



New Cutting Edge Strategies to Improve Executive Function Skills

Day 1 - September 25, 2019

Surrey Schools Resource & Education Centre (REC)

Surrey, BC

Presented by

Sarah Ward M.S., CCC/SLP

Co-Director, Cognitive Connections LLP, Boston

Co-Sponsored by



Event Schedule

8:00 – 9:00	Registration
9:00 – 10:20	Session 1
10:20 – 10:40	Morning Break
10:40 – 12:00	Session 2
12:00 – 12:40	Lunch Break
12:40 – 2:00	Session 3
2:00 – 2:20	Afternoon Break
2:20 – 3:30	Session 4

Tips for Improving the Conference Experience

- Please turn off your cell phones or put them on vibrate.
- In respect for the speakers and fellow participants, please do not whisper.
- This workshop is being web streamed to an online audience. Please ask questions using a microphone so that all can hear.
- Personal recording of any kind is strictly forbidden.
- Please secure your belongings! ACT cannot take responsibility for theft.
- Many of your fellow participants require a scent-free environment. Please be considerate.
- For your comfort, dress in layers. It may be a warm day but bring a sweater just in case!



Acknowledgements

Those who have attended ACT – Autism Community Training’s events over the years know that we depend on community collaboration and support to sustain our work. Our volunteers and funders make it possible for us to provide cost-effective training in-person, via web streaming and online video.

ACT’s volunteers range from parents and community groups, who advise us on venues and speakers, to ACT’s membership, including our Board of Directors, who provide a range of expertise, as well as those who volunteer at our events. Their contributions are all essential to ACT’s work.

This event has been made possible thanks to the support of the Surrey School District and to the Provincial Outreach Program for Autism and Related Disorders. We are very grateful for this collaboration which has allowed us to web stream to 21 school districts across BC from Surrey School District’s excellent facilities. Our thanks to ODIN Books for continuing to support our bursary program. ACT provided \$23,000 in bursary funding in 2018 in the form of reduced registration fees.

Special thanks to Sarah Ward for returning to British Columbia to present for ACT. Ms. Ward’s two-day presentations provide practical resources and techniques that enable parents and teachers to tackle the challenges of executive function for those with autism and related conditions.

Free Resources from ACT

Autism Videos @ ACT (AVA) – Over 50 quality online videos available free – without a log-in, thanks to our sponsors. www.actcommunity.ca/videos

ACT’s Autism Information Database (the AID) – Like Google for Autism but better! Keyword search nearly 1,500 curated AID records for evidence-informed, practical information resources useful to families and community professionals. www.actcommunity.ca/aid

ACT’s BC Community Resources Database – Search by your postal code for professionals and service providers throughout BC. www.actcommunity.ca/aid-search/community

ACT’s Autism Manual for B.C – 13 chapters! www.actcommunity.ca/autism-manual-for-bc -

ACT’s Monthly News Round-Up & Event Alerts - Sign-up to keep in touch with developments affecting the special needs community www.actcommunity.ca/updates

ACT’s Facebook - ACT carefully sources interesting, insightful stories to inform our 6,000 plus followers. www.facebook.com/autismcommunitytraining

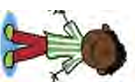
ACT – Autism Community Training

Suite 204– 2735 East Hastings Street, Vancouver, BC, V5K 1Z8 Tel: 604-205-5467

Toll-Free: 1-866-939-5188 Fax: 604-205-5345

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Executive Function Vocabulary



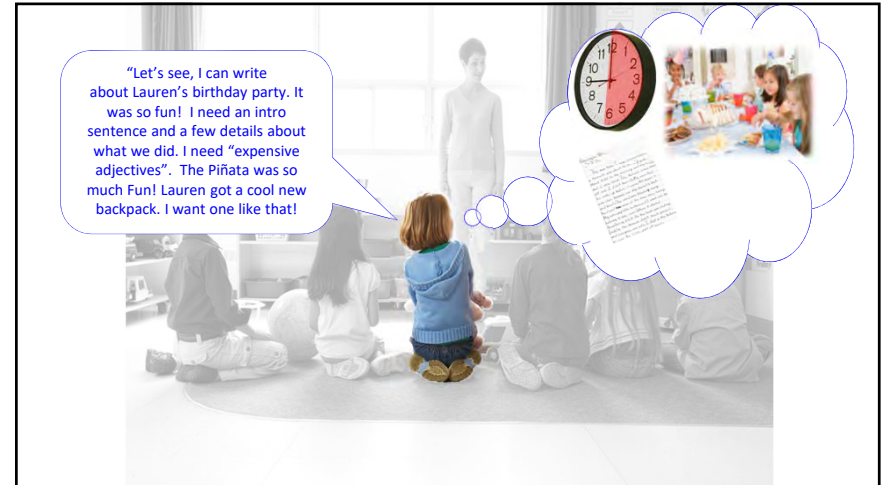


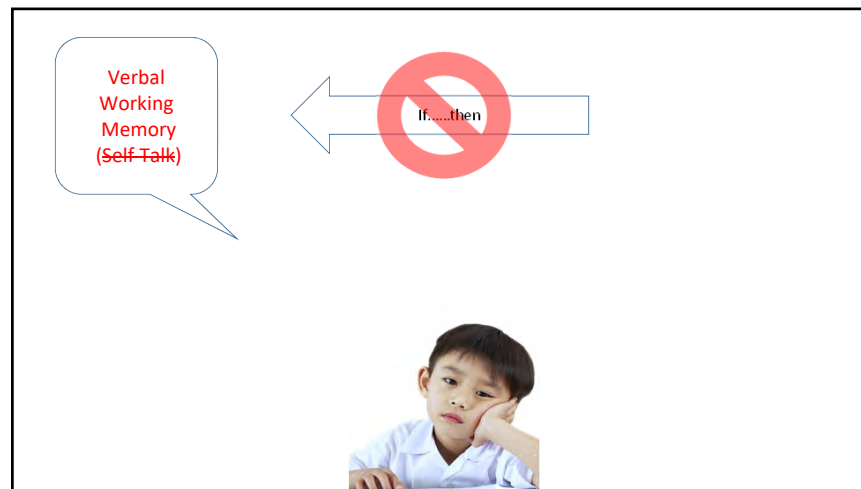
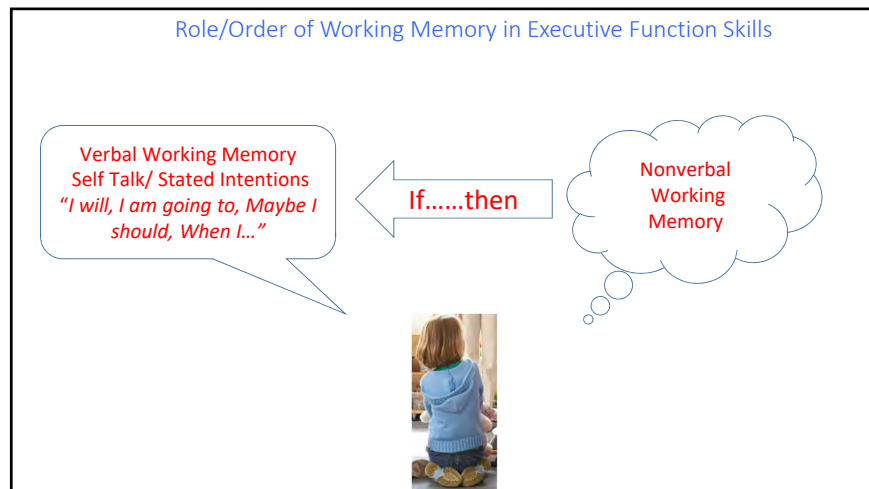
Cutting Edge Strategies to Improve Executive Function Skills

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978-369-5200 | www.efpractice.com





Non Verbal Working Memory and Early Self Regulation

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

- Critical for anything that unfolds over time

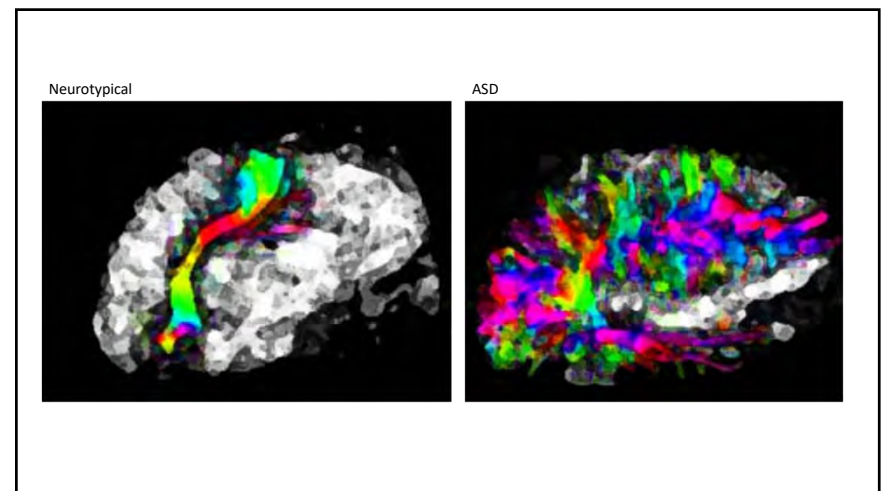
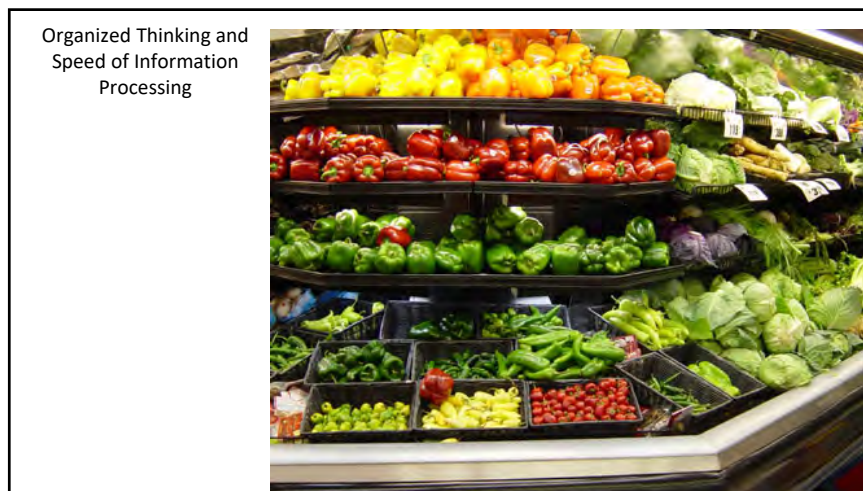
Enables you to demonstrate **Inhibitory/Self Control**: since you 'see' what you need to be doing you are more able to resist the strong inclination to do something else

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

Planning: emergence of cause and effect and means to an end: "if.....then....."

Situational Awareness/Intelligence
STOP and Read the Room

Space	Time	Objects	People
Navigate the Room	Get on the Timeline	Organization/Objects	Read the Person: 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"> □ Face □ Body □ Appearance □ Mood □ Pace □ Saying-Tone



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)



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

Episodic/Autobiographical Memory

Memory for autobiographical events (Contextual)
you can explicitly re-experience:

- Places (Spaces)
- Times
- Objects
- People
- Emotions

Features of Past Episodic Memory

- Knowing vs Remembering
 - Knowing is more factual (semantic)
 - i.e. Knowing what a wedding is
 - Remembering is a feeling that is located in the past (episodic)
 - i.e. Re-experiencing the wedding you attended last summer
- Autonoetic Consciousness
 - Sense of subjective (emotional) self in time



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*



Bedtime Routine



- Space** "In My Bedroom! In my Bed"
- Time** "Quick! After watching Blues Clues!"
- Objects** Pajamas! Book! Bear!
- People** I'll brush my hair and teeth! Daddy will be a reader!



Nonverbal Working Memory + Situational Intelligence =

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



The Situational Intelligence Shifts
from Now to Next = Self Regulation

Check your Understanding. What does MIME IT stand for?

M
I
M
E
i
T

"Time for Math!
Let's get ready!
You will need last
night's homework,
your math journal
and the fraction
manipulatives!"

HW in Cubby
Math Manipulatives
Math Journal

Goggles
Turn in HW
Lab Notebook

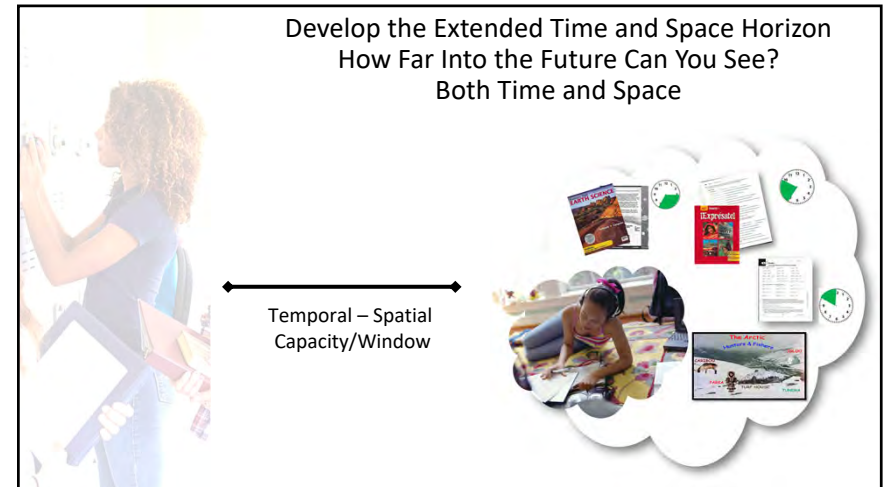
90% of the Time
Task Planning Happens in a
Different Space from
Where you Execute the Plan

Left at Home
Bring Right Back

August 28-September 3

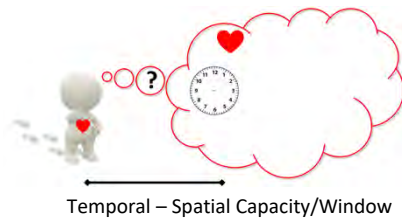
Science Chap3 and Q's 1-6
Spanish chap 5
Math read chap 2
Finish Poster

"Not Much"
"I hate HW"



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

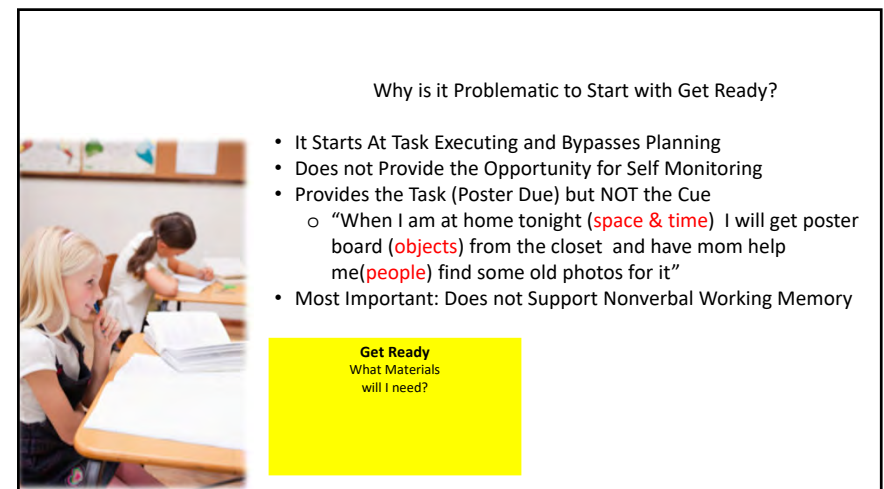
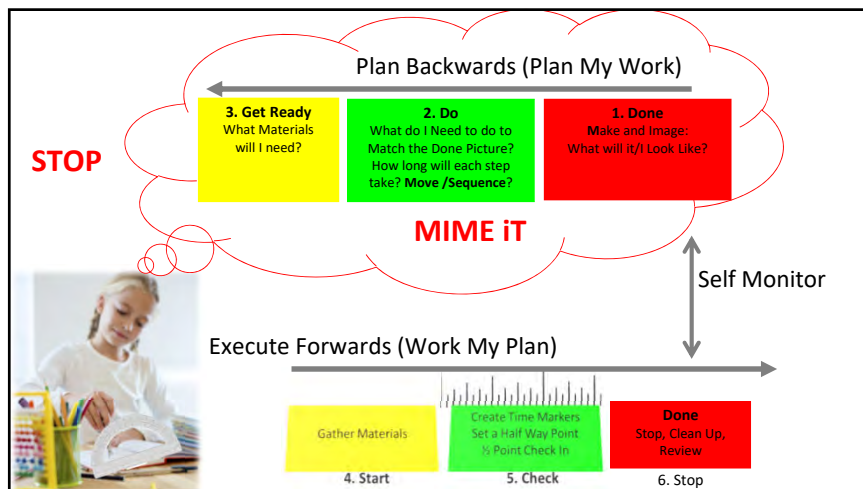
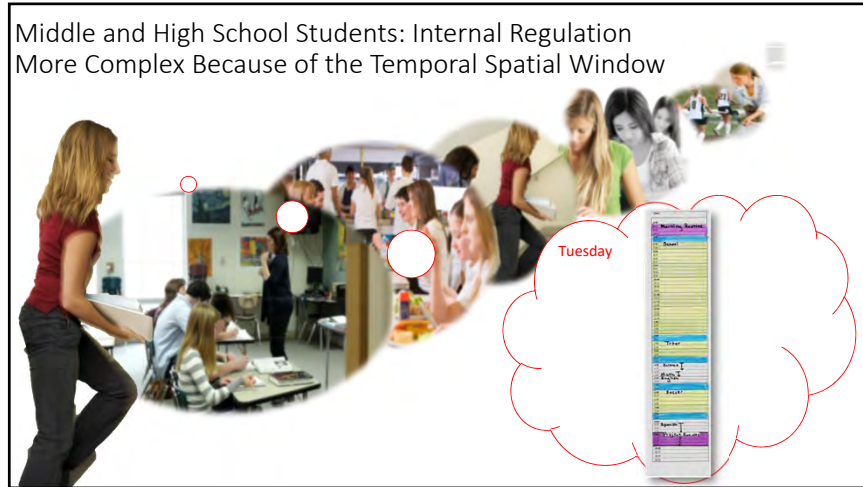
2 Years Old: NOW
3-5 Years Old: 5-20 Min
K- 2nd Grade: Several Hours
3rd -6th Grade: 8-12 Hours
6th-12th Grade Years : 2-3 Days
17-23 Years Old : 2-3 Weeks
23-35 Years Old: 3-5 Weeks

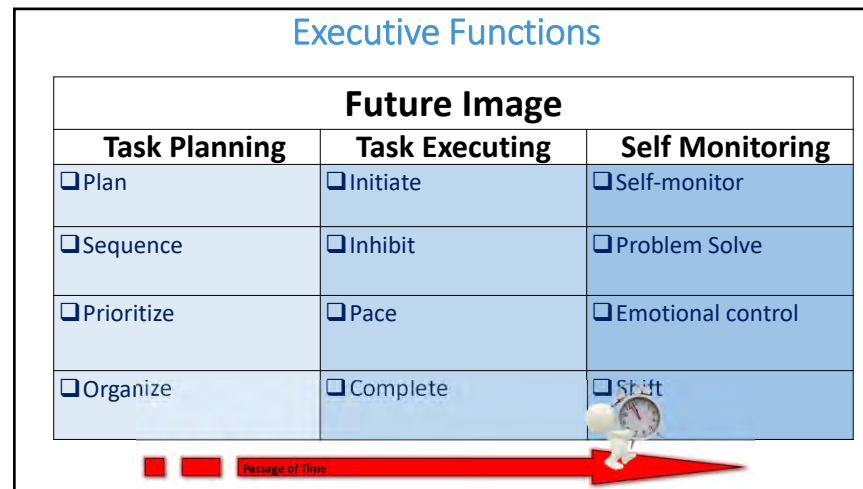
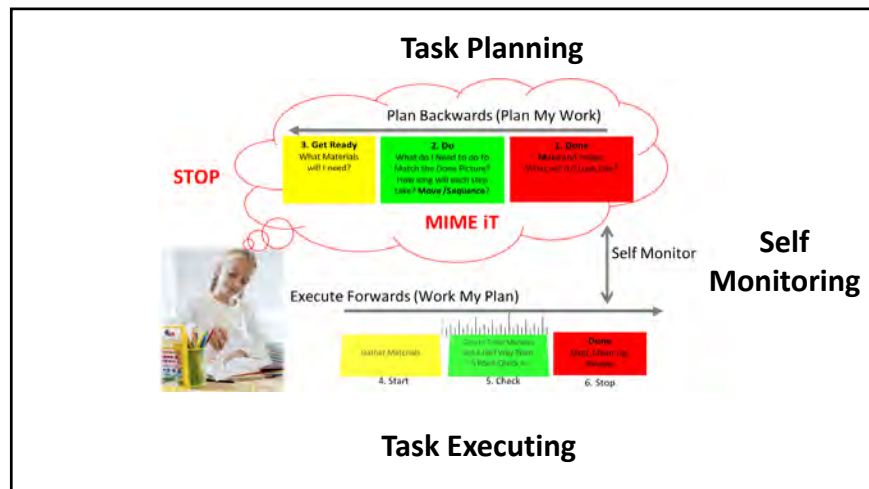


ADHD → EFDD: Executive Function Developmental Delay
- Typically of the Spatial Temporal Window
Average of a 3 to 3.5 year delay

Elementary school: 'Now and Next' & External Regulation







Interactive vs Character Toys



- Play was Purely Functional
 - Push the buttons
 - Switch on and Off
 - No attention to accessories
 - Shoved the food down the bird's throat: no pretend feeding
- No sense the duck was hungry and "I am feeding it"
- Never took the role of the duck
 - No statement on behalf of the duck
 - Only talked about the toy's actions (It's off)
- No sign of imagination, imaginary situations
- No Play storylines unless facilitated by an adult



Smimova, E. O. (2011). Character toys as psychological tools. *International Journal of Early Years Education*, 19, 35-43.



Think & Play the Social Scouts Way™:
Firefighter Leo to the Rescue!

<https://socialscoutsla.com>

The power of play

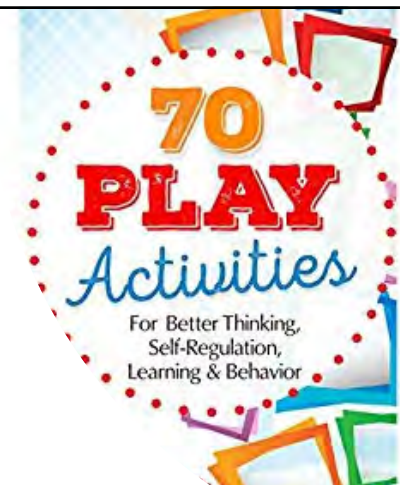


Make Play R.O.C.K.™ Booklet Series

If you have a young child with autism, you may have noticed that he has difficulty learning to play. His play may be less flexible or creative than that of other children, and it may rarely involve other people.

The Make Play R.O.C.K.™ booklet series gives you practical, research-based strategies for expanding your child's play skills during everyday play activities. You'll learn powerful ways to get involved in your child's play and help him learn while having fun together. After all, fun is what play is all about!

70 Play Activities for Better Thinking, Self Regulation, Learning and Behavior
by Lynne Kenney and Rebecca Comizio



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 bath-room 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.*

Created by:

North Shore Pediatric Therapy

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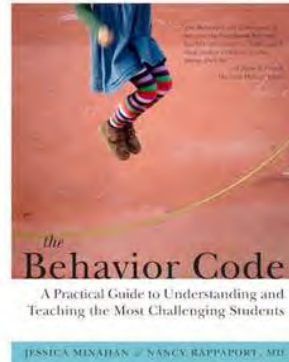
www.NSPT4kids.com

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The Behavior Code by Jessica Minnahan and Nancy Rappaport, MD

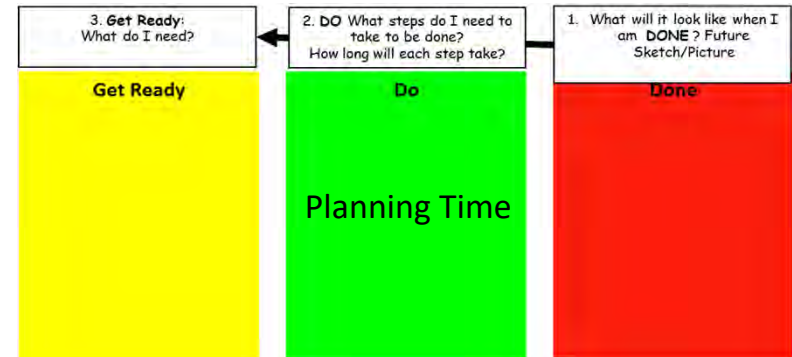
All Behavior is a Form of Communication

- Attention
- Escape/Avoid
- Gain a Tangible Object
- Gain Sensory Satisfaction



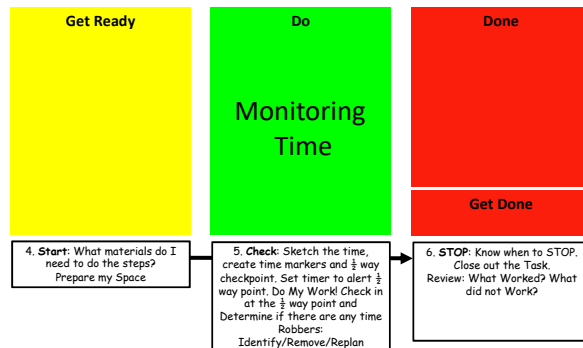
The Get Ready *Do *DONE Method Plan Backwards to Move Forwards

Stage 1: Task Planning



The Get Ready *Do *DONE Method Plan Backwards to Move Forwards

Stage 2: Task Execution



START WITH THE DONE

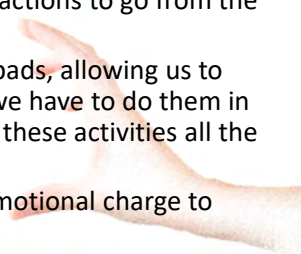
Developing Independent Executive Function Skills



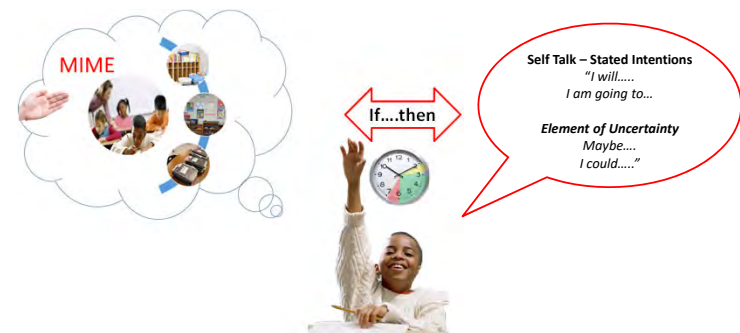
Representational Co-thought Gesture

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



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



Gesture enables us to 'pre-experience' the mental spatial time travel and actions of the future so we can 'experience the self in time' and then talk ourself through that experience to be efficient and successful

Role/Order of Working Memory in Executive Function Skills

Get Ready	Do	Done
<p>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.</p>	<p>If..... Then</p>	

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

Creating Episodic Future Memory vs Cueing Semantic Recall

"Head to Toe!"

- ☐ Head Band
- ☐ Sweatshirt/ Coat
- ☐ Snack
- ☐ Bag
- ☐ Homework / Notebook
- ☐ Shoes for Gym

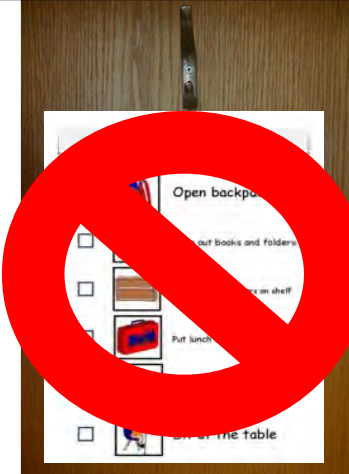
Develop NonVerbal Working Memory for Goal Directed Future Thinking

Start with the Done to:

- Teach "Thinking in Pictures"
- Develop Whole to Part to Details Thinking (OODA Loop)
- Teach Flexible Thinking
- Develops Gesture for Mental Spatial Time Travel
- Develops Stated Intentions: I will, I am going to, Maybe, I could

"Let's get ready to go home!"

Semantic vs Episodic Memory



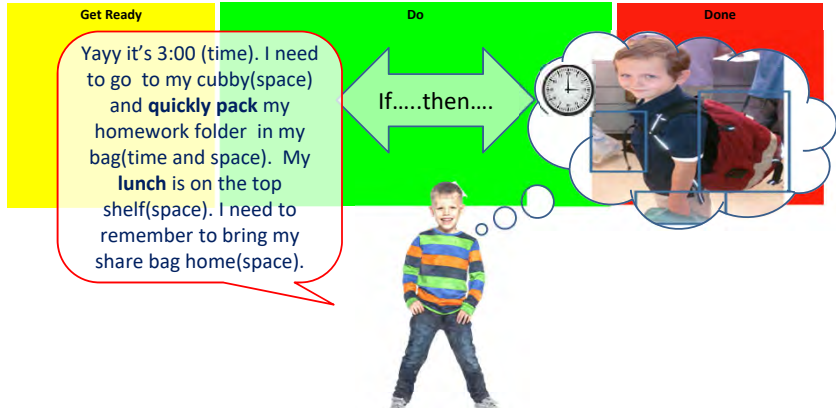
The image shows a checklist on a wooden door. The checklist includes items like 'Open backpack', 'Take out books and folders', 'Put lunch in my share bag', and 'Put my share bag on the table'. A large red 'X' is drawn over the checklist, indicating that this is not the correct way to teach these skills.

Role/Order of Working Memory in Executive Function Skills

Get Ready Do Done


If....then....

Yayy it's 3:00 (time). I need to go to my cubby(space) and **quickly pack** my homework folder in my bag(time and space). My **lunch** is on the top shelf(space). I need to remember to bring my share bag home(space).



The diagram illustrates a child's thought process for getting ready to go home. It is divided into three sections: 'Get Ready' (yellow), 'Do' (green), and 'Done' (red). A large green double-headed arrow labeled 'If....then....' connects the 'Do' and 'Done' sections. A speech bubble from the child says: 'Yayy it's 3:00 (time). I need to go to my cubby(space) and **quickly pack** my homework folder in my bag(time and space). My **lunch** is on the top shelf(space). I need to remember to bring my share bag home(space).' A thought bubble shows a child packing a backpack.

Organized Thinking and Speed of Information Processing

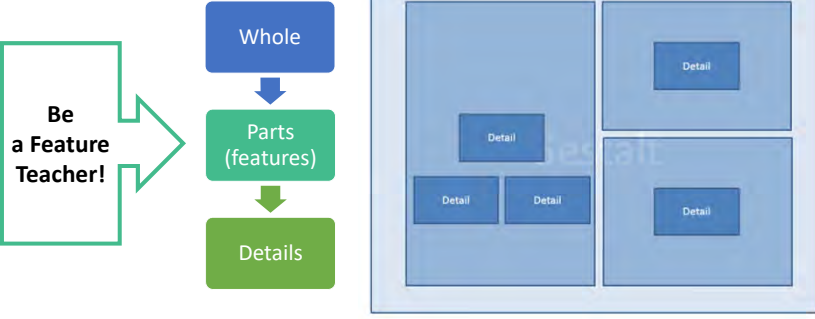


The image shows a well-organized grocery store produce section. The vegetables are arranged in neat rows and bins, demonstrating organized thinking and speed of information processing.

To Improve Organization Use Feature Blocking:
Add "Block and Box" to "What will it Look Like"

Be a Feature Teacher!

Whole
↓
Parts (features)
↓
Details

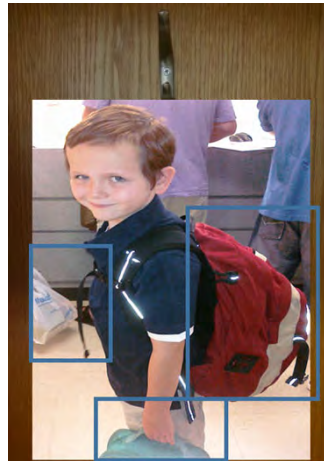


The diagram illustrates the process of feature blocking. It starts with a box labeled 'Be a Feature Teacher!' with an arrow pointing to a flowchart. The flowchart consists of three boxes: 'Whole', 'Parts (features)', and 'Details', connected by downward arrows. To the right of the flowchart is a large blue box containing several smaller blue boxes, some labeled 'Detail', representing the 'Block and Box' concept.

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



Ready for School ... Match the Picture



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

Great Apps for Making Visuals to "Match the Picture"

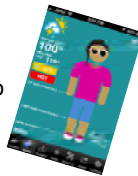
- Strip Design

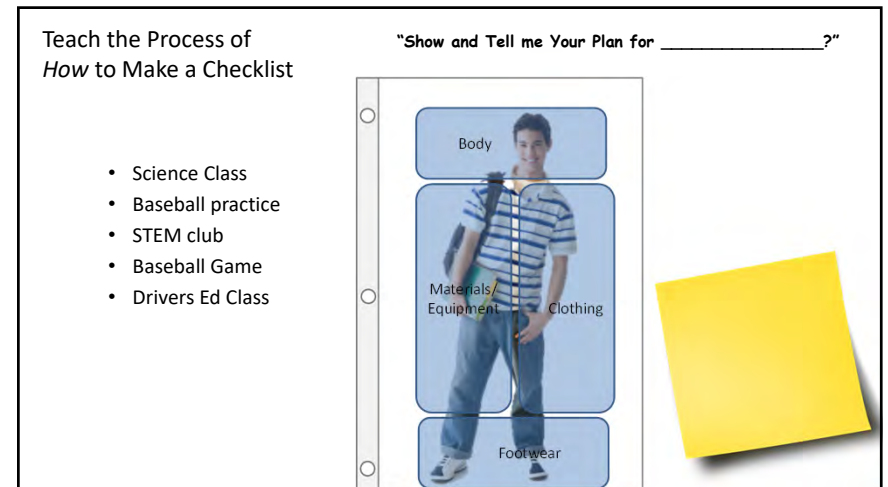
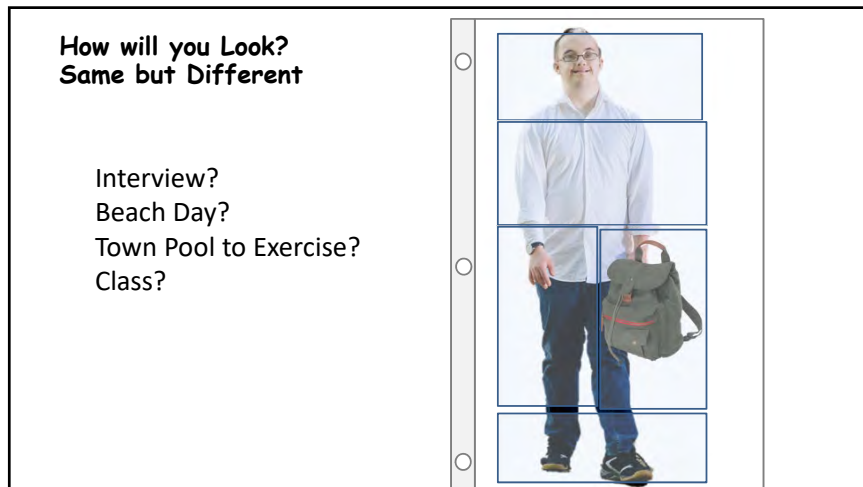
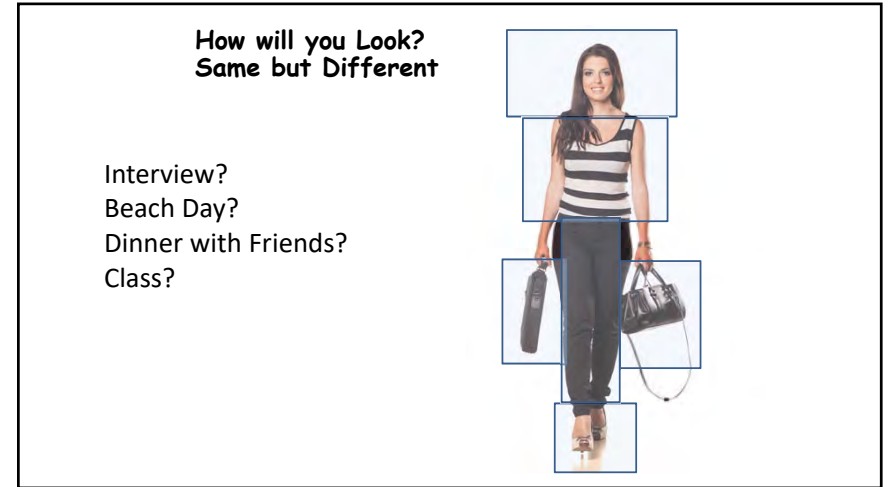
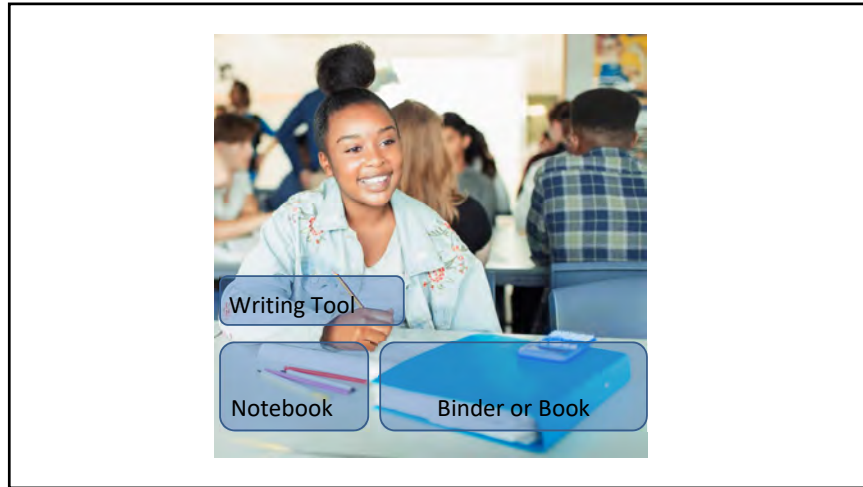


- Skitch



- Check out the Swackett Weather App (Swackett Jr too!)






The Ultimate Goal?

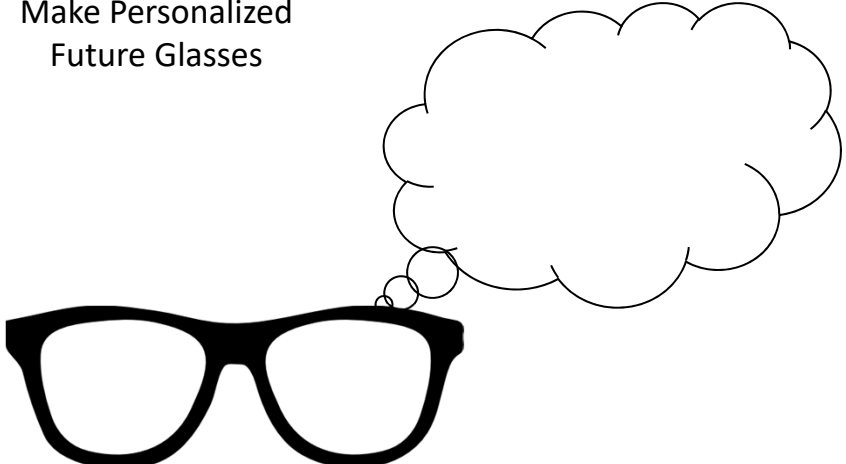
Students Understand that All Tasks Start with
"What will it look like?"

In Executive Function
Class have Students Make
their Own Future Glasses

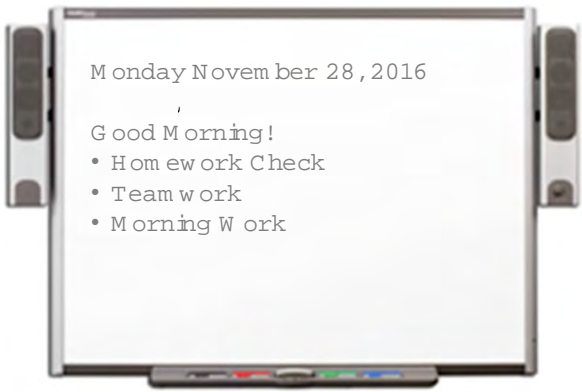

A Craft Project! Dollar store Glasses
With 'Peel and Stick' Googly Eyes from Lakeshore Learning



Make Personalized
Future Glasses



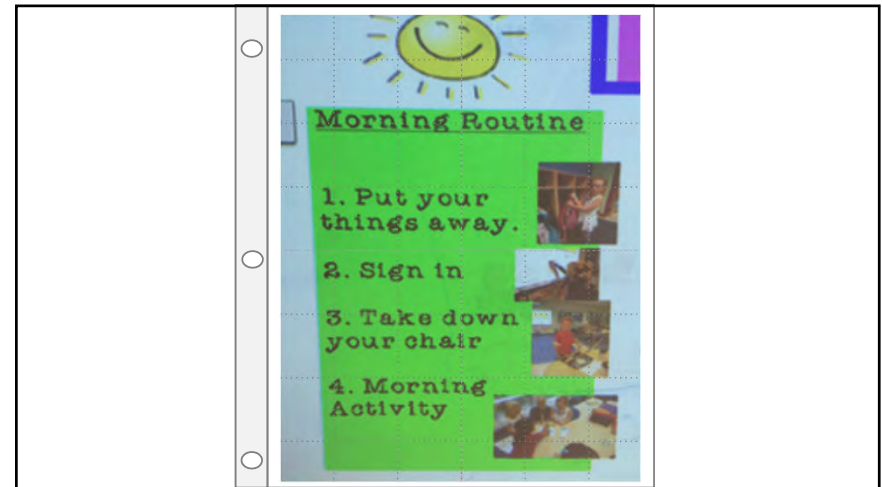
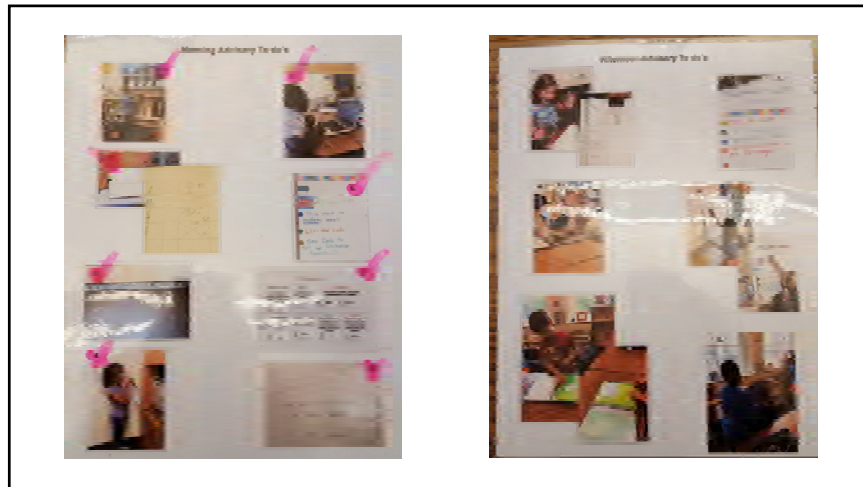
Visuals of Classroom Routines



Monday November 28, 2016

Good Morning!

- Homework Check
- Team work
- Morning Work



Creating Visual Picture Routines: MIME

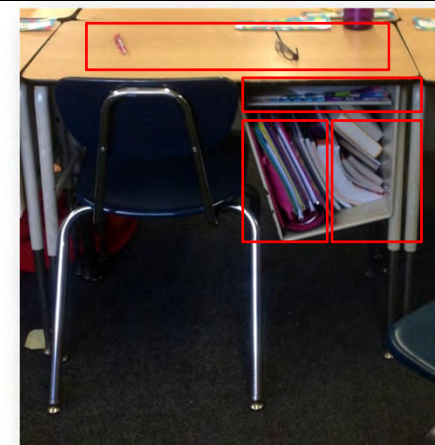


- Ask the student what **space** they go to
- **Walk** with them to that space
- **Stop** at the doorway/boundary of that space
- Have the student use **self talk** to describe the actions they will do and the materials they will use
- The student enters the space and carries out the **action**: Take 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!



Be a Feature Teacher!

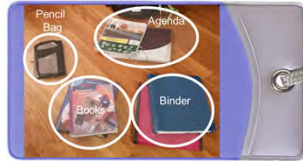


MANAGING MATERIALS:

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



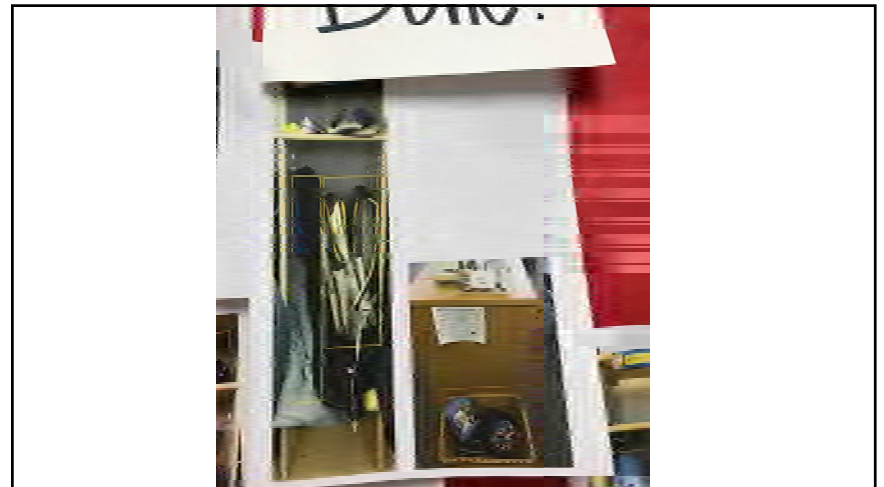
Managing Materials: Have Students Use Devices to Create an Album of Materials



Middle School: What does Ready Look Like?

Kristen Jacobsen, M.S., CCC/SLP
and the Glen Urquhart School

Try the Pic Stitch App!



360 Thinking™ Cognitive Connections, LLP | www.efpractice.com

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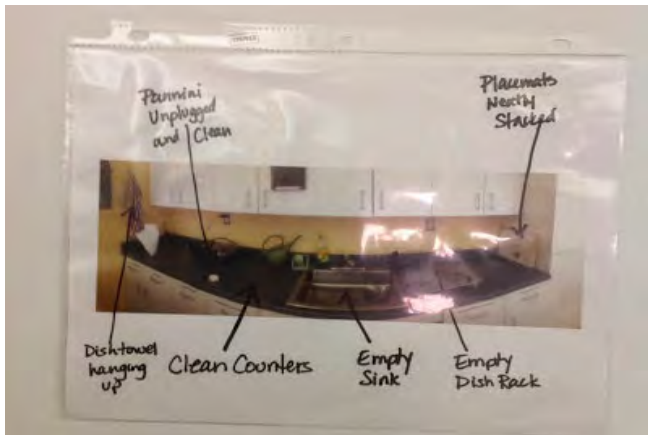
Reading:

Hatchet, Chap 2

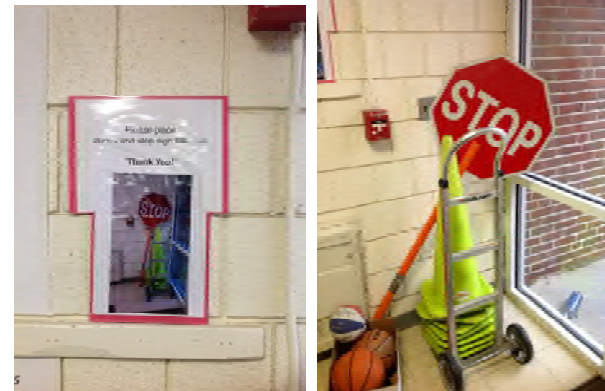
Take Active Notes*

*Use Active Reading Questions
Worksheet

**Have a
Model Desk**



Fayerweather School, Cambridge, MA



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.

Apply what you have learned:

- What is one skill/task that a student you work with is really struggling with?

- If they were doing the task what would they/it look like?

- How can you turn that into a 'Future Picture' to support the student's executive function skills? _____
- How would you incorporate this 'Future Picture' into your classroom?

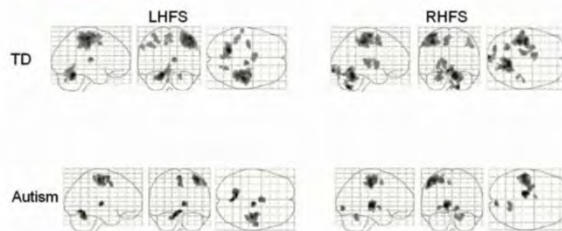
Improving Transitions and Task Initiation: Being a Beat Ahead



Remember – 90% of the time Task Planning Happens in a Different Space from where you Execute the Plan!

Less and different motor activation in individuals with ASD
Difficulty shifting motor activity: standing to sitting, From reading to writing
Hard to shift and get materials out
Motor interventions – Students require additional structure and time

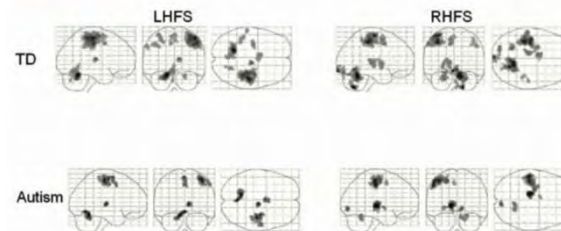
Motor



Mostofsky et al 2009

Found that children with autism have difficulty visually gauging the position of their bodies when learning a motor task. Instead of using this visual feedback to guide their movements, they rely more on proprioception, the ability to sense the body's position in space.

Motor



Mostofsky et al 2009

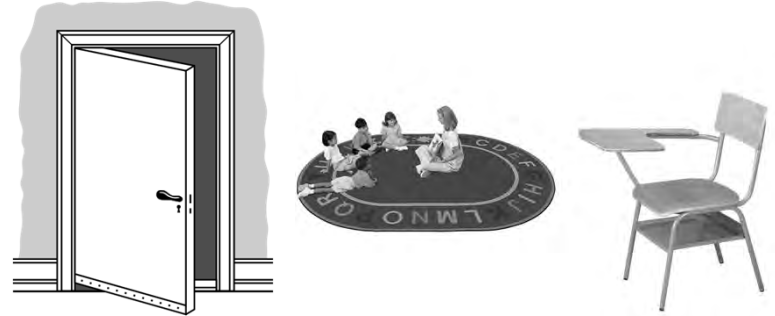
Improving Transitions: Being a Beat Ahead



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

Developing Situational Awareness: Transitions

- Identify Natural Barriers in Space



To Decrease Impulsivity and Improve Transitions:
Facilitate Distance & Point out your Plan to Self Project and Develop Mental Time Travel



Freeze, Point and Share Your Plan



Pre-Imagine and MIME the Future Task:
An Executive Function Approach for the
Accommodation of Preview



Center Ticket

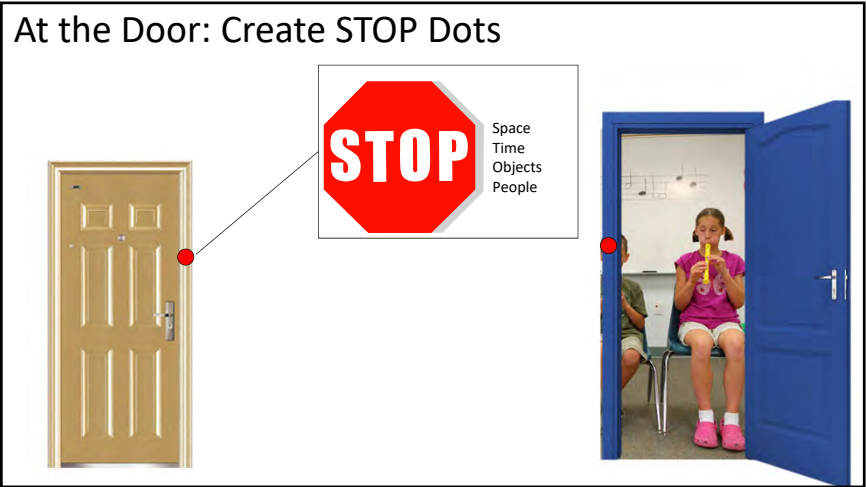
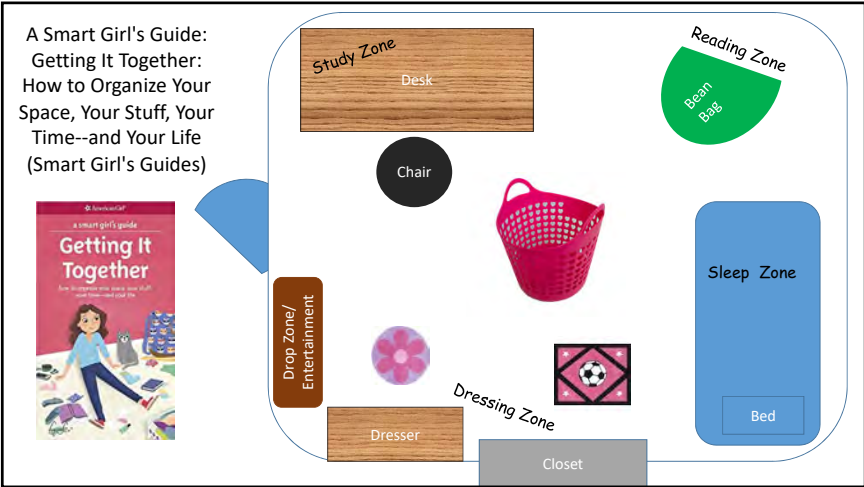
Listening Center	<input type="checkbox"/>	Stories and Charts	<input type="checkbox"/>
Investigations	<input type="checkbox"/>	Penmanship center	<input type="checkbox"/>
Word Puzzles	<input type="checkbox"/>	Make a book	<input type="checkbox"/>
Literacy Games	<input type="checkbox"/>	Sound Center	<input type="checkbox"/>

Handwritten student work on a 'Center Ticket' form. The form includes sections for 'Listening Center', 'Stories and Charts', 'Investigations', 'Penmanship Center', 'Word Puzzles', 'Make a Book', 'Literacy Games', and 'Sound Center'. The student has written 'Gregory' for the name, '3/6-3/10' for the date, and 'Mona' for the study buddy. The form also contains various words and phrases like 'Millions', 'Little Boy', 'Pocky', 'Sentence', 'Hot Sour', 'Beginning', and 'WV'.

Tools of the Mind Curriculum - D. Leong

Creating Zones in the Classroom is Important
Students can Pre-Imagine What Space they are Going to Next



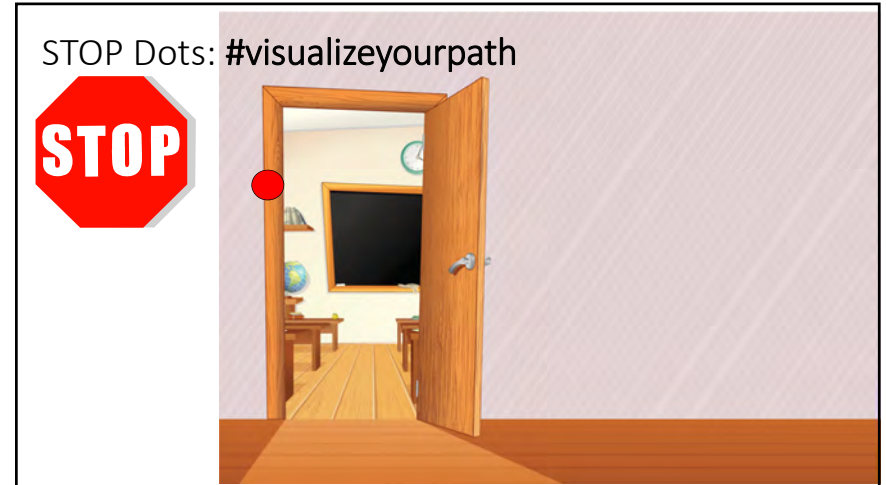


Learn to **STOP** and Look: **S**pace | **T**ime | **O**bjects | **P**eople
If.....then.....

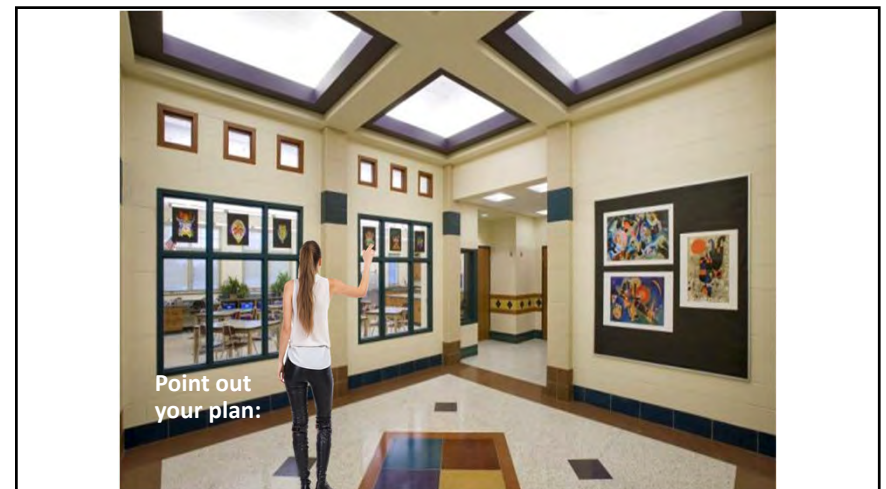
Space	
Time	
Objects	
People	

Learn to **STOP** and Look: **S**pace | **T**ime | **O**bjects | **P**eople
If.....then.....

Space	
Time	
Objects	
People	



MIME : Downstairs - Task Planning Happens in a Different Space than Where you Execute the Plan



MIME: Right in Front of Me



MIME: At the Door



MIME: Down the Hall



MIME : Downstairs - Task Planning Happens in a Different Space than Where you Execute the Plan





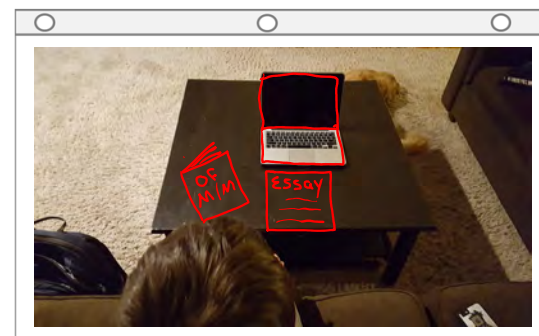
Teach Students to MIME:
Have a Notebook of Photos of Spaces the Student Goes to



MIME IT



Increase the Spatial Temporal Window for the Future Homework Space



The Wall Clock

- Have Analog Clocks in the Room – Make sure they are not Roman Numeral!
- Ideally located in the front of the classroom where the child can compare their work to the time of the day.



A common mistake is to say the time is 2:55, not 1:55. It makes sense to the student when he or she thinks back to when they learned time to the hour. The short hand is the closest to the 2, so of course that's the hour!



How to prevent misunderstanding the hour hand?

Teach that each hour has a room. When the hour hand is inside the room, that is the hour!

"The hour is 2."
How do you know?

"Because the short hand is inside 2's room."
By teaching the idea of the hour owning a space, kids learn from the very beginning that the hour hand is different from the minute hand.

www.ainsleelabs.com

Wondertime Clock: For Directions and a Video on How to make this clock: executivefunctiontherapy.com



This clock can be created and used as a pre-cursor to learning how to read an analog clock. It is especially terrific for Pre K -3rd grade students.



Find the Wondertime Clock pdf to Print Out in the lecture resource section at: www.efpractice.com

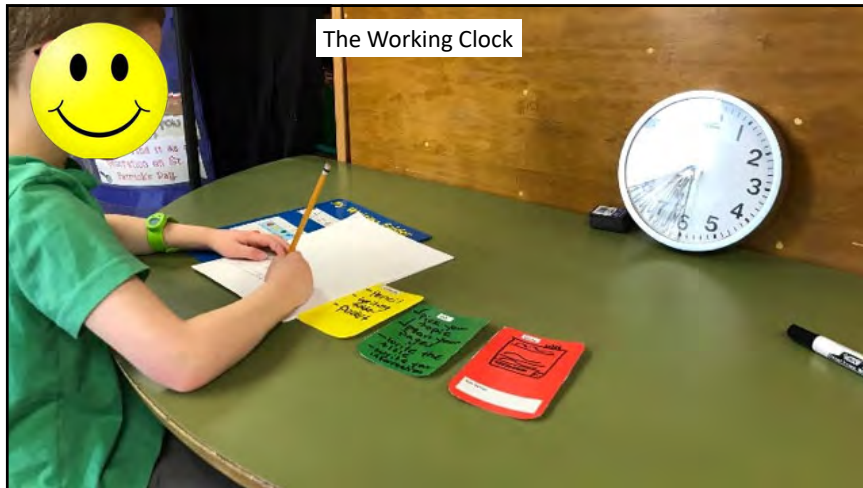
Or....Use Stickers on Clocks to Create Time Markers



The **WORKING** Clock



The Working Clock



Show the Sweep of Time



<https://www.online-stopwatch.com/large-online-clock/>



← Comments

celebrategoodtimes Working Clock for the WIN...AGAIN!!! My kiddos were having a little TOO much fun sharing their writing with their writing partners, so I decided to use the working clock. The RED shows when Partner ONE shares (Pineapples) and the BLUE shows when Partner TWO shares (Palm Trees). The BLACK shows them when they are taking their partner's suggestions, not sharing anymore, and getting back to work! Once again...GAME CHANGER! @socialthinking @360thinking #timemanagement #classroommanagement #behaviormanagement #writersworkshop #workingclock

Sketching is a Precursor to Gesture and MIMEing

It is a challenge for students to Sketch.

Teach the process of How to Sketch (and eventually MIME time)



MIME IT

People Think in Time Markers



The 360 Thinking Time Tracker Program
www.efpractice.com or Amazon



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

Create Time Markers

Time markers are the equivalents of the spatial cues – trigger an implementation intention (self) not the goal (outcome)



Planning Time: Create Time Markers

Shade, Mark, Check

Draw How Much Time The Student Has

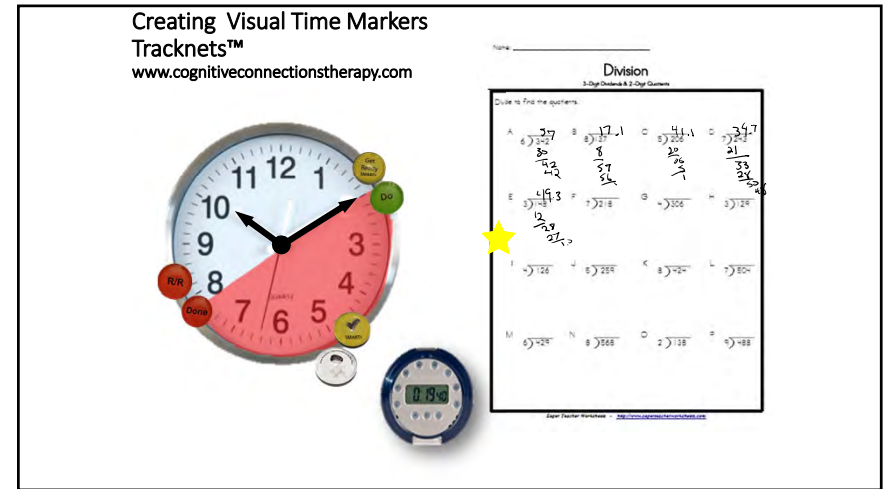
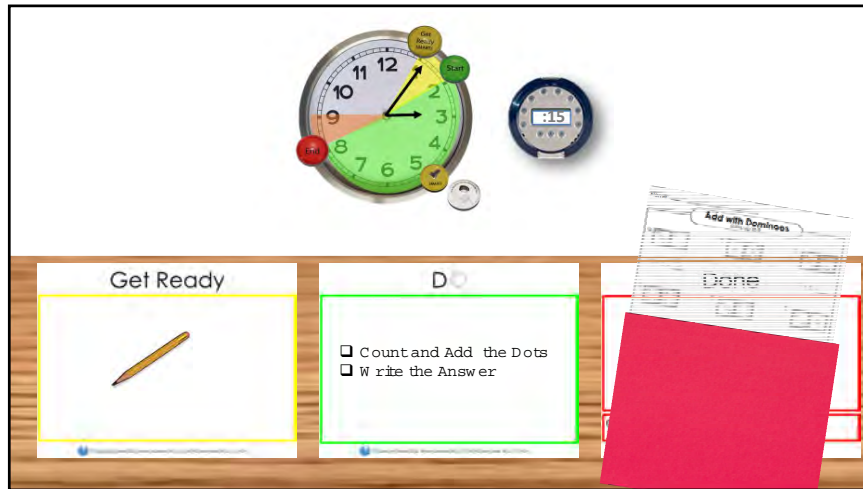
Identify/Sketch The “Future Picture Image” **[Fixed vs Flexible Time]**

Factor in time to ‘Get Ready’ and ‘Close out’ task


Create Time Markers:

- Start Time
- Stop Time
- Mid Point






The Mid Point Check In



- How am I doing at this Mid Point time Marker?
 - Am I still focused on the goal?
 - Has my priority changed?
 - Am I still answering the question?
- Do I have any time robbers?
 - Identify
 - Remove
 - Re-Plan
- What are my Time Savers?
- Do I need to change my pace?

Make Time Robbers Tangible and Teach Students to Prospectively Manage Distractions and Jail their Time Robbers?


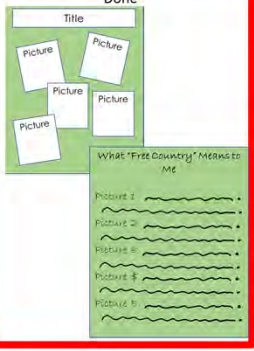



How do you keep your Time Robbers Jailed?


Get Ready

Do


Done

Get Ready	Do	Done
Magazines Construction paper Scissors Glue Chrome book - Type Explanations 	Create a Collage to Symbolize "a Free Country" Cut Out Images - 5 Arrange Glue on Construction Paper Back of Collage <ul style="list-style-type: none"> write 1-2 sentences <u>per</u> image that explains HOW the image represents "a Free Country" 	
 <p>Get Ready: Materials and Mindset – Prospectively Jail Time Robbers</p>		<p>Get Done</p> <ul style="list-style-type: none"> Be Prepared to discuss my collage Turn into Class Work Bin


Prospective Management of Time Robbers: Forethought for Future Assignments




Time Saver: Fidget Tool




Time Saver: Drink Water



Time Saver: Lunch?




Time Saver: Airplane Mode




'Plan Your Work' then 'Work Your Plan' Post Its www.efpractice.com

Forest App


Put down your phone and focus on what's more important in your life



Whenever you want to focus, plant a tree.



The tree will grow in the following time.

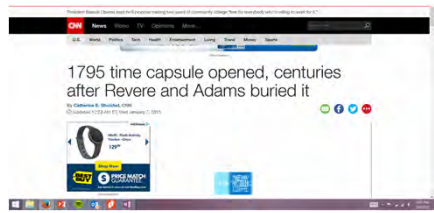


The tree will be killed if you leave this app.


Use Reader View Mode or Reader View "Add Ons" with your Browser

If you go to a web page and you want to read the content but not be distracted by all the ads around it, just click reader view. It will remove all the ads so you can just get the content.

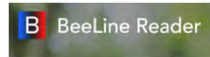
Before Reader View:



After Reader View:



BeeLine Reader – Great for Kids with poor visual tracking



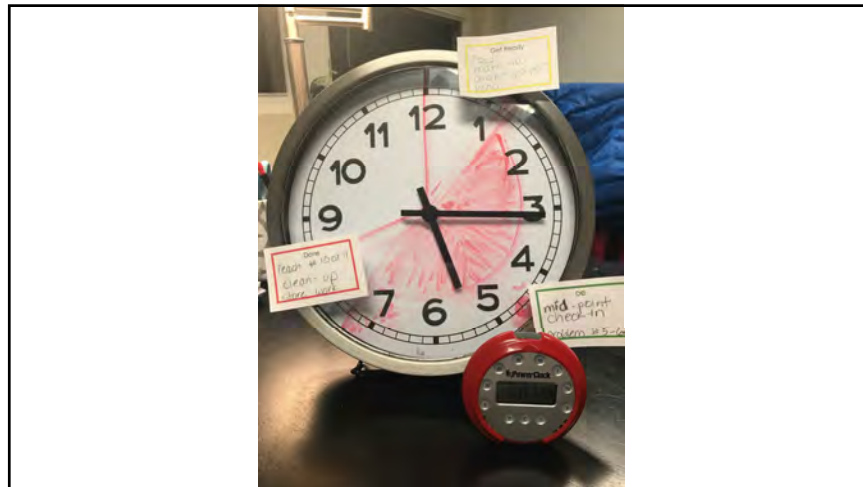
HOW IT WORKS

Ever wonder why stop lights use colors and not words? It's because the human brain processes color very quickly—much more quickly than it can process words. BeeLine Reader uses the same principle to make reading easier and faster. With BeeLine Reader, the color of the text guides your eye across and between lines, eliminating "line transition errors" (accidentally skipping or repeating lines) and making reading faster, easier and more efficient.

BeeLine Reader is helpful for readers of all levels—from young readers to graduate students and beyond. Readers with dyslexia, ADD, and vision difficulties reap some of the largest benefits from BeeLine Reader, with speed increases that can top 50%. How much will BeeLine Reader help you? Try the BeeLine Reading Challenge and find out!

Learning to Think in Time Markers

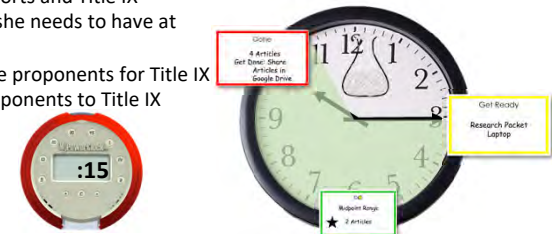
See
Sketch
Gesture
MIND MIME

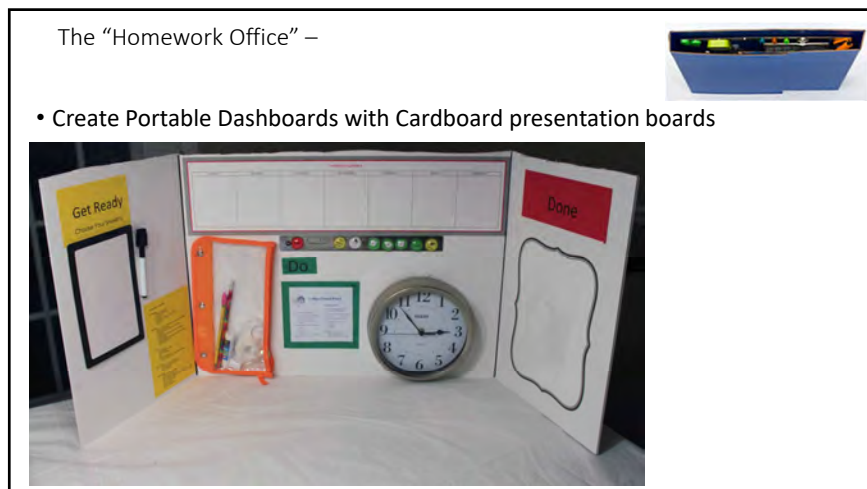
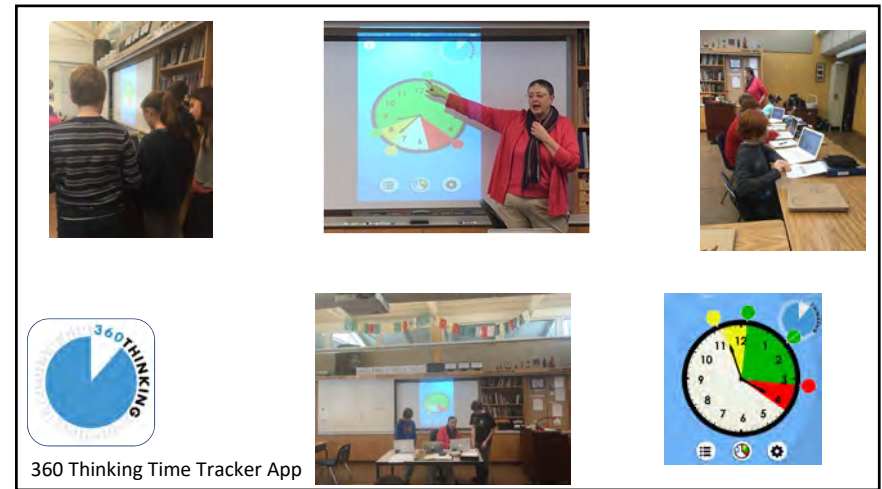
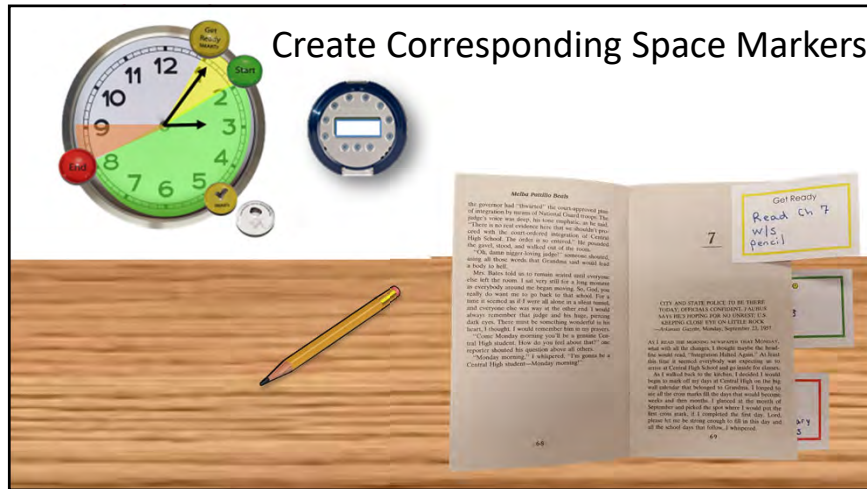


High School

- It is 10:15 am
- Anne needs to get ready to transition to science class at 10:55.
- She is working on an essay about Title IX.
- She needs to look through and read the library book and primary sources she has about Women in Sports and Title IX
- By the end of class she needs to have at least:
 - 2 facts about the proponents for Title IX
 - 2 facts about opponents to Title IX

- Draw How Much Time The Student Has: Fixed vs. Flexible
 - Start in the middle & draw out the minute hand.
 - Draw clockwise to the end time
- Identify/Sketch The "Future Picture Image"
- Factor in time to 'Get Ready' and 'Get Done'
- Create Time Markers and Label:
 - Start Time
 - Stop Time
 - Mid Point
- Write in the amount of time you would set the timer for, for the student to do a mid point check in

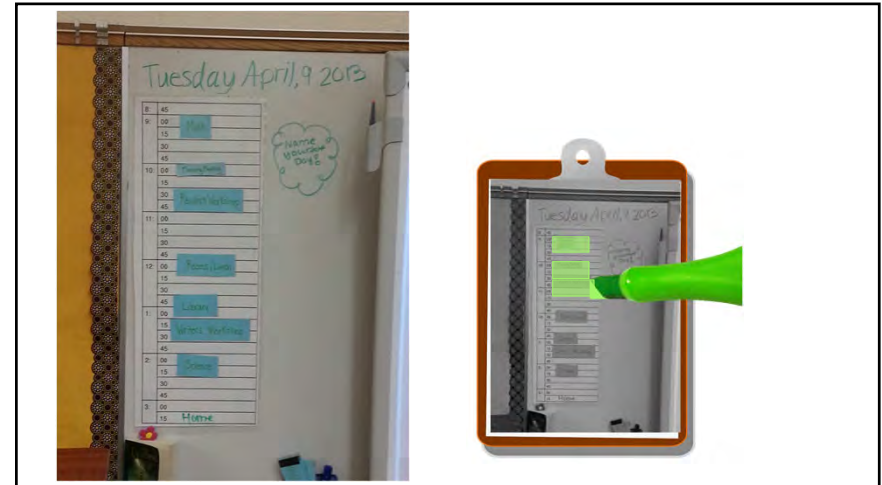
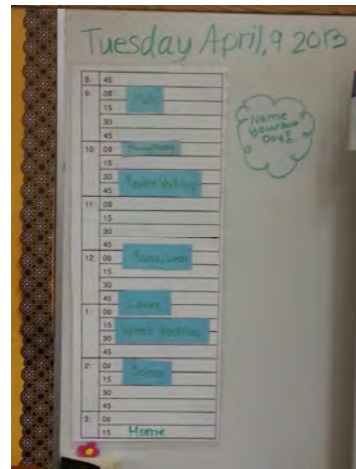




Seeing Time as a Unit

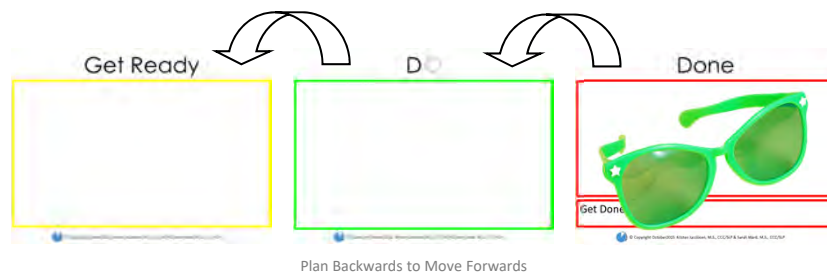


Vs.



Teach Planning Backwards

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

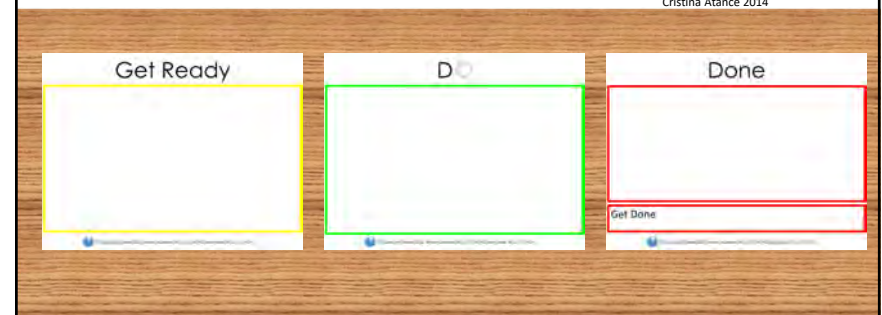


GDD in the Classroom and Clinic: First Present the Planning Tool

Creating the Get Ready*Do*Done Work Space

Develops the skill of the **Anticipatory Look**
associated with Episodic Future Thinking

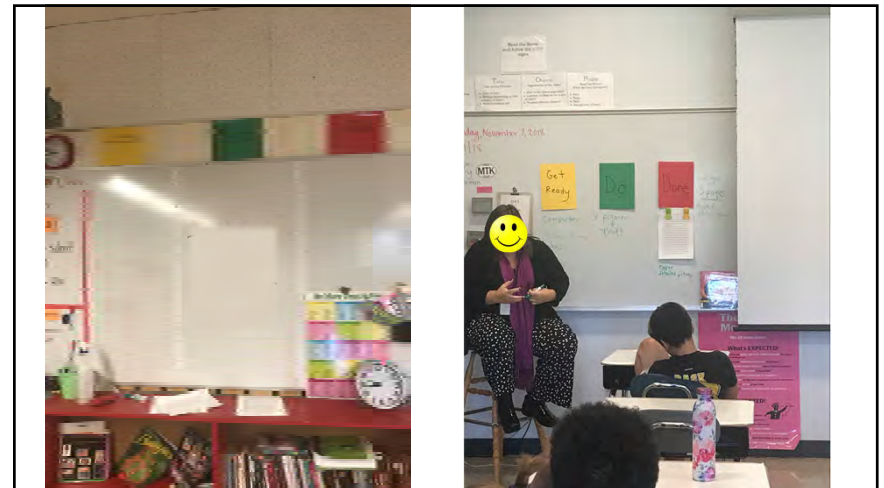
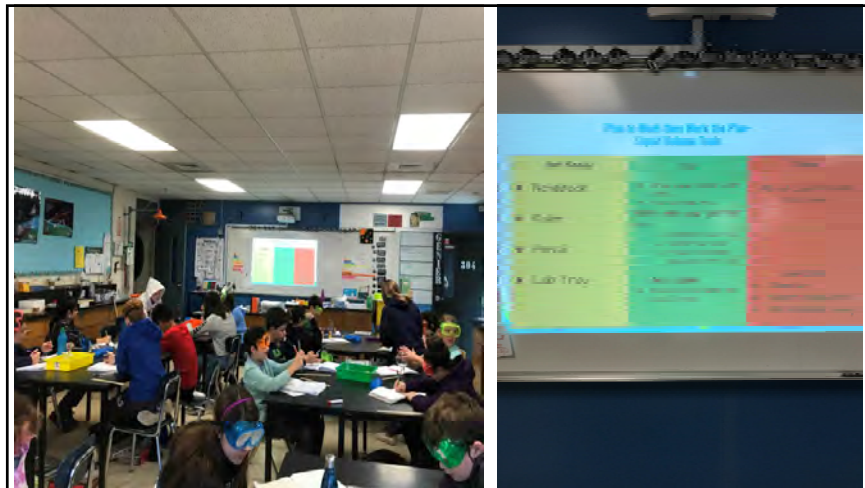
Cristina Atance 2014

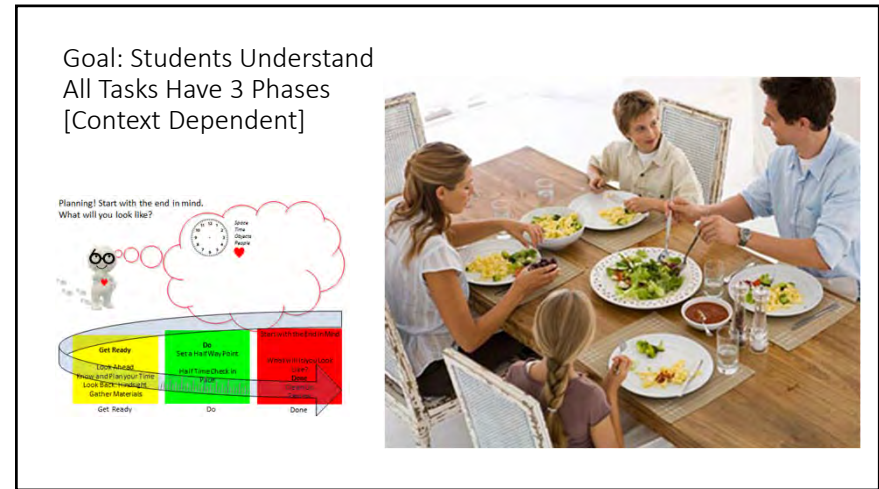
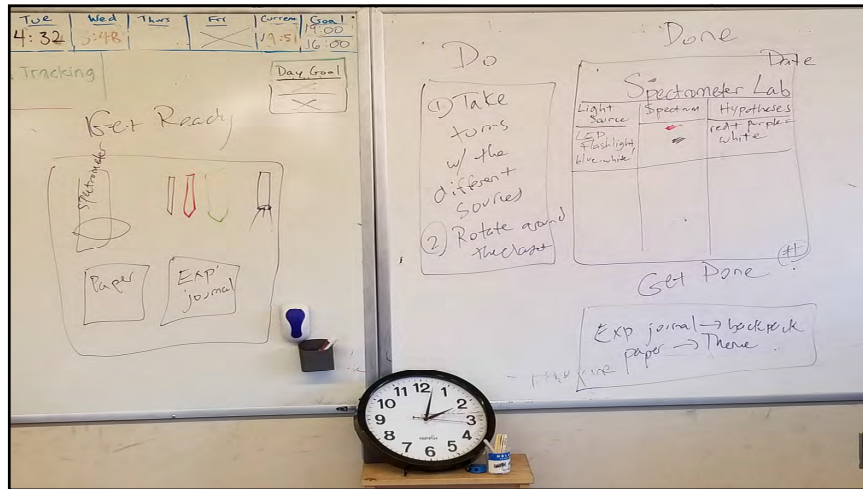


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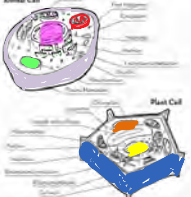
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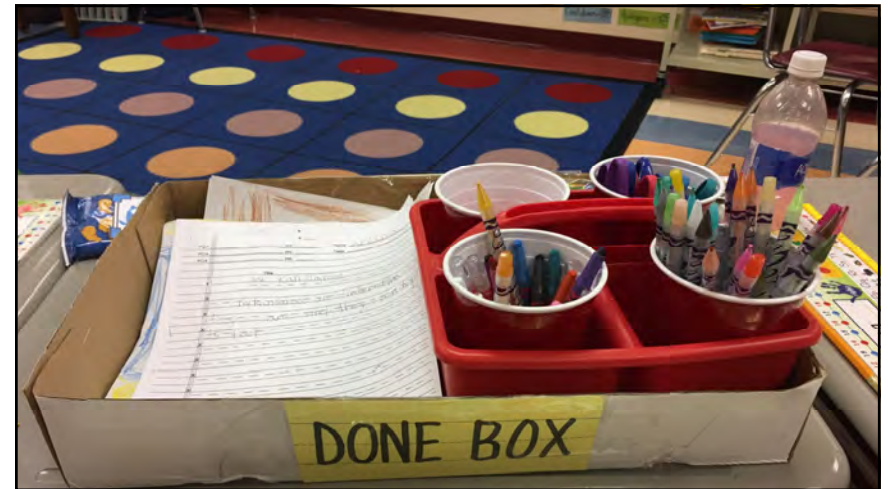
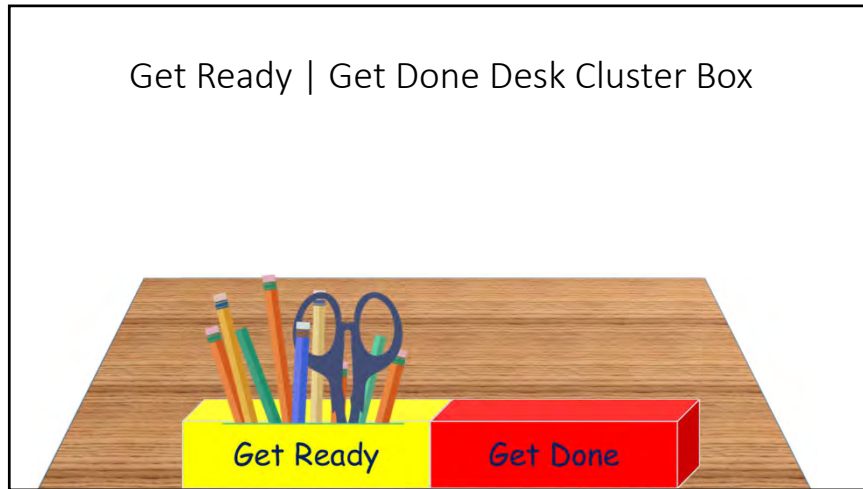
Just as We 'Get Ready' for a task we also 'Get Done' with a Task!!

Get Ready	Do	Done
<input type="checkbox"/> Worksheet <input type="checkbox"/> Class Notes <input type="checkbox"/> Text Book <input type="checkbox"/> Colored Pencils	<input type="checkbox"/> Identify the Parts of the Cell <input type="checkbox"/> Label <input type="checkbox"/> Color cell parts the same color	Animal and Plant Cells 
		Get Done <input type="checkbox"/> Turn in, Sci 11:10

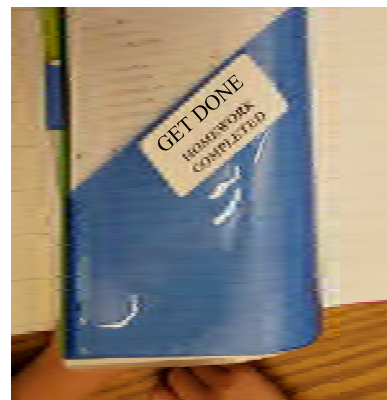
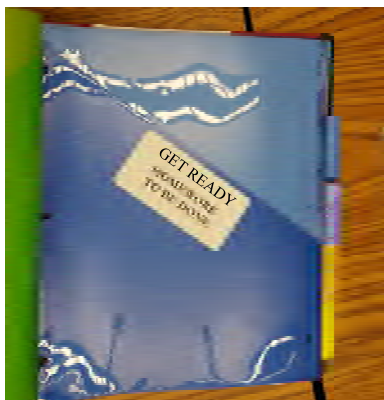
Just as We 'Get Ready' for a task we also 'Get Done' with a Task!!

Get Ready	Do	Done
	Cut: <input type="checkbox"/> Red Mouth <input type="checkbox"/> Pink Tongue <input type="checkbox"/> White Teeth Label <input type="checkbox"/> Sweet <input type="checkbox"/> Sour <input type="checkbox"/> Salty	
		Get Done <input type="checkbox"/> Name on Back <input type="checkbox"/> Store on Science Shelf <input type="checkbox"/> Clean Up

Get Ready | Get Done Desk Cluster Box



Middle & High School: A Homework Pocket in 3 Ring Notebooks



Cognitive Connections

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

- Bookmark Teacher Websites for Easy Access
- Create a Homework Recording Sheet for Web Based Homework Postings

TODAY'S HOMEWORK

TODAY'S DATE: _____
TOMORROW is day: _____

1. Put a check by class you have tomorrow.
2. Number your priorities.
3. Write down the assignment:

☐ CHEMISTRY Hand In _____ | Print | email | Checked | Google Drive

☐ PRECALCULUS Hand In _____ | Checked

☐ COMPUTER SCIENCE Hand In _____ | Google Drive

☐ ENGLISH 11 Hand In _____ | Print | email | Checked | Google Drive

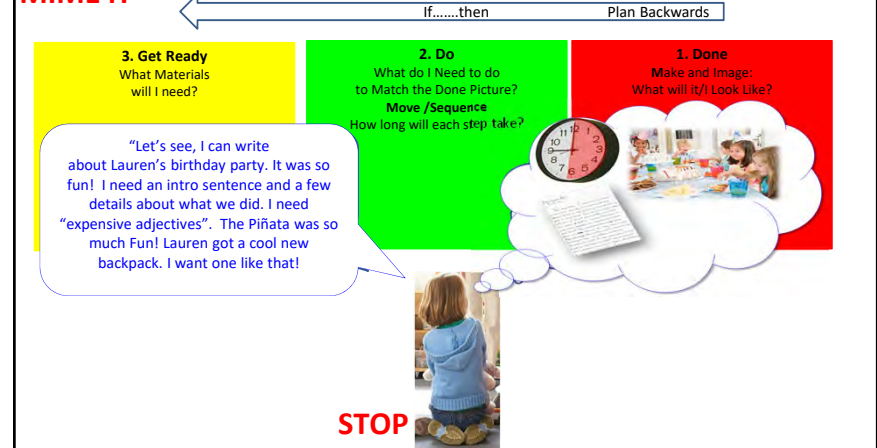
☐ U.S. HISTORY Hand In _____ | Print | email | Checked | Google Drive

☐ OTHER Hand In _____ | Print | email | Checked | Google Drive

☐ LEFT OVER FROM LAST NIGHT Hand In _____ | Print | email | Checked | Google Drive

Thinking Ahead: Hand In _____ | Print | email | Checked | Google Drive

MIME IT



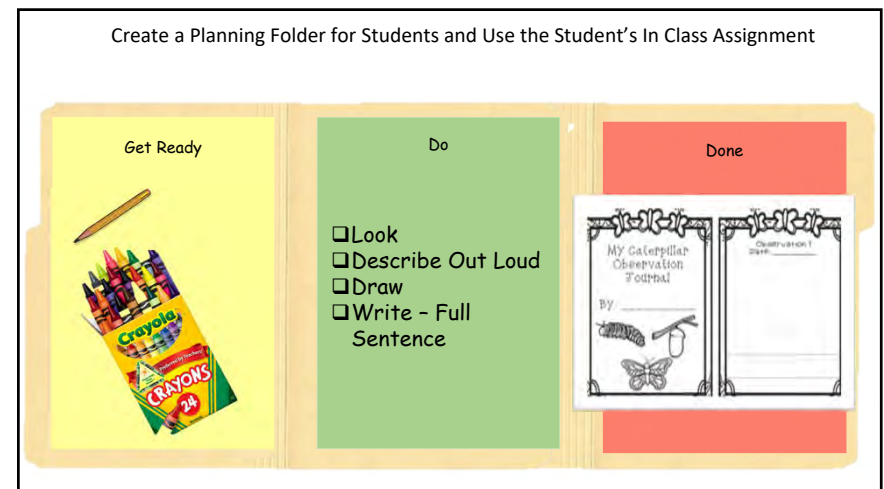
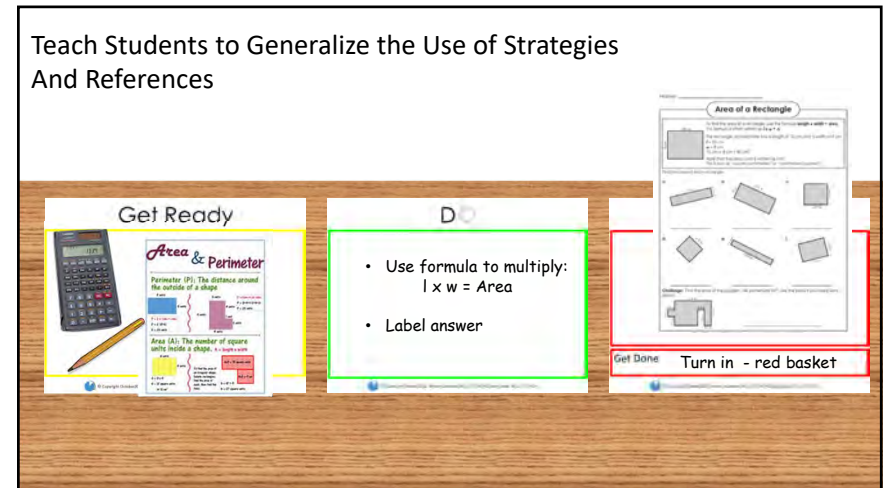
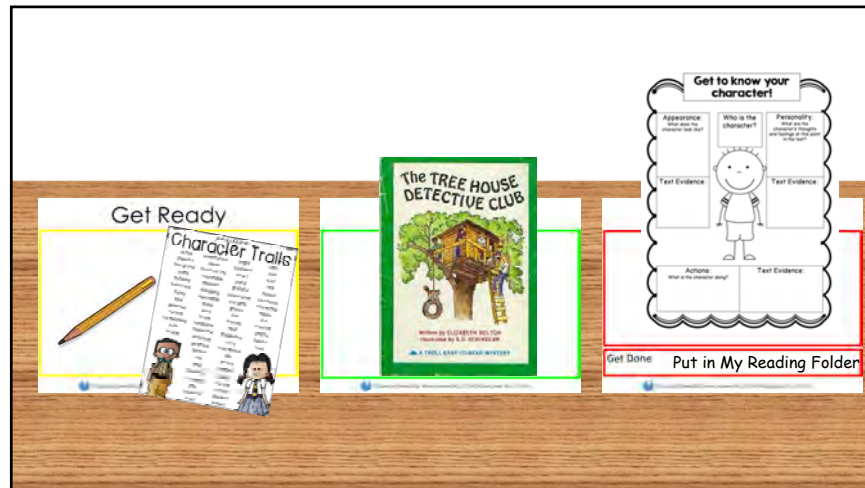
MIME IT



GDD in the Classroom and Clinic: Present the Planning Tool and Teach Backwards Planning

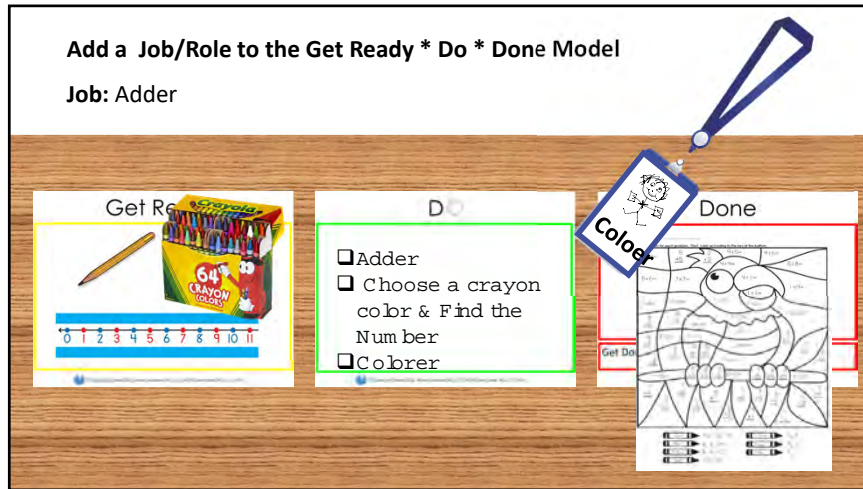
- Post the class goal, objective or essential question in the **Done**
- What do we need to **Do** in class today to answer that question?
- What can we do to **Get Ready**?

- Materials, Prior Knowledge, Self-Regulation Strategies, Potential Obstacles/Time Robbers
- Prior Experiences and Feedback



Add a Job/Role to the Get Ready * Do * Done Model

Job: Adder



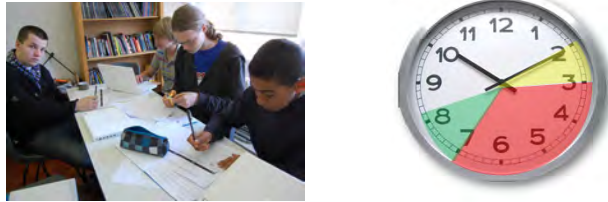
Get Ready

Do

- ☐ Adder
- ☐ Choose a crayon color & Find the Number
- ☐ Colorer

Done

Use your Existing Treatment Activities in Conjunction with the Get Ready * Do * Done System



Choose jobs:

- storyboarder
- casting director
- sign maker
- camera man

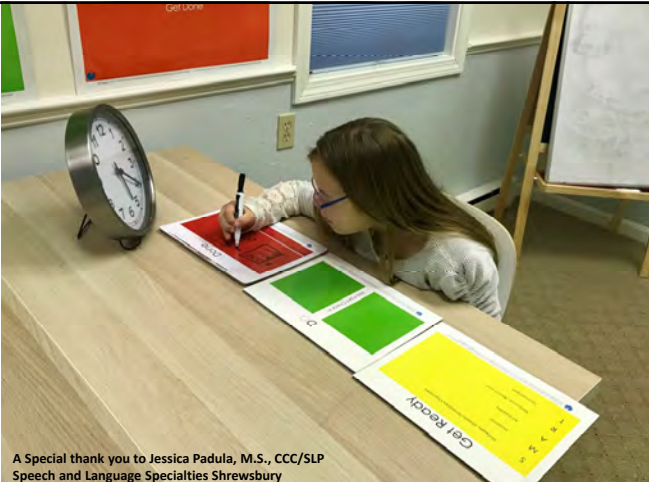
Materials:
whiteboard, markers, poster board, ipad

Make a sign

- Create Storyboard
- Cast the roles
- Rehearse
- Record

Practice, See and Feel How we Join Group

Make a Movie: How to Join a Group



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

Goal: Learn How Cells Absorb Water

Get Ready

Celery
Cup
Water
Food Dye
Paper Towel

Lab Notebook
Pencil
Worksheet
Markers/Colored Pencils

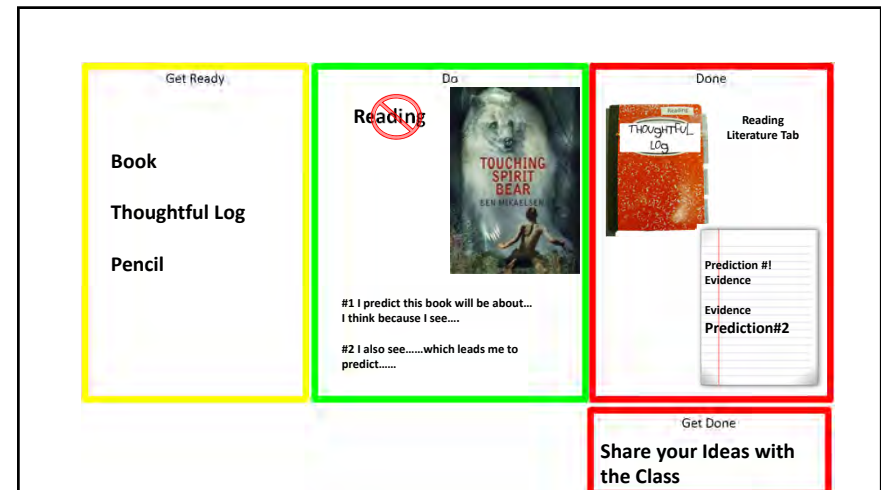
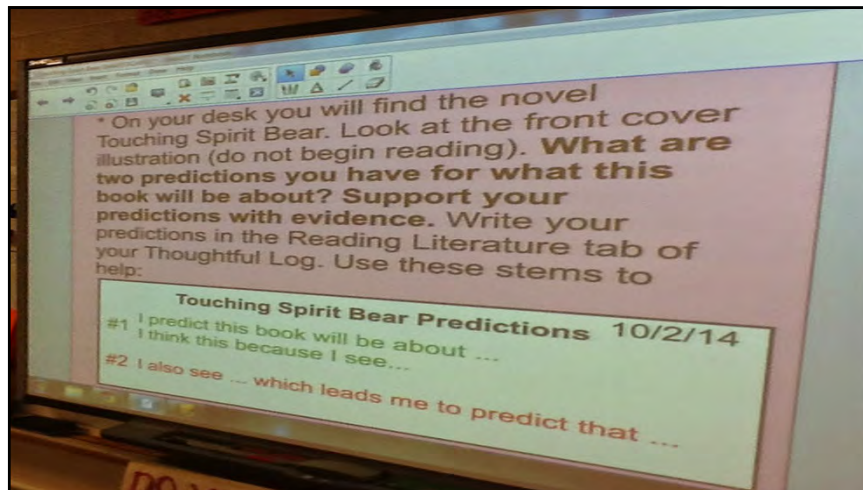
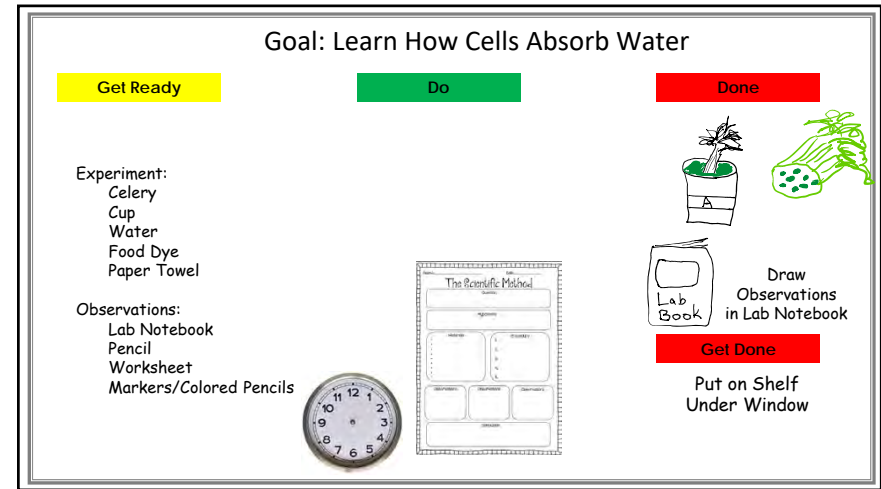
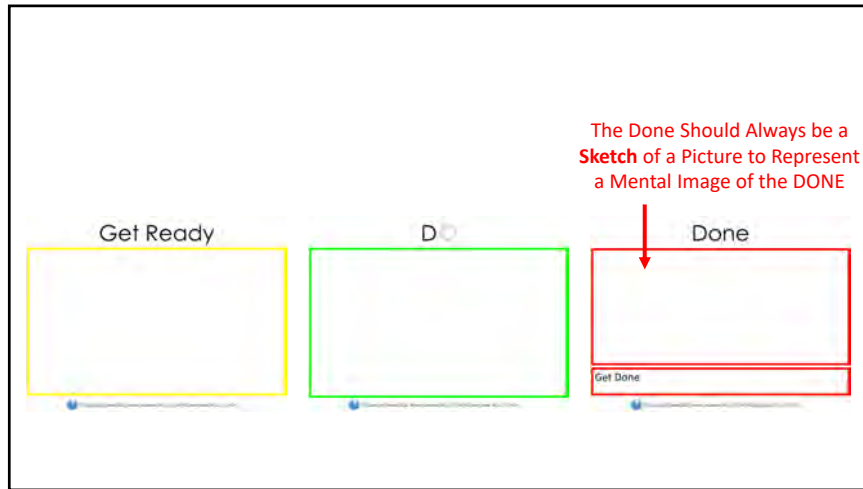
DO

The Scientific Method

Done

Draw Observations in Lab Notebook

Put on Shelf Under Window




```

graph LR
    subgraph Get_Ready [Get Ready]
        A1[Chrome Book]
        A2[Biography]
        A3[Worksheets]
        A4[Web Organizer]
        A5[grading rubric]
        A6[pencil]
    end

    subgraph Do [Do]
        B1[Select Biography]
        B2[Read]
        B3[Fill out Vocabulary Bookmark]
        B4[Take Notes on Web organizer]
    end

    subgraph Done [Done]
        C1[Write Historical Figure or Person they are famous for]
        C2[Character Traits]
        C3[Interesting Facts]
        C4[Concluding Sentence]
    end

    subgraph Get_Done [Get Done]
        D1[Use grading rubric to check your work]
        D2[Share: Google Classroom]
    end

    A2 --> B1
    A2 --> B2
    A2 --> B3
    A2 --> B4
    B1 --> C1
    B1 --> C2
    B1 --> C3
    B1 --> C4
    B2 --> C1
    B2 --> C2
    B2 --> C3
    B2 --> C4
    B3 --> C1
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    B4 --> C4
    C1 --> D1
    C1 --> D2
    C2 --> D1
    C2 --> D2
    C3 --> D1
    C3 --> D2
    C4 --> D1
    C4 --> D2
  
```

Get Ready

- ☐ Chrome Book
- ☐ Biography
- ☐ Worksheets
 - Bookmark
 - Web Organizer
 - grading rubric
- ☐ pencil

Do

- ☐ Select Biography
- ☐ Read
- ☐ Fill out Vocabulary Bookmark
- ☐ Take Notes on Web organizer

Done

- Write Historical Figure or Person they are famous for
- Character Traits
- Interesting Facts
- Concluding Sentence

Get Done

- ☐ Use grading rubric to check your work
- ☐ Share: Google Classroom

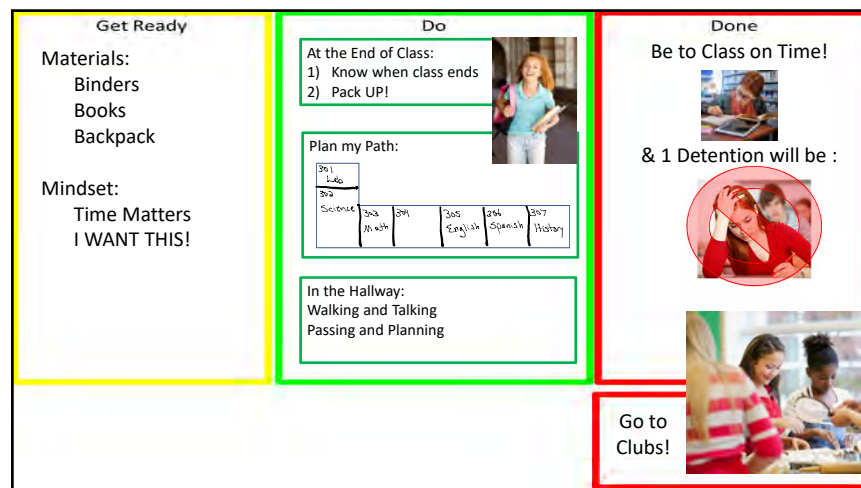
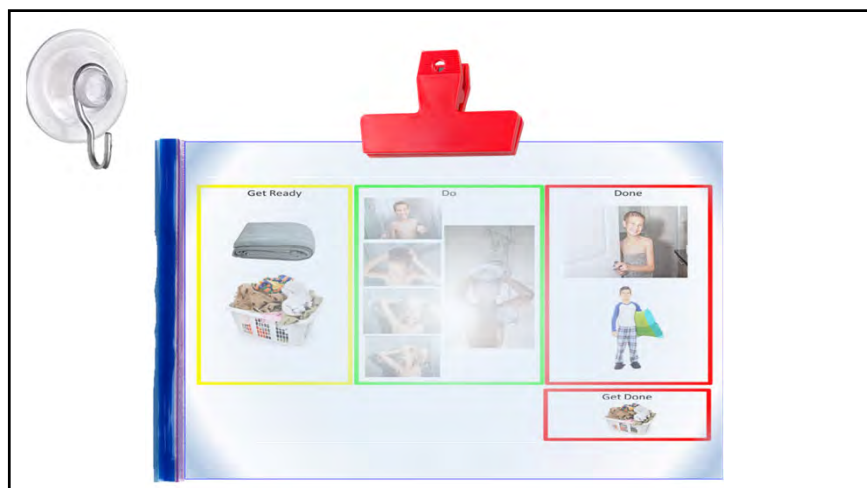
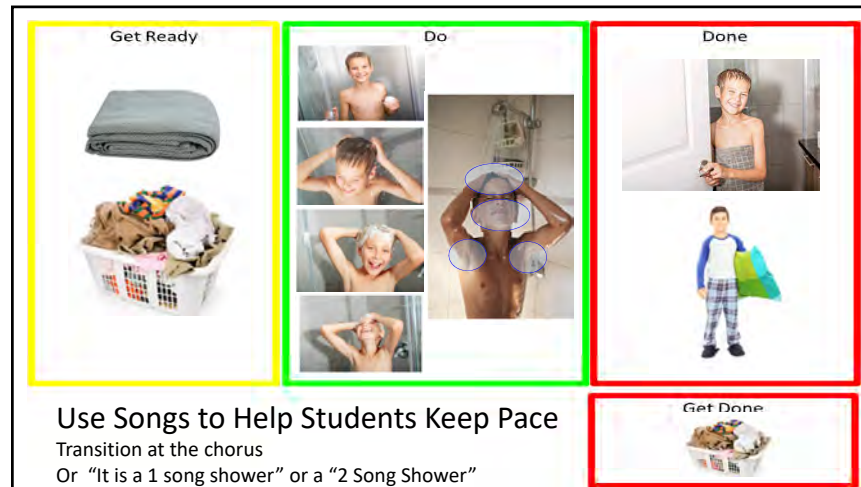
Get Ready

Do

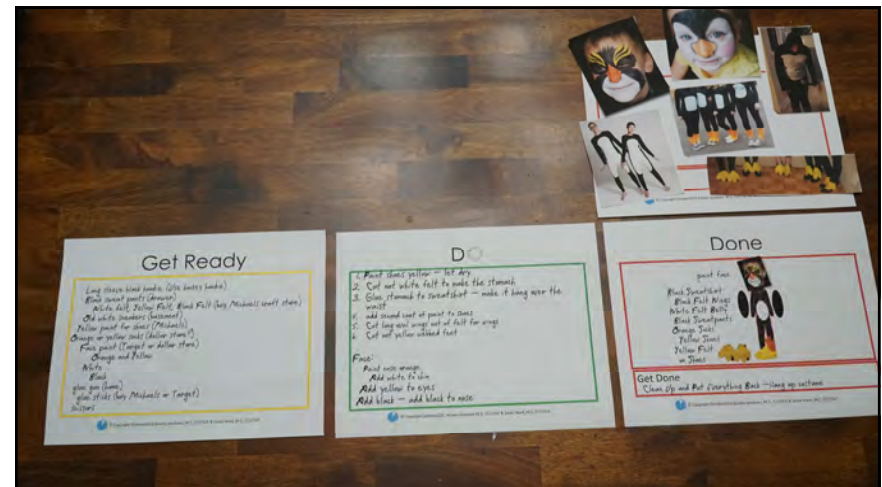
Done

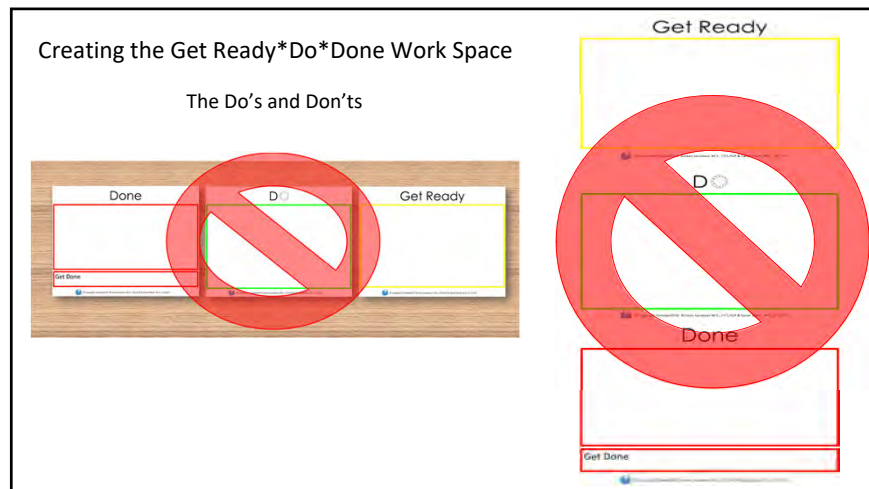


Get Done



Get Ready	Do	Done
		I Want to be a Vet Tech and Work with a Veterinarian! 
		Get Done





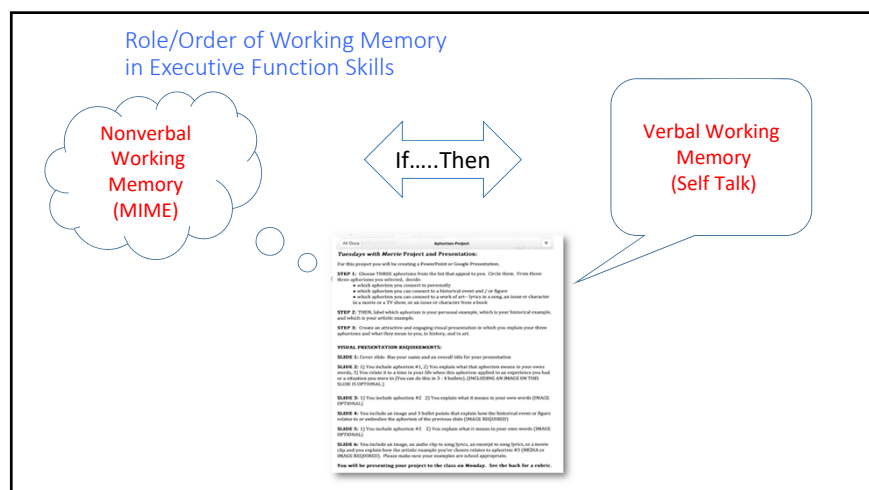
GDD in the Classroom: **SKETCH** When the Done is Open Ended or Novel

Review the assignment and *with the student* sketch what **Done** will look like

With the student break down the steps or directions in the **Do** space

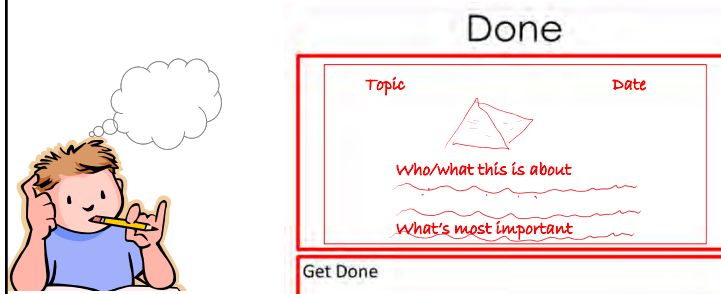
Have students identify what they need to **Get Ready**

Materials, Prior Knowledge, Self-Regulation Strategies, Potential Obstacles/Time Robbers

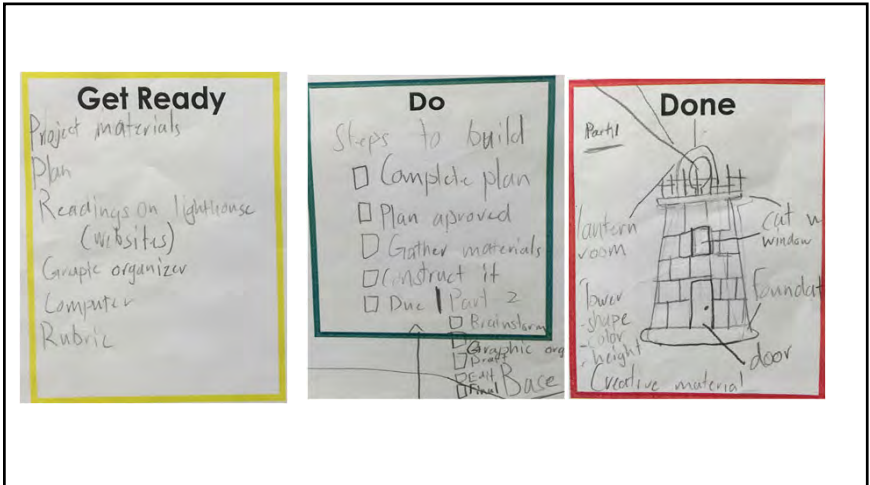
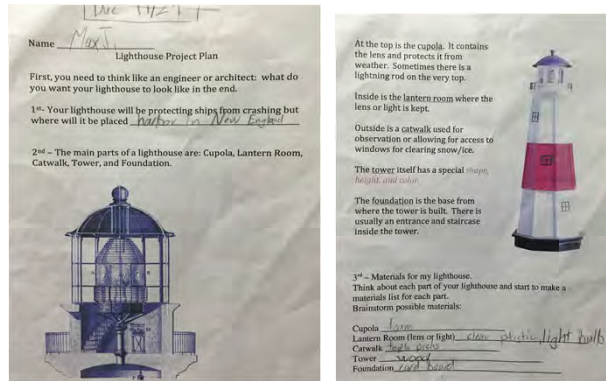


Ancient Egypt Time Line Landmarks

On an index card carefully draw a colorful picture representing your topic. At the top of the card write the "topic" and date. Below the picture write two or three sentences explaining your topic. Your sentence should state who or what the card is about and describe what's most important to know about this person, place or event.



Long Term Projects



Middle School Writing Assignment

Write a multi-paragraph essay. Be sure to include a graphic organizer OF YOUR CHOICE!

- Man has always been a questioner, wanting to know the whys of everything. Man used both his intelligence and his imagination to answer his questions long before science solved these mysteries. Myths were created thousands of years ago to help answer these age old questions, as well as to calm fears of the unknown, and as a means to teach good from evil.

Write a well-structured, multi-paragraph essay summarizing three Greek myths (you may choose ones we have read together) and describe what natural phenomenon they explain.

Write a well-structured, multi-paragraph essay summarizing three Greek myths (you may choose ones we have read together) and describe what natural phenomenon they explain.

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

¶ Introduction

¶ Greek Myth #1 - Summarize

Phenomenon explained:
Good vs Evil

¶ Greek Myth #2 - Summarize

Phenomenon explained:
To Calm a Fear

¶ Greek Myth #3 - Summarize

Phenomenon explained:
Answer a science question

¶ Conclusion

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

THREE PARAGRAPHS

Practice Sketching:
Roller Coaster Homework Assignment

Done

Get Ready

Do

Done

Get Done



360 Thinking™ Get Ready * Do * Done

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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)?
THREE PARAGRAPHS

The Importance of Sketching, Gesture and Context

Done

Challenge #1

- How we built it.
- What was successful
- What were the errors.
- How many trials and what we plan next..

Challenge #2

- How we built it.
- What worked this time.

Challenge #3

- What did not work this time..
- How many trials we ran.
- How we will design the next coaster

Challenge #3

- How we plan to build coaster #3
- Why we think it will work this time
- What are the possible errors we anticipate?
- What we have learned from the trials

Practice Sketching: Roller Coaster Homework Assignment

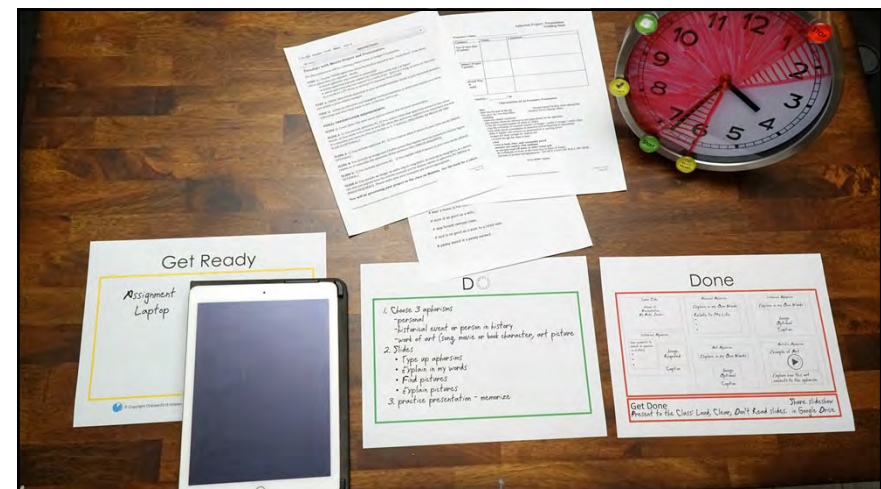
HOMework WEEK OF 3/12 -3/16

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)?
THREE PARAGRAPHS

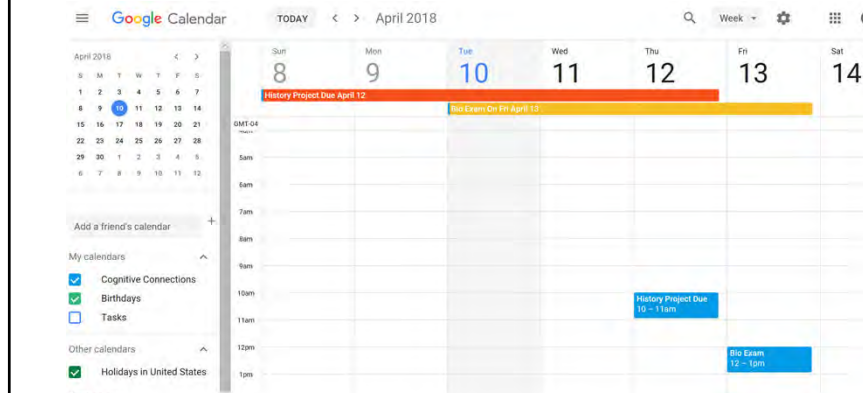
Make Your Own Word Bank

Start
Finish
Loop
Dip
Turn
Hill
Marble

Stool
Table
Books



Digital Calendars



How it Changes the Classroom ...

Task Introduction

Teacher A ...

- You are going to build a poster
- Here's is what I need you to do
 - Gather your materials at the back of the room
 - In your group decide who is going to do what
 - Your poster needs 3 ideas and 3 pictures

Task Introduction

Teacher B ...

- Puts on a pair of future glasses
- You are going to build a poster
- Here is an example of what it might **Look Like(Done)**. What parts/features do you notice in this poster?
- How do you imagine your poster will look the same but different?
- What steps will need to **DO** to complete the task?
- What will you need to **Get Ready** to complete the task?

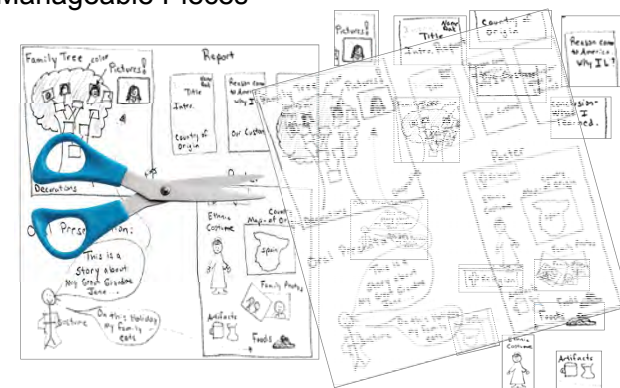
Long Term Social Studies Project

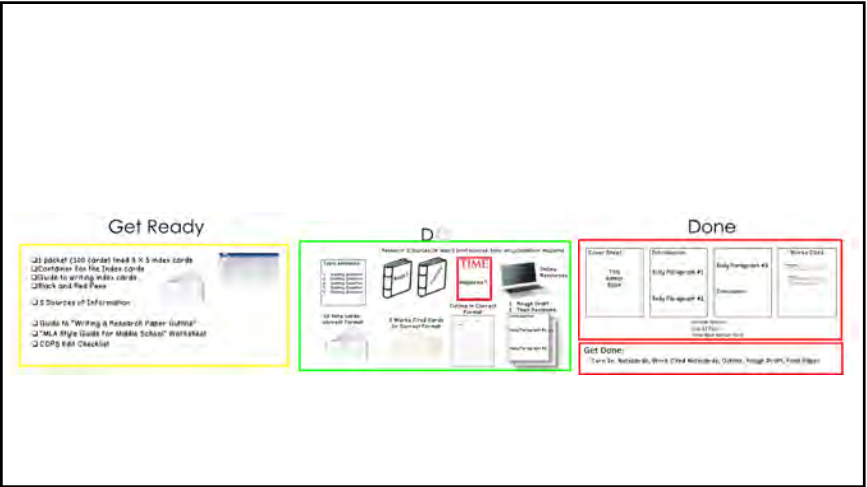
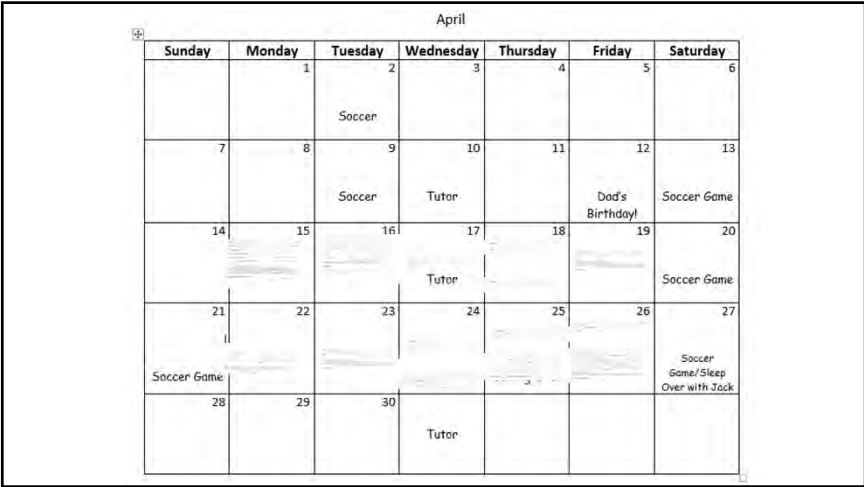
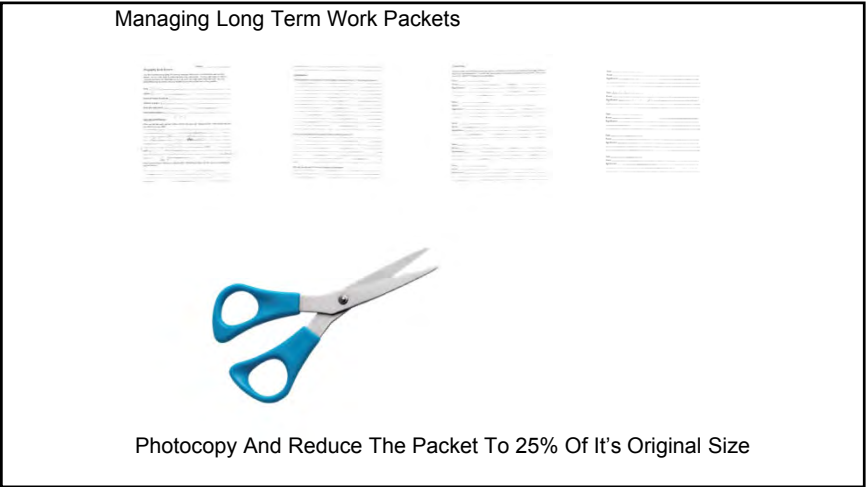
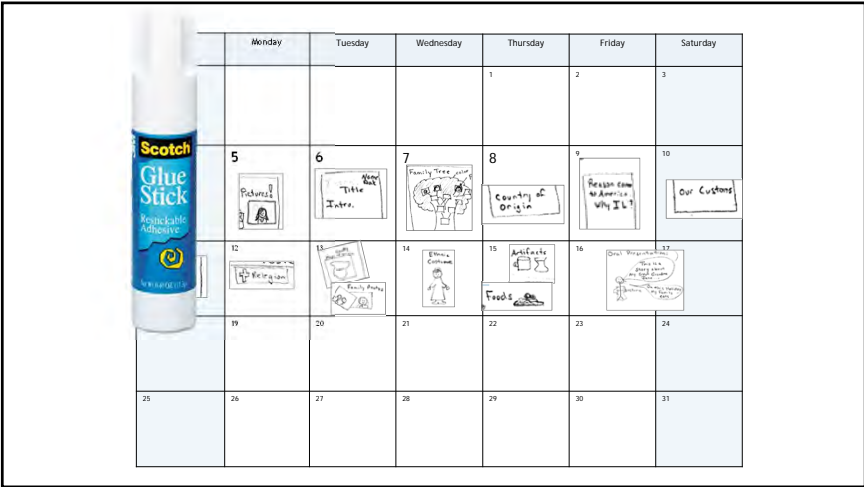
In this long-term project students will be asked to interview members of their families to learn about their ethnic heritage. Students will

- construct a family tree,
- compose a report,
- craft a poster board,
- make a n oral presentation to the class.



Breaking Large Projects into Manageable Pieces





2016 DECEMBER						
SUN	MON	TUE	WED	THU	FRI	SAT
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31



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



A

FTER 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 get to 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 bear” 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 Bear 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. Jensen?" 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-imagine 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 midpoint 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.