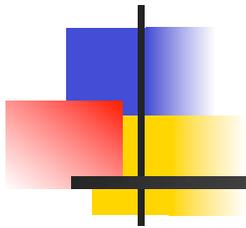


Executive Functioning Skills In Your Child:

- *What are EF skills?
- *How to Assess EF Skills
- *What are researched-based interventions?

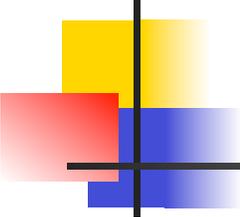


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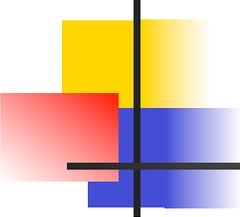
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Opening Activity

- You are having a dinner party in your home for 10 people. You have two weeks to prepare.

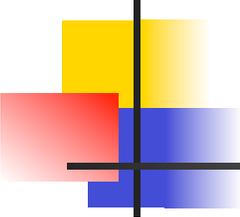




Definitions of Executive Functioning

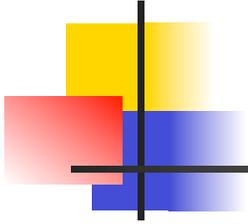
- The ability to engage in purposeful, organized, strategic, self-regulated, and goal-directed behavior.
- Processes required to plan and organize activities, including task initiation and follow through, working memory, sustained attention, performance monitoring, inhibition of impulses, and goal-directed persistence.

(McClosky, 2006)



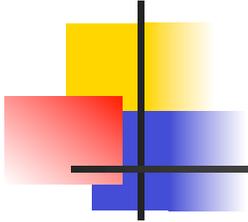
Definitions of Executive Functioning

- Also commonly referred to as, “Conductor of the brain’s orchestra”
- Executive functioning oversees the use of other cognitive processes.
- These skills help us create a picture of a goal, roadmap to that goal, and materials/resources we will need to achieve that goal.



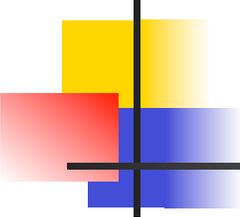
School Success

- What are the characteristics of a successful student ?



Student Profile:

- Perceived as classic underachievers
- Difficulty getting started on tasks
- Distracted easily
- Lose papers/assignments
- Forget to bring materials home
- Forget to hand in homework
- Rush through work
- Make careless mistakes
- Not know where to begin on long-term assignments
- Difficulty with whole-part analysis
- Misjudge time needed and begin an assignment at the last second
- Lack of a system for keeping track of materials
- Minimal routines
- Difficulty problem-solving when an obstacle presents itself (comparison/contrast paper)
- Difficulty shifting gears when new information is presented
- Difficulty regulating their emotions

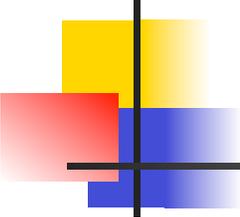


Executive Function Strands

- **Planning** This is the ability to create a roadmap in order to complete a task. Planning also involves prioritizing what is most important.

Example: Planning a long-term research paper

- What steps are involved?
- How will I achieve those steps?
- What materials do I need?
- When will I begin?
- Can the student break a larger unit into smaller tasks?



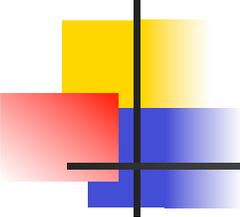
Executive Function Strands

- **Organization** ■ The ability to arrange or place things according to a system, orderliness of materials

Example: Physical organization of materials

- Does the child use a binder system?
- What does his/her backpack look like?
- What does his/her locker look like?





Executive Functioning Strands (cont.)

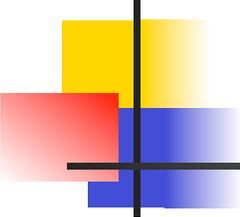
- **Internal Organization:** Relates to the ability to bring order to information when expressing or understanding information

Example 1: Summarize the story I just read

- Did the student retell the information in an appropriate sequence?
- Was the student able to access (retrieve) details of the story?
- Did the student get caught up in the details and miss the “big picture”?
- Does the student seem overwhelmed by the large amounts of information?

Example 2: Written Expression Assignments

- Is the student's writing sample well organized?
- Does the student have good ideas but fails to express them on paper?



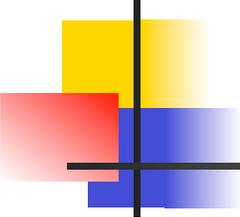
Executive Functioning Strands (cont.)

- **Time Management:** The capacity to estimate how much time one has to complete a task. Also involves the sense that time is important!

Example: Have the student write out their after school schedule estimating how long each task/activity will take.

- Was the student able to allocate their time appropriately?
- Did the student under/over estimate how long each task would take?
- Did the student stay within time limits?
- Does the student seem to lack *time urgency*?
- Does the student tend to overextend themselves?



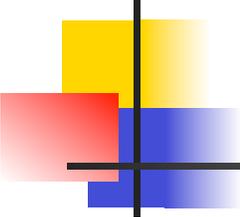


Executive Functioning Strands (cont.)

- **Working Memory:** The ability to hold information in mind while performing a relevant task.

Example: Have the student follow a multi-step directive.

- Did the student comply with all steps?
- Does the student seem to only get “bits and pieces” of information?
- Does the student often ask for directions to be repeated?
- Does the student seem to have difficulty “multi-tasking”?
- Can the student listen to a lesson while taking good notes?

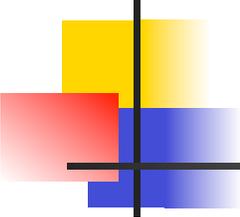


Executive Functioning Strands (cont.)

- **Self-Monitoring:** This is the ability to evaluate your own skills and have that internal conversation with yourself about how to complete tasks. ***Self-Questioning is key!!***

*Example: Ask the student, “How will you solve this word problem?
Or What is your study plan?”*

- Is the student able to verbalize what their plan is?
- Does the student have a monitoring routine?
- Does the student tend to rush through their work?
- Does the student tend to make careless errors?
- Does the student fail to check their work?
- Does the student have poor editing skills?

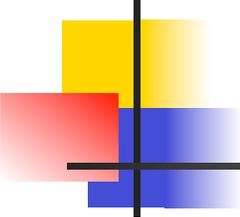


Executive Functioning Strands (cont.)

- **Task Initiation:** The ability to begin a task without undue procrastination, in a timely manner. Task Initiation also refers to generating ideas and responses independently.

Example: Monitor the student's ability to begin an activity, chore, or assignment.

- Does the student tend to procrastinate?
- Does the student often need to be told to begin a task?
- Does the student often take ample time before responding?
- Does “*Is not a self-starter*” seem to describe the student?

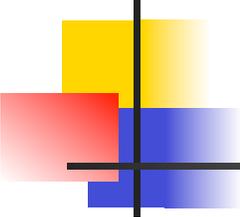


Executive Functioning Strands (cont.)

- **Flexibility/Shift:** The ability to move freely from one situation or aspect of a problem to another as demands shift. It involves adaptability to changing conditions.

Example: Observe the student as their daily schedule changes.

- Is the student able to make transitions freely?
- Can the student change focus from one mindset or topic to another?
- Can the student switch or alternate their attention?
- Is the student often rigid or inflexible in their thinking?
- Does the student often say the same things over and over again?

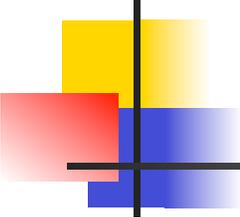


Executive Functioning Strands (cont.)

- **Response Inhibition:** The capacity to think before you act. This ability to resist the urge to say or do something allows us the time to evaluate a situation and how our behavior may impact it.

Example: Has trouble waiting for a turn

- Is the student impulsive?
- Does the student have to be closely supervised?
- Does the student often speak out of turn or “blurts things out”?
- Does the student often fail to “look before leaping?”

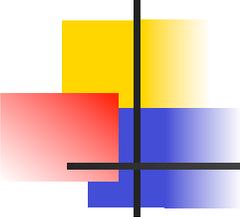


Executive Functioning Strands (cont.)

- **Sustained Attention:** The capacity to attend to a situation in spite of distractibility, fatigue, or boredom.

Example: Is the student able to get seatwork/homework done without distractions?

- Does the student tend to start and stop tasks often?
- Is the student easily distracted?
- Does the student tend to “zone out”?
- Does the child need a significant amount of cueing to stay on task?

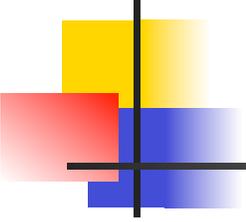


Executive Functioning Strands (cont.)

- **Goal-Directed Persistence:** The ability to set a goal, follow through to the completion of the goal, despite distractions and competing interests.

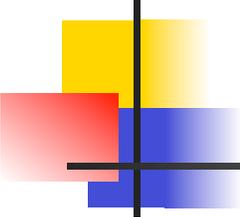
Example: Have the student establish a long-term goal (with all necessary steps involved). Monitor and evaluate the integrity of the plan.

- Was the student able to follow their goal?
- Were there any deviations in the goal plan?



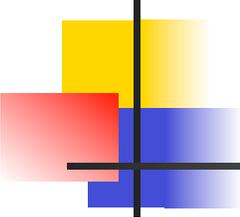
Development of Executive Skills

- Executive functioning skills are slow to fully develop
- Executive functioning skills are applied as early as infancy and continue to develop into young adulthood
- Researchers agree that the frontal brain system (frontal and prefrontal cortex along with connections to adjacent areas) make up the neurological base for executive skills
- The frontal lobe decides what is worth attending to and what is worth doing
- The frontal lobe modulates affective and interpersonal behaviors
- The frontal lobe monitors, evaluates and adjusts



Developmental Tasks Requiring Executive Skills

- **Preschool:**
 - Follow simple tasks
 - Inhibit behaviors (don't touch hot stove, don't hit, push, etc.)
- **Kindergarten - Grade 2**
 - Run errands (two to three step directions)
 - Decide how to spend allowance money
 - Complete homework assignments (up to 20 minutes)
- **Grades 3 - 5**
 - Run errands (may involve time delay or greater distance)
 - Complete homework assignments (up to 1 hour)
 - Consistently able to bring materials to and from school
 - Inhibit/Self Regulate (behave when teacher is out of the classroom, controls temper tantrums)
 - Keeps track of changing daily schedule



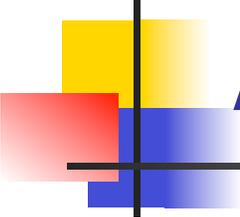
Developmental Tasks Requiring Executive Skills

■ Grades 6 - 8

- Follows through with daily chores and responsibilities (tasks may take 60-90 minutes to complete)
- Baby-sits for younger siblings
- Uses a system for organizing schoolwork
- Plans long-term projects
- Plans time
- Inhibits rule breaking

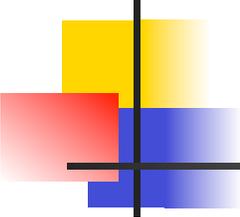
■ High School

- Manages schoolwork effectively on a day-to-day basis
- Establishes and refines a long-term goal and makes plans for meeting that goal
- Makes good use of leisure time
- Inhibits reckless and dangerous behaviors



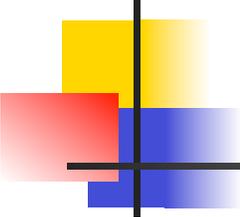
Assessing Executive Skills

- Accurate assessment of executive skills is essential for effective intervention for two primary reasons:
 1. EF skills are intimately related to frontal regions of the brain. Because of this, a variety of other factors may affect executive skills.
 2. Need to understand the pattern of strengths and weaknesses in a child's executive skills profile.



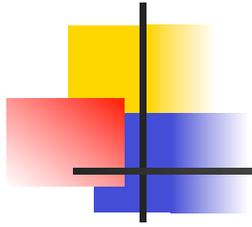
Assessment of EF Skills

- Best practice in the assessment of EF skills must extend beyond formal standardized measures:
 - Detailed case history with interview questions
 - Classroom observations
 - Work samples
 - Standardized behavior rating scales
 - Standardized assessment measures

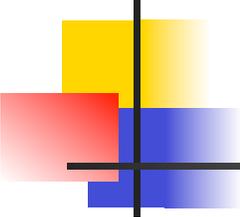


ADHD and Executive Functions

- It has been long thought that features of EF were prominent in the presentation of ADHD.
- Barkley has highlighted that deficits in inhibiting, shifting, self-monitoring, and sustained attention are strongly related to the combined type of ADHD.
- It is recommended that an assessment of EF be part of the assessment for ADHD.
- ADHD is being recognized as impairments in one's EF skills.

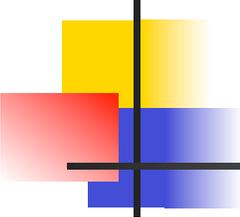


Interventions



Case Example

Suzy, a seventh grade student, was forever losing her notes, papers, assignments and worksheets. She had the tendency to work slowly, often continuing to take notes, write her assignments, and gather her things at the very end of class. As a result, she tended to stuff papers into her notebooks or fold them into her books without paying close attention to where she stored them. This lead to lost assignments, ultimately having a big impact on her grades. Suzy also tends to miss teacher instructions or parts of a lecture. In addition, at home, Suzy left work until the last minute. She frequently asked teachers to give her extensions on due dates.



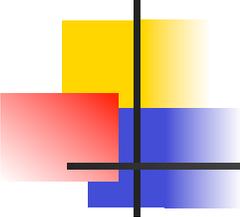
Interventions

Organization:

- **Three ring binder system** (Each Subject = one subject folder with inbox/outbox pockets, separate folder for tests/quizzes, separate folder for homework, pencil case, pocket for materials going home)
- **Archive System** (Hanging file folders in Spacebox)
- **Daily binder/backpack checklist** (Taped in locker and in binder)
- **Consistent use of Assignment Notebook** (Homework assignments, Tests/Quizzes, Long-term projects/papers, activities, appointments)
- **Set Weekly Goals** (Step-by-step plan)
- iCalendar, MyHomework App

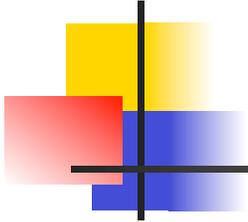
Time Management:

- Estimate how long assignments will take. Record start time and end time. Compare the **real** time with Suzy's **estimated** time.
- Timetimer.Com



Interventions

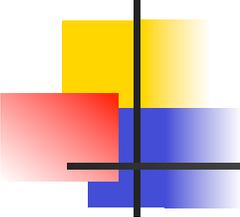
- Working Memory:
 - Pre-exposure to lessons
 - Copy of teacher notes or peer notes
 - Tape record lessons and transcribe at home
 - Simplified note-taking strategy (T-Chart/Cornell Note-Taking System)
 - After reviewing notes, encourage Suzy to keep a log of questions to ask teacher at another time
 - Break up or chunk information
 - Ask teacher to modify pace and amount of information presented at once
 - Teach student to be active readers by annotating



Interventions

Planning/Prioritizing:

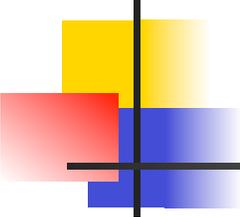
- Teach student to review homework and gather all necessary materials before starting work
- Prioritize homework tasks based on due date, level of difficulty or level of anxiety/stress the student feels about the task. In the assignment notebook write the order of task to complete, then check off when done.
- For long-term projects, break it down into manageable parts. List each step and set a goal or due date to every part of the project.
- Encourage student to conference with his/her teacher regularly until project is complete in order to attain feedback on each component of project (Also boosts self-monitoring skills).



Interventions

Self Monitoring:

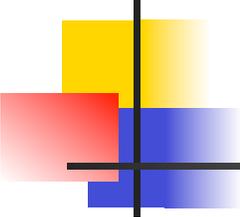
- Encourage student to continuously ask, “Why should I do this?”
- Teach editing skills
- Encourage student to slow down while working
- Use checklists and/or visual reminders
- Frequent conferences with teacher regarding his/her work performance
- Encourage self-questioning techniques while reading:
 - Why am I reading this and what will I learn from it?
 - Do I understand the way information is presented?
 - Can I connect this to anything I already know?
 - Do I understand the ideas and words or do I need to stop to look them up or ask for help?



Closing Activity

- You are having a dinner party in your home for 10 people. You have two weeks to prepare.





Final Thoughts

- Executive functions direct us to engage in and complete most daily tasks
- They are especially significant for academic success
- If you suspect your child struggles with their EF skills, ask the following:
 - How often are the behaviors (of lack of EF skills) occurring? Frequency
 - How long have these behaviors been present? Duration
 - How bad is it? Intensity
 - Are these issues significantly interfering with school functioning? Functionality