



**Executive Function Skills:
Practical Therapy Ideas for
the Speech and Language Pathologist**

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

Co-Director
The Center for Executive Function Skill Development

Adjunct Instructor
Department of Communication Sciences and Disorders
School of Health and Rehabilitation Sciences
MGH Institute of Health Professions, Boston, MA

The Center for Executive Function Skill Development www.executivefunctiontherapy.com

3 Primary Layers of Executive Functions

Layer 1 Self – Regulation

Balance: Basic needs are met

Awareness
Motivation

Emotional Control



3 Primary Layers of Executive Functions

Layer 2 Organization/Integration

Integrate details into a bigger picture

Organize and store information so it can be traced back and retrieved over time




3 Primary Layers of Executive Functions

Layer 3 Higher Order Reasoning Skills

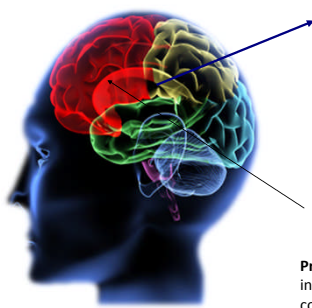
Analyze
Predict an outcome
Draw a conclusion

Reason
Evaluate

Solve a problem



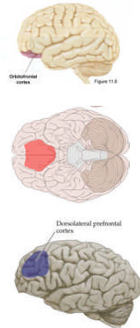
The Subcortex



- **Basic Drives:**
 - Hunger/Thirst
 - Sleep/Wake
 - Sexual
- **Emotion**
- **Memory**
- **Time**
 - Chemical Control of Pace
 - Bio-Rhythm
 - “sensation” of time passing

Prefrontal lobe – planning, initiation, anticipation, impulse control – higher order thinking

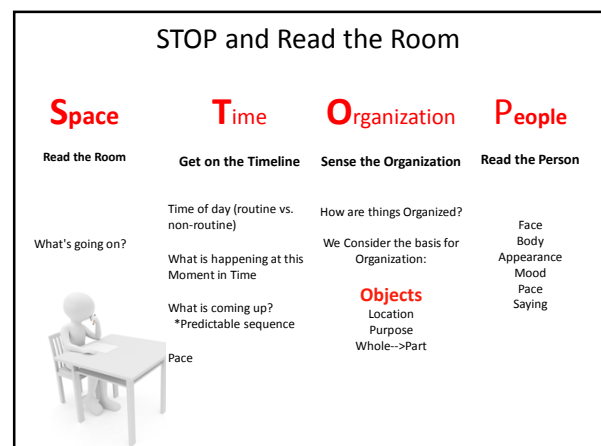
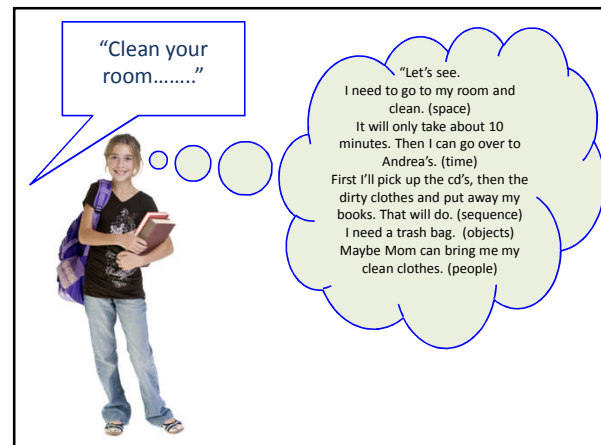
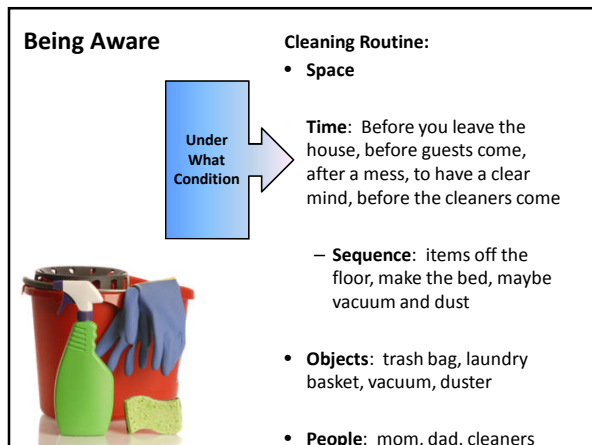
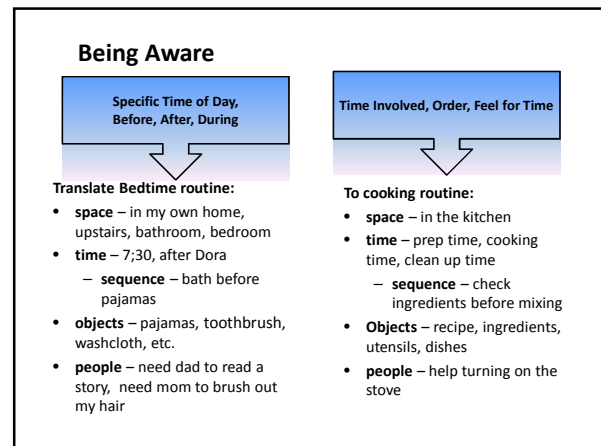
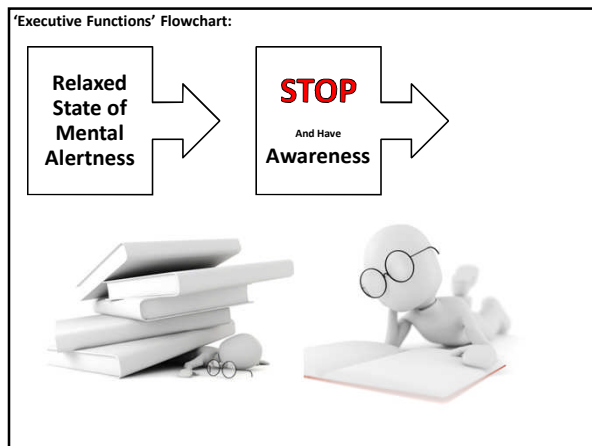
PreFrontal Cortex

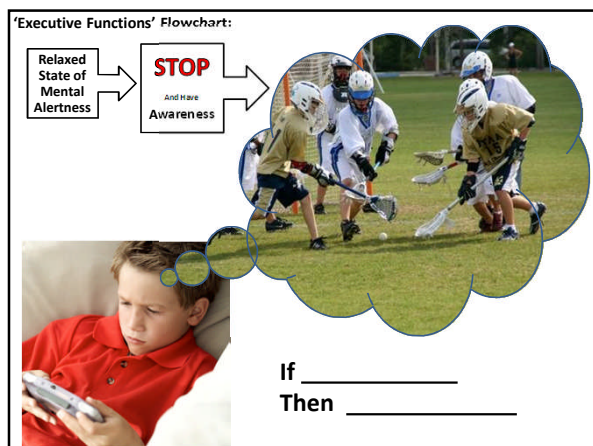


Orbitofrontal = **STOPS**

Ventromedial = **SELECTS**

Dorsolateral = **ACTS AND MONITORS**



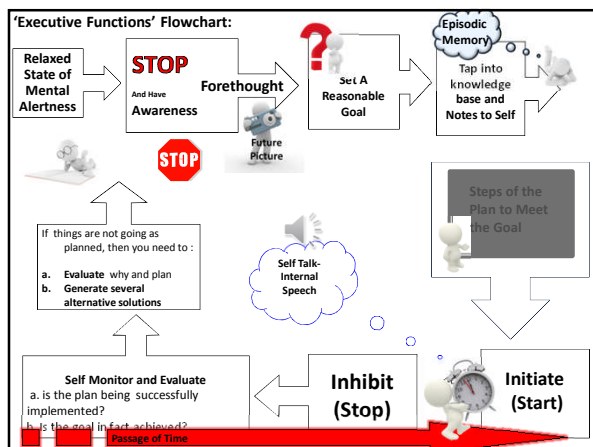


Summary:

- Awareness is the ability to respond to important national cues about space, time, objects and people
— Think – Decide- Act
- Enables a student to integrate these details for knowledge and **shift** to the big picture to understand the gestalt of 'now' and 'next'.
- Creates a mental screenplay of 'How' to do something so a student can then self direct or execute in that fashion.

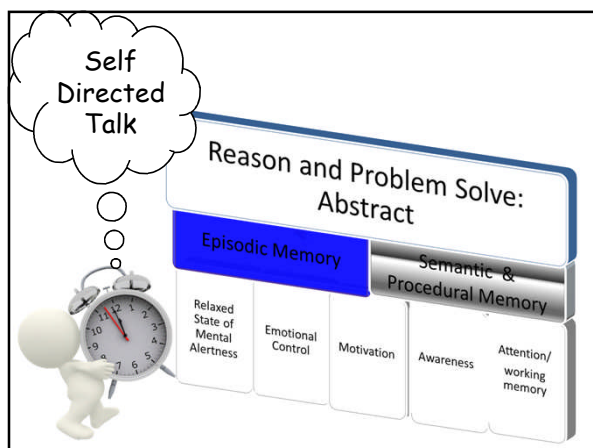


Anticipate the Outcome!



Working Definition of Executive Control

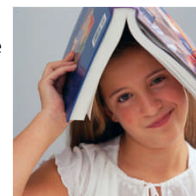
Executive Control is the ability to
integrate a present **awareness**
with a **future anticipation** and **prior experiences**
to achieve a reasonable **goal & plan**
(while still accounting for and
flexibly managing and organizing
the **space, time, objects and people around you**)



Observations: EF Difficulties in the Classroom

"Can talk the talk but can not walk the walk"

- Requires frequent feedback to complete tasks
- Inconsistent Effort and Performances
- May perform well on quizzes and short tests, but less well on homework
- Looks Unmotivated and/or Stressed
- Unprepared for Class or Assignments
- May have rigid and Inflexible Thinking



Developmental List Of Executive Function Skills

From Executive Function Skills in Children and Adolescents, by Peg Dawson and Richard Guare

Preschool

- Run simple errands (e.g., “Get your shoes from the bedroom”).
- Tidy bedroom or playroom with assistance.
- Perform simple chores and self-help tasks with reminders (e.g., clear dishes from table, brush teeth, get dressed).
- Inhibit 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.

Kindergarten

- Run errands (two to three step directions).
- Grade 2
- Tidy bedroom or playroom.
- Perform simple chores, self-help tasks; may need reminders (e.g., make bed).
- Bring papers to and from school.
- Complete homework assignments (20-minute maximum).
- Decide how to spend money (allowance).
- Inhibit behaviors: follow safety rules, don’t swear, raise hand before speaking in class, keep hands to self.

Grades 3—5

- Run errands (may involve time delay or greater distance, such as going to a nearby store or remembering to do something after school).
- Tidy bedroom or playroom (may include vacuuming, dusting, etc.).
- Perform chores that take 15—30 minutes (e.g., clean up after dinner, rake leaves).
- Bring books, papers, assignments to and from school.
- Keep track of belongings when away from home.
- Complete homework assignments (1 hour maximum).

Grades 3—5 (continued)

- Plan simple school project such as book reports (select book, read book, 'write report).
- Keep track of changing daily schedule (i.e., different activities after school).
- Save money for desired objects, plan how to earn money.
- Inhibit/self-regulate: behave when teacher is out of the classroom; refrain from rude comments, temper tantrums, bad manners.

Grades 6—8

- Help out with chores around the home, including both daily responsibilities and occasional tasks (e.g., emptying dishwasher, raking leaves, shoveling snow); tasks may take 60—90 minutes to complete. Baby-sit younger siblings or for pay.
- Use system for organizing schoolwork, including assignment book, notebooks, etc. Follow complex school schedule involving changing teachers and changing schedules.
- Plan and carry out long-term projects, including tasks to be accomplished and reasonable timeline to follow; may require planning multiple large projects simultaneously.
- Plan time, including after school activities, homework, family responsibilities; estimate how long it takes to complete individual tasks and adjust schedule to fit.
- 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, creating and following timelines for long-term projects, and making adjustments in effort and quality of work in response to feedback from teachers and others (e.g., grades on tests, papers).
- Establish and refine a long-term goal and make plans for meeting that goal. If the goal beyond high school is college, the youngster selects appropriate courses and maintains grade point average (GPA) to ensure acceptance into college. The youngster also participates in extracurricular activities, signs up for and takes Scholastic Aptitude Tests (SATs) or American College Tests (ACTs) at the appropriate time and carries out the college application process. If the youngster does not plan to go to college, he or she pursues vocational courses and, if applicable, employment outside of school to ensure the training and experience necessary to obtain employment after graduation.
- Make good use of leisure time, including obtaining employment or pursuing recreational activities during the summer.
- Inhibit reckless and dangerous behaviors (e.g., use of illegal substances, sexual acting out, shoplifting, or vandalism).

The Hierarchy of Task Execution

Is the Student Aware? Are they Reading the Room?
Do they have a Future Picture?
Do they Know and Sense the Passage of Time?
Are the Key Features Organized in their Mind? (Big Picture □ Features □ Details)
Have they accessed any Notes to Self? Do they recall last Time how Things Worked Out?
Do they have a Plan for managing the steps, the time and the materials?
How do they initiate best?

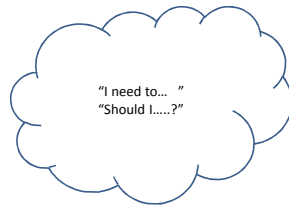
Key Principles of Executive Control

- Establish a Relaxed Alertness
- Talk less to maximize working memory
- Cue Awareness: "If....then" Future Picture Thinking
- Show the Sweep of Time
- Access Hindsight: How is this the Same but Different?
- Do Students Know the "How to"?
- Teach Organization:
 - Big Picture--> **Features** --> Details

Imperative vs Declarative Language

Imperative: Command

Declarative: ○ ○ ○



A Declarative References or Describes 'what' is to be accomplished so the learner creates the goal vs. commanding 'what needs to be done' to achieve the goal.

What is Declarative Language?

- The type of language used when one is communicating what the mind is producing. Develops inner speech.
 - "I need to...."
- Allows us to do "small talk".
 - "She just said she got her nails done. I went this weekend with my mom too!"
- Helps the brain to integrate information from multiple sources
 - Integrating body language, tone of voice, 3 peers, 'where in the four square game' we are, my own idea
- Allows us to learn and process 'online' in an integrated fashion
 - *I can* learn and think at the same time. So I will add this comment about the Colonists....

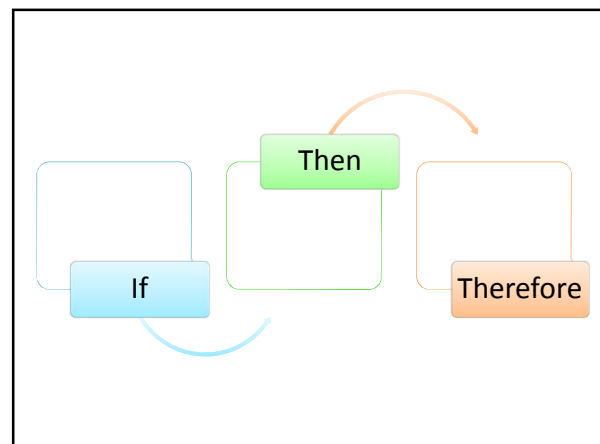
1 Relationship Development Intervention, Dr. Steve Gutstein

Declarative Language in Academics

- Comment on a shared experience
- Compare and Contrast
- Think back and reminisce
- Brainstorm
- Plan and prepare
- Integrate ideas
- Repair misunderstandings



1 Relationship Development Intervention, Dr. Steve Gutstein



My Top 5 Reasons to Use Declarative Language

1. Model self-narrative to help your child develop his or her own inner voice.

Early on infants and toddlers develop and learn language when they hear it from others. When children are just learning to talk, parents are reminded to label objects, narrate simple actions and comment on their child's focus of attention so that the child will learn and then use those words accordingly. After the initial language spark is ignited, most of us then go on to develop our own voice that we use to share our thoughts, recap experiences, talk about what we are doing, and talk about what we are thinking.

Most of us also then go on to create our own inner voice. This is a hugely important by-product of our language learning. We use our inner voice to problem solve and plan. We remember what we have learned or noticed in the past, and apply it to the here and now. For example, imagine you are getting ready to go to work and you can't find your keys. Your inner voice may say something like, 'Hmmm.... Now when did I last see my keys? Where do I usually put them down? What jacket did I have on yesterday?... Maybe they're in the pocket.' Your inner voice helps you think through the problem and gets you started on a plan of action to solve it.

Children with Executive Functioning difficulties do not usually develop this inner voice to regulate their thoughts and actions on their own. Just as modeling was important when your child was learning to talk, thoughtful modeling now, in this regard, is equally important. So – talk out loud, think out loud, work through a problem, make predictions, ponder opportunities, consider possibilities, and reflect on past experiences when you are with your child. They will learn from your models, internalize the ideas, and begin to form their own inner voice.

2. Provide a window into another person's perspective.

Some children have difficulty taking perspective. Using declarative language to share your thoughts and feelings provides your child a regular window into these things in an inviting, nonthreatening way. We are providing them information that is critical in a social interaction that we know they may not pick up on their own. When we present declarative language in this way, we are not asking them to provide an answer that may be right or wrong. Rather, we are clueing them into social information and then allowing them to decide what to do with the information.

By regularly using declarative language in this way, we are also slowly building memories and awareness that different people have different thoughts, opinions, perspectives and emotions. For example, you say something to your child but he is facing the other way, appearing not to listen. Rather than say to him "turn around!" or "look at me" (both imperatives) share your feelings and perspective with declarative language: "It would make me happy if you would face me when I'm talking to you" or "I feel like you are not listening to me." Or, if you arrive home and your child does not say hello, instead of saying "say hello to me" we could say, "I really like it when you say hi" or "I feel disappointed because you haven't said hello to me yet." In my experience, kids usually make choices that are good for the relationship once they are provided this information. It's not that our kids don't want to say hi! It may just be that they don't realize how happy it will make you when they do.

3. Help your child zoom out to see the big picture and generate multiple solutions to a problem.

Often times when we get caught up trying to get our kids to do specific things, we all lose sight of the big picture. Because some children with executive function challenges are strong when it comes to details, but weak when it comes to seeing the big picture, it is important to think about the big picture when we present information. Giving very specific directions or questions that have one right answer promotes that focus on details. For example, if we tell a child to "put the toy in the box" or "say goodbye to Grandma" we are zooming into the details and creating a situation where there's one and only one right answer. However, if we use language instead to comment on what we see in the big picture: "I see a toy on the floor" or "Grandma is leaving" - we are instead encouraging our children to take a step back, notice the context and situation around them, and subsequently form a plan of action that makes sense to them. We are also leaving open the possibility that there may in fact be more than one solution – i.e., maybe the toy could go on a shelf or in the toy box, maybe the child could say "goodbye," wave, give Grandma a hug or walk her to the door. Generating multiple or alternate solutions to a problem can be hard for some kids. Declarative language naturally creates opportunities to practice this skill.

4. Empower your child to be a problem solver rather than direction follower.

Anytime we tell children what to do, ask them to follow a direction, or ask them to answer a question that has a right/wrong answer, we are honing their receptive language skills. This is not a bad thing, but it may not be what your child needs most. In contrast, if we use declarative language to present information about the environment or situation at hand, we are instead inviting her to notice this information and develop a plan of action. We are inviting her to have an “aha!” moment where she figures out on her own what to do with presented information. We are giving her an opportunity to think! Problem solving moments are huge for all children as they learn to view themselves as competent human beings in the world. Most kids have been asked right/wrong questions and given directions from a very young age. More practice in this area is not what they need most! Rather, they need practice problem solving, and identifying themselves as competent problem solvers. It is important to become comfortable presenting information to your child, and then waiting. The waiting time allows your child time and space to consider his next step. Here are some examples of direction following vs. problem solving opportunities – can you feel the difference?

“Throw that away” vs. “There is a piece of trash on the floor.”

“Wash your hands” vs. “Your hands look dirty.”

“Open the door” vs. “I heard someone knocking on the door.”

“Give that to your sister” vs. “I sure bet your sister would like to use that now.”

“Pass me that” vs. “I can’t reach that.”

5. Help your child read what’s going on in his environment.

We know that it can be difficult for some kids to tune into the social information that is going on around them. Rather than telling them exactly what to do and when to do it, use declarative language to help them notice what is important! For example, if it is time for a transition, instead of telling your child “go to the table for snack” or “put on your coat,” direct his attention toward the changes in the environment: “I notice all the kids are at the table” or “I notice all the kids are putting on their coats.” This will help internalize the importance of periodically checking in on one’s environment; there are visual clues available all the time, and they are important to pay attention to! We want our kids to learn that information is not always going to come to them - they have to become active information gatherers. In contrast, if we are using imperatives all the time with our kids, information *is* coming to them on a regular basis, and they don’t have the same need to look around or read the behaviors of others.

Situation: Max is using the hot glue gun for a school project. The teacher notices that he has put the glue gun on the counter in such a way that the hot tip of the glue gun is resting on the cord. It is starting to look melty.

Child's Perspective:	
Imperative Command	
Suggestions without Explanations	
Suggestions with Explanations	
Declarative – Problem Solving	

Using Declarative Language

- Don't tell the student the problem. Identify the feature of the problem or point to where the error is and see if they can find it.
- Don't give the student the solution. Ask them what tool/strategy might help them solve the problem.

This makes student's think critically about what they are doing rather than mechanically correcting or doing what they are told. It therefore builds self control and metacognition.

Declarative Language to Self Talk

You are going to _____. What Questions do you need to ask yourself before and during that task?

Examples:

Taking a Shower: Do I need to shampoo and condition? Do I have soap?

Getting out the Car: Have I gathered all my sports equipment? Do I need my school bag inside? Will I really want to come back out in the cold to get it?

Having a peer over: What will we do? Do I need to clean my room? Do I need to plan food? Have I made driving arrangements?

Getting ready for soccer: Do I have my shin guards? Do I need a water bottle? Do I need a change of clothes for after practice?

Getting ready to make cards for our moms: What are all the colors of construction paper I need? Do I need Scissors? Do I need glue?

Summary: Declarative Language

Don't cue to do – cue to know what to do

- Increase Awareness: Hmmmm
- Use of three levels of declarative cuing:
 - A look,
 - Make a statement,
 - Ask a how question
- Use the "Objective Voice" to keep the relaxed state of alertness

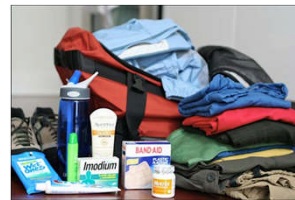
Awareness Trick



Trick: Turn the task into a "job" and name for the child their "job title"

Supplier, Builder, Tracer, Washer, Holder, Dumper, Wiper, Loader, Sprayer, Wiper

Allows the child to stay engaged and to participate towards task execution to the degree that they are able.



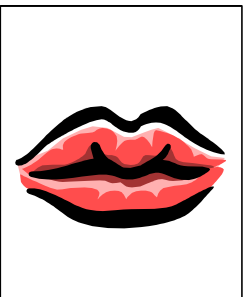
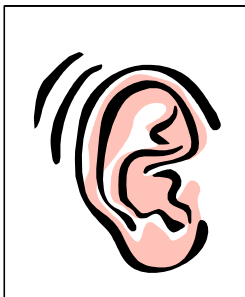
Situation: Student is Not Engaged in Packing for School Based Overnight Outdoor Adventure Trip

Jobs:

Roles:

How Should I look in Class?

Am I a Talker or a Listener? toolsofthemind.org


Need Help Around the House?*

Critical for Transition

Create A Help-Wanted Bulletin Board



Awareness



Future Picture

Verbal Mediators

Visual Mediators

"Time to go! Are you ready for school?"




"Head to Toe!"


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



How will you look?

Match the Picture Head to Toe

- ☐ Helmet
- ☐ Mouth Guard
- ☐ Shirt
- ☐ Shoulder Pads
- ☐ Gloves
- ☐ Cup/shorts
- ☐ Socks
- ☐ Cleats
- ☐ Stick
- ☐ Water bottle




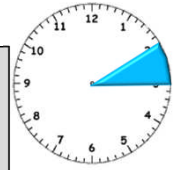
"Get Ready for Class – Match the Picture! How will today be the Same but Different?"

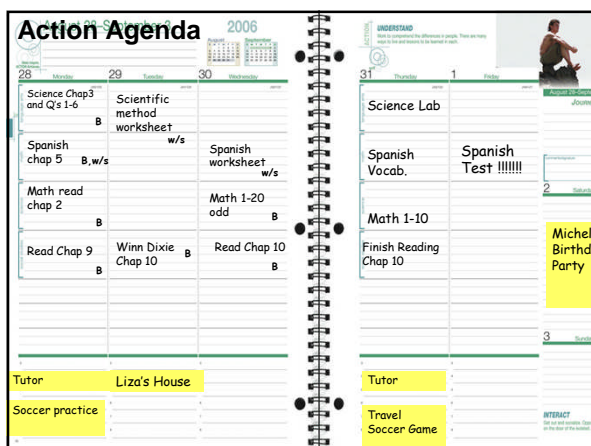
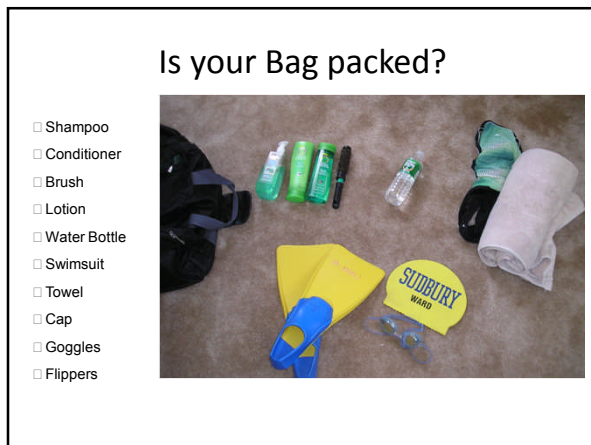
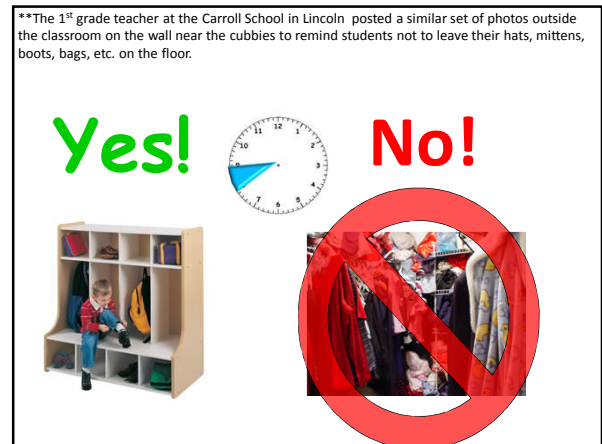
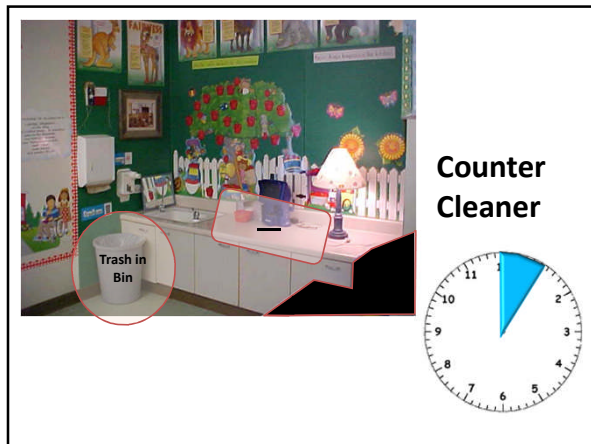
Planner

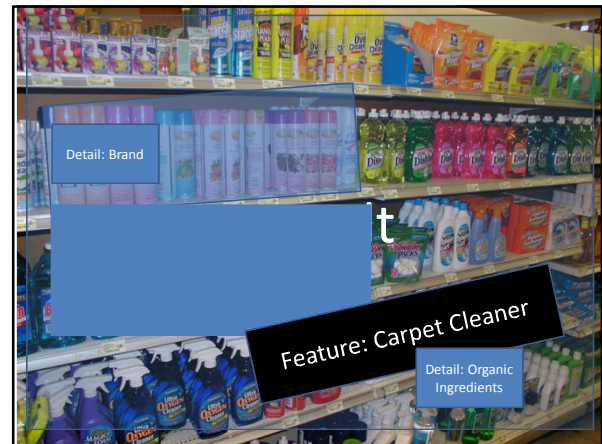
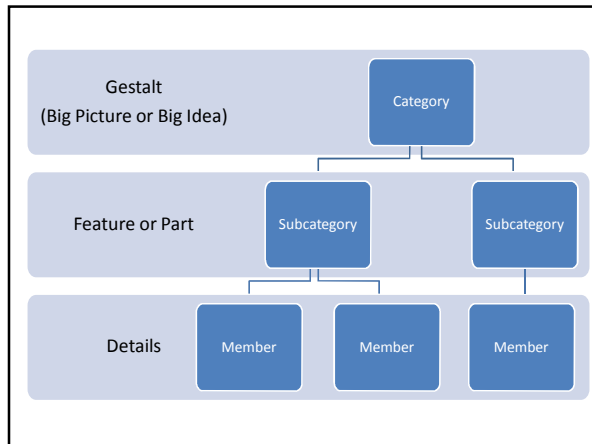
Book/s

Worksheet or Handout

Supplies



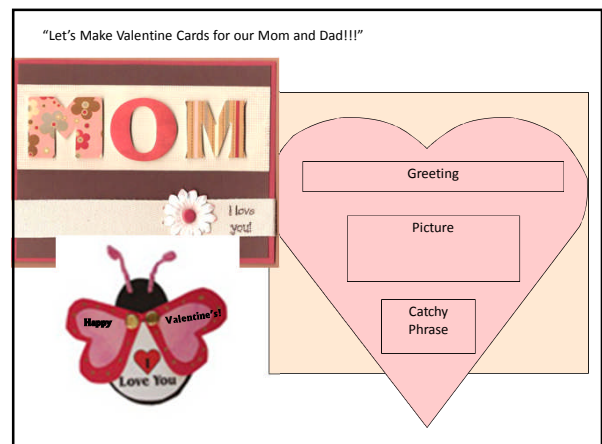
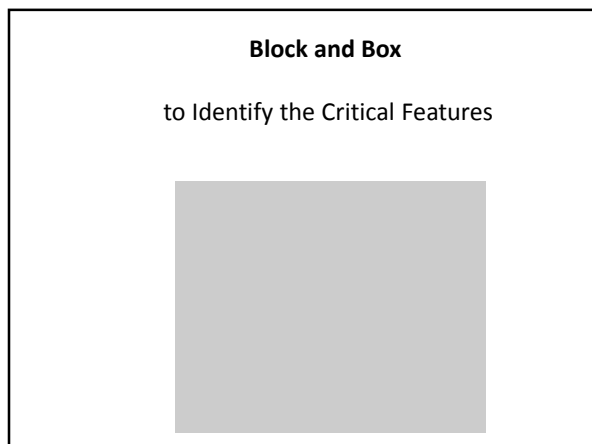


Semantic Memories: Memories from Experiences or Episodes that are stacked together to form a concept

Schema: <u>Party</u>	
Features	Details
Decorations	Red and White balloons, Streamers, Party Plates & Cups, Centerpiece
Food	'Strawberry Shortcake Character' Cake with Candles, Juice Boxes, Goldfish
Games	Piñata, Pin the Tail on the Donkey, Musical Chairs
Guests	Girls in Party Dresses
Presents	A Barbie, a new Puzzle, Pretty Hair Barrettes, Beads
Treats	A goody Bag!

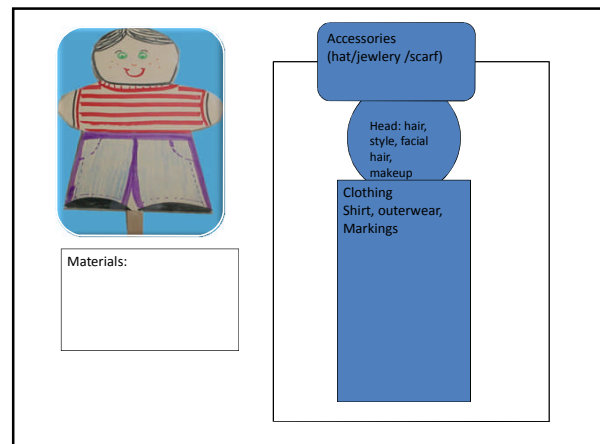
Script:

1. Games
2. Food
3. Presents
4. Treats



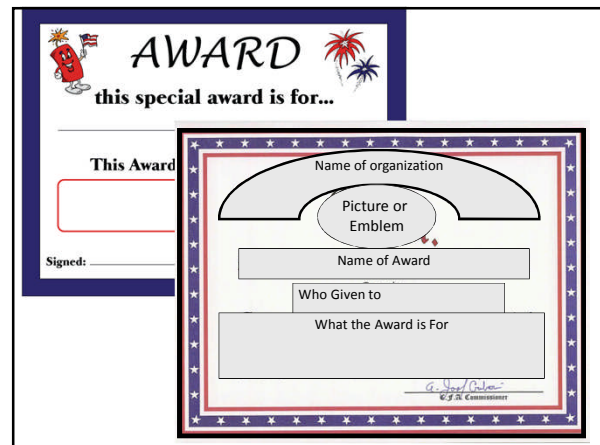
Puppet

- **Part 1:** After choosing a fiction book and reading it, you will have the chance to bring the main character in the book to life by designing a puppet.
- Your puppet will be made from a wooden spoon or paint stick and should represent the main character in dress and appearance from the time period.



Award

- Next, you will create a special award to honor the most noteworthy accomplishment of your chosen character.
- You can create a trophy, ribbon, certificate, or plaque to award your character.
- Your award must have a written paragraph describing the reason your character deserves the recognition.

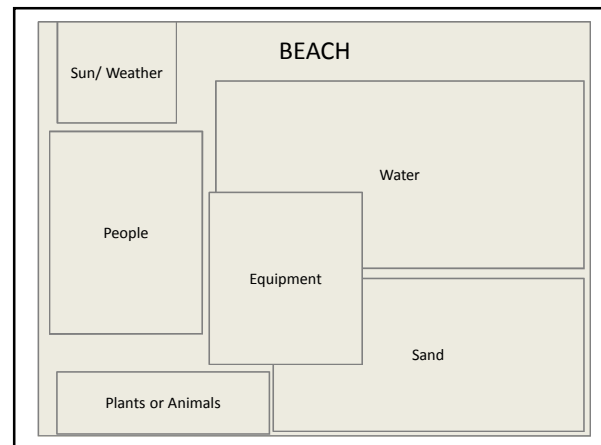
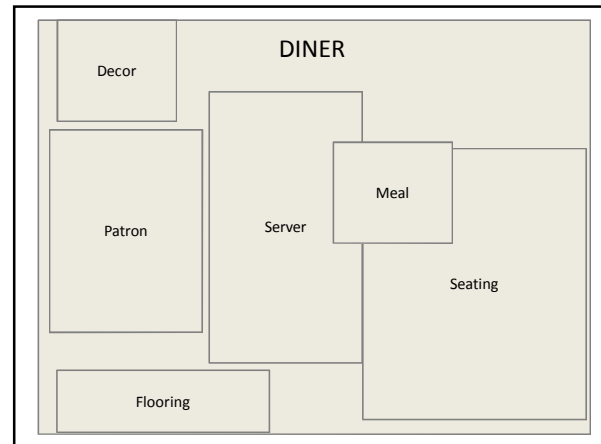


Have You Tried Cool Iris?

- www.cooliris.com
- This is a great website if you need to find photos fast so that your student has a visual image for novel circumstances, for writing, projects, etc.





Writing Assignment

- Use vivid details to describe a local diner. Write in descriptive detail what you see. What is the waitress like? What is the floor like? Describe the food. When I read your writing I want to see this restaurant in my mind's eye!



Paper Management: The Younger Student

1. Ask the parents to support the student in beginning to know what types of materials come home
2. How to make a decision about what to do with those materials

Test	Treasure	Trash	Think on It
I need to keep this.	Something Special (A book report, Special Project)	Papers that i did but there is no reason at all to keep them	I don't need it for a test but I don't want to throw it away yet!
			

Challenge

MythBusters Episodes

1. Possible Solutions
 - a. Single Solution?
 - b. Multiple Solutions?
 - a. Are the solutions simple or complex?
 - b. Required Materials
 - a. Amount of materials?
 - b. Ease of getting materials?
 - c. Special Tips
 - c. Actual Steps of the Solution
2. Obstacles to the Solutions
 - a. Plan B?
 - b. Plan C?
3. Success of the Bust?
4. Reaction to the Bust?
5. Reason/Rationale for the success or failure of the bust
 - a. Scientific
 - b. Unexplained?
6. Conclusion
 - a. Is it realistic or plausible?

Executive Function Skills –Therapeutic Interventions

SELF TALK

How Self Talk Evolves: Play Skills



Declarative Language Through Play



Mature Make Believe Play

- Symbolic representations
- Future goal
- Complex interwoven themes
 - What goes with this scene?
- Rich roles that are multifaceted
- Extended time frame

• Best Books About Play:

Tools of the Mind by Elena Bodrova and Deborah J. Leong
Einstein Never Used Flashcards, by Roberta Michnick Golinkoff, Kathy Hirsh-Pasek Ph.D.,
 and Diane Eyer
Power of Play

'Veterinarian' Imaginary Play



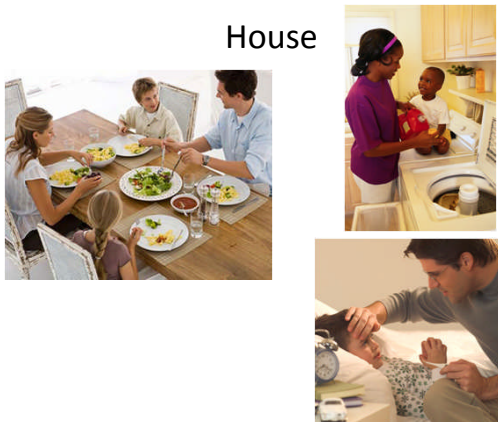
- Symbolic representations
- Future goal
- Complex interwoven themes
- Rich roles that are multifaceted
- Extended time frame

Animals



- Habitat?
- Body Parts?
- Special Skills?
- If _____ then how could it have gotten hurt?
- Let's go tell the vet!

House



Figurative Language

Phrase	Literal Interpretation	Figurative Deduction
	Paraphrase:	Apply the Impact:
	Determine the Impact: If _____ Then _____	

Materials: *Saying one thing Meaning Another*, Cecile Spector, *The Expressions*

1. Give phrase in a sentence.
2. Interpret Literal meaning.
3. Apply impact to the sentence
4. Clinician creates a sentence using the phrase; student interprets impact.
5. Student uses the phrase in a sentence; clinician interprets impact.

119

Time Management

HOW IS TIME USED? PICTURE IT!

Starting, Stopping, Finishing: Goal vs. Future Picture



Goal



Future Picture: This is How I Picture My Accomplishment!

Future Picture Thinking and the Sweep of Time

Goal	If everything goes your way what do you see/ what do you look like at _____ o'clock?
Work on writing Essay	At 4:00 I see the Introductory Paragraph written. About 6 sentences.
Do research	At 7:30 I see 3 articles printed from the internet.
Do my math.	In 30 minutes I should see 6 problems completed.
Work on my poster	In 40 minutes I see 3 pictures pasted on, each with a title and a caption underneath.

Sequencing Cards



- Ask the student to identify which is the “future picture”
- Ask them to pair the pictures by the 3 phases of tasks : get ready, do, clean up/review
 - If these cards are not here ask the student to draw or describe them
- Identify the same but different between cards
- Ask student how their experience is the same but different

I Like the book “Let’s Talk About Planning” by Marilyn Toomey

Time Management

SEE & SENSE THE SWEEP OF TIME: PACE

Clock Time

- Have Analog Clocks in the House – Make sure they are not Roman Numeral!
- Make sure they are at eye level of the child!
- Have an analog and a digital clock in the child’s room
- Have a wall clock and a working clock

Sense, See and Feel Time



Use Wipe OFF markers in kid section at Staples or Overhead Markers.
Dry erase will not work

Time has Passed...Has the Pace Changed?

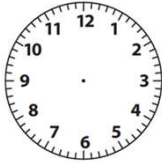
Coaching: Review How Time was Used and Identify Time Robbers

Drawing Time: Show the Sweep of Time

1. Draw How Much Time the Child Has
2. Identify the student’s forethought goal. When this task is over how do you see yourself?
3. Identify/sketch the “Future Picture image”: if everything goes your way what will see when you are done?
4. Make sure to state over and over:
“Factor in time for _____” (gathering materials, the computer to boot, to find your equipment, etc.)
5. Set up “time checks” at the ½ way point.
“What should be completed at this point?”

Show the Sweep of Time

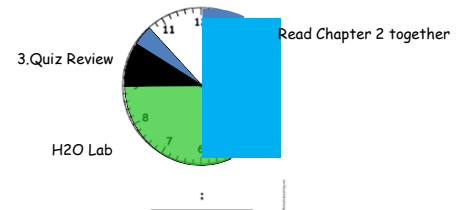
- For a Single Activity
- For a Single Step of a Larger Task:
Brainstorming or Editing, Cleaning
- When Proctoring Homework



1. Read Chapter 2 together: Review
Electrons and Protons

2. H2O Lab

3. Quiz Review



½ Way Check Point

- Am I half way done?
 - Am I still focused on the goal?
 - Has my priority changed?
 - Am I still answering the question?
- What are my time robbers?
- How are the strategies working?
- Do I need a new strategy?



Manage Time Robbers



Wondertime Clock: Wondertime.com; in the search query for the website type: clock and download the pdf file and instructions to make the clock



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.



Time Markers



Young Children are Literal

- “In a minute..”
- “In 5 minutes....”
- “In 10 minutes we will...”

Be exact so children really learn how to sense time.
Clarify when needed.

“I said I minute...but I needed 5”

“I said 5 minutes...but really 15 passed”

Time Management

INTERNALIZE A TIME PLAN

Planning is as easy as 1-2-3!

1
Look Ahead
Know and Plan your Time
Look Back: Hindsight
Gather Materials

Before

2
Do
Set a Half Way Point
Half Time Check in
Pace

During

3
Know your Stop Spot
Clean Up
Review
Add Experience to
Knowledge Base

After

Planning is as easy as 1-2-3!

1
Get Ready

2
Do

3
Clean and Review

Executive Function Skills –Therapeutic Interventions

ORGANIZED THINKING: PUTTING IT ALL TOGETHER



Goal



Future Picture: This is how I picture my accomplishment!

Obstacles



Time:



Plan



Do



Review: Note To Self
What worked?

What did not Work?

GOAL	
Future Picture: How you picture your Accomplishment (where are you? What are you doing? When is it? Are you relaxed? Exhausted? Calm? What do the materials look like?	
Any Obstacles? What will distract you? What time robbers can you anticipate? How can you prevent them?	
Look Back: Have you done this task or a similar task before?	
What worked?	
What did not work?	
Plan/Do	Use Clocks and ½ Way checks
Review	NOTE TO SELF

Create a Script of the Steps – or select a pre-created Script	<input type="checkbox"/> 1. <input type="checkbox"/> 2. <input type="checkbox"/> 3.
Materials I need to gather	
I need to purchase	
Set up a Timeline	
Prep time	Use this time to get ready to do the task
Start Time	What time will I begin the work?
Time at the ½ way point	By this time check I should have completed these tasks; _____
Stop Time	I know I am done at this time because I will see:
Set up Time Checks	Check in with myself. How is my attention? Am I focused on the task? What do I need to do to sustain my focus and productivity?

Work It Out

Look Forward Picture	Look Back	Set the Time Pace	Stay on Track	Reward!
I see:	Last Time?	When Will I be done?	½ point?	

Choosing EF Therapy Tasks

- Must be Motivating (relaxed state of alertness)
- Must have Multiple Materials to Organize and Manage –
Include Irrelevant Materials
 - Depending on skill level of the child – I require the student to find the materials and to allow enough time to do so.
- Multiple Choices of Outcomes –So the individual must choose a reasonable goal for the given amount of time
- Carry over to a “Same but Different Task”
 - Each successive task should become increasingly open ended
 - Review “Notes to Self” from previous task to build episodic memory
- Time demands
 - Limit time to teach pacing
- Requires Student to “get a feel for it” by just starting –
teaches self regulation and delayed gratification
- Carry Over the Planning Skills to Academic Tasks



Tip: The Amazon Website has
“how to” videos
on the web page
for the book!

	Goal Make Chocolate Butterflies from Hello Cupcake. Yum!
	Future Picture: This is what I see for myself when I am done! 4 Completely Finished and Cooled Butterflies! No cupcakes
	Obstacles Time. It is new—never done it before. Could be Hard to do. Sarah Talking—Shhhhh Chocolate is a distraction - I might eat it!
	Time: 5 min to Plan 5min to Gather Materials 5 min to Clean up Leaves me with 15' to work! 2 Butterflies at ½ way point
	Plan Gather Materials Melt Chocolate Trace picture Trace with Chocolate Fill in with Orange Chocolate Cool off and clean up Admire! <input type="checkbox"/>
	Do Worked! <input type="checkbox"/> Did not Work <input type="checkbox"/>
	Review: The look great! 10 sec melt choc. Then massage chocolate to Honey Consistency. Tapping table to blend orange Cooking 30 sec. it burned ((Syrup or toothpaste consistency of chocolate. Only had time for 1 ((. Melt choc. Then make the picture.

Change It Next Time to Use Experience to Guide Planning and Behavior

- New Butterfly Shape:



- Random Design



Goal Make an Animal out of Chocolate

Future Picture: This is how I see my accomplishment
A Dolphin Made of Chocolate Jumping over a Blue Wave

Obstacles New!
Time: 25 minutes
Materials: Could be too small / Difficult!
Distracted by looking for the "Perfect Picture"

Plan 8 min → look for Picture (P) 5 min Fast gather of Materials
3 min → Fast Clean Up! 5 min to trace + melt chocolate

Do Look Up Pic Melt Trace → Wave

Review Worked
✓ table top to Blend chocolate colors
✓ Watching time while look for Dolphin

Work
X "Syrupy" chocolate
X Not having a Cookie sheet

Pretzels –Very Open Ended



Goal Make a Chocolate Pretzel

Future Picture: This is how I see my accomplishment
6 Finished decorated Sticks

Obstacles Never Made pretzel Sticks
- No molds - Enough Ingredients? - Tired
- No Plan - Time - Grumpy

Time: 35 minutes

Plan ☐ Music → Cheer Up ☐ Fill bowls of "extras"
☐ Cookie Sheet ☐ Melt Chocolate
☐ Wax paper ☐ Dip / Cool

Do Add "extras"
Drizzle White chocolate
Clean Up

Review Worked
✓ Dip + Cool + Add
✓ put extras on plates
✓ Music

Not Work
Add extras when chocolate melts
→ they slid off
Bowls - too shallow to dip in

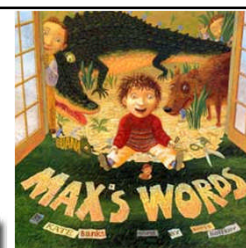
American Girl

- Tiny Treats



Max's Words

- Read the book
- Make a collage



Use Your Experiences


Scrapbook → Paper Punch Art


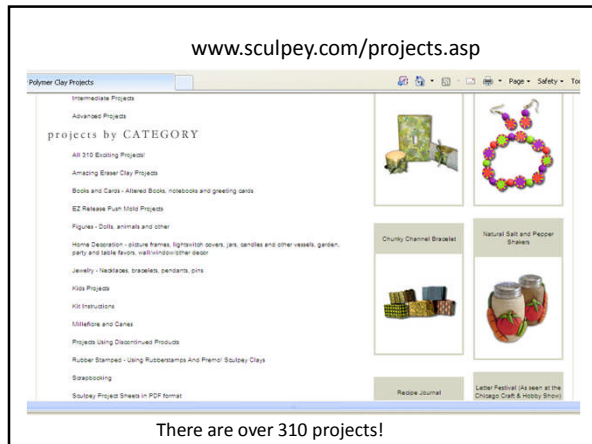
More Ideas: Make your Own Lava Lamp

First make one using a recipe that only uses salt.

Then use this recipe with alkali seltzer:

www.wikihow.com/Make-a-Lava-Lamp-with-Household-Ingredients or www.howcast.com

A photograph of a lava lamp. The lamp is a tall, cylindrical container filled with a dark liquid. Inside, there are several bright, glowing shapes in shades of pink, orange, and yellow, which appear to be floating and moving. The background is dark, and the lamp is illuminated from within, creating a warm, glowing effect.



Contact Information

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

www.executivefunctiontherapy.com
swardtherapy@aol.com
Telephone: 781-453-0841

Recommended Reading on Executive Function Skills and Related Disorders

by Sarah Ward, M.S., CCC/SLP

Tools of the Mind: The Vygotskian Approach to Early Childhood Education (2nd Edition) by Elena Bodrova and Deborah Leong

- *This book is my absolute favorite for understanding how executive function skills develop in young children. Several chapters are dedicated to an outstanding approach to teaching writing to young children. Writing can be a real struggle for kids with executive function based deficits and this technique is extremely helpful. This book also addresses the value of teaching play skills as a means of learning self regulation, delayed gratification and tolerance for frustration. The companion website toolsofthemind.org has unbelievable resources and lists of research on the EF skills.*

Executive Skills in Children and Adolescents: A Practical Guide to Assessment and Intervention 2nd Edition (Practical Interventions in the Schools) by Peg Dawson and Richard Guare

A good introductory book on Executive Function Skills. Particularly excellent for teachers and parents who need foundational understandings on what the Executive Function Skills are. The Second Edition has lots of additional information and updates. These authors have also written the book Smart but Scattered which has many practical ideas to improve executive function routines in the home setting.

A great website on teen brain development: <http://www.pbs.org/wgbh/pages/frontline/shows/teenbrain/>

Developing College Skills in Students With Autism and Asperger's Syndrome by Sarita Freedman

Raising a Thinking Preteen: The "I Can Problem Solve" Program for 8- to 12- Year-Olds by Myrna B. Shure and Roberta Israeloff and I can Problem Solve Workbook Series by Mynra Shure

These books focus heavily on teaching students how to develop flexible problem solving skills. This is one of the few books I have read that does not merely say 'problem solving is an important skill' but rather truly teaches the reader "how to" teach children the steps to being independent problem solvers. If you work with younger students, her workbooks have terrific premade group lessons to teach problem solving and thinking skills to elementary aged children.

Thinking About You Thinking About Me 2nd Edition by Michelle Garcia Winner

- Provides a strong foundational understanding for how to evaluate and treat students who struggle with social thinking skills.
- This is a must have book to understand social interaction and social awareness. Many students, including those with high-functioning autism, Asperger syndrome, ADHD and similar social and communication challenges, have difficulties understanding that other people have perspectives that are different from their own. Michelle's model of perspective-taking makes research into Theory of Mind practical for teaching these students and even students who may be considered "neurotypical." Specific lessons, and how to apply them in different settings, are explored. The

Recommended Reading on Executive Function Skills and Related Disorders

by Sarah Ward, M.S., CCC/SLP

assessment chapter now includes the Social Thinking Dynamic Assessment Protocol®, with more detailed assessment techniques.

Lost in School and The Explosive Child by Ross Green.

Both are excellent books for communicating to school professionals about the underlying EF difficulties children with behavioral challenges experience and why they act the way they do. A must read for teachers and parents alike. If you have an explosive child at home this is a must read resource, but I do not recommend you skim the book. Read it cover to cover to really understand collaborative problem solving to work with children who struggle with flexibility. Related resources include the websites:

- thinkkids.org
- www.greatschools.org/special-education/health/executive-function-lens-to-view-your-child.gs?content=1017
- <http://www.livesinthebalance.org/> This is an OUTSTANDING website with many great videos for learning the collaborative problem solving approach.

That Crumpled Paper Was Due Last Week: Helping Disorganized and Distracted Boys Succeed in School and Life by Ana Homayoun.

Missed assignments. Lack of focus and enthusiasm. Falling grades. For too many boys and their frustrated parents, these are the facts of life. But they don't have to be. Top academic counselor Ana Homayoun has helped turn even the most disorganized, scattered, and unfocused boys into successful young people who consistently meet their personal and academic challenges. She does this by getting back to basics- -starting with a simple fact: Most boys need to be taught how to get organized, how to study, and-- most important--how to visualize, embrace and meet their own goals.

Organizing the Disorganized Child: Simple Strategies to Succeed in School - by Martin L. Kutscher and Marcella Moran

A superb book. The author's explain the roots of children's organizational problems, and the parents' role in fixing them. They outline different organizational styles used by different students. (Not all kids organize the same way!) They provide a step-by-step plan for an organizational system including: Refining morning and nighttime routines, Getting the correct work home, Planning the work, and getting it back to where it belongs, Tips for reading and note taking, Study and test taking skills, Learning how to ask the right questions.

For Teaching Executive Function Skills in the Classroom:

Fostering Independent Learning: Practical Strategies to Promote Student Success by Virginia Smith Harvey and Louise Chickie-Wolfe

This has many practical strategies to improve study habits, time management, organization, writing and reading comprehension skills. An excellent book for teachers and tutors alike, the strategies are very metacognitive in nature and demonstrate how to move the student from dependence to independence.

Recommended Reading on Executive Function Skills and Related Disorders

by Sarah Ward, M.S., CCC/SLP

Strategies for Organization: Preparing for Homework and the Real World by Michelle Garcia Winner

This 3.5 hour DVD and handout booklet features the highlights of Michelle's popular all day workshop on this same topic. The information on this DVD is applicable to teaching and treating ALL students, not just those with learning disabilities, and is best for those in 4th through 12th grade. It is an excellent resource!

Promoting Executive Function in the Classroom by Lynn Meltzer

A must for all teachers interested in improving executive function skills in the classroom. Has many practical strategies to improve classroom organization, note taking, studying, emotional self-regulation and task management.

Executive Function in the Classroom: Practical Strategies for Improving Performance and Enhancing Skills for All Students by Christopher Kaufman

"This book provides a plethora of information on what should be the next big push in education--enhancing the executive skills of our students. Dr. Kaufman gives a variety of suggestions which should assist all classroom teachers in connecting with and helping their students stay connected with the lesson. This is a very readable book with a chapter describing seven general strategies for developing executive functioning in the class. The next three chapters describe specific ways executive functioning interferes with the academic topics of reading, writing and mathematics."

Great Books and Resources for Learning How to use Play to Develop Self-Regulation and Self Talk

Power of Play : Learning What Comes Naturally by, David Elkind. In this book, the author shows how imaginative play prepares children for academic and social success. Many great practical suggestions.

Einstein Never Used Flash Cards: How Our Children Really Learn--and why They Need to Play More and Memorize Less by Roberta Michnick Golinkoff, Diane Eyer, Kathy Hirsh-Pasek

- Drawing on overwhelming scientific evidence from their own studies and the collective research results of child development experts, and addressing the key areas of development-math, reading, verbal communication, science, self-awareness, and social skills-the authors explain the process of learning from a child's point of view. They then offer parents 40 age-appropriate games for creative play. These simple, fun—yet powerful exercises work as well or better than expensive high-tech gadgets to teach a child what his ever-active, playful mind is craving to learn.

Recommended Reading on Executive Function Skills and Related Disorders

by Sarah Ward, M.S., CCC/SLP

There are several excellent shows on NPR on play. Below are several links to audio archives of these radio shows:

Creative Play Makes for Kids in Control

<http://www.npr.org/templates/story/story.php?storyId=76838288#73598288>

Old-Fashioned Play Builds Serious Skills

Self-regulation is a critical skill for kids. Unfortunately, most kids today spend a lot of time doing three things: watching television, playing video games and taking lessons. None of these activities promote self-regulation. Here are some great ideas!

<http://www.npr.org/templates/story/story.php?storyId=19212514>

Therapy Materials for Teaching Goal Plan Do Review Concepts to Students

- Generalizing by Marilyn Toomey (Paperback - 2002)
- [Talk About Planning](#) by Marilyn Toomey
- Developing Language Comprehension Using Multisensory Activities by Marilyn Toomey
- Teaching the Language of Time by Marilyn M. Toomey and Susan Christy-Pallo
- 101 categories by Marilyn Mantifel Toomey
- Sequence plus by Marilyn M Toomey
- Teaching kids of all ages to ask questions by Marilyn M Toomey

Therapy Materials for Teaching Figurative Language

- Between the Lines: Saying One Thing, Meaning Another: Activities for Clarifying Ambiguous Language - by Cecile Cyrul Spector
- Enhancing Inferencing Skills by Cecile Cyrul Spector
- As Far As Words Go: Activities for Understanding Ambiguous Language and Humor - by Cecile Spector Ph.D.
- As Far As Words Go: Unraveling the Complexities of Ambiguous Language and Humor - by Cecile Spector
- The Expressionary and the Expression Connection, Mark Schmidek.

Great Games for Therapy to Teach a Variety of Self Regulation Skills and Social Thinking Skills

- A Bit of Banter Jr. – I use for conversation skills
- Taboo – to develop vocabulary, schematic thinking and expressive language
- Outburst Junior - to develop vocabulary, schematic thinking and expressive language

Recommended Reading on Executive Function Skills and Related Disorders

by Sarah Ward, M.S., CCC/SLP

- Imaginiff Jr.- great for developing episodic memory and abstract, inferential thinking skills
- American Girl 300 Wishes – great for social skills, forming opinions and making decisions (can be used with boys too)
- Break the Safe- amazing collaborative social skills game: you will need to find on ebay..the boys LOVE it
- Oodles of Doodles- to develop vocabulary, schematic thinking and visual imagery skills
- Stare Junior – for episodic memory, attention and schematic thinking
- Whoonu - great for social skills, forming opinions and making decisions
- Sync Up- great for social skills, schematic thinking and expressive language
- Remote Control Impulse Control, Franklin Learning Systems, a great game for teaching impulse control and self regulation.

Other Therapy Resources:

- Expanding Expression Tool by Sara Smith, M.S., CCC/SLP Exceptional treatment program to build vocabulary and oral and written expression skills
- Story Grammar: mindwingconcepts.com For developing story grammar, self talk and oral discourse skills
- Beyond Story Grammar: <http://www.caroleedean.com/index2.htm> She has amazing ideas for teaching story grammar to adolescents and college level students who are reading complex literature. Check out her handouts from the 2009 ASHA conference on the ASHA website.