREE PARAGRAPHS

Done

<p>Challenge #1</p> <p>How we built it.</p> <p>What was successful</p> <p>What were the errors.</p> <p>How many trials and what we plan next.</p>	<p>What did not work this time.</p> <p>How many trials we ran.</p> <p>How we will design the next coaster</p>
<p>Challenge #2</p> <p>How we built it.</p> <p>What worked this time.</p>	<p>Challenge #3</p> <p>How we plan to build coaster #3</p> <p>Why we think it will work this time</p> <p>What are the possible errors we anticipate?</p> <p>What we have learned from the trials</p>

Open Ended Assignments

HOME LEARNING MENU WEEK 2

Choose ___ activities to do at home this week.

- Practice your typing skills on TypingClub.com.
- Create a comic strip to show something fun you did last month. Don't forget conversation bubbles.
- Use a grocery store ad to plan what you would buy if you had \$35 to spend at the store to make dinner for your family.
- Plant a seed and research online how to take care of a plant. Make a list of the most important thing that you need to do.
- Make a creation using Legos. Then tell the steps someone would have to follow to make a creation that looks just like yours.
- Read aloud and the words big, long, up, and baby. Then watch the movie and write about how the book and the movie are similar and how they are different.
- Hide 5 things around your house. Create a scavenger hunt with written clues or draw a map to help a family member find them.
- Research the city you live in online. Create a brochure that explains the places to see, places to shop and other things that you can do in the city you live in.
- Listen to an audio book using getaudiobooks.com or audiobooks.org. Write a review about how you liked or disliked the book.

Done

Get Done: Turn in? Store in Binder/Folder? Backpack? Put Materials Away? Clean up? Other?

Done

- Find what to hide
- Hide
- Write Clues
- Draw Map

Get Done: Turn in? Store in Binder/Folder? Backpack? Put Materials Away? Clean up? Other?

If I Could Be Anyone...
There are times when we all wish we could be someone else for the day. Who would you choose to be? What would you do? Imagine you were that person for a whole day! Write a short story telling about one thing you did that day.

Don't Forget to Include:

- ✓ A list of questions
- ✓ A list of adjectives
- ✓ Dates and Descriptions
- ✓ Complete Sentences

Revisit them

Done

<p>Get Ready</p> <p>Materials:</p>	<p>Preparation: Do</p>	<p>Done</p>
<p>BOOK TALK Use your iPad camera to create a 1 to 1 1/2 minute long video applying the strategy of the month.</p>		<p>Get Done Upload to YouTube Submit Link to Google Classroom Put away Materials, Bring iPad to Class</p>
<p>Strategy of the Month: Infencing</p>		

The Ultimate Goal?
Give the Child Future Glasses
Develop Episodic Future Thinking!

- Develop The ability to STOP and MIME
 - What will it look like? **Make an Image DONE**
 - What will I look Like? **Episodic! Do**
 - How will I Move: **Mental Spatial Time Travel**
 - How will I feel: **Pre-experience Emotion Get Ready**
- I might imagine that Plan in a Different Space than Where I Actually Execute the Plan. I am a beat ahead!
- I execute my Plan by Sensing the Passage of Time and Comparing my Current Performance against my Imagined Future

Cognitive Connections, LLP
www.efpractice.com
Telephone: 978-369-5200

If you share our ideas, please make attribution to Sarah Ward and Kristen Jacobsen. Please reach out to us! We love to hear from you!

Sarah Ward, M.S., CCC/SLP
Speech and Language Pathologist
sward@efpractice.com

Kristen Jacobsen, M.S., CCC/SLP
Speech and Language Pathologist
kjacobsen@efpractice.com

RESOURCES

Parenting with a Purpose: Great site with blog posts on a variety of topics, resource recommendations and frequent updates. <http://shmsparent.wordpress.com/>

Middleweb: This site is currently undergoing a big upgrade. There are lots of resources for middle school teachers on this site but also some great resources and blogs for parents. <https://www.middleweb.com/>

Adolescent Brain: This is one helpful article on the teen brain. More is learned every day about how basic brain development affects teenagers and can explain some of what is seen in adolescence. <http://harvardmagazine.com/2008/09/the-teen-brain.html>

Centers for Disease Control and Prevention: For information on adolescent health issues and development. <http://www.cdc.gov/healthyouth/>

Activities to Develop Executive Function Skills
Activities Guide: Enhancing and Practicing Executive Function Skills with Children from Infancy to Adolescence by the Harvard Center on the Developing Child. <https://developingchild.harvard.edu/resources/activities-guide-enhancing-and-practicing-executive-function-skills-with-children-from-infancy-to-adolescence/>

Helpful Books

"How to talk so Teens will Listen and Listen so Teens will Talk" Adele Faber, Elaine Mazlish, HarperCollins (2006).

"Staying Connected To Your Teenager: How to Keep Them Talking To You And How to Hear What They're Really Saying," Michael Riera, Da Capo Press (2007)

"A Smart Girl's Guide to Starting Middle School" (American Girl) (American Girl Library), Julie Williams

"Smart but Scattered Teen" <https://www.smartbutscatteredkids.com/>

Step 1: Executive Function 101

If you just need a quick introduction to the basics about executive function and self-regulation, start here:

Executive Function & Self-Regulation
Get the facts about executive function and self-regulation skills—what they are, what they help us do, how they develop, and why ensuring that children learn and practice them benefits everyone.

InBrief: Executive Function: Skills for Life and Learning
This five-minute video shows how children use executive function skills and provides scientific insight into how those skills develop and grow, as well as what can disrupt their development.

Activities Guide: Enhancing and Practicing Executive Function Skills with Children from Infancy to Adolescence

<https://developingchild.harvard.edu/guide/a-guide-to-executive-function/>

by Sarah Ward,
MS, CCC-SLP, and
Kristen Jacobsen,
MS, CCC-SLP

AFTER RECESS, as part of the daily routine, the class reconvenes on the rug. Jackson runs from the back of the room where he has been playing with the class hamster to his cubby and slips off his jacket. It drops to the floor. He kicks off one boot. The teacher calls stragglers to join the others on the rug, so he hops to the circle wearing one boot and plops down. The teacher shares the agenda for the afternoon, which includes reviewing the science homework. Looking alarmed, Jackson pops up, and races back to his cubby while kicking off his other boot.

He pulls out his backpack, removes a homework folder, and grabs his assignment. Leaving the backpack open and boots scattered, he races to the homework bin. Realizing his name is not on the assignment, he zooms back to his desk to grab a pencil and sits back down on the rug with the rest of the class.

As the teacher gives instructions for the next activity, Jackson slips his homework underneath him and sits on it. The class is dismissed to their desks, and Jackson, talking excitedly to the boy next to him, stands up and follows the boy to his desk. His nameless homework is left on the floor. When he gets to his desk, his morning work folder and silent reading book are on the floor with assorted bits of paper. As the class starts the next activity, Jackson does not have the materials he needs. Again, he needs to walk about the class to get ready.

Anne has a music lesson Saturday morning at 9:00. Her mom wakes her at 7:30; Anne rolls over and groans, "Ten more minutes." Mom returns ten minutes later and tries again to wake Anne. After two more rounds of "Ten more minutes," Anne finally gets out of bed and heads for the shower. She showers for twenty minutes. Mom knocks on the door to announce the time. She encourages Anne to hustle so they can leave the house in thirty minutes. Anne gets out of the shower, puts on a robe, plops herself on the living room couch, flips open her laptop, and checks her social



media sites. Mom reminds her to get ready for music. Ten minutes later, Anne saunters into her room and stares at a land mine of clothes trying to decide what to wear. She sits on her bed and starts to remove her nail polish.

Mom hollers a reminder, "Get dressed!" Finally, ten minutes later, Mom exclaims anxiously, "We have to go...!" Anne responds to this seemingly sudden pressure and shouts, "I'm coming!" She heads into

Staying

the bathroom in her bathrobe to blow dry her hair. Patience waning, Mom asks about her instrument and sheet music; Anne directs her to the basement. Finally finished with her hair, Anne heads to the kitchen for something to eat.

Exasperated, Mom, who is standing at the door holding Anne's instrument, music sheet, and breakfast bar, exclaims, "We need to go now. We are late!" Anne yells back in frustration, "I told you to wake me up earlier!"

As adults, we joke about "senior moments." That moment when you have imagined an item you are going to retrieve and then when you finally that room to get it you draw a blank. "What did I come in here for?" Ack. A senior moment.

What do a student zigzagging about the classroom, a slow-paced teen, and a senior moment all have in common? Challenging executive function skills.

Weak executive function skills

Individuals with strong executive function skills stay a beat ahead. In contrast, teachers and parents describe individuals with weak



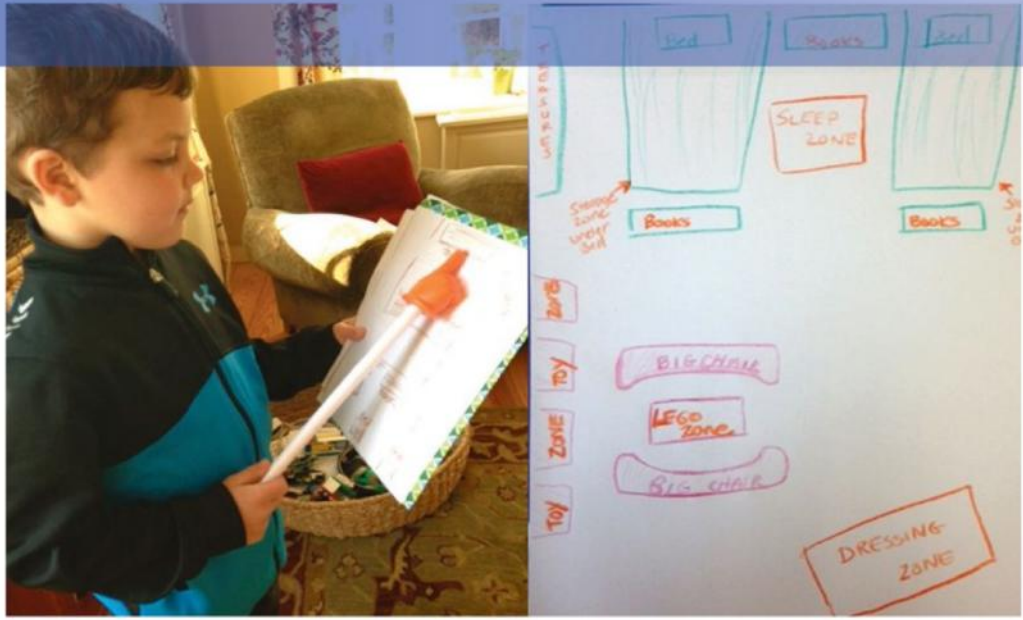
executive function skills as being “a beat” or—as Jackson’s teacher sighs—“twenty-two beats behind.” How do executive skills enable us to stay a beat ahead? Strong executive function skills enable us to imagine and plan a “dry run” of the task in our mind before we begin to carry out the plan. If a task is planned in a different space than where the task will be carried out, then we create an image of the future space in our minds. For example, when a child hears the direction, “Get ready for lacrosse,” he might be downstairs in the family room and imagine walking upstairs into the bedroom, heading over to the dresser, opening the third drawer, and retrieving their uniform. Then he might envision a transition from the bedroom to the mudroom and then the garage, where cleats and gear bags are stored.

The imagery is a mental anchor that allows the child to better resist distractions and maintain a pace so as to reach a goal. When forethought guides children’s actions, they can carry out tasks more successfully. Small glitches, such as looking for a missing item, can also be

a Beat Ahead



handled more smoothly. However, when children with weak executive function skills hear the instruction “get ready,” they hear the words, but do not pre-imagine the task or the steps to be ready. Even if they respond, “Okay,” they do not initiate any actions to move toward their goal. When these children finally enter their rooms, because they have not pre-imagined the task, they are only starting to ask themselves, “Okay, what am I doing?” Without the vision of an outcome in mind, they are open to distraction. When these children go into their bedrooms and see books, Legos, and a laptop, they easily disengage from the goal of getting ready. They are



ORGANIZATION & FOLLOWING DIRECTIONS: A basic map of a bedroom or a classroom can be used with a pointer to plan out directions and rehearse routines. This strategy can improve the use of mental imagery and self-talk, which are two skills that support a child's ability to carry out tasks and routines.

now a beat behind. Likewise, a senior moment is simply the loss of this pre-imagined intention.

Developing strong executive function skills

So, what can we do to develop a child's capacity to be a beat ahead and successfully carry out intentions in the future? According to Russell Barkley, in order to develop strong executive function skills, individuals "need to repeatedly practice: self-monitoring, self-stopping, seeing the future, saying the future, feeling the future, and playing with the future so as to effectively 'plan and go' toward that future."

Our natural inclination might be to provide checklists. While this strategy can sometimes work, it is limited. Checklists made by adults are not that helpful in creating mental imagery for children. For example, as adults, we might make a list of items to buy at the market. While making this list, we create, if only for a brief moment, a mental image of the supermarket, our dinner table, or shelves in our cabinets. These images help us navigate the market and remember items even if the list is left at home. When we hand children a checklist we've made, they have not used imagery to create the list and may find it hard to create imagery after the fact.

A better technique, when giving directions, is to use words that create mental imagery. For example, rather than asking a child, "What do you have for homework tonight?" pose a question such as: "When you walk into

class tomorrow, what do you see yourself handing to your science teacher Mr. Jenson?" Instead of directing your child to get ready for soccer, try asking, "If you were standing at the door ready to go to soccer what would you look like? What does 'ready' look like?" To improve the effectiveness of your instruction to go upstairs and get dressed, try saying, "What drawer do you see opening to find your sport clothes?"

Visuals are also helpful in teaching kids to get ready and organize themselves. It's often a struggle to get children out the door in the morning. Multiple prompts and checklists might get your child out the door, but the process is likely to be difficult. Instead, try snapping a quick photo of your child when he is ready for school and standing by the door with his coat, clothing, shoes, backpack, and lunch. The next morning, show your child the photo, and simply say, "This is what 'ready' looks like." Ask him to imagine a plan that enables him to "match the picture." Once children remember the images in these photos, they can use their mental imagery and the photos no longer need to be shown.

In the classroom, cue students to imagine their actions before they transition. For example, when students are transitioning from recess, as they line up, say: "Imagine yourself at your cubby. What do you look like? What do you see yourself doing?" For younger students, ask them to describe how they will prepare for an activity. They can use a pointer to point to the space they will go to and pre-immerse themselves in



What does 'ready to start the lesson' look like? You need 5 minutes before your lesson actually starts at 4:30 to prepare so that you are ready when the lesson starts. This 5 minutes gives you time to take your instrument out of the case, open the sheet music to the practice warm-up page and to be seated in front of the music stand.



Working backwards to shade in the time needed, what does the travel time look like? 5 minutes to walk through the parking lot, 15 minutes to drive to the music lesson.



Shading in 5 minutes to gather your instrument and sheet music and 10 minutes to dress and brush your hair and teeth, you can see that you need to start getting ready for your 4:30 music lesson at 3:50.

that space carrying out the expected actions, "I am going to go to the back of the room and get a worksheet, then I am going to walk to the counter under the windows and get my text book, then I am going to sit at my desk and take out my pencil."

Take this technique a step further. Ask the student to draw a blueprint of the classroom or their house. Tape this blueprint to a clipboard, so the child can 'tap out their plan' before a task. Use a pencil or pointer to tap on the blueprint while encouraging them to pre-imagine and verbalize their plan; this method will foster an important skill—self-talk. For example: "I am going to walk into the bathroom, brush my teeth, then go across the hall to my bedroom. Next, I'll go to my closet, get my shoes, then walk downstairs to the front hall to get my backpack."


Use an analog clock

Children may still have difficulties using an appropriate pace even if they have a mental image of the directions. If their pace is slow, then they are vulnerable to distractions. What helps children to imagine carrying out a plan within a particular time frame? An analog clock.

As adults, we often strategize times before verbalizing the plan to children. We say, "You need to start getting ready at 3:45." However, this direction is given after we have thought, "Dance starts at 4:30, so we need to leave the house at 4:00." Try asking children to work backwards from an end time. Many children benefit from seeing how time fills up on an analog clock. A dry erase marker can be used to shade "slices" of time and write actions when planning backwards on a glass analog clock. See the example of backwards planning for estimating the time to prepare and travel to a music lesson (see graphic above).

Students can also use the clock to visually plan their time for homework or in-class assignments.

Another advantage of drawing on the clock is building self-awareness. Students can see visual markers of the time that has passed, and then determine if they have used time effectively or had any "time robbers" such as daydreaming or getting distracted by the television or Internet. To stay a beat ahead, students must monitor how closely their outcomes match the future plan they had imagined.

Ask students to plan checkpoints when they can stop and determine if they are on track with their plan. Students set a mid-point timer to stop and check how well they are working towards completing an assignment. The purpose of the timer is to improve self-monitoring and an awareness of how time is used, but not how quickly they can complete an assignment. Students who set timers for the end of a task frequently experience more stress, whereas a timer set for check-ins midway through a task provides opportunities for problem solving. Overall, when students are given guidance to plan and self-monitor while using mental imagery, they often experience independence and a better sense of self-control. Try it! 

Sarah Ward, MS, CCC-SLP, and Kristen Jacobsen, MS, CCC-SLP, are the codirectors of *Cognitive Connections: Executive Function Practice, LLP*, in Concord, Massachusetts. Ms. Ward has over fifteen years of experience in diagnostic evaluations, treatment and case management of children, adolescents and adults with a wide range of developmental and acquired brain-based learning difficulties and behavioral problems. Her particular interest is in the assessment and treatment of executive function deficits. Ms. Jacobsen, an ASHA certified speech-language pathologist, has worked in public education, private schools and hospital settings and has provided teacher training seminars and school consultations nationally. She has strong interests in cognition, language and mindfulness.