



Executive Function Skills with Sarah Ward Webinar Series

Presented by Sarah Ward, MS, CCC-SLP
Friday, July 29, 2021

Presentation Handout

Part 1 - Learn it Today, Use it Tomorrow!

**Practical Interventions for Helping Students Develop
Independent Executive Function Skills**

Session Schedule

All times Pacific Time.

10:00 – 11:30	Presentation
11:30 – 11:40	Break
11:40 – 12:00	Q & A Period

*This schedule will be used for all four sessions

Session Descriptions

To review the learning outcomes for each session, visit:

www.actcommunity.ca/executive-function-skills-with-sarah-ward-webinar-series.

Tips for Improving the Zoom Experience:

- Join the Zoom webinar at 9:45 to give time to address technical issues.
- Ensure you have an up-to-date version of Zoom installed:
www.zoom.us/download
- If you are viewing in a web browser:
 - Check that your browser is up to date.
 - If you are having trouble with Internet Explorer or Safari, try Google Chrome.
 - Close all other open 'tabs'. [These use your computer's memory and slow the connection]

Acknowledgements

ACT – Autism Community Training is pleased to bring back Sarah Ward to present on Executive Function training via web streaming. We thank to Sarah Ward and everyone at Cognitive Connections for agreeing to facilitate this important four-part webinar to provide practical resources and techniques that enable parents and teachers to tackle the challenges of executive function for those with autism and other neuro-developmental challenges.

As we all struggle to keep our communities healthy, ACT is pleased to be continuing our presentations online while maintaining the safety of attendees, staff, and our presenters.

Over the years, those who have attended ACT events know that we depend on community collaboration and support to sustain our work as we are a small not-for-profit. We deeply appreciate the many parents and professionals across British Columbia who volunteer their time, donate funds, and help spread the word - especially during these challenging times.

Support evidence-based resources – [Donate to ACT!](#)

Free Resources from ACT

ACT's Coronavirus (COVID-19): Resources for the Autism Community - ACT has gathered resources specific to those who are neurodiverse, and useful general resources related to COVID-19: www.actcommunity.ca/covid-19-resources

Autism Videos @ ACT (AVA) – Nearly 70 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 1,400 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 in Chinese – www.actcommunity.ca/information/act-in-chinese

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 8,000 plus followers. www.facebook.com/autismcommunitytraining

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Learn It Today – Use It Tomorrow!

Facilitating Independent Executive Function Skills

July 29, 2021



Learn it Today, Use it Tomorrow!
Practical Interventions for Helping
Students Develop Independent
Executive Function Skills

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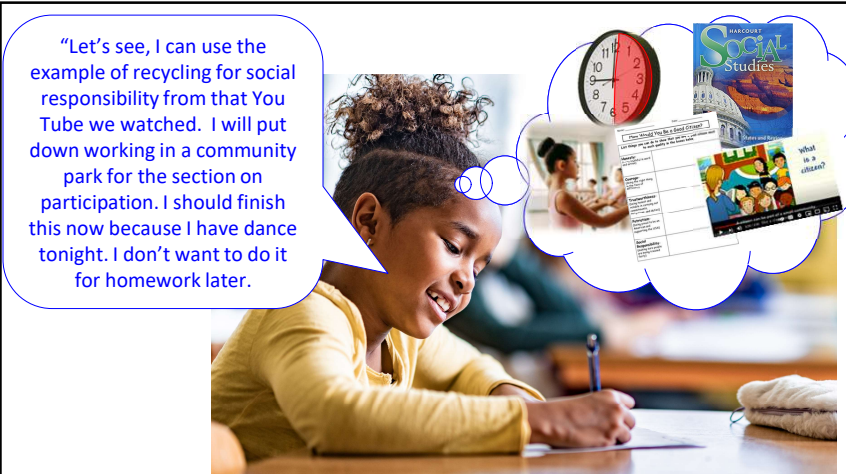


Ok Class...You have about 25 minutes to fill out your organizers on being a citizen. Use strong evidence!

SEPT IS THURSDAY
AGENDA
-PREVIEW CH 7 ON CO
-DO NEW GRAPHIC O
NETWORK
-STMT LOG
BRING ON RE

VOCAB
-EXPLICIT
CLARIFY THE ME
THE TEXT POINT
HERE
-EVIDENCE:
GET STATE FROM
OPINION AND
TEXT

OBJECTIVE: MAKE A CLAIM A
TO PROVE OUR CLAIMS WITH
RESPONSES USING THE "CLA
STANDARD: QUOTE ACCURATE
EXPLAINING WHAT THE TEXT
AND DRAWING INFERENCES FROM

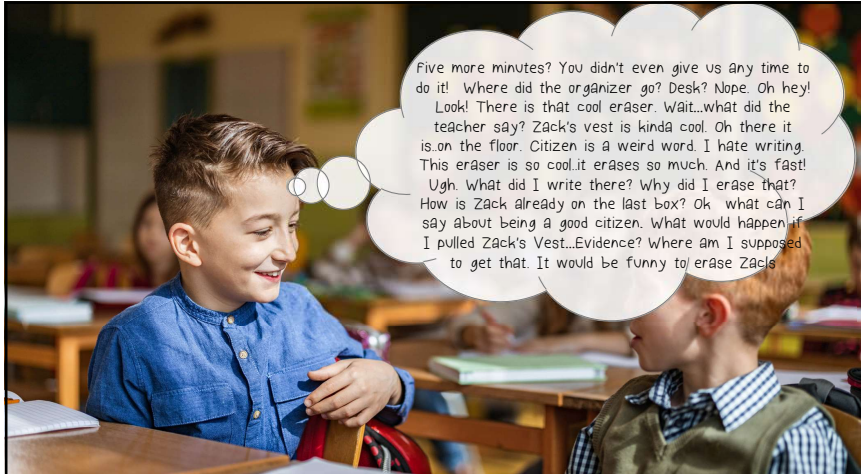


"Let's see, I can use the example of recycling for social responsibility from that YouTube we watched. I will put down working in a community park for the section on participation. I should finish this now because I have dance tonight. I don't want to do it for homework later."

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

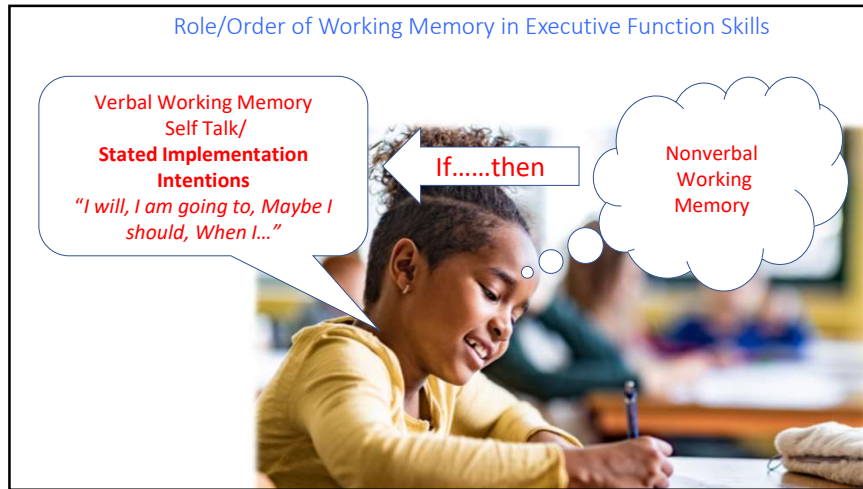
SOCIAL Studies

What is a citizen?



Five more minutes? You didn't even give us any time to do it! Where did the organizer go? Desk? Nope. Oh hey! Look! There is that cool eraser. Wait...what did the teacher say? Zack's vest is kinda cool. Oh there it is, on the floor. Citizen is a weird word. I hate writing. This eraser is so cool, it erases so much. And it's fast! Ugh. What did I write there? Why did I erase that? How is Zack already on the last box? Ok, what can I say about being a good citizen. What would happen if I pulled Zack's Vest...Evidence? Where am I supposed to get that. It would be funny to erase Zack's

Facilitating Independent Executive Function Skills



Nonverbal Working Memory and Self Regulation

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

- Critical for anything that unfolds over time

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

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

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

"Let's see, I can use the example of recycling for social responsibility from that YouTube we watched. I will put down working in a community park for the section on participation. I should finish this now because I have dance tonight. I don't want to do it for homework later."

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

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Situational Awareness + Nonverbal Working Memory


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

"Let's see, I can use the example of recycling for social responsibility from that YouTube we watched. I will put down working in a community park for the section on participation. I should finish this now because I have dance tonight. I don't want to do it for homework later."



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 **I**mplementation **I**ntention

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

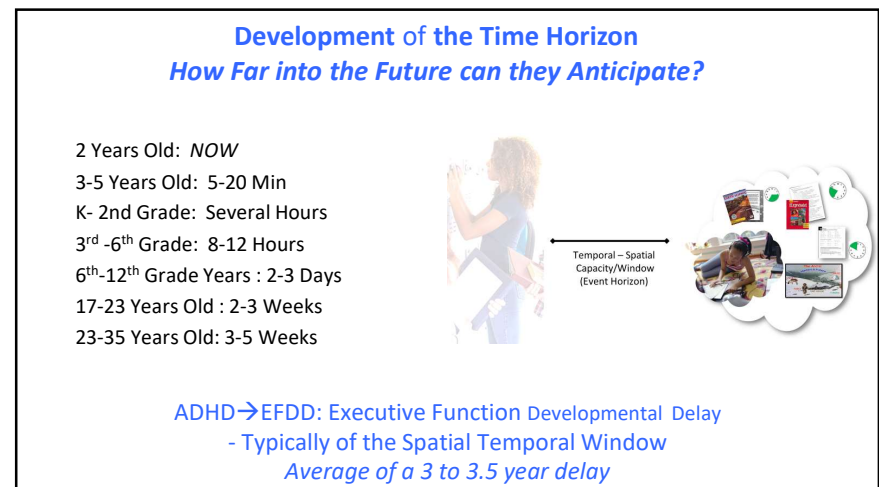
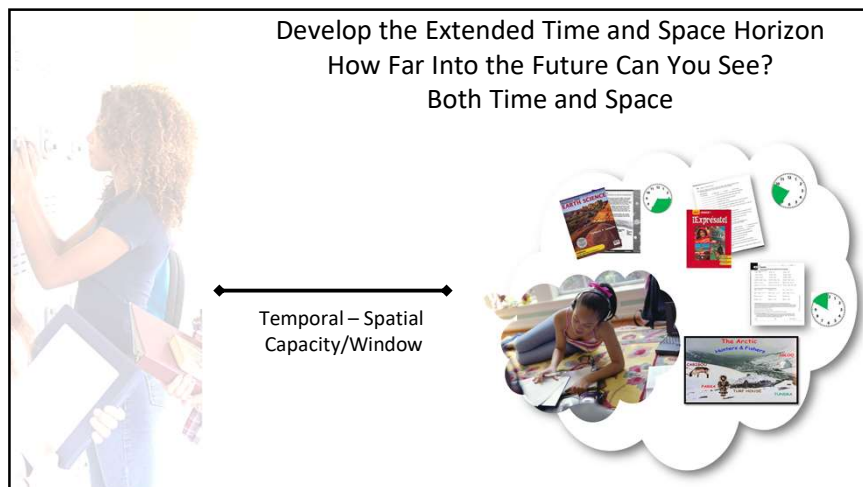
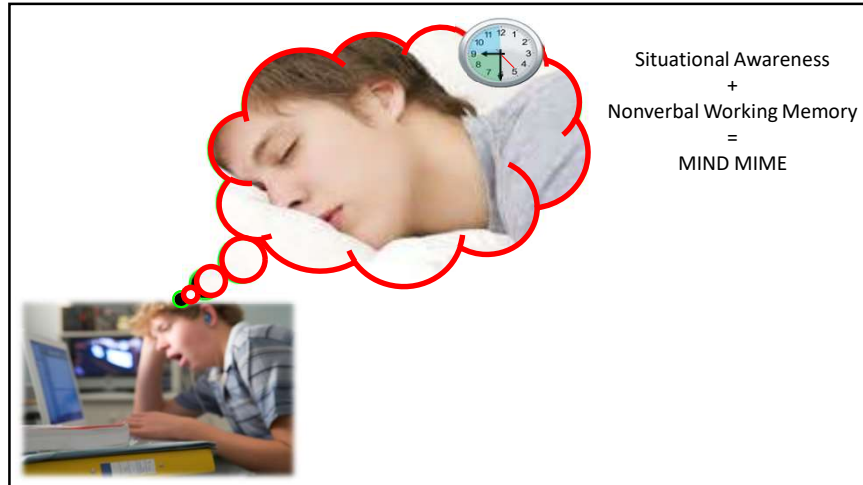


90% of the Time Task Planning Happens in a Different Space from Where you Execute the Plan

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Elementary school: 'Now and Next' & External Regulation



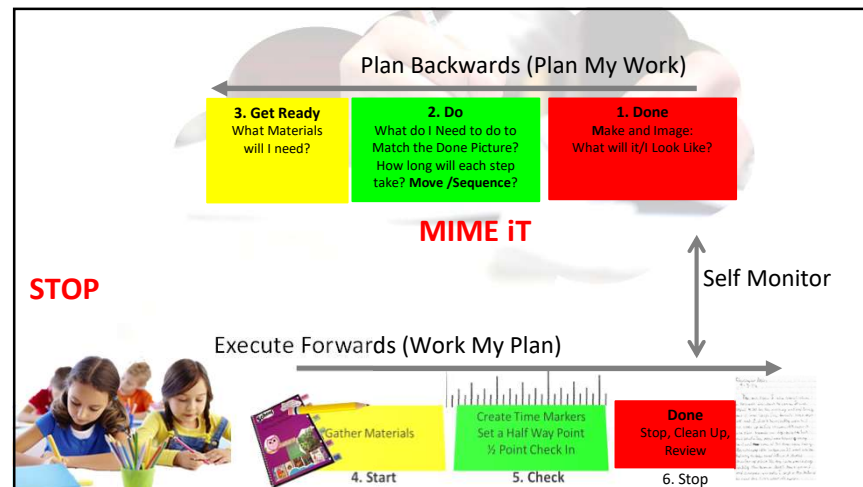
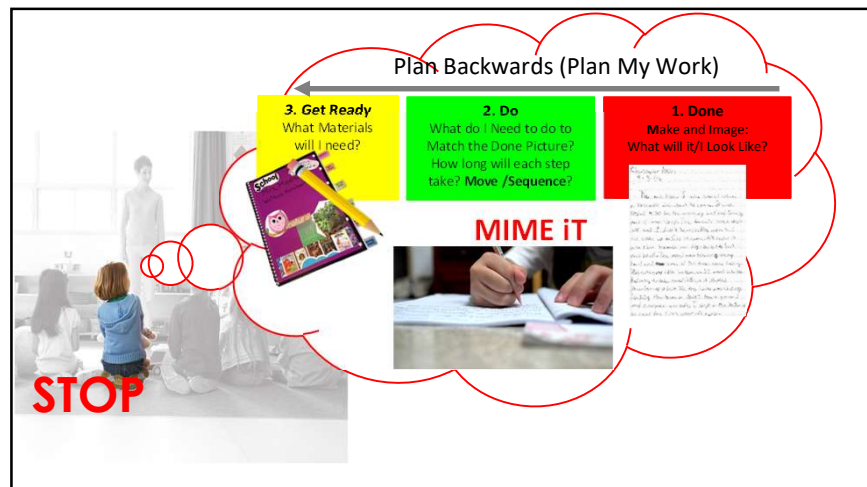
Middle and High School Students: Internal Regulation More Complex Because of the Temporal Spatial Window



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

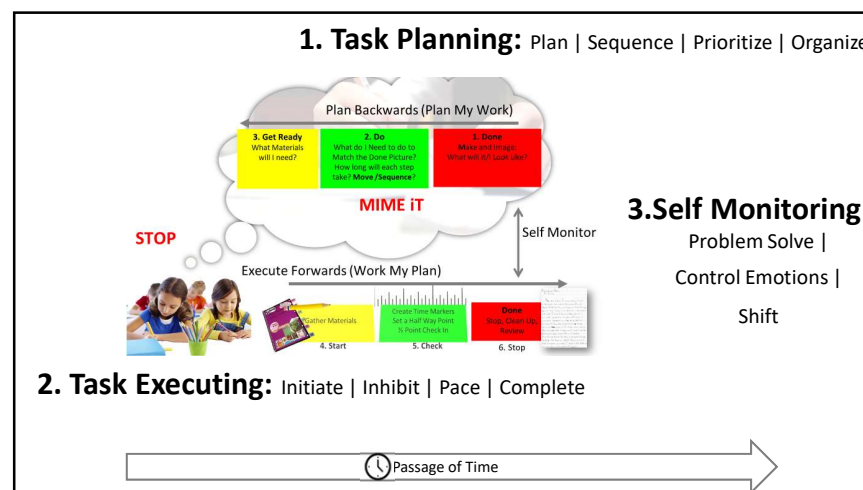




Why is it Problematic to Start with Get Ready?

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

Get Ready
What Materials will I need?



How Executive Function Challenges Present

Doesn't bother to write down assignment; forgets the directions

Can't find things in backpack/desk/cubby/locker or leaves a "paper trail"

Forgets to bring materials back and forth between home and school

Overwhelmed by large assignments; doesn't know how to start

Chooses fun stuff over homework or chores

Does things either quickly and messily or slowly and incompletely

Sticks with a plan, even when it is clearly not working

Leaves long-term assignments or chores until last minute

Procrastinates or doesn't study at all

Loses or misplaces or leaves things (assignments, books, lunchbox, notebooks, jacket, etc.)

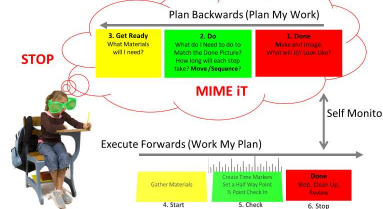
Does work, but forgets to turn it in

Does not seek help when stuck

Facilitating Independent Executive Function Skills

Intervention:

HOW to Develop 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

WHY DON'T WE START WITH GET READY?

“Get Ready for Camp!”

“Honey We need to leave for camp at 8:30. Time to get ready!”

ORDER OF WORKING MEMORY

Verbal Working Memory Self-Talk

- Get Dressed
- Brush Teeth
- Sunscreen
- Backpack
- Shoes
- Soccer ball
- Water bottle
- Yoga mat

If.....then

Nonverbal Working Memory

Role/Order of Working Memory in Executive Function Skills

Get Ready

Ugh..it's 7:15 (time). I need to go upstairs(space) and quickly brush my hair and get dressed (time and pace). My bag is in the mudroom(space). I need to remember to fill and put my water bottle in my bag.

Do

If.... Then

Done

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”

MIME

feel

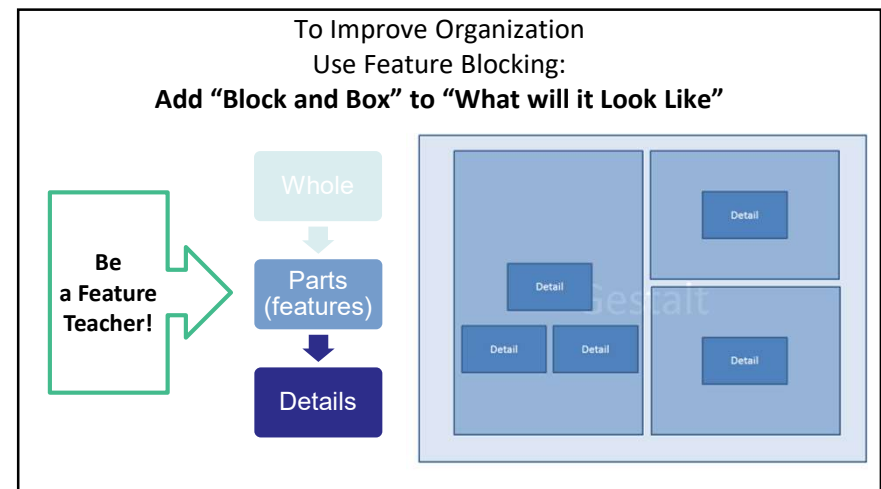
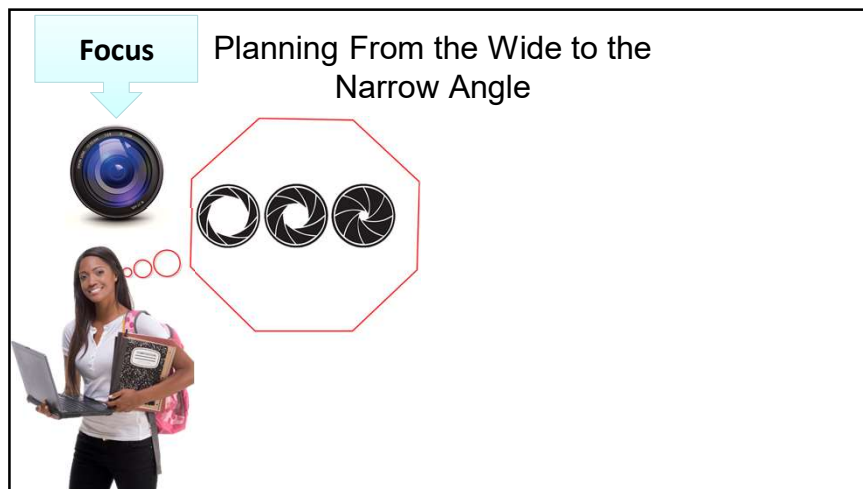
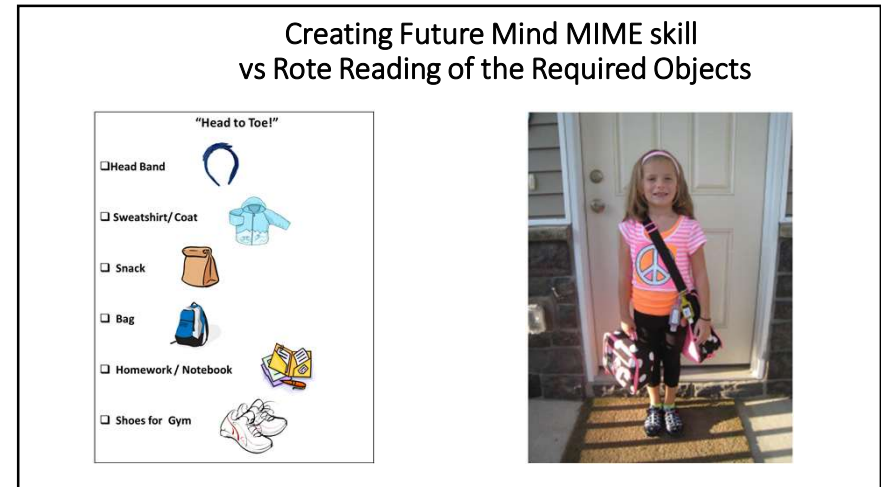
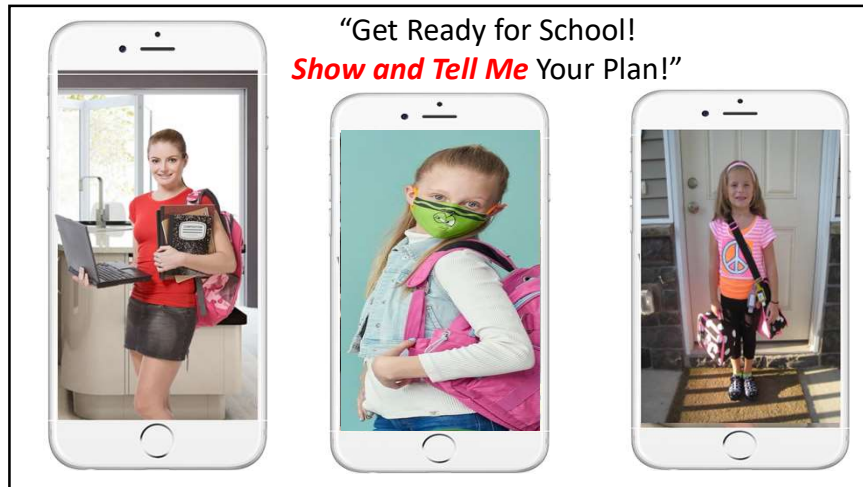
If....then

Self Talk – Stated Intentions
“I will.....
I am going to...”

Element of Uncertainty
Maybe.....
I could.....”

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

**“Get Ready for School!
Show & Tell Me Your Plan!”**

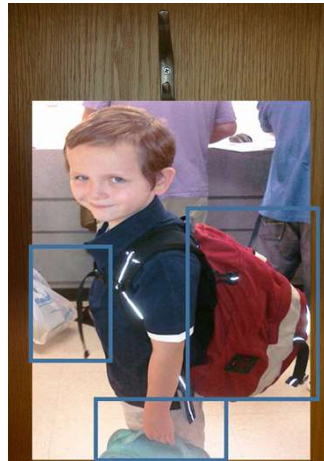


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Make an Image - What will I look Like?
"Tell me your Plan to Match the Picture!"

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

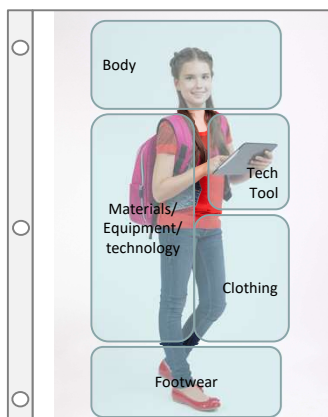


"Let's get ready to go home!"

Semantic vs Episodic Memory



"Are you ready for _____?"
Show and tell me your Plan to Match the Picture."



1. Teach the Routine
2. Then add the complex decision:
"Same but Different"

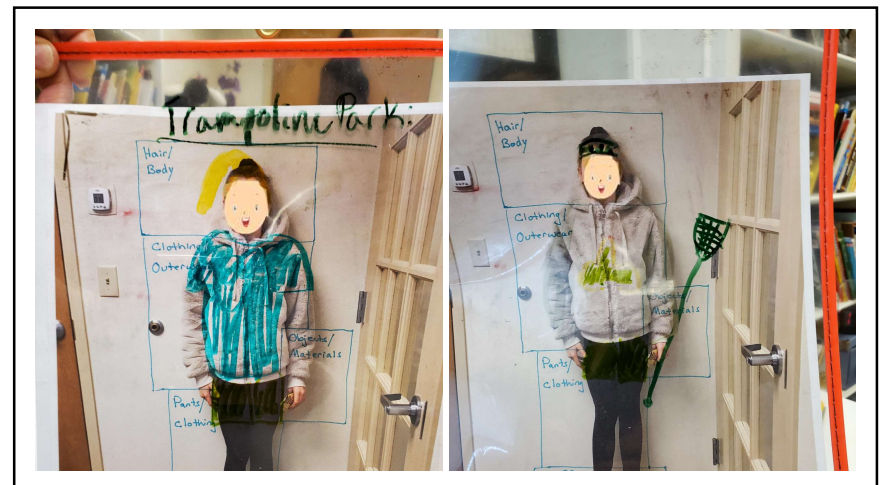
Rainy Day

Science Class

Soccer Practice

Birthday Party

Beach



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Transitions


Stopping the Activity

Making a Cognitive Shift

Starting the Activity


“Get Ready for Baseball”

The Behavior Code by Jessica Minahan



How will you Look?
Same but Different


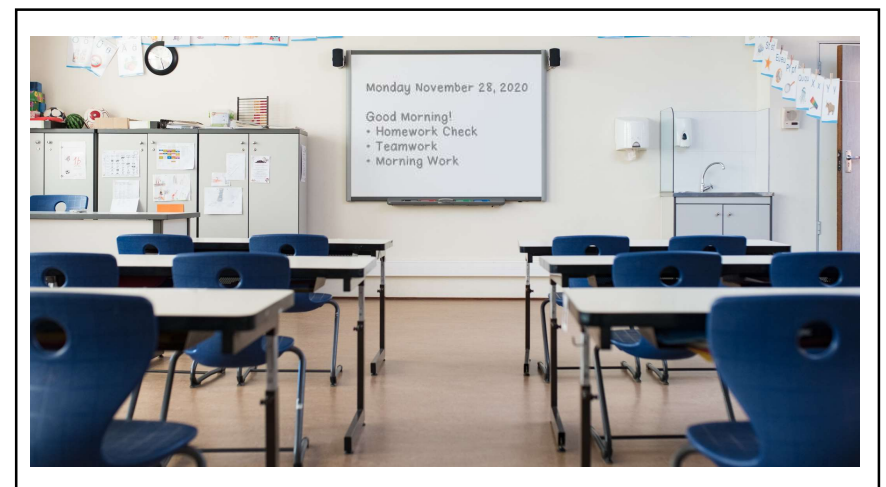
Interview?
Beach Day?
Town Pool to Exercise?
Class?



See
Sketch
Gesture
MIME

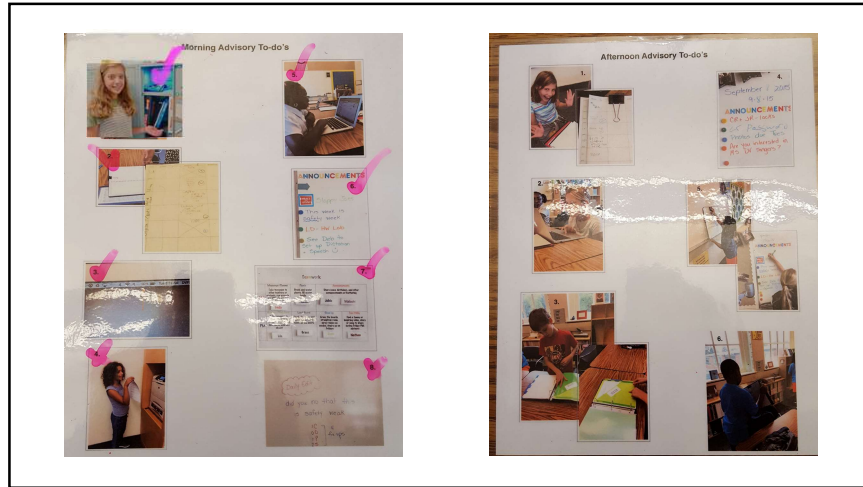
Benefit of Photographs to Access
Nonverbal Working Memory

- Give a check for completeness: Are all the parts there?
- Give a check for coherence: Does it make sense?
- Forces Abstraction
- Give you platform for inference: Can make some causal inferences
- Promote Collaboration & We watch each others' gestures
- Encourages Prediction
- Helps to take Perspective

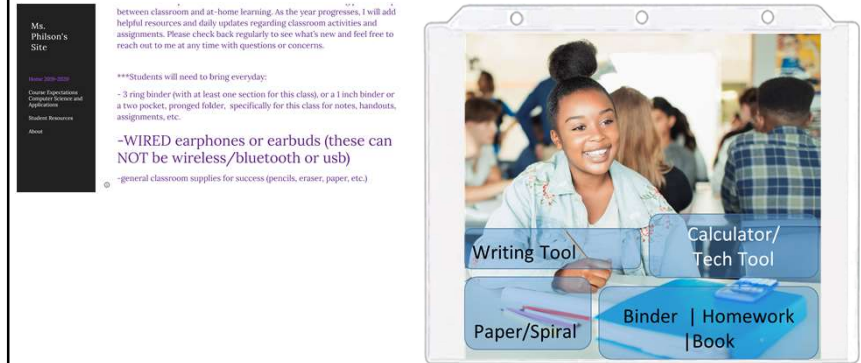



Facilitating Independent Executive Function Skills

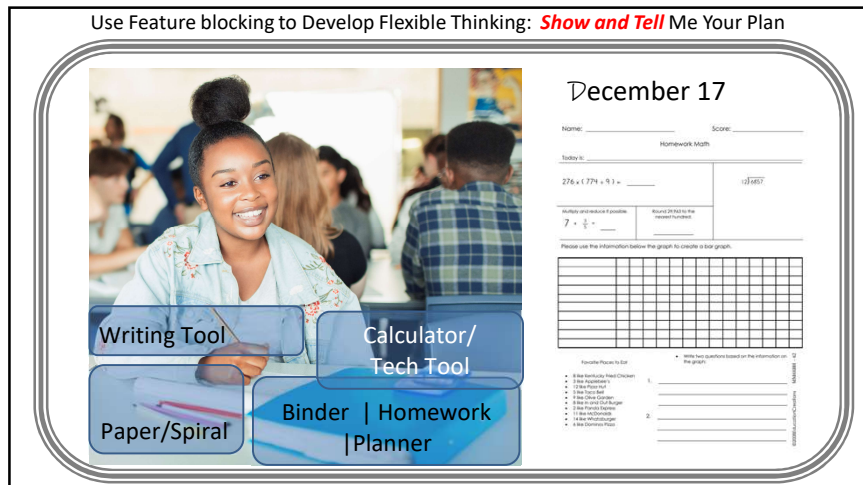
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Use Feature blocking to Develop Flexible Thinking: *Show and Tell* Me Your Plan

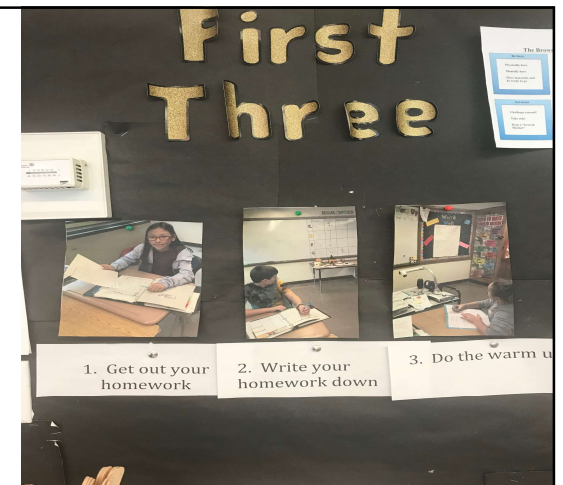


Use Feature blocking to Develop Flexible Thinking: **Show and Tell** Me Your Plan



Classrooms

Where can you look to know what to do before class starts if you are unsure?



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Facilitating Independent Executive Function Skills

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**

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

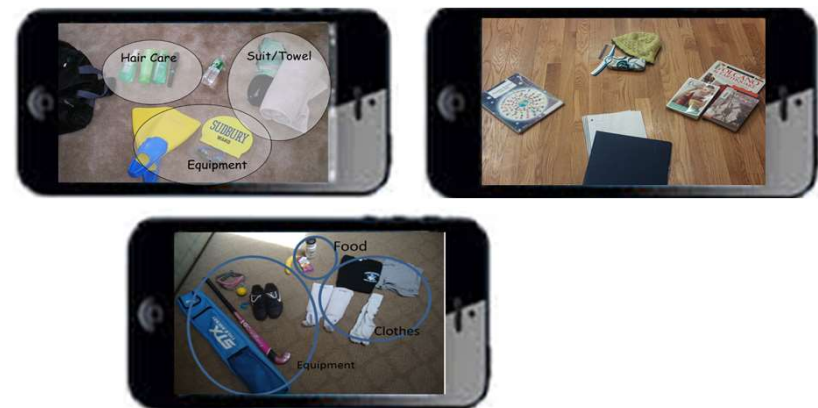


MANAGING MATERIALS:

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



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












Learn It Today – Use It Tomorrow!

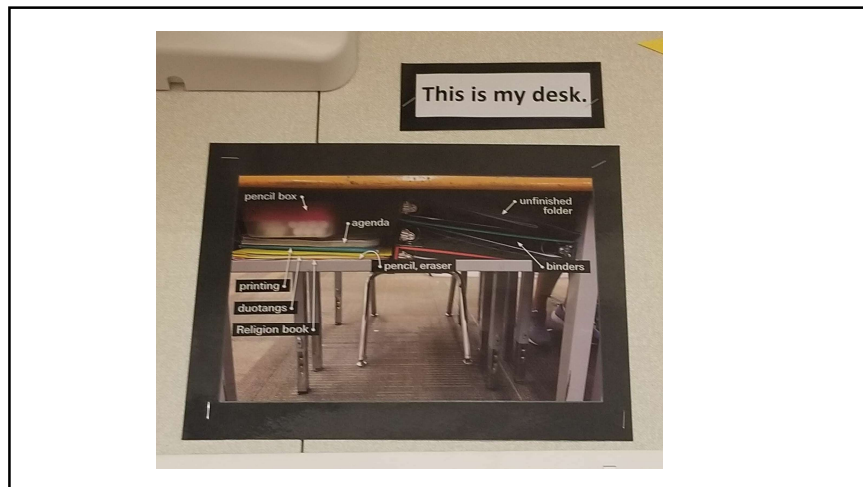
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Breakfast Menu		
Fast Morning – No Prep	A Little Time Morning – Small Amount of Prep	Slow Morning – Cooking Required
<ul style="list-style-type: none"> Breakfast Bar 	<ul style="list-style-type: none"> Cereal 	<ul style="list-style-type: none"> Pancakes 
<ul style="list-style-type: none"> Cereal in a cup 	<ul style="list-style-type: none"> Oatmeal or Hot Pocket 	<ul style="list-style-type: none"> Eggs 
<ul style="list-style-type: none"> Breakfast Drink 	<ul style="list-style-type: none"> Fruit 	<ul style="list-style-type: none"> Quesadilla 

Take a Break Visual Menus:	Creative	Mindful	Physical
	<ul style="list-style-type: none"> Get my Sharpie on! 	<ul style="list-style-type: none"> Spotify Playlist 	<ul style="list-style-type: none"> Shoot Hoops 
	<ul style="list-style-type: none"> Coloring Pages/Crafts/ Easy crafts Hattifat.com 	<ul style="list-style-type: none"> Watch Ocean Videos 	<ul style="list-style-type: none"> Scooter Obstacle Course 
	<ul style="list-style-type: none"> Quick creative snack/cook 	<ul style="list-style-type: none"> Play with the Dog or Kaleidoscope drawing pad 	<ul style="list-style-type: none"> Go for a walk 





Shift from the Scripted Plan
to being a Mind MIME

The Importance of Gesture for
Mental Spatial Time Travel and the
Mental Dress Rehearsal

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



MIME:
Right in Front of Me: Cubbie



MIME: At the Door



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MIME:

Down the Hall



Freeze, Point and Share Your Plan



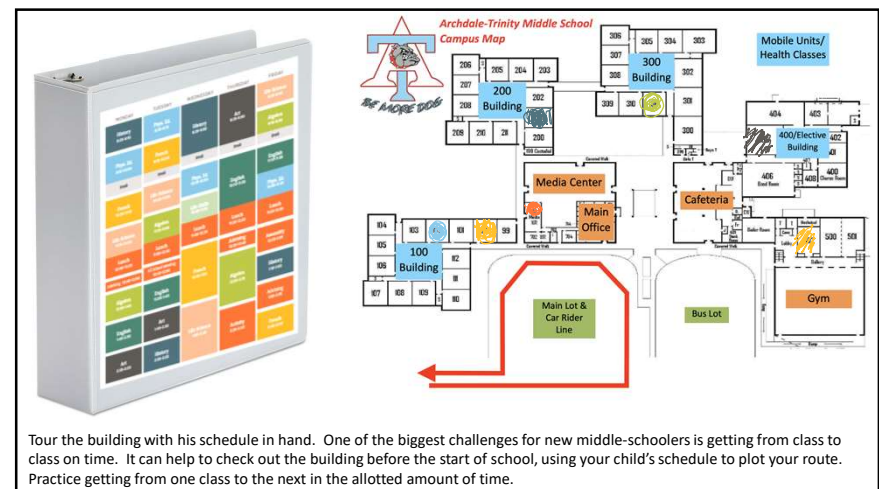
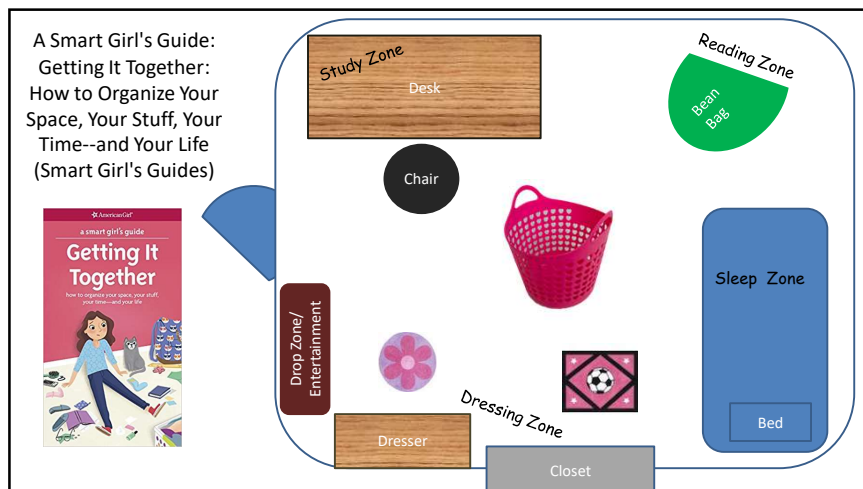
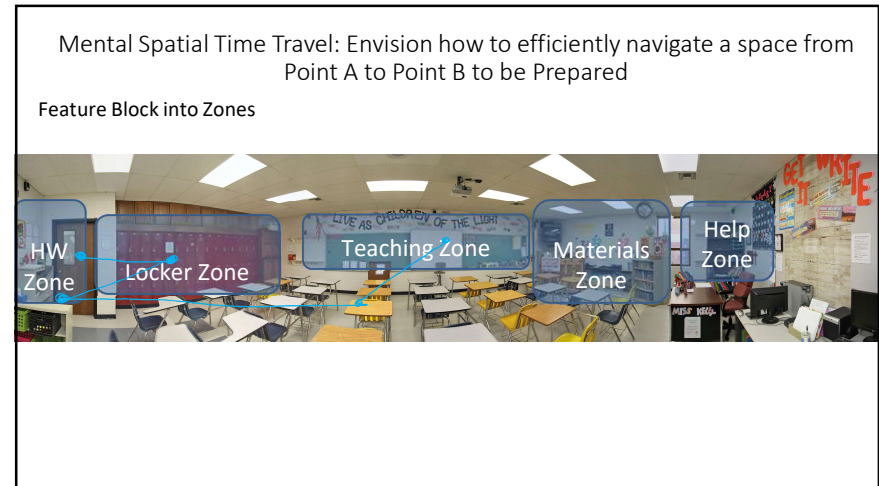
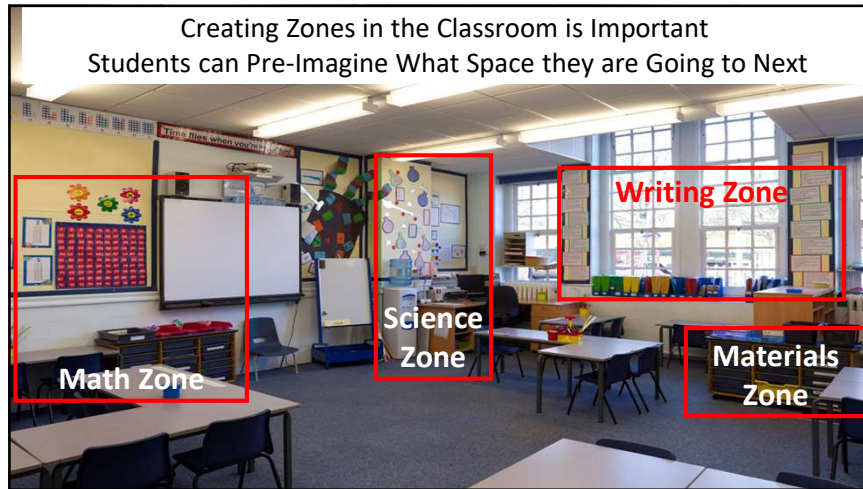
Creating Zones in the Classroom is Important
Students can Pre-Imagine What Space they are Going to Next



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Facilitating Independent Executive Function Skills



Tour the building with his schedule in hand. One of the biggest challenges for new middle-schoolers is getting from class to class on time. It can help to check out the building before the start of school, using your child's schedule to plot your route. Practice getting from one class to the next in the allotted amount of time.

Model Representational Co-Thought Gesture



Develop the Spatial Temporal Window
Have a Future Planning Room/Space

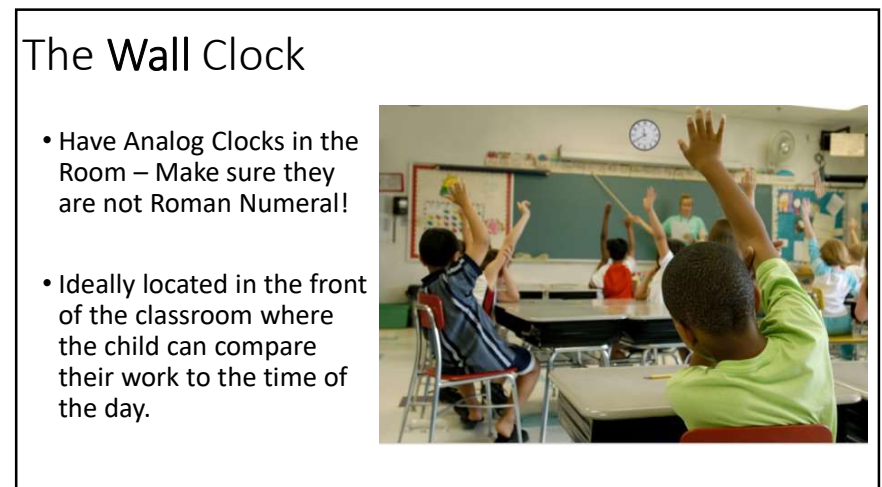
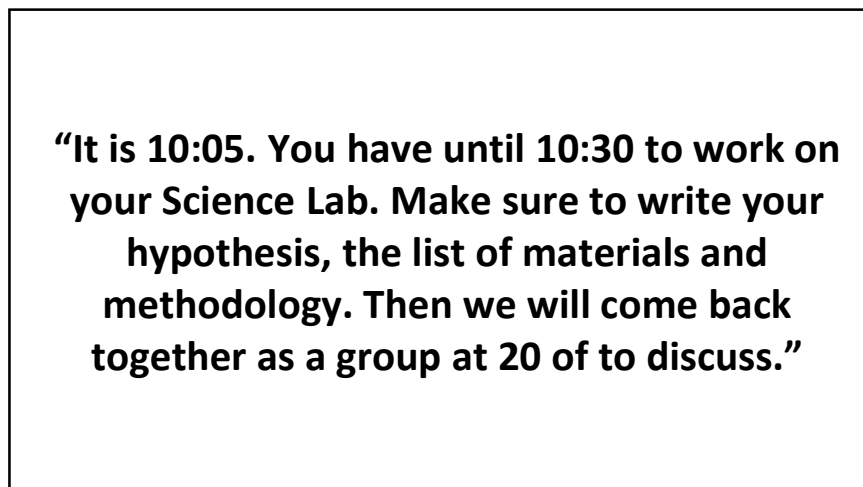
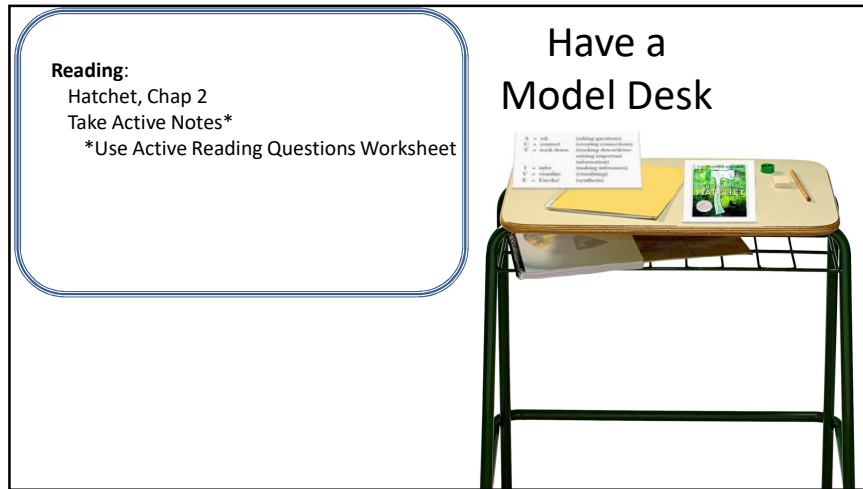


https://www.amazon.com/s?k=magnetic+photo+pockets&ref=nb_sb_noss_1

Develop Cognitive Flexibility, Same but Different
Thinking and Forethought for Transitions



https://www.amazon.com/s?k=magnetic+photo+pockets&ref=nb_sb_noss_1





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!

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!

"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

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."

Science Lab Report Template

Question (purpose): What is the experiment about? What are you trying to discover?

Hypothesis: Write a 1-2 sentence statement predicting the result of your experiment. This is an educated guess based on what you already know. You also need to be specific and exact. Your experiment will test the hypothesis to see if it's true or false.

Materials: List the materials you use for the experiment and the specific in the amounts needed and used.

Method: Write down the steps you follow for the experiment.

Future Self Talk

Plan A: At 1:00 PM

Plan B: At 1:00 PM

I Will: I am going to: I can: I might/ Maybe: I could: I should: I probably: I can't: I then

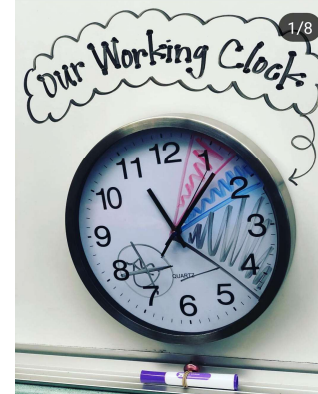
Time (seconds)	10	20	30	40	50	60	70	80	90	100	110	120
at Base Line:	2.1	3.2	5.1	5.5	8.1	8.2	8.1	8.1	8.1	8.1	8.1	8.1
at First Reading:	2.3	3.3	5.3	5.7	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3
at Initial Reading:	2.3	3.3	5.3	5.7	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3
at Second or Third, Connected (3rd or 4th):	2.3	3.3	5.3	5.7	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3
at Release of P ₂ O ₅ (Start of 1st run):	2.3	3.3	5.3	5.7	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3

Facilitating Independent Executive Function Skills

Make Time Visible!



Comments



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

Tip! If you are using a clock with a plastic cover, the dry erase marker will not work as well. Instead use Vis à vis Markers or Water Based markers!

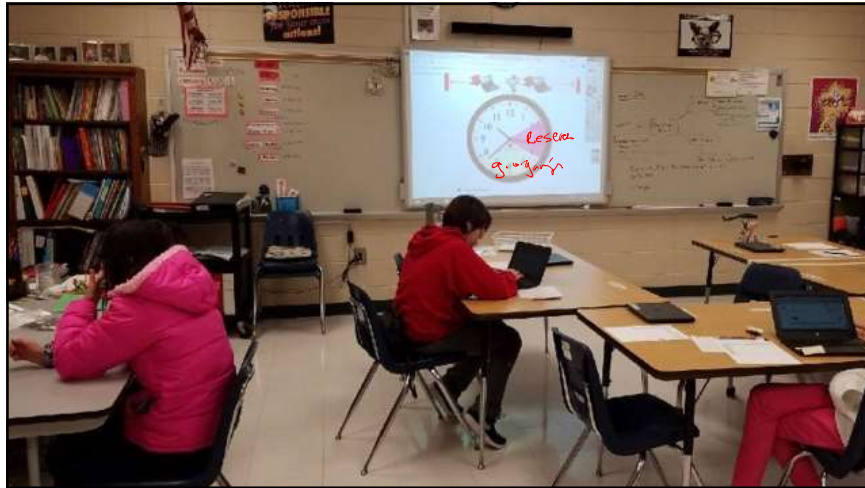


<https://www.online-stopwatch.com/large-online-clock/>





Facilitating Independent Executive Function Skills


July 29, 2021



Analog Clock Display + **Epic Pen** for Remote Learning
Or try the **Web Paint** Chrome Extension




or



Web Paint
Chrome Extension
[Web Paint - Chrome Web Store \(google.com\)](#)

Epic Pen
<https://epic-pen.com/>

Create Time and Space Markers



The image contains two objects. On the left is an open book with a red cover and white pages. A yellow sticky note is attached to the right page with the text "Pause Here". On the right is a round analog clock with a silver frame and a white face. The numbers 1 through 12 are visible. A green highlight is drawn on the clock face, covering the area from the 1 o'clock position to the 3 o'clock position. A green Expo brand marker is positioned horizontally below the clock, with its tip pointing towards the right.

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Learn It Today – Use It Tomorrow!

Facilitating Independent Executive Function Skills

July 29, 2021

Shading on the Clock: Do's and Don'ts!



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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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