

EXECUTIVE FUNCTION SKILLS & WRITING

Amanda M Marshall, CTESL, M.Ed.
Writing Centre Project Coordinator

WHAT ARE WE GOING TO DO?



1. Talk about Executive Function (EF) Skills & the Brain
2. Examine Student Writing Needs
3. Explore Techniques related EF & Writing Support
4. Pick Your Brains 😊

WHAT THE SCIENTISTS SAY

“Executive Function is a *neuropsychological* concept referring to the cognitive processes required to **plan** and **direct** activities, including **task initiation** and **follow-through**, working **memory**, sustained **attention**, performance **monitoring**, **inhibition** of impulses, and **goal-directed persistence**.”

(Dawson, P. & Guarre, R., 2012, p.4)

EXECUTIVE FUNCTION IS RESPONSIBLE FOR

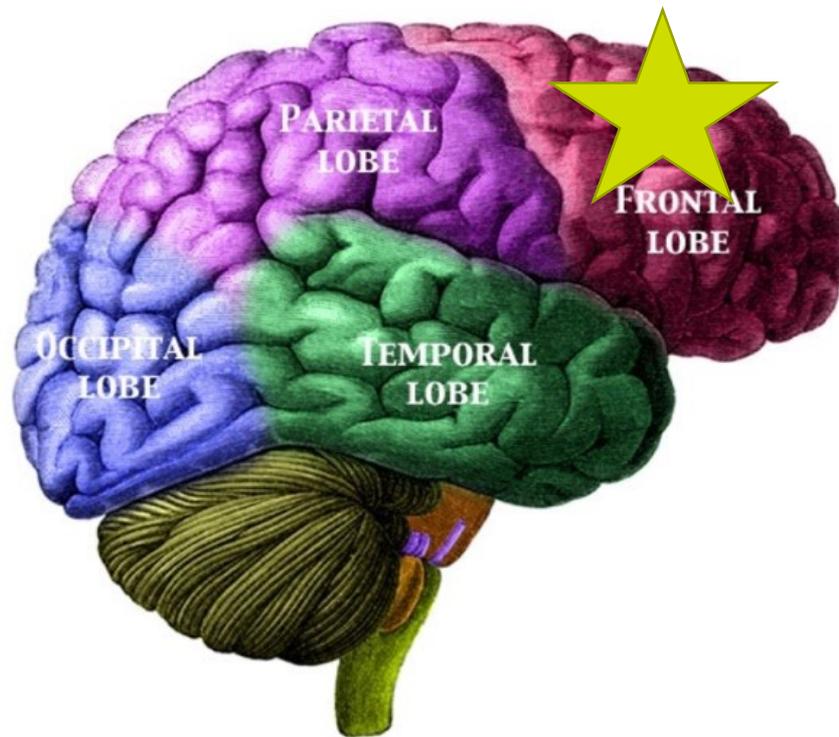
- goal-setting
- task-initiation
- task follow-through
- time-management
- flexibility
- processing information
- evaluating information
- understanding cause and effect
- organization
- making inferences
- evaluation and reevaluation
- self-regulation
- problem solving
- strategizing
- memory
- metacognition
- logic

(Bradley-Ruder 2008)



A WEE BIT ABOUT THE BRAIN

- EF Skills live in the frontal lobe/prefrontal cortex of the brain



BrainLobesLabelled. [Scott Camzaine. CC BY 3.0](#)

FRONTAL LOBE

- “The prefrontal cortex is one of the last regions of the brain to reach maturation...[it] is not complete **until near the age of 25**” (Arain et al., 2013, p. 435)

What does this mean for our learners aged 17 – 24?

- This part of the brain is *physiologically* and *cognitively* developing simultaneously
- We need explicit instruction and support to develop EF skills

TOP STUDENT WRITING NEEDS

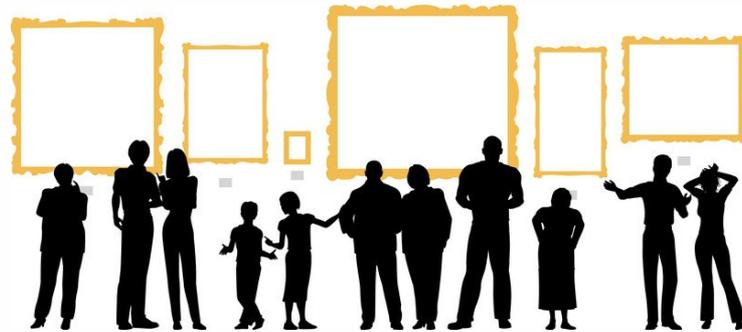
- The NSCC Writing Centre Pilot Project began in January 2017

- During that time, we tracked student needs:
 1. Organization
 2. Essay & Paragraph Writing
 3. Grammar & Punctuation
 4. Paraphrasing & Summarizing
 5. Vocabulary Development
 6. Resumes & Cover Letters*

*depending on the term, this sometimes floats closer to the top

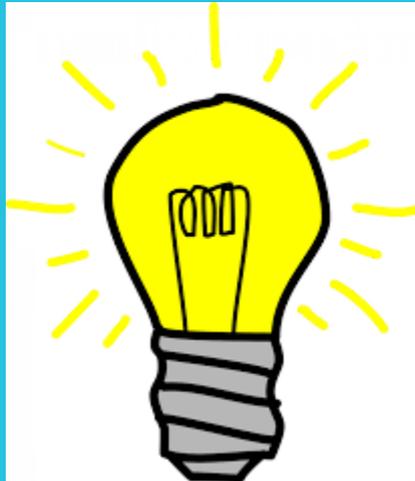
WHAT DO THEY ENTAIL?

Activity: Gallery Walk



1. What are we doing when we engage in these skills?
2. What goes into teaching these skills?

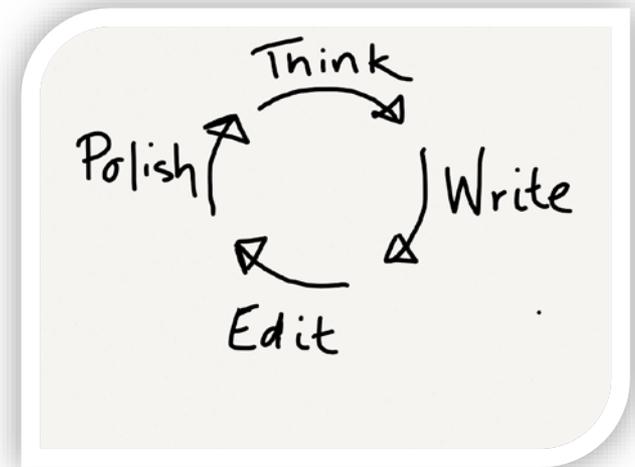
SEE ANY CONNECTIONS BETWEEN
EXECUTIVE FUNCTION & WRITING?



WRITING & EXECUTIVE FUNCTION

In writing, much of what we require of our students depends on their ability to:

- Organize
- Critique
- Remember
- Reflect (including Metacognition)
- Evaluate
- Revise
- Plan
- Reason
- Strategize

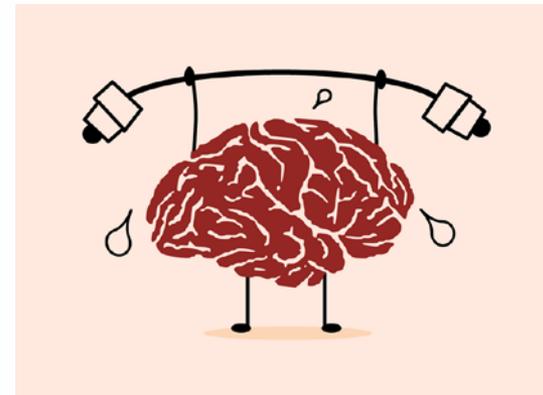


(Graham, Karris, & Olinghouse, 2007)

WHEN EF SKILLS ARE UNDERDEVELOPED

When a learner faces difficulty with Executive Function and/or lacks EF skills, they will likely encounter challenges with:

- Parsing
- Sequencing
- Remembering
- Evaluating
- Organizing
- Manipulating
- Planning
- Strategizing
- Self-regulating
- General task follow-through

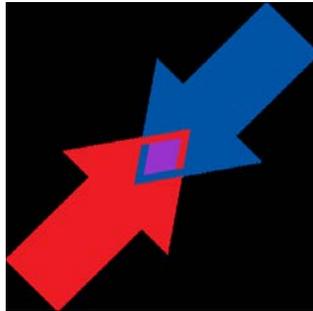


(Zumbrunn, Tadlock, & Roberts, 2011)

WRITING & EXECUTIVE FUNCTION SKILLS

When we face difficulty with EF, we encounter challenges with:

- Parsing
- **Reasoning**/Applying Logic
- **Sequencing**
- **Remembering**
- **Evaluating**
- **Organizing**
- **Manipulating**
- **Planning**
- **Strategizing**
- **Self-regulating**
- Task follow-through



Much of what is required when writing depends on our ability to:

- **Organize**
- **Critique**
- **Remember**
- **Reflect** (including Metacognition)
- **Evaluate**
- Revise
- **Plan**
- **Reason**
- **Strategize**

(Graham, Karris, & Olinghouse, 2007)

(Zumbrunn, Tadlock, & Roberts, 2011)

WRITING AS EF

“Writing is used to **gather, remember, and share** subject-matter knowledge, as well as to **explore, organize, [convey,] and refine ideas** about a topic.” (Graham, et al, 2007, p. 216)

My Hypothesis...

Writing **IS** Executive Function



STRIVE. *nscc*

INITIAL THOUGHTS

Strategies for Fostering EF Skills:

1. Talk about EF

- Name it
- Explain it
- Set realistic expectations
- **Use Cues**

2. Encourage Students to be Involved in Learning

3. Talk about Your Plan & What You're Going to Do (and why!) with Students

4. Reward EF Development/Strategy Use

(Wilson, D., 2015)

Strategies for Writing Development:

- Explain what happens when we learn, including:
 - Learning takes time and is a process
 - Writing takes time and is a process
 - Processes need to be learned & practiced
 - **Use a Correction Code**
- Encourage student involvement, peer evaluation, decode/use the correction code, etc.
- Ensure you connect all learning to prior knowledge
- Try not to get bogged down in too much minutia at once
- Always have a plan and communicate it to students. Adults want to know why!
- Be positive and encouraging. Reward accurate use and development of EF and Writing Skills. Foster a positive environment

HOW DO YOU DEVELOP EF & WRITING SKILLS?

- If everything we do when we write is related to Executive Function, how do we encourage and foster the development of both writing and EF?
- Have any tips & tricks?



QUESTIONS?

Contact Info:
amanda.marshall@nsc.ca

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