



"Executive functions are a set of processes that have to do with self-management and exerting mental control and self-regulation. The skills of executive function are often needed to study well and succeed in school and include, for example: focusing, paying attention, organizing, starting and finishing schoolwork, flexible problem solving, and prioritizing."

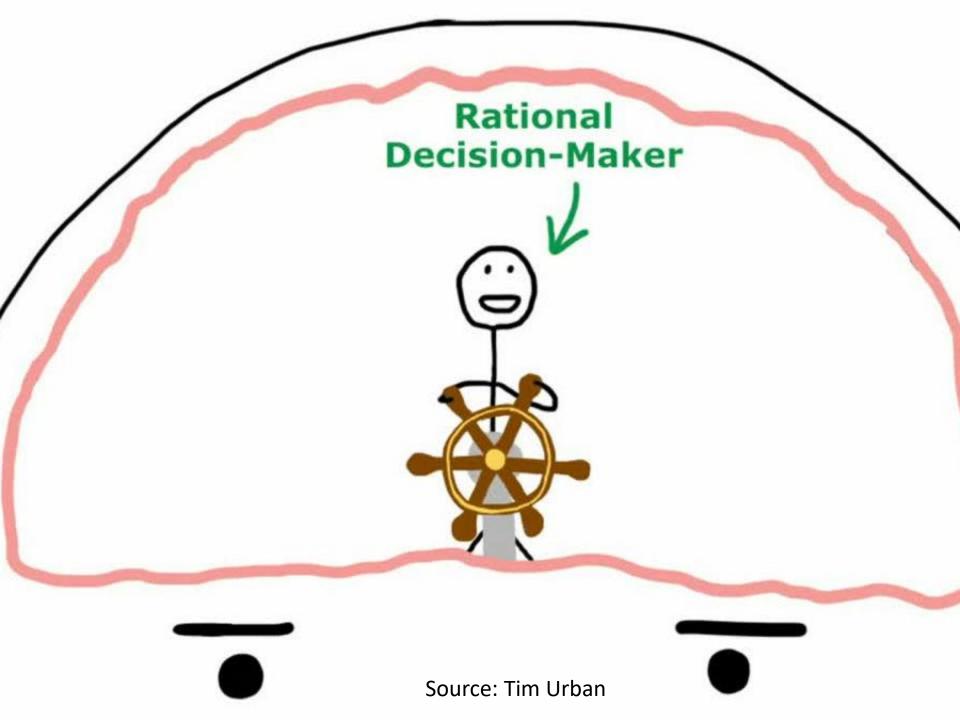




In plain English...

Executive Function means the ability to get stuff done (homework, writing a paper or cleaning a room, etc.). In other words, to "execute" complex tasks through to completion.

Seth Perler, sethperler.com/executive-function-holy-grail/







Our Executive Function Skills



Task Initiation

The ability to begin projects without undue procrastination, in an efficient or timely fashion.

Response Inhibition

The capacity to think before you act; this ability to resist the urge to say or do something.



The ability to revise plans in the face of obstacles, setbacks, new information, or mistakes.

Flexibility The ability to rev

Organisation

The ability to create and maintain systems to keep track of information or materials.

Goal Directed Persistence

The capacity to have a goal, to follow through to completion, and not be put off or distracted.

Metacognition

The ability to stand back and take a bird's-eye view of yourself in a situation, to see how you problem solve.



The capacity to keep paying attention to a situation or task in spite of distractibility, fatigue, or boredom.

Planning & Prioritisation

The ability to create a roadmap to reach a goal or to complete a task. Also to make decisions.

Emotional Regulation

The ability to manage emotions to achieve goals, complete tasks, or regulate and direct behaviour.



Working Memory

The ability to hold information in memory while performing complex tasks.

Time Management

The capacity to estimate how much time one has, how to allocate it and how to keep within deadlines.

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Additional executive function skills:

- Task completion
- Asking for help
- Following instructions (with multiple steps)
- Handling criticism/ learning from mistakes

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WHY DOES EXECUTIVE FUNCTION MATTER FOR PRE-COLLEGE STUDENTS?

- The ability to develop executive function skills can mean the difference between a successful student and a struggling student.
- Virtual learning impacted students' ability to concentrate, complete assignments, and turn things in. We are still catching up!
- Being a successful college student requires even higher order EF skills – now is the time to develop them.



Executive Functioning Development

Age	Executive Functions
6-12 mo	 Attends to things for longer amounts of time (still minimal) Behavior is reflexive (not flexible)
1-2 yr	Inhibits some reflexive behaviors inconsistentlyShifts attention to new things in environment
3-6 yr	 Increases impulse control, attention, and concentration Resists some distractions Follows 2-4 step tasks Demonstrates knowledge of rules
7-9 yr	 Performs self-talk (talking to themselves to work through a task) Processes new information faster and more accurately Resists more distractions Develops goals Learns from mistakes and creates alternatives Switches between tasks
10-12 yr	 Increases impulse control, attention, and concentration for longer periods of time Switches between multiple tasks Learns from mistakes and creates alternatives more often Plans and organizes tasks more effectively
Teens	 Increases working memory capacity Increases cognitive flexibility Able to plan and organize more complex tasks Demonstrates better decision making and goal selection skills

Communication Community

SKILLS ASSESSMENT

Inhibit (Recognizing the need to stop your own behavior and re	esist impulse	es)	
I rush through things.	N	S	0
I have problems waiting my turn.	N	S	0
People say I am easily distracted.	N	S	0
Shift (Easily transition and change focus)			
I have trouble changing from one activity to another.	N	S	0
I am bothered by having to deal with changes.	N	S	0
After having a problem, I don't get over it easily.	N	S	0
Emotional Control (Modulating your emotional response)			
I have emotional outbursts for little reason.	N	S	0
My mood changes frequently.	N	S	0
I get emotionally upset easily.	N	S	0
Self-Monitor (Awareness of the impact of your behavior on oth	ers)		
I talk at the wrong time.	N	S	0
I don't think about consequences before doing something.	N	S	0
When people seem upset with me, I don't understand why.	N	S	0

[N = Never | S = Sometimes | O = Often]

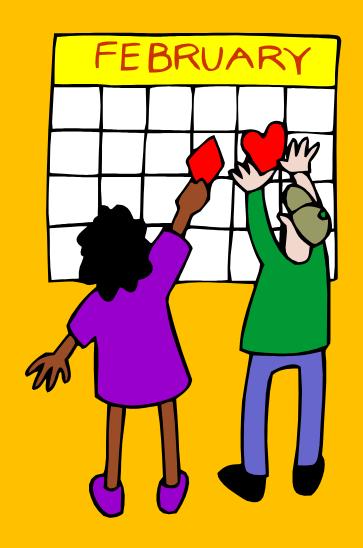
TIME MANAGEMENT

Sample Schedule



Master Calendar

- Have a master calendar for the family
- Post it in a prominent location
- Paper or white board options available
- An electronic calendar will work as well



Other Tips to Manage Time

- Watch Tim Urban's video on procrastination
- Set up reminders, alarms, and/or timers to help you follow through



Teach Back Planning

Research and reading done on Friday

Outline done on Saturday

Start writing on Sunday

Finish rough draft – Tuesday night Finish Paper – Wednesday night

Turn in paper on Thursday



More Organizational Tips



- Pack all bags the night before and have them sitting by the door ready to go so they can be grabbed on the way out. Ask an adult to help you double check.
- Lists in lockers/mirrors
- Folders in order in backpack
- Locker/desk/backpack cleanouts if necessary – once a week?
- Sticky book flags are great for helping with note taking

Planning and Prioritizing

Sometimes students struggle with getting started because they don't know what to do first.

Most common manifestation: procrastination/rushed or sloppy homework/

unprepared/overwhelmed

- What are your daily/weekly homework goals?
- What needs to happen first? Second? What can wait?
- Are there steps to this assignment or project that need to be followed precisely?

Monday Homework To-Do List Example

English

- Read X. Be prepared to discuss in class tomorrow.
- Write a one-page paper based on X. Due Thursday.
- Vocabulary quiz on Wednesday.

Math

- Complete all "2" problems in chapters 8. Due tomorrow.
- Review last week's assignment and make corrections.
- Prepare for unit test on Friday.

Social Studies

- Read chapter 6.
- Watch documentary on the Space Race by Wednesday.
- Man on the Moon Project outline due Thursday.

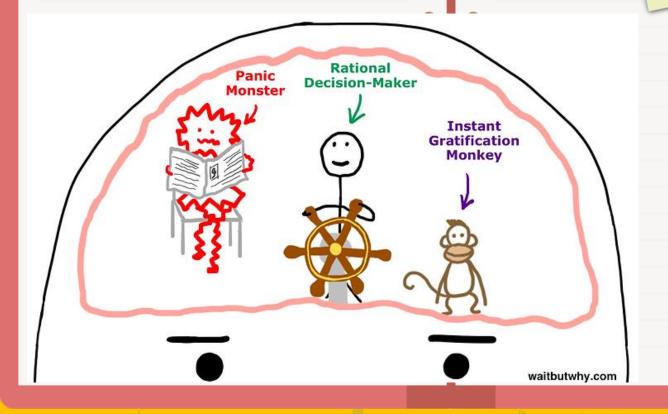
Science

- Complete group assignment on gravity by Friday.
- Read chapters 7 and 8. Quiz Thursday.

TASK INITIATION

Why do we procrastinate?

Most common manifestation: homework not started until the last minute, rushed and sloppy



Anti-Procrastination Tips

- Make the environment as conducive to taking action as possible.
- Arrange some immediate reward that you'll receive if you manage to get started.
- Ask yourself "if I were to take action right now, what's the smallest possible step I could take?"

To understand how to stop procrastinating in the long term, try this systematic approach:

- 1. Determine your goals.
- 2. Figure out *when, how,* and *why* you procrastinate.
- 3. Create a plan of action based on relevant antiprocrastination techniques.
- 4. Implement your plan and monitor your progress.

SUSTAINED ATTENTION/FOCUS

- There are specific skills that can increase the likelihood of completing tasks and creating improved study habits.
- First, determine the starting attention time.
- During the next few days, pick a study task that you have been avoiding or find difficult and time how long you work on the task before taking a break or allowing a strong distraction to pop into your head.

- Record the stop and end times and complete the exercise a few times.
- Average the amount of time that passed before you became distracted and make this your starting attention time.

NOW:

- Use timers to build your attention span.
- Start with your average time, then add five minutes per day or week until you reach an optimal attention span.

Other top tips for maintaining focus:

- Set concrete deadlines.
- Eliminate distractions –
 especially digital distractions from the environment.
- Use the Pomodoro method to avoid brain fatigue.
- Count to 10 before indulging the impulse to procrastinate.
- Get started by committing to work for only 5 minutes.



- Mark streaks of days on which all tasks are completed.
- Give rewards for accomplishments.
- Avoid a perfectionist mindset.
- Visualize a future self.
- Focus on goals instead of on tasks.

WORKING MEMORY/ FOLLOWING STEP-BY-STEP DIRECTIONS

- Do students know how to take notes?
- Multiple step directions – how many steps are appropriate for each age group?
- Each year should be stretching students one or two additional steps.

Most common manifestation:

Lost details. Homework is

incorrect. Ineffective studying.

Poor quiz/exam grades.

Showing work in math is a great way to help students understand step-by-step directions – because math is about understanding the process by which you got the correct answer, not necessarily the answer itself.

Requiring students to show their work does more than just teach math, it enhances working memory for other subjects.

Perseverance/ Goal-Directed Persistence

- SMART Goal Making
 - Specific
 - Measurable
 - Achievable
 - Relevant
 - Time-bound

Finally...

- Focus on process and not product
- A growth mindset for EF skills is just as important as it is for academics (Carol Dweck)
- Students should be prepared to investigate what works and what doesn't.

Resources

- Guare, R., Dawson, P., and Guare, C., *Smart* but *Scattered Teens* (2013)
- Comprehensive and integrated services for learning differences and mental health, https://www.chconline.org/
- Dweck, C. S. (2006). *Mindset: The new psychology of success.* Random House.
- Thegraysonschool.org/executive-skills-giftedlearners/ (Dr. Matt Zakreski, How to Engage Strong Executive Skills in Gifted Learners)
- sethperler.com/executive-function-holy-grail/
 (Seth Perler, What is Executive Functioning?
 How Does it Affect My Child?)

- www.youtube.com/watch?v=arj7oStGLkU
 (Tim Urban TED talk, Inside the Mind of a Master Procrastinator)
- <u>lifeskillsadvocate.com/blog/how-executive-functioning-skills-develop-by-age/</u>



Your Presenters



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