

Executive Function Concepts

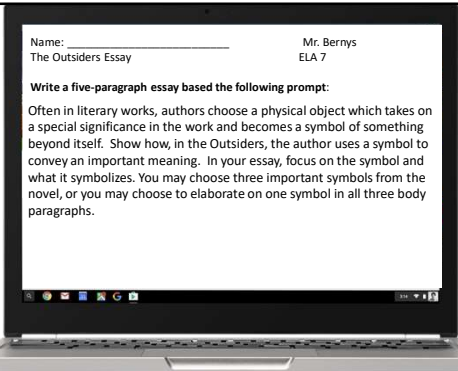


Practical Strategies to Develop Independent Executive Function Skills

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Cognitive Connections, LLP | www.efpractice.com



Name: _____ Mr. Bernys
The Outsiders Essay ELA 7

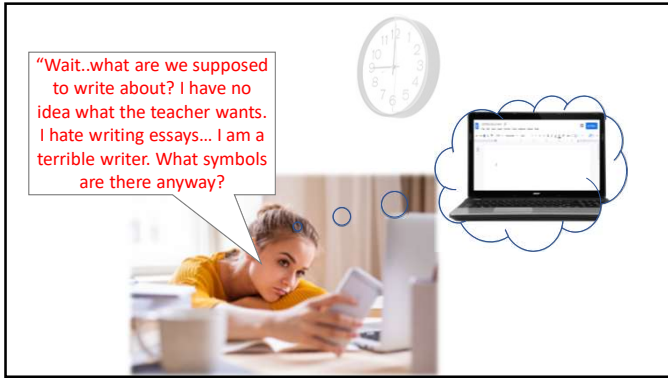
Write a five-paragraph essay based the following prompt:

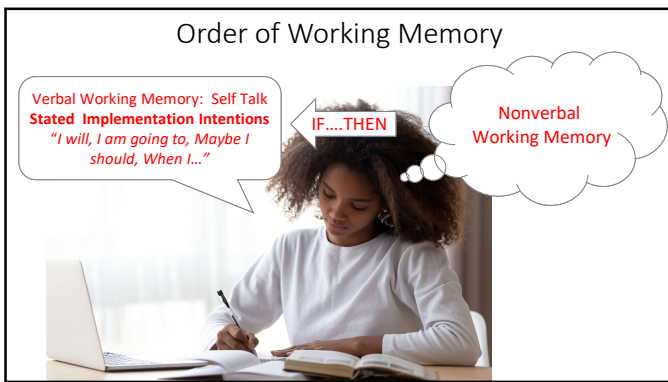
Often in literary works, authors choose a physical object which takes on a special significance in the work and becomes a symbol of something beyond itself. Show how, in the Outsiders, the author uses a symbol to convey an important meaning. In your essay, focus on the symbol and what it symbolizes.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

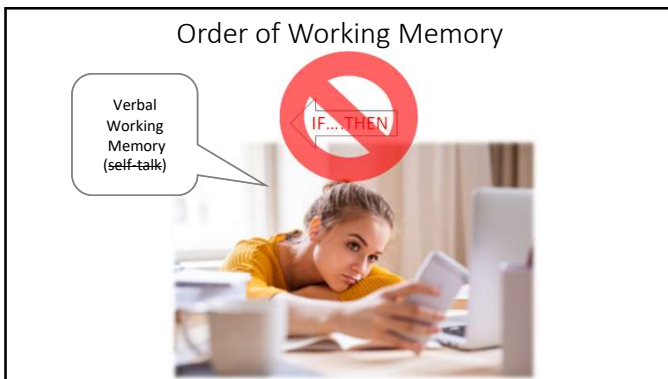


"I will get started on this 5 paragraph essay on The Outsiders now because I have music lessons and won't have enough time later tonight to do the whole thing. I can probably get through the intro and thesis. Let's see...sunsets are important..If I can find 3 quotes before I go, then it will be easier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

If....Then







Situational Awareness/Intelligence: STOP and Read the Room

Space

Time

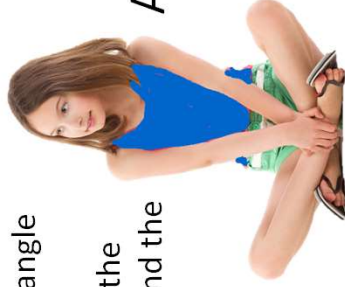
Objects

People

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**?



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?

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

Read the Person: **ROLE**

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

Any action that allows students to **STOP** and direct themselves



Over Time

Mark it's Tuesday!

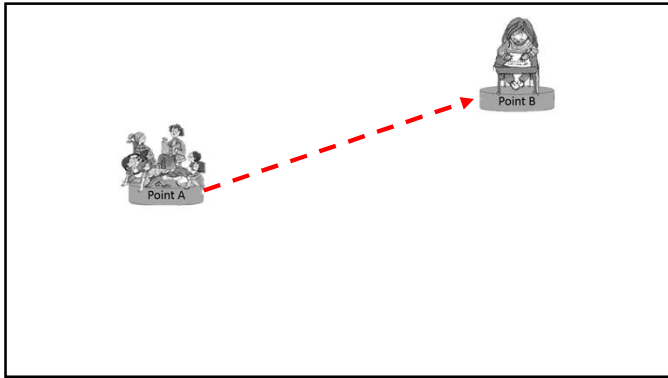
If _____
Then _____

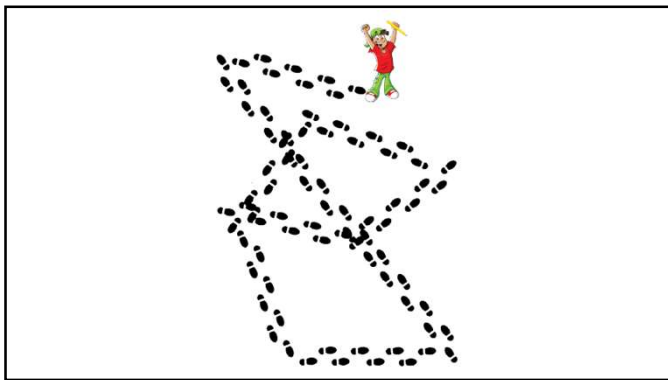
Space	Time	Organization/ Objects	People
Read the Room -What's going on? -Expected? -Unexpected? -Wide Angle →Zoom In	Get on the Timeline •Pace •Time of day •What is happening at this Moment in Time •What is coming up? >Predictable sequence	Read the Organization of the Space Objects Parts Location Purpose	Read the Person(ROLE) Face Body Appearance Mood Pace Saying

Situational Intelligence Guides Planning

Room
Mudroom
Kitchen



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





Bedtime Routine

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



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'

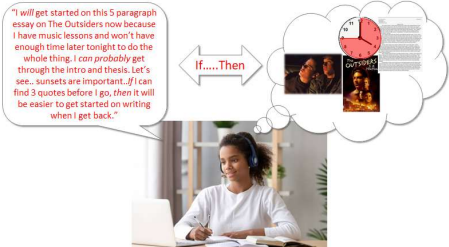
Situational Intelligence

- 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 + 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 of a Situation
- Without Risk You can Run Plan A and Plan B and Pre-Experience How Those Feel

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

M Future Scene Thinking: **M**ake an Image: **STOP** What will **it** look like?

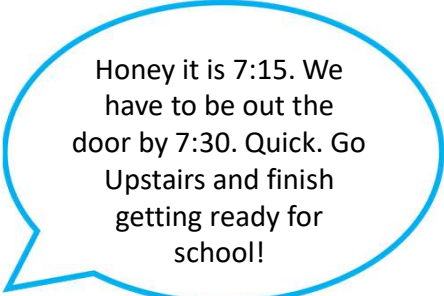
I Episodic Future Thinking: What do **I** Look like? Self Projection into the Future

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

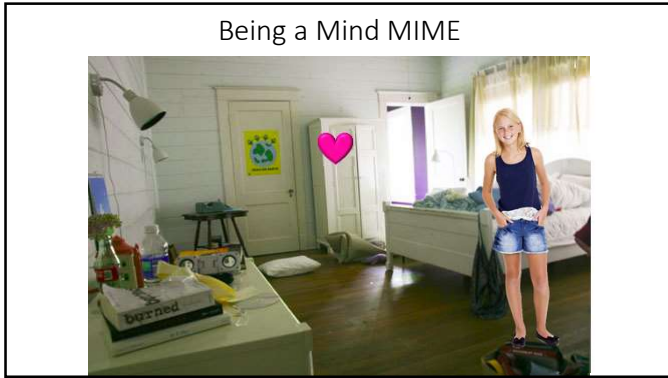
E The Future **E**motion: How will I **feel**? Emotional Physiological State

i Ifthen

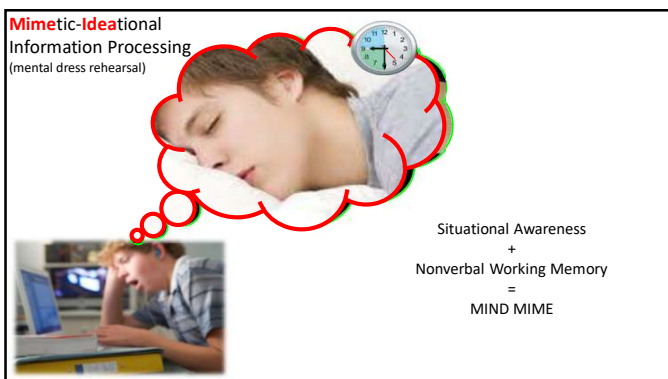
T Self **T**alk *It is 'experiencing the self in time' and talking yourself through that experience so you are efficient and successful*



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





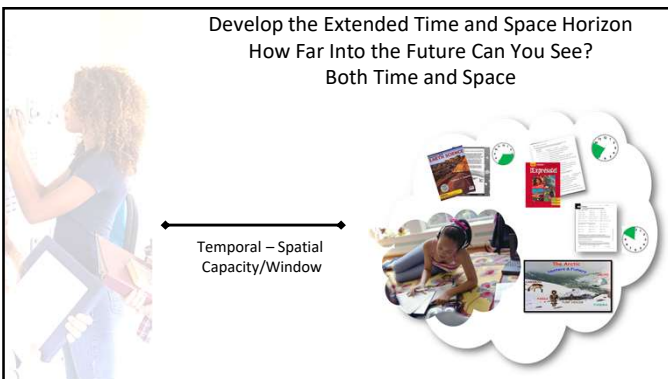


MIMETIC processing is Episodic Forethought
The ability to *imagine oneself at a particular time in a future situation*

Important for

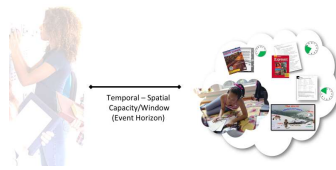
- “Intention” to set goals and implementation intentions;
- “Simulation” of a future event;
- “Planning” to identify, organize, and prioritize the steps of a future task
- “Predicting” to forecast affective states (e.g., how one will feel when one attains a goal; how one will feel if one encounters an obstacle along the way, and how one can “feel better” by imagining a Plan B to avoid that obstacle);
- “Prospective Memory” to remember a future intention.





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: Several Hours
 3rd -6th Grade: 8-12 Hours
 6th-12th Grade Years : 2-3 Days
 17-23 Years Old : 2-3 Weeks
 23-35 Years Old: 3-5 Weeks






Temporal - Spatial
Capacity/Window
(Event Horizon)

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

Executive Function Skills Across the Day

- Being Ready for Class
- Morning/Departing Routines
- Transitions within and between classes
- Managing Papers and Materials
- Completing work within time frames
- Homework
 - Accurately Record
 - Know what to do
 - Have the Required Materials
 - Turn it In
- Study for Exams
- Complete multi-day/long term projects



THE LAST NORMAL SCHOOL YEAR...
for students currently in...

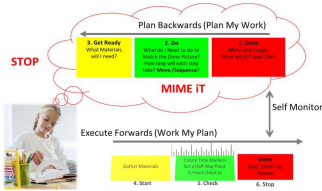
12th Grade	Grade 9
11th Grade	Grade 8
10th Grade	Grade 7
9th Grade	Grade 6
8th Grade	Grade 5
7th Grade	Grade 4
6th Grade	Grade 3
5th Grade	Grade 2
4th Grade	Grade 1
3rd Grade	Kindergarten
2nd Grade	Never
1st Grade	Never
Kindergarten	Never

SY 2021-2022 SY 2018-2019

**Key Underlying Executive Function Skills
to Develop in School Age Children**

- Nonverbal Working Memory / Mental Imagery
- Situational Intelligence
- Impulse Control: Stop - Wait – Think (to develop the MIME skill)
- Episodic Memory: Re – Experiencing an Event
- Internal Sense of the Passage of Time
- Flexible Thinking
- Attention
- Stamina for learning
- Planning Skills

1. Task Planning: Plan | Sequence | Prioritize | Organize



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

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



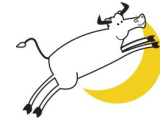
Why is it Problematic to Start with Get Ready?

- 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 – Gather Materials

Executive Functioning Skills Check-List



- **3-4 Year Olds**

- ★ Complete simple errands; “Get your shoes from the bedroom”.
- ★ Clean and put items away with minimal assistance.
- ★ Perform simple chores and self-care tasks with reminders and physical assistance if needed; clear dishes from table, brush teeth, get dressed.
- ★ Inhibit unsafe or inappropriate behaviors; don’t touch a hot stove; don’t run into the street; don’t grab a toy from another child; don’t hit, bite, push, etc.

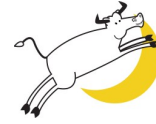
- **5-7 Year Olds**

- ★ Complete 2-3 step errands; “Put the napkin in the trash and then bring me a cup.”
- ★ Tidy bedroom or playroom independently.
- ★ Initiate and perform simple chores and self-help tasks, but may need reminders; making their bed, make a bowl of cereal.
- ★ Bring papers to and from school.
- ★ Complete homework assignments (20-minutes maximum).
- ★ Decide how to spend their money.
- ★ 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.

- **Ages 8-11**

- ★ Run errands, including those involving a time delay, such as remembering to bring something home from school without reminders.
- ★ Perform chores that take 10-30 minutes; setting the table, dusting.
- ★ Bring books, papers, assignments to and from school.
- ★ Keep track of belongings when away from home.
- ★ Complete the majority of homework assignments without assistance (1 hour maximum).

Executive Functioning Skills Check-List



- Ages 8-11 (continued)
 - ★ Plan simple school projects such as book reports; select book, read book, write report.
 - ★ Remember changes in daily schedule including different after school activities.
 - ★ Save money for desired objects and plan how to earn money.
 - ★ Inhibit/self-regulate behaviors; maintain composure when teacher is out of the classroom; inhibit temper tantrums and bad manners.
- Ages 12-14
 - ★ 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.
 - ★ Able to safely baby-sit younger siblings
 - ★ Appropriately use a system for organizing school work
 - ★ Independently follow complex school schedule involving multiple transitions with teachers and classrooms.
 - ★ Plan and carry out long-term projects, including tasks to be accomplished and a reasonable timeline to follow;
 - ★ Plan time effectively, including after school activities, homework, family responsibilities
 - ★ Inhibit rule breaking in the absence of visible authority.
- High School
 - ★ Manage schoolwork effectively on a day-to-day basis, including completing and handing in assignments on time, studying for tests, and creating and following timelines for long-term projects.
 - ★ 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.
 - ★ Avoid reckless or risky behaviors (e.g. use of illegal substances, sexual acting out, shoplifting, or vandalism).

***If your child demonstrates difficulty in 2 or more of the above areas for their age, it is recommended that you contact an executive functioning specialist to further identify executive functioning needs and create strategies to address those needs.**

Signs of Executive Functioning Issues at Different Ages

Signs of Executive Functioning Issues in Preschool

- Gets frustrated easily and often throws things on the floor instead of asking for help.
- Has trouble following directions and often forgets what to do.
- Has frequent tantrums over things that seem fairly minor and manageable.
- Acts out aggressively instead of expressing feelings and frustrations.
- Can't master simple classroom tasks like finding things in a cubby or packing up at the end of the day.
- Frequently raises his hand but doesn't remember the answer when called on.
- Often insists on doing things a certain way and has trouble making adjustments.
- Frequently gives unrelated answers to questions during group time.

Signs of Executive Functioning Issues in Grade School

- Starts one task and gets distracted, then doesn't ever finish the original task.
- Can solve a math problem one way but gets stuck when asked to solve it using another method.
- Focuses on the least important thing you said.
- Often mixes up assignments and doesn't bring home the books and handouts needed to complete the work.
- Has a desk full of loose papers and pencil stubs. But her schoolwork folder and pencil box are empty.
- Panics when rules or routines are challenged, like going out to dinner instead of ordering in because it's Friday and that's pizza night.
- Struggles to find the right information in a word problem to come up with an equation.
- Sticks with a plan even when it's clear that the plan isn't working.

Signs of Executive Functioning Issues in Middle School

- Wants to invite kids over but never gets around to scheduling it.
- Hesitates to make afterschool plans and instead just follows what the other kids are doing.
- Is still arranging materials in science lab while the other kids are halfway through the experiment.
- Has a hard time starting a big assignment and focuses on the less important details first.
- Frequently gets upset about small things like running out of his favorite snack at home.
- Often thinks the teacher is being "unfair" when he's told to do his work at home, even though the other kids finished theirs in class.

Signs of Executive Functioning Issues at Different Ages (*continued*)

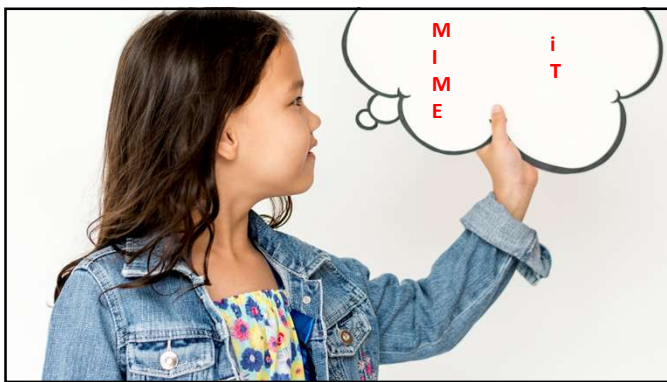
Signs of Executive Functioning Issues in High School

- Has trouble finishing short-answer tests in the time allotted.
- Loses track of time and is often still “in the middle of something.”
- Hasn’t filled out any of the job applications that have been sitting on her desk for a month.
- Tries to convince you to extend her curfew but can’t give any good reasons why.
- Doesn’t know when she’s overstayed her welcome at a friend’s house.
- Has trouble working in groups and complains the other kids aren’t working with her.
- Finds it hard to incorporate feedback into work or an activity.
- Tends to be impulsive and engages in risky behaviors.

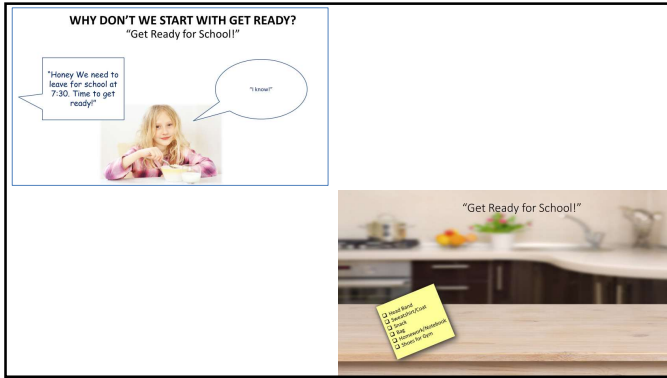
Developing Independent EF Skills

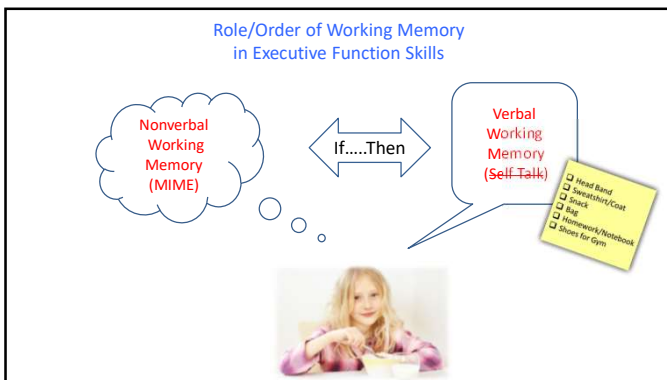
Repeatedly practice:
Self-monitoring, self-**STOP**ping, **seeing** the future, **saying** the future, **feeling** the future, and **playing** with the future so as to effectively “plan and go” toward that future. (Barkley 2012)

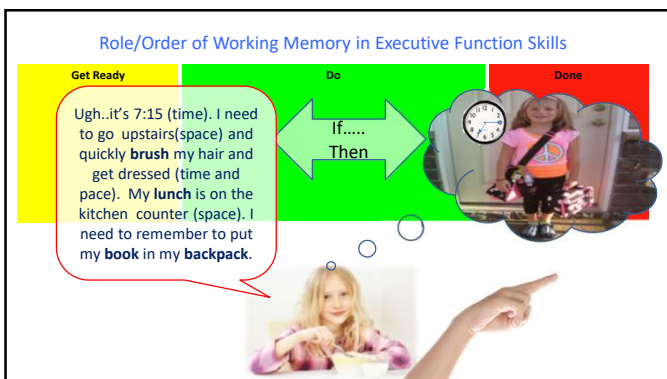
Barkley, Russell A. *Executive Functions: What They Are, How They Work, and Why They Evolved*. New York: Guilford, 2012.



Start with the Done
Developing Independent Executive Function Skills







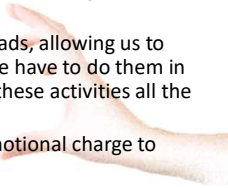
Describe your Home

Describe your plan to be ready to get out the door after you eat breakfast

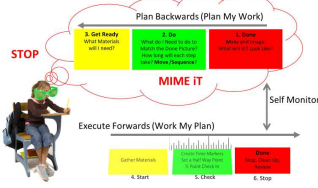


Representational Co-thought Gesture
We Gesture to Pre- Experience Mental Spatial Time Travel

- 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



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)

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

Take a Photo of What "Ready" Looks Like



"Get Ready for School!
Show and Tell Me Your Plan!"



Creating Future Mind MIME skill
vs Rote Reading of the Required Objects



Use Photographs to Develop NonVerbal Working Memory for Goal Directed Future Thinking

Start with the Done to:

- Teach "Thinking in Pictures" to **Increase Working Memory**
- Develop Whole to Part to Details Thinking **Teach Flexible Thinking**
- **Develops Gesture** for Mental Spatial Time Travel
- **Develops Stated Intentions:** I will, I am going to, Maybe, I could
- Sensitivity to delay: **decreases impulsiveness**

"Get Ready for School!
Show & Tell Me Your Plan!"

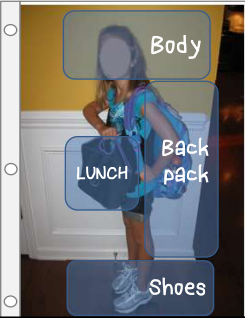
Make an Image - What will I look Like?
"Tell me your Plan to Match the Picture!"

Block and Box to Increase Processing Speed
Laminate or Put in a Plastic Sleeve Protector
to Keep it Dynamic!

Same but Different!
Develops Cognitive Flexibility

Teach "Same but Different" to Develop Cognitive Flexibility & Generalize the Routine

"We have to go!
Are you ready for _____?"



Same but Different

- Cold Day
- Recess
- Bedtime
- Basketball



Two photographs of a child in a winter outfit (grey hoodie, green pants, black hat) standing in front of a whiteboard. The whiteboard is titled "Beach" and has categories: "Hair/Body", "Clothing/Outerwear", "Party clothing", and "Shoes". The child is holding a green shovel.



Two photographs of a child in a winter outfit (grey hoodie, green pants, black hat) standing in front of a whiteboard. The whiteboard is titled "Beach" and has categories: "Hair/Body", "Clothing/Outerwear", "Party clothing", and "Shoes". The child is holding a green shovel.

Ready for Dance... Match the Picture

A Special thank you to Jessica Padula, M.S., CCC/SLP
Speech and Language Specialists Shrewsbury

Creating Visual Picture Routines: MIME

- Ask the student what **space** they go to
- **Walk** with them to that space
- **Stop** at the doorway/boundary of that space
- Have the student use **self talk** to describe the actions they will do and the materials they will use
- The student enters the space and carries out the **action**: Take a Picture
- Then have the student state what space they will go to next
- Repeat the process until the Visual Schedule is complete

Try the Pic Stitch App for Photo Collages

MANAGING MATERIALS:

START WITH THE END IN MIND WHAT WILL IT LOOK LIKE?

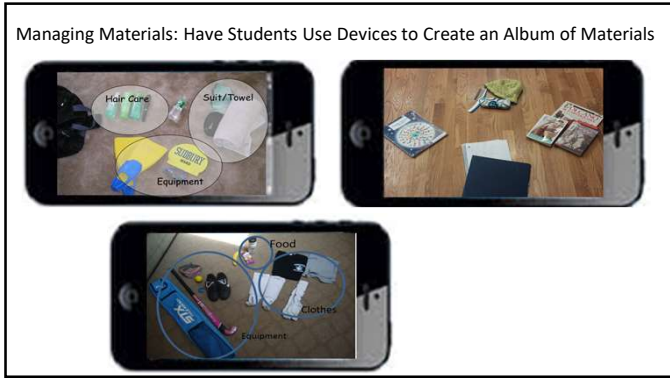
- Ask students to take the essential items of their back pack out and lay them on the floor
- Then have the student group like items together
- Have families take a photo of the items and print/email you the picture
- Laminate and create 'backpack' tags for students so they can 'match the picture' when it is time to go home!

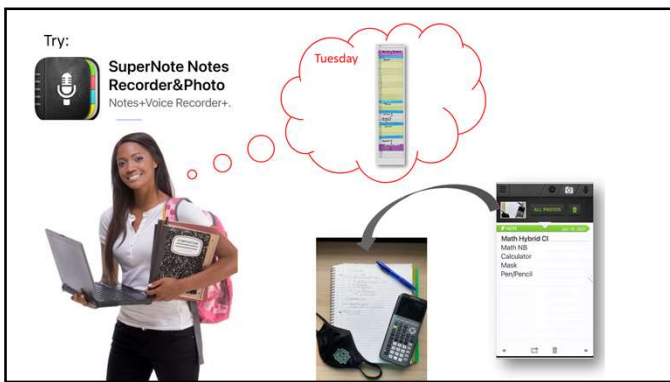
Create Backpack Tags for Students







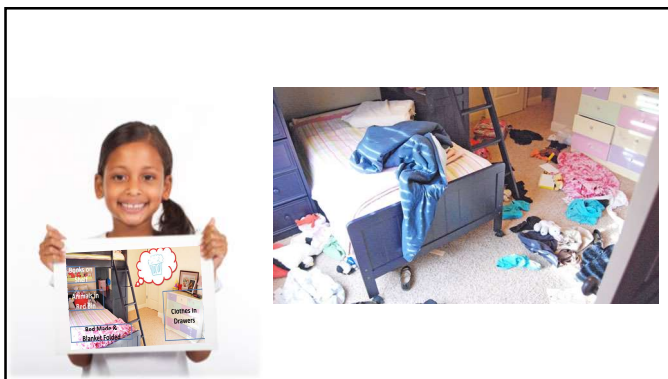












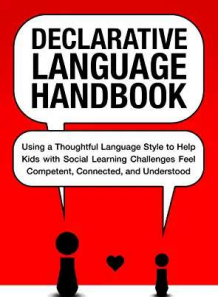


Give the Student Future Glasses!



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

A photograph of a child with a braid looking at a television. Next to it is a pair of blue-rimmed glasses with images of a child and a landscape in the lenses.



Check out www.declarativelanguage.com

Linda K. Murphy MS, CCC-SLP

The cover of the 'Declarative Language Handbook' features a red background with a white speech bubble containing the title. Below the title, it says 'Using a Thoughtful Language Style to Help Kids with Social Learning Challenges Feel Competent, Connected, and Understood'. At the bottom, there are silhouettes of two people and a heart.

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.



Use your Language to Coach the Student to Independently MIME
Job Talk!

Turn the Verb/Action word into a Noun label (add -er)



By Turning the action into a "job" and give student a "job title":

- Develops Nonverbal Working Memory (What will I look like?)
- Creates Immediate Structure for the Child
- Accesses Procedural Memory (How am I moving?)
- Limits Emotional Reactions
- Provides a sense of time boundaries with a visualized 'Done' for open ended tasks (Read versus "summarizer")



Develop the skill of 'Workability'
Initially make it stimulating, creative and fun so the brain associates work with something positive


Teaching your child to do monotonous work at an early age is the foundation for future "workability"!

Be creative!

Examples:

- Folding towels/ laundry, Sorting Laundry
(Make baskets or towel towers or hot towels!)
- Making the bed (Make the bed in the bed and slip out!)
- Hanging up Clothes (Beat the clock!)
- Unpacking Groceries (Use Job Talk! Shelver, Stocker, Bag Squisher)
- Setting the Table (Napkin design and art!)
- Make Lunch/Unpack the Lunch Box
- Sweeping

Victoria Prooday, OT <https://yourot.com/>



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.

Need Help Around the House?

Create A Help-Wanted Bulletin Board



A corkboard with several help-wanted cards pinned to it. The cards are:

- Sweeper Back Deck \$2.00
- Stacker Recycles Newspapers \$1.00
- Organizer Kitchen Junk drawer \$2.00
- Organizer Pantry Shelves \$2.00
- Event Manager: Set table, Set out Food, decorate \$3.00
- Packer: Ski Trip \$1.50
- Wrapper Birthday Presents \$1.00
- Chef Prepare Snacks \$2.50

Need Help Around the House?

Create A Help-Wanted Bulletin Board



A corkboard with several help-wanted cards pinned to it. The cards are:

- Sweeper
- Stacker Recycler
- Towel Folder
- Organizer Box Squisher
- Sock Sorter
- Wrapper Birthday Presents
- Chef Prepare Snacks

Make Social Learning Stick
by Elizabeth Sautter



The book cover features a group of diverse children standing together. The title is 'Make Social Learning Stick!' and the subtitle is 'How to Guide and Nurture Social Competence Through Everyday Routines and Activities'. The author's name is Elizabeth Sautter, MEd, CCC-SLP.

Chore Resources for You!

- [17 Chore Games \(that'll Make Your Kids WANT to do Chores\) \(moneyprodigy.com\)](https://www.moneyprodigy.com)
- [Turning Chores into Games - Black Hills Parent](#)
- [Chores App for Kids to Earn Money | BusyKid](#)
- [A List of Age-Appropriate Chores for Kids 2 to 18 \(thespruce.com\)](https://thespruce.com)
- [Printable age-by-age chore chart \(todaysparent.com\)](https://todaysparent.com)

For Parents:
Positive Parenting
to Develop Social Emotional
Regulation Skills



https://genmindful.com/pages/make-it-stick-parenting-program?rfsn=5382774_509f8b

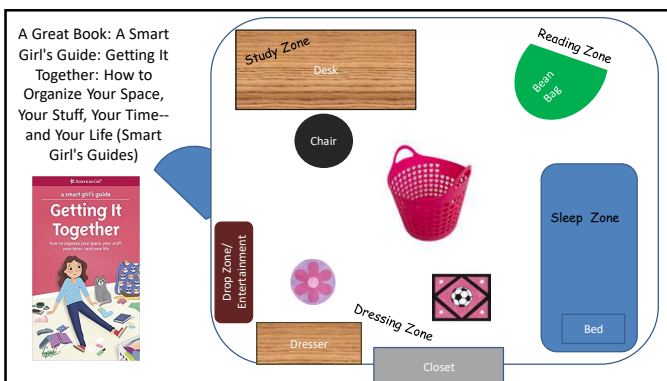
Improving Transitions: Being a Beat Ahead



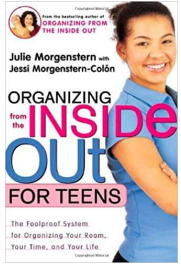
Don't Start the Planning
in the Space Where the Child Will be Executing



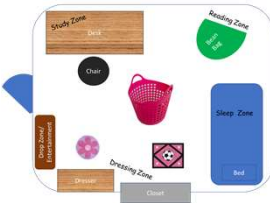




A Great Book for teaching students HOW to organize their space!



Organizing



- S Sort
- P Purge (Prioritize/Pick Out /Put away)
- A Assign a Home
- C Containerize
- E Evaluate



"It is a about 10 past 1. We are going to leave at a quarter after to go to your friend's house..."

The Wall Clock

- Have Analog Clocks in the Room (Make sure they are not Roman Numerals!)
- Try to not only have digital clocks (alarm clock, cable box, microwave, etc.)





See Time
Plan Time

The **WORKING** Clock

"It is 10:05. You have until 10:30 to work on the Science Lab. You need to write the hypothesis, the list of materials and methodology."

A clock face with handwritten notes: Hypothesis, Materials, Ready Method, For Soccer. A green Expo marker is shown writing on the clock face.

A desk setup with a laptop, a clock, and papers. The laptop screen shows a "Science Lab Report Template" with sections for Hypothesis, Materials, Methodology, and Results. The clock shows 10:05. A green Expo marker is shown writing on the clock face.


Time	10	11	12	1	2	3	4	5
10:00	10	11	12	1	2	3	4	5
10:05	10:05	11:05	12:05	1:05	2:05	3:05	4:05	5:05
10:10	10:10	11:10	12:10	1:10	2:10	3:10	4:10	5:10
10:15	10:15	11:15	12:15	1:15	2:15	3:15	4:15	5:15
10:20	10:20	11:20	12:20	1:20	2:20	3:20	4:20	5:20
10:25	10:25	11:25	12:25	1:25	2:25	3:25	4:25	5:25
10:30	10:30	11:30	12:30	1:30	2:30	3:30	4:30	5:30

See Time
Plan Time

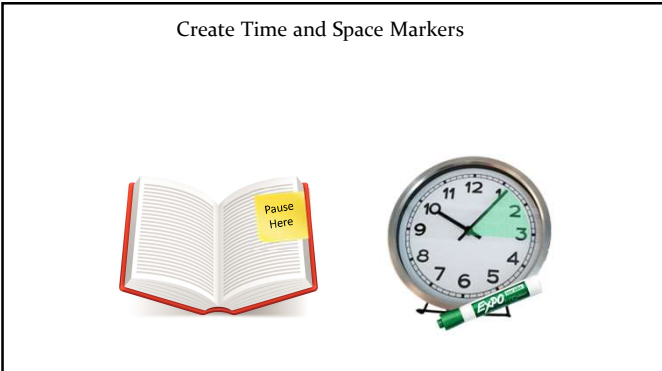


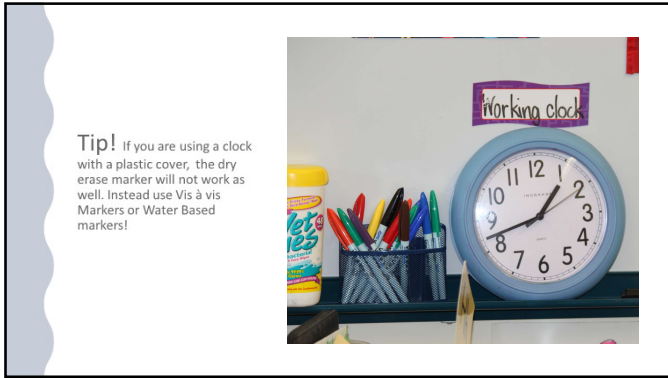
..uhm...I'll just finish the book...

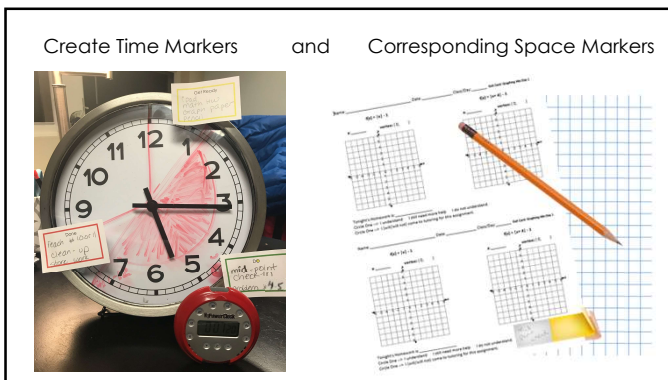
"Tell me your 10-minute plan."

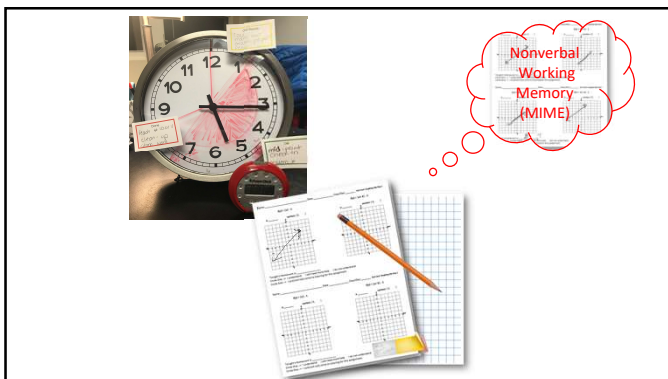


Create Time and Space Markers

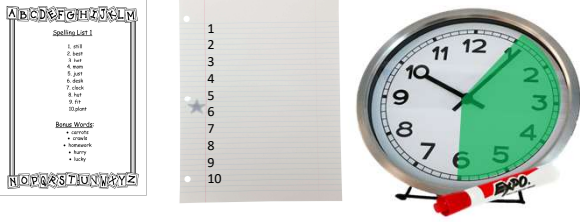








The **WORKING** Clock



The WORKING Clock materials include a spelling list (A-Z), a list of numbers 1-10, and a clock with a red eraser and a red marker.

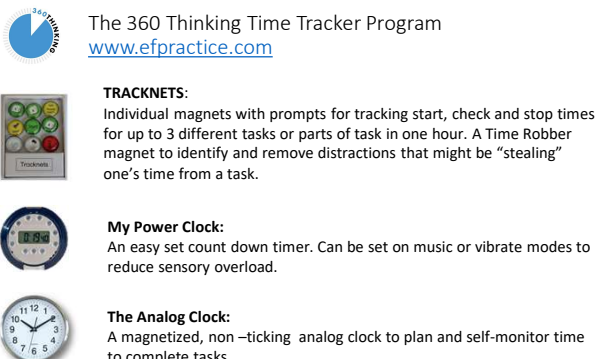
Learning to Think in **Time** Markers



Learning to Think in Time Markers materials include a clock with photos of children and a green sticky note.

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

**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.


The Mid Point Check In



- How am I doing at this Mid Point time Marker?
 - Am I still focused on the goal?
 - Is the work easier or harder than I thought?
 - Do I need any help? From who or what?
- What is distracting me?
 - Identify
 - Remove
 - Re-Plan
- What are my Time Savers?
- Do I need to change my pace?

What are my Time Robbers?		
Physical Needs 	Anxious	<input type="radio"/>
	Sleepy	<input type="radio"/>
	Hungry/Thirsty	<input type="radio"/>
	Antsy	<input type="radio"/>
Organization 	I can't find my assignments, papers, links, etc.	<input type="radio"/>
	My papers/binders are messy.	<input type="radio"/>
	I'm looking for materials: pens, pencils, ruler, etc.	<input type="radio"/>
	I do not have a plan for how to do this.	<input type="radio"/>
Scope 	I don't know how to start.	<input type="radio"/>
	I can't decide what to do. I'm not clear what the goal is.	<input type="radio"/>
	I am trying to do too much.	<input type="radio"/>
	I'm trying to make it perfect.	<input type="radio"/>
Focus 	I'm distracted by technology or other objects.	<input type="radio"/>
	I'm socializing.	<input type="radio"/>
	I am going from task to task.	<input type="radio"/>
	I forgot what the assignment was asking me to do. I have gone in a different direction.	<input type="radio"/>
Other		<input type="radio"/>
		<input type="radio"/>
		<input type="radio"/>

Managing Distractions: Creating Time Savers



Theraband Bouncy Bands Hokki Wobble Stool


Homework Zone

An Electric Hole Punch is a MUST for every homework station!

Unstuck!
Know ? Sorta Know ?, No Clue?
Phone a Friend!
Email a Teacher a Specific Question!
(Check my Email for the Answer!)
Circle/Highlight/Flag the Stuck and Keep Going!


Resource Binders

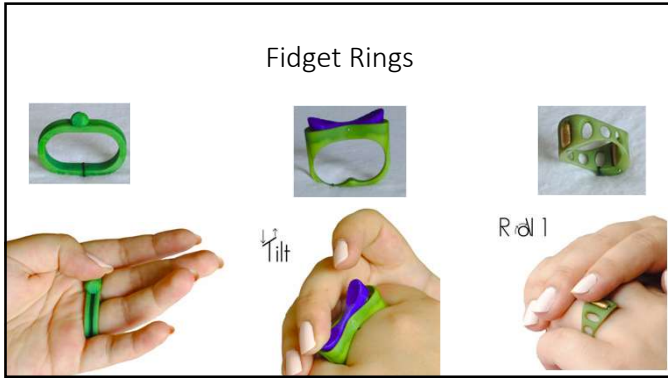
Fidget

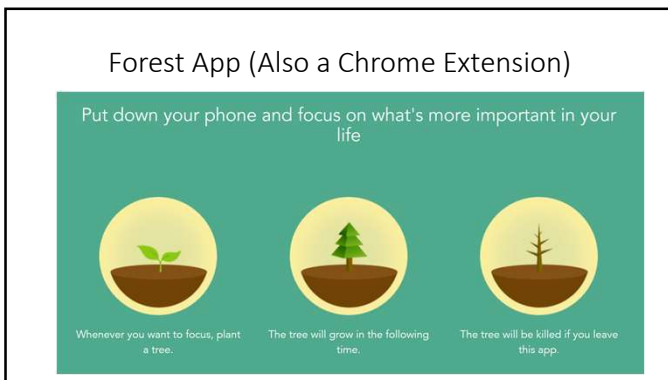


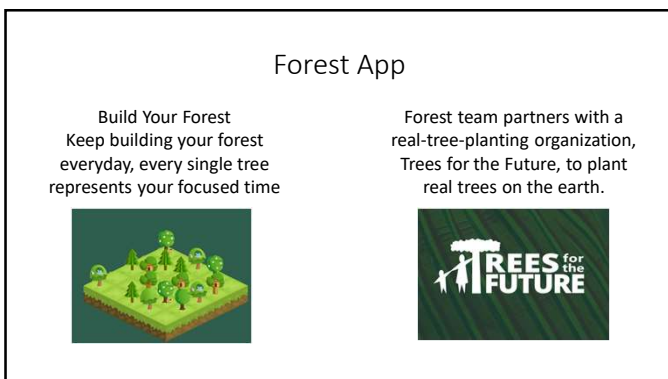
Reduce the Materials Hunt

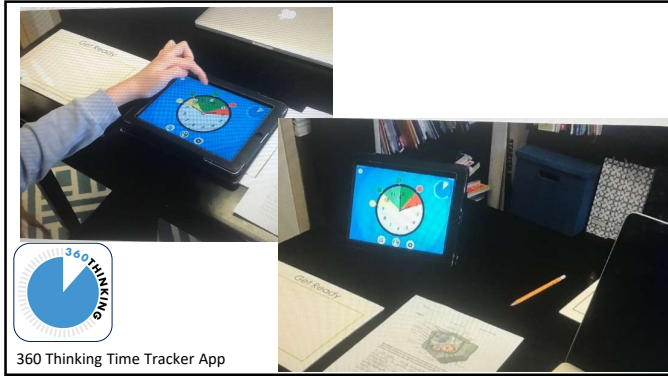
Try Seat sacks for Younger Kids
<http://www.seatsack.com/practicalclassroomstorageseatsack.aspx>

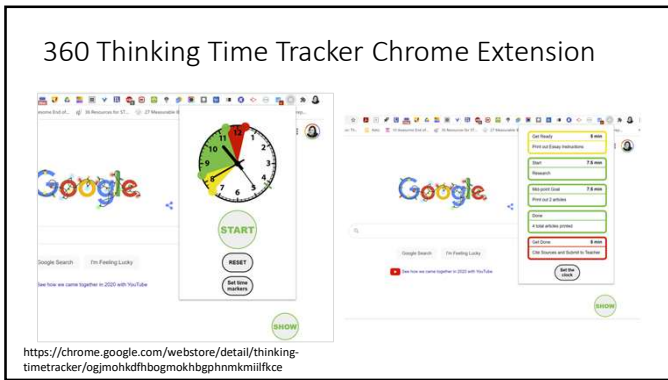


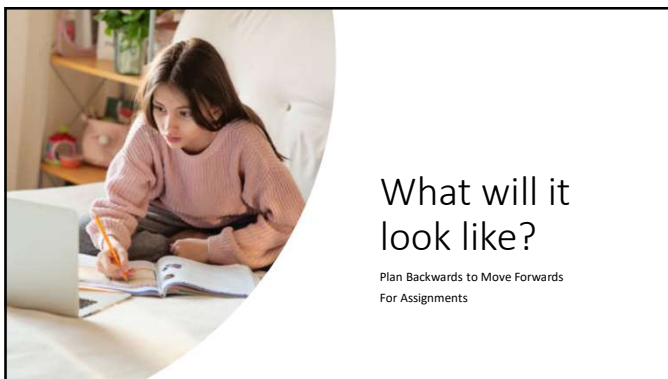




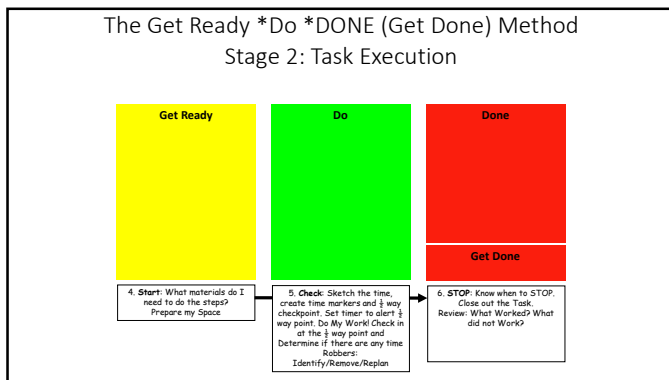


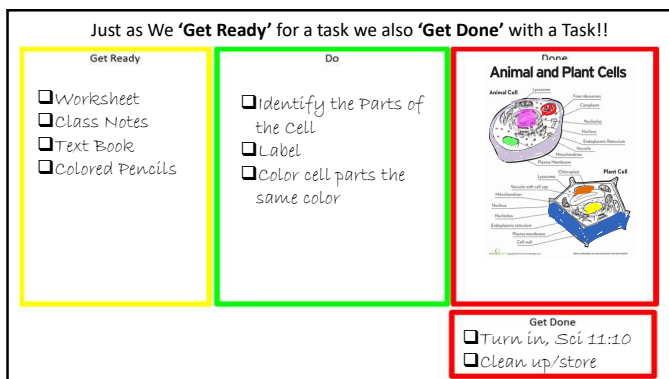












Get Done

Clean Up Turn In/Submit Work Throw out Trash

Check Off as Complete in Planner Review/Share what Learned

Charge Computer/Headphones/iPad

Name: _____

Area of a Rectangle

To find the area of a rectangle, use the formula: length \times width = area. The formula is often written as $l \times w = A$.

The rectangle on the left has a length of 10 cm and a width of 8 cm.
 $l = 10$ cm
 $w = 8$ cm
 $A = l \times w$
 $A = 10 \times 8$
 $A = 80$ cm²

Note that the area's unit is written as cm². This is read as "square centimeters" or "centimeters squared".

Find the area of each rectangle.

a. b. c.

d. e. f.

Challenge: Find the area of the polygon. All corners are 90°. Use the back if you need work space.

Teach Students to Generalize the Use of Strategies And Reference Tools

Get Ready

Area & Perimeter

Perimeter (P): The distance around the outside of a shape.

Area (A): The number of square units inside a shape.

D

- Use formula to multiply:
 $l \times w = \text{Area}$
- Label answer

Name: _____

Area of a Rectangle

To find the area of a rectangle, use the formula: length \times width = area. The formula is often written as $l \times w = A$.

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a. b. c.

d. e. f.

Challenge: Find the area of the polygon. All corners are 90°. Use the back if you need work space.

Get Done Store in Math Binder

Get Ready

Gather Materials

Estimate Time

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

Review the Plan

Emotions in the End

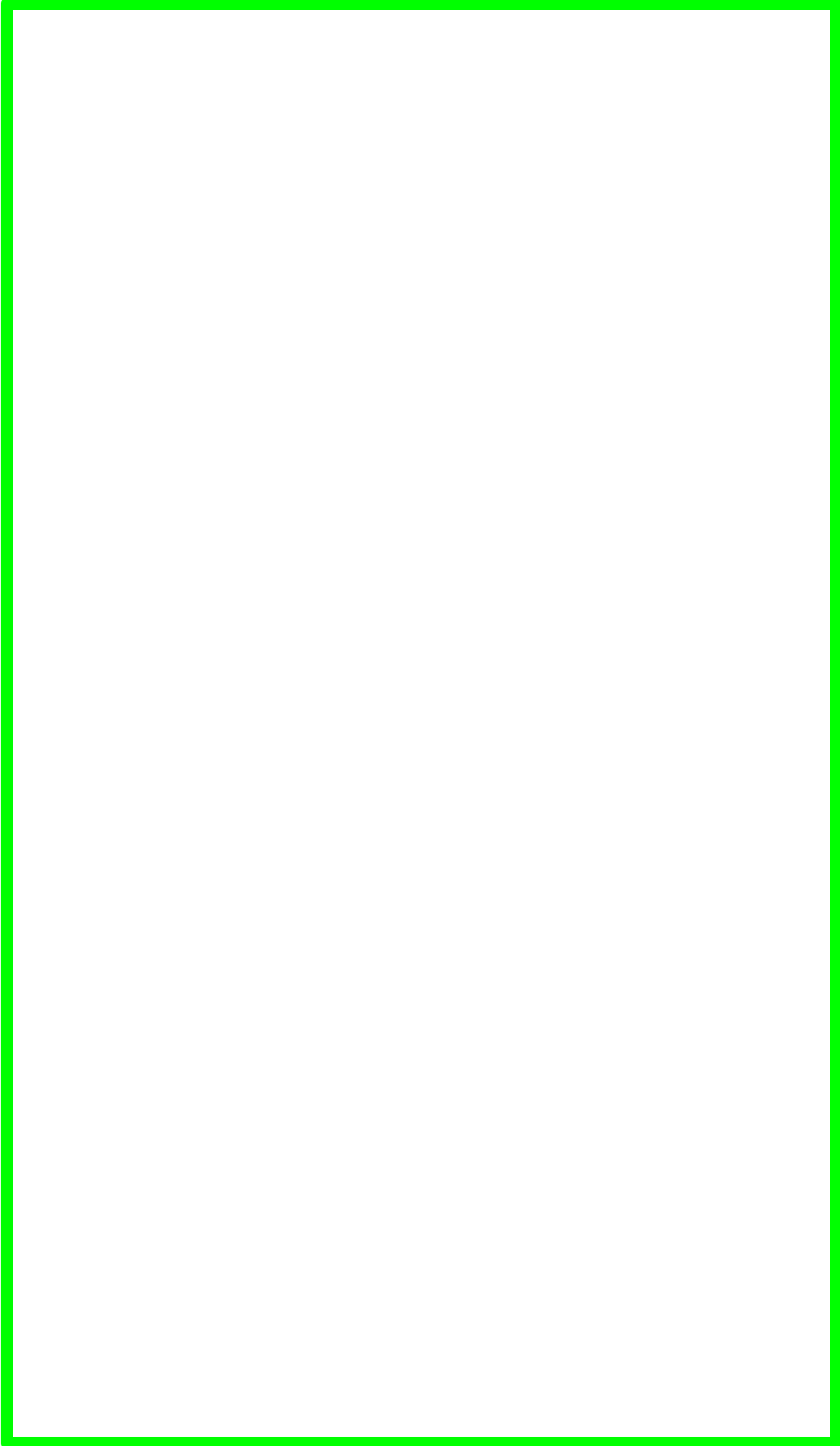
Add Resources, Strategies and Materials

Determine Distractions and Time Savers

You can do this!



D



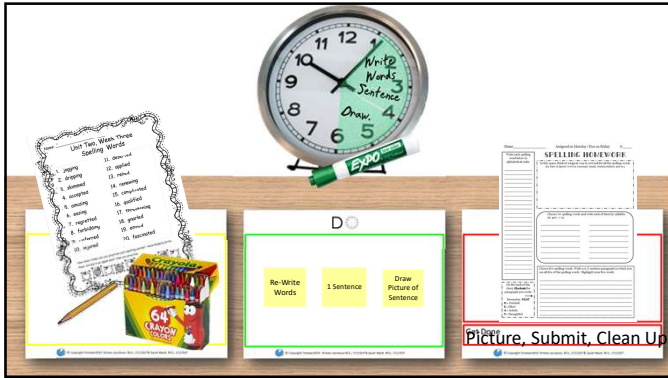
Done

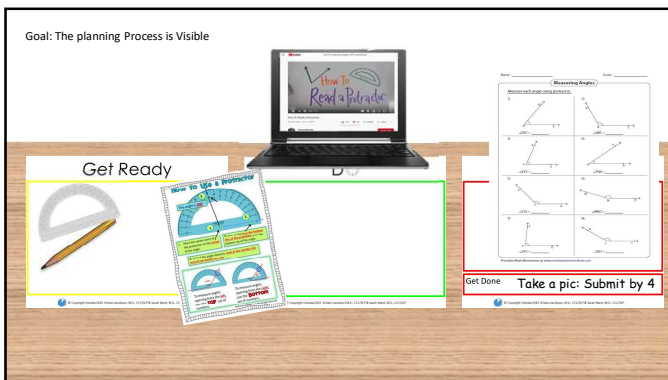
Get Done: Turn in? Store in Binder/Folder? Backpack? Put Materials Away? Clean up? Other?



<p>3. GET READY: Materials Resources Create Time Plan Anticipate Obstacles Mindset</p>	<p>Get Ready</p>
<p>2. DO: What are the steps? How long will each step take?</p>	<p>Do</p>
<p>1. DONE: What will it Look Like When I am Done? Future Sketch/or Create a Template</p>	<p>Done</p>
<p>Turn in Share Store Backup Clean up Other</p> <p>Get Done</p>	





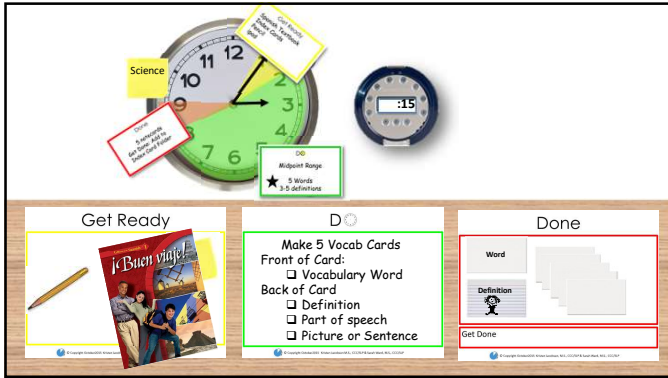


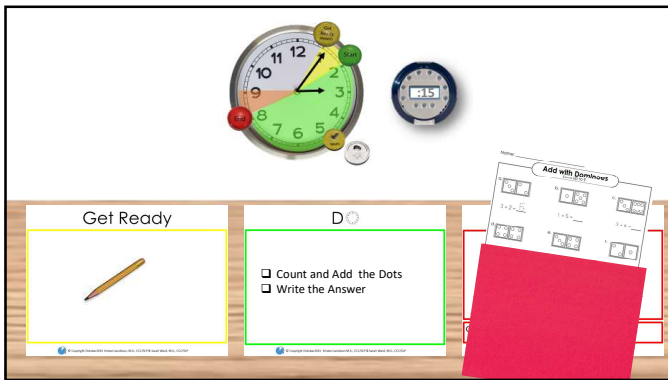
Assignment: Make flash cards for new vocabulary words in the article.

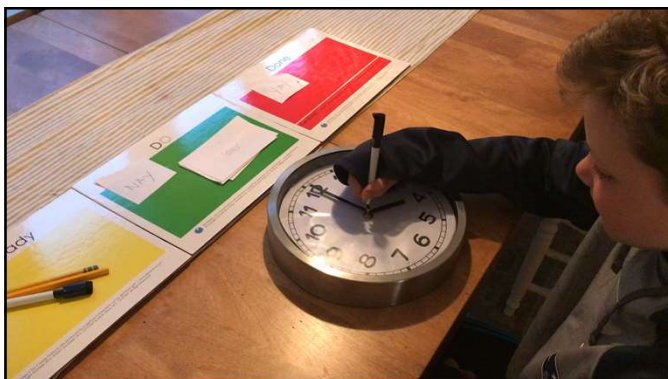
"We tried the GDD with her schoolwork on Saturday. I laminated construction paper to create simple colored mats. We started with a very basic handwriting sheet and she did so well we continued on.

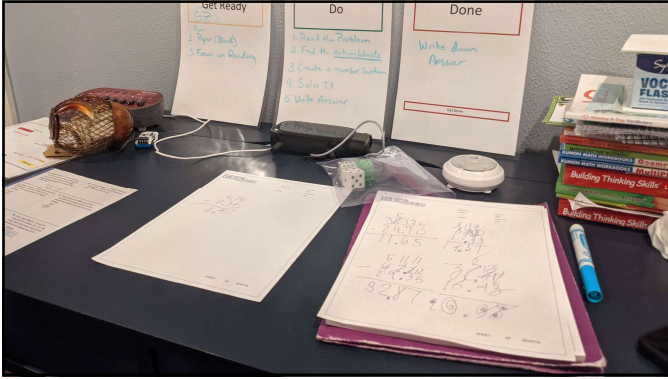
What blew me away was that when we got to this activity, she had no idea what to put in the "DO" section. She really couldn't explain how you would make the vocabulary cards. She wanted to tell me I would write down all the words in the book. I said okay so I write every word you read? She said, no, wait, just the hard words. Just the ones I can't read.

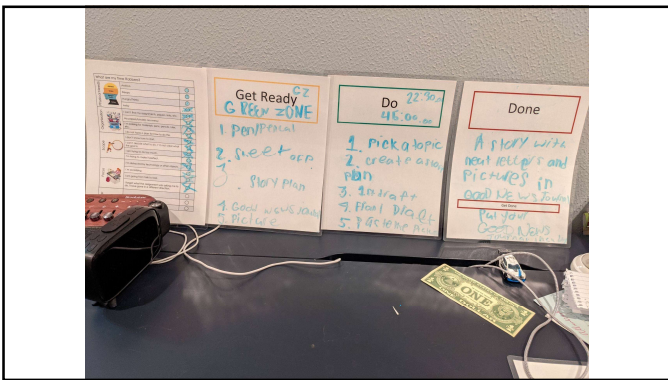
I feel so silly for wasting so many years being her executive function for her."

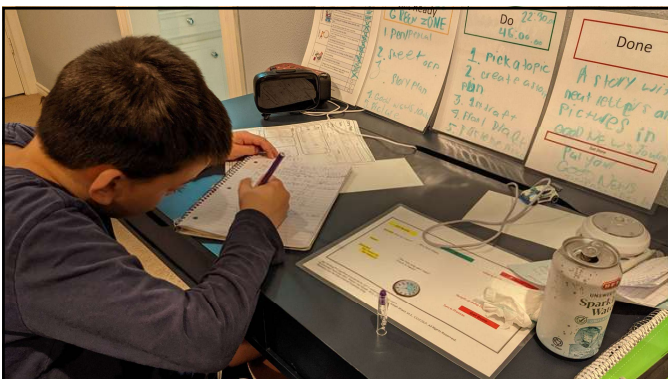


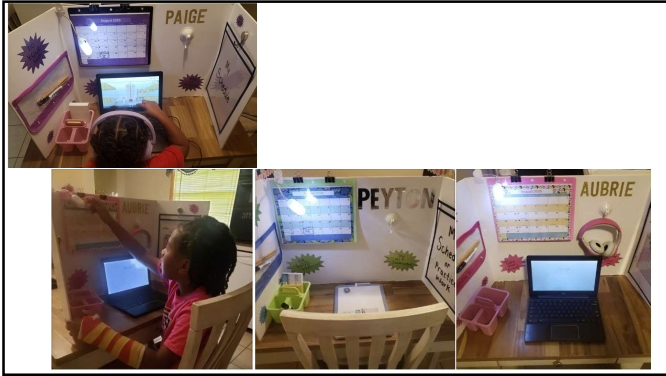


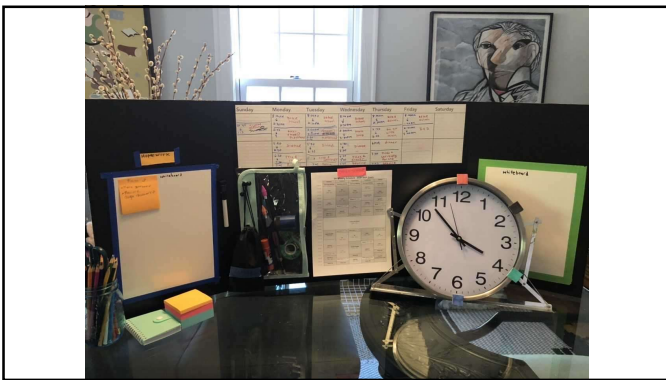


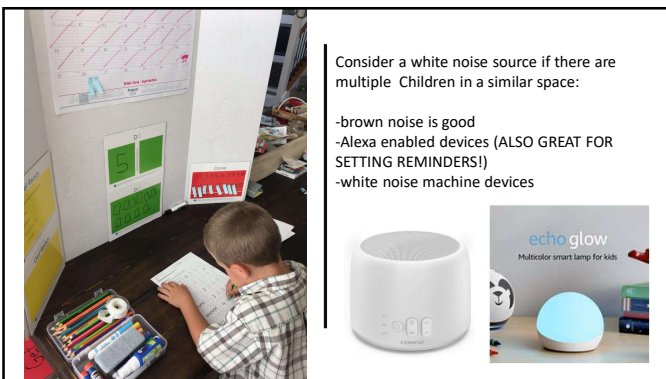






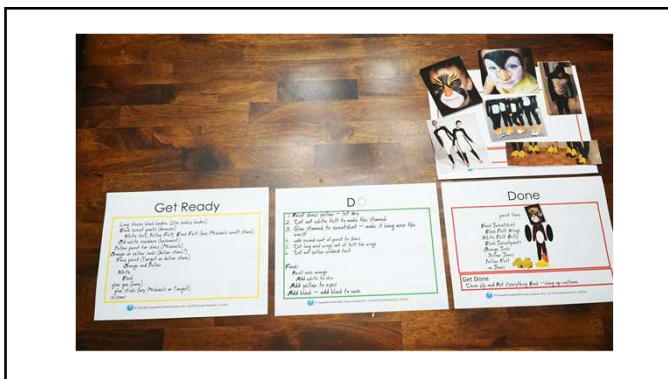













Get Ready	Do	Done
<p>Clean the basement Get my sleeping bag and pillow Stuffed Animal</p> <p>Popcorn</p> <p>Sundaes:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Ice cream <input type="checkbox"/> Sprinkles <input type="checkbox"/> Whip cream <input type="checkbox"/> Cherries <p>Nails:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Nail Polish Remover <input type="checkbox"/> Nail Polish <input type="checkbox"/> Pens <input type="checkbox"/> Paper Towels 	<ul style="list-style-type: none"> <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>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>

Planning Backwards – Complex Assignments

Nonverbal Working Memory (MIME)

↔

Verbal Working Memory (Self Talk)



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

Name of the Book and Type of Story

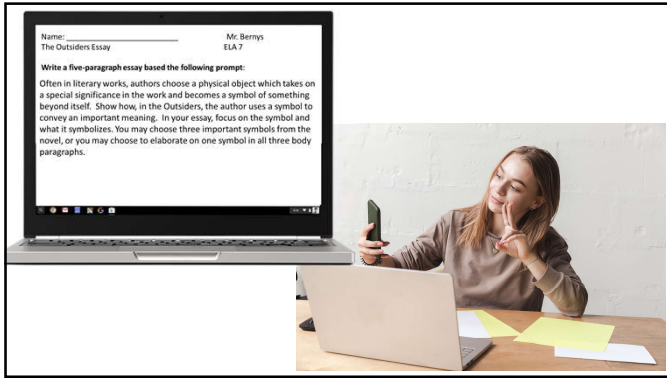
Tell about main character/setting

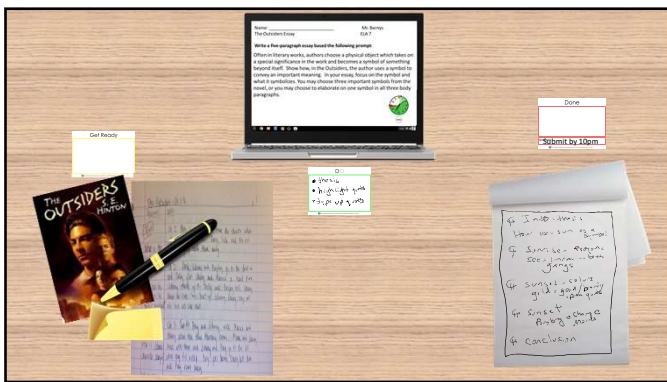
What was the conflict?

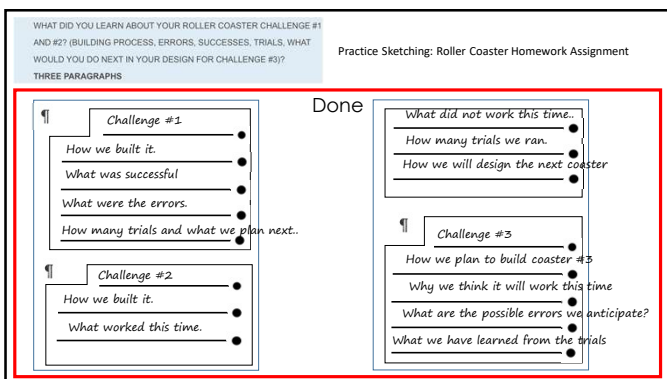
How does the character react to conflict?

Cliff hanger question: will the character?

Get Done Submit in Google Drive by end of the day. Put away book. Charge Laptop







Get Ready

Do


Done



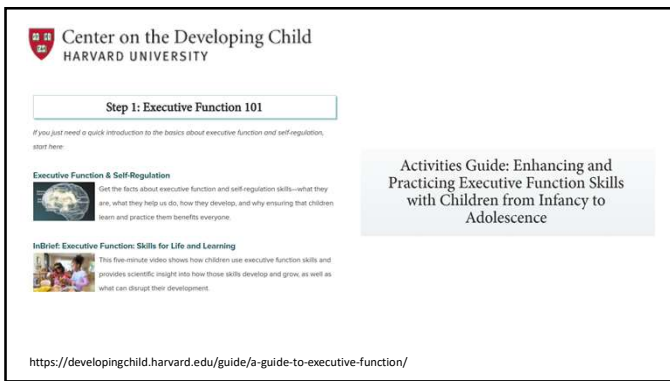
Get Done



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



1. 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 **Get Ready**
 - How will I feel: Pre-experience Emotion
2. I might imagine that Plan in a Different Space than Where I Actually Execute the Plan. I am a beat ahead!
3. I execute my Plan by Sensing the Passage of Time and Comparing my Current Performance against my Imagined Future



Center on the Developing Child
HARVARD UNIVERSITY

Step 1: Executive Function 101

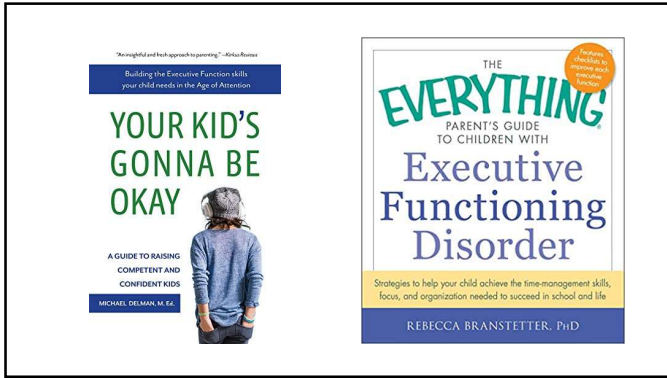
If you just need a quick introduction to the basics about executive function and self-regulation, start here:

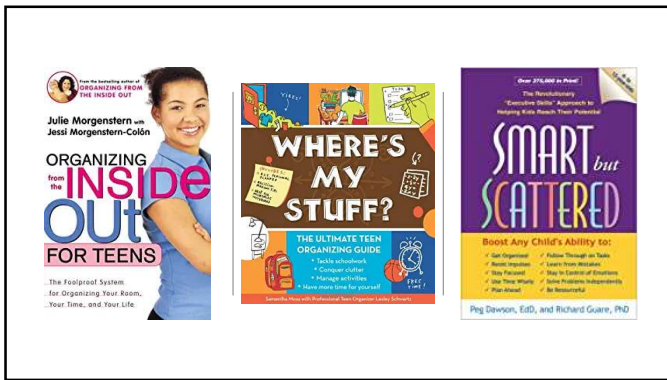
Executive Function & Self-Regulation
Get the facts about executive function and self-regulation skills—what they are, what they help us do, how they develop, and why ensuring that children learn and practice them benefits everyone.

In-Brief: 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/>









Cognitive Connections, LLP
www.efpractice.com
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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!

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 Plan	Know How I am Doing in School	Break Down My Assignments!
<input type="checkbox"/> Look at School Website?	<input type="checkbox"/> Check my Grades/ Assignments	<input type="checkbox"/> Plan for and manage obstacles and distractions
<input type="checkbox"/> Make a Visual Plan for WHEN I See myself doing the work	<input type="checkbox"/> Everything submitted? <input type="checkbox"/> Anything Missing? <hr/>	<input type="checkbox"/> Make and follow my: <input type="checkbox"/> Get Ready Do Done Plan
<input type="checkbox"/> Anything I need to do that is not posted online? <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <input type="checkbox"/> English? <input type="checkbox"/> Science? <input type="checkbox"/> History? <input type="checkbox"/> Math? </div> <div style="width: 45%; border-left: 1px solid black; padding-left: 10px;"> <input type="checkbox"/> Specials? <input style="color: orange;" type="checkbox"/> Projects Coming up? <input style="color: orange;" type="checkbox"/> Quiz/Test Coming up? <input style="color: orange;" type="checkbox"/> _____ </div> </div>	<input type="checkbox"/> Self Advocate: <input type="checkbox"/> Do I need to email any teachers or go to office hours? Check in..am I on the right track?	<input type="checkbox"/> Plan my time! 
<input type="checkbox"/> Organize my Work: <input type="checkbox"/> What is my number one priority? _____	<input type="checkbox"/> Organize Backpack/Papers: Visualize/MIME when and where I will turn work in <hr/> <input type="checkbox"/> Transfer to storage notebook?	<input type="checkbox"/> What distractions do I need to eliminate? <hr/> <input type="checkbox"/> What time savers do I need to implement? <hr/>
<input type="checkbox"/> When I am done – remember to GET DONE <input type="checkbox"/> clean up <input type="checkbox"/> turn in submit pack up <input type="checkbox"/> Charge Devices	<input type="checkbox"/> Organize my homework/learning space <ul style="list-style-type: none"> <input type="checkbox"/> Sort <input type="checkbox"/> Prioritize <input type="checkbox"/> Assign a home <input type="checkbox"/> Containerize <input type="checkbox"/> Evaluate 	<input type="checkbox"/> What's stressing me out? <hr/> <input type="checkbox"/> What/who would help? <hr/>

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



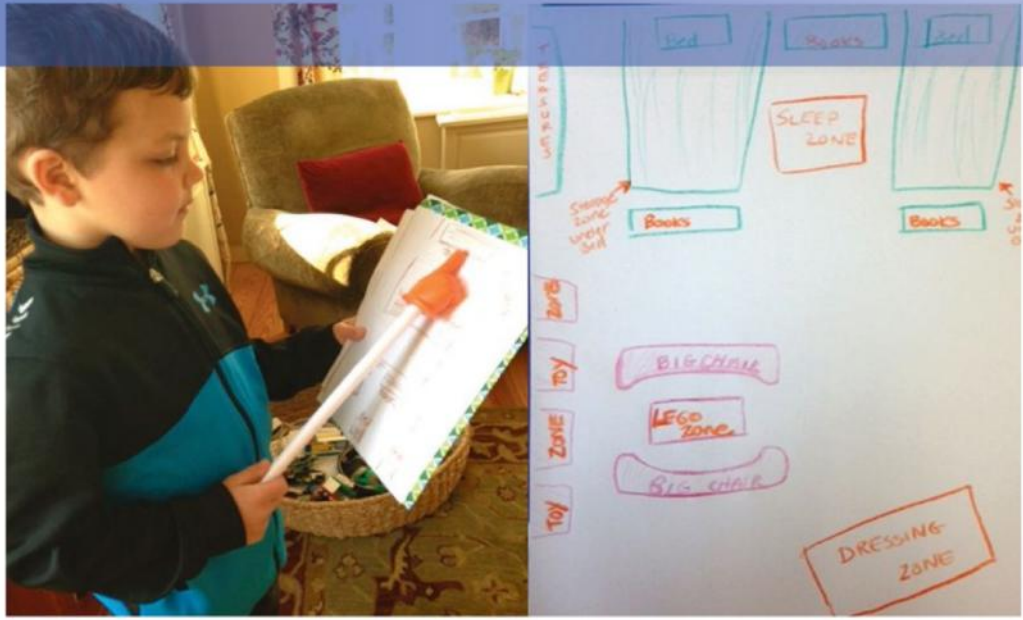
executive function skills as being “a beat” or—as Jackson’s teacher sighs—“twenty-two beats behind.” How do executive skills enable us to stay a beat ahead? Strong executive function skills enable us to imagine and plan a “dry run” of the task in our mind before we begin to carry out the plan. If a task 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.