

# Where's your water bottle?

Understanding and supporting your child's struggles with executive function

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May 19, 2022



# Domains of executive function



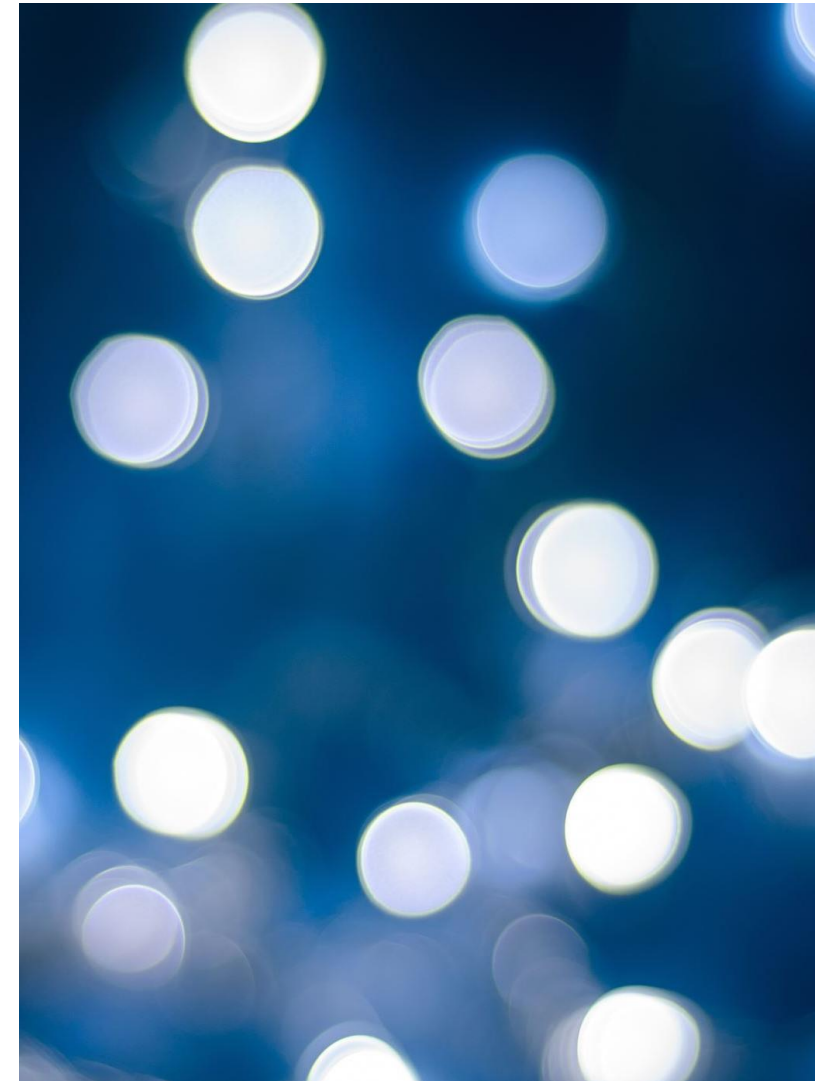
**Working memory** governs our ability to retain and manipulate distinct pieces of information over short periods of time.



**Mental flexibility** helps us to sustain or shift attention in response to different demands or to apply different rules in different settings.



**Self-control** enables us to set priorities and resist impulsive actions or responses.



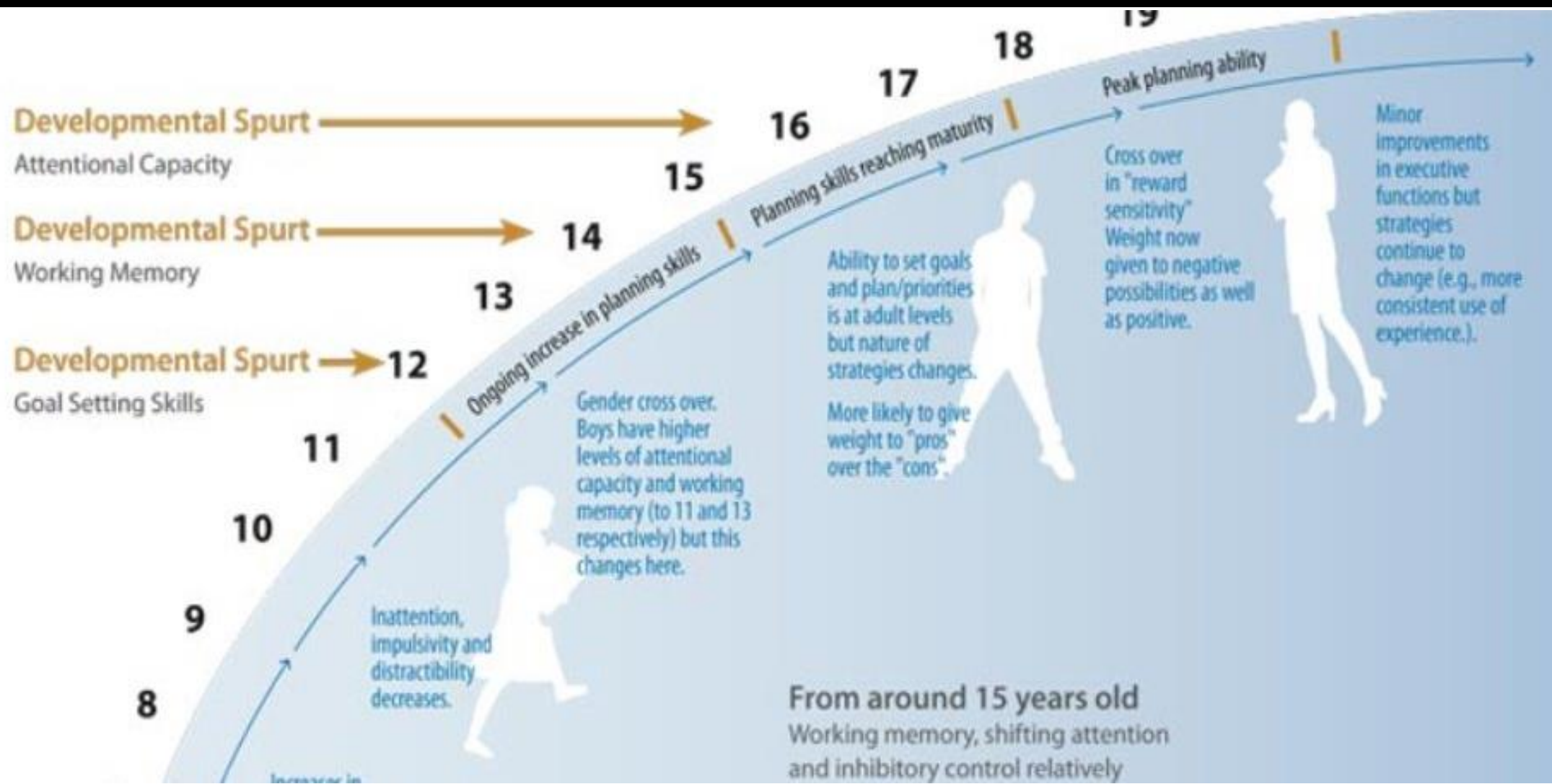
## EF Skills Involved With Thinking:

- working memory
- planning and prioritizing
- organization
- time management
- metacognition

## EF Skills Involved with Behaviour:

- response inhibition
- task initiation
- emotional control
- sustained attention
- goal-directed persistence
- flexibility





Developmental stages of executive function



# Scenarios

Please go clean your room!

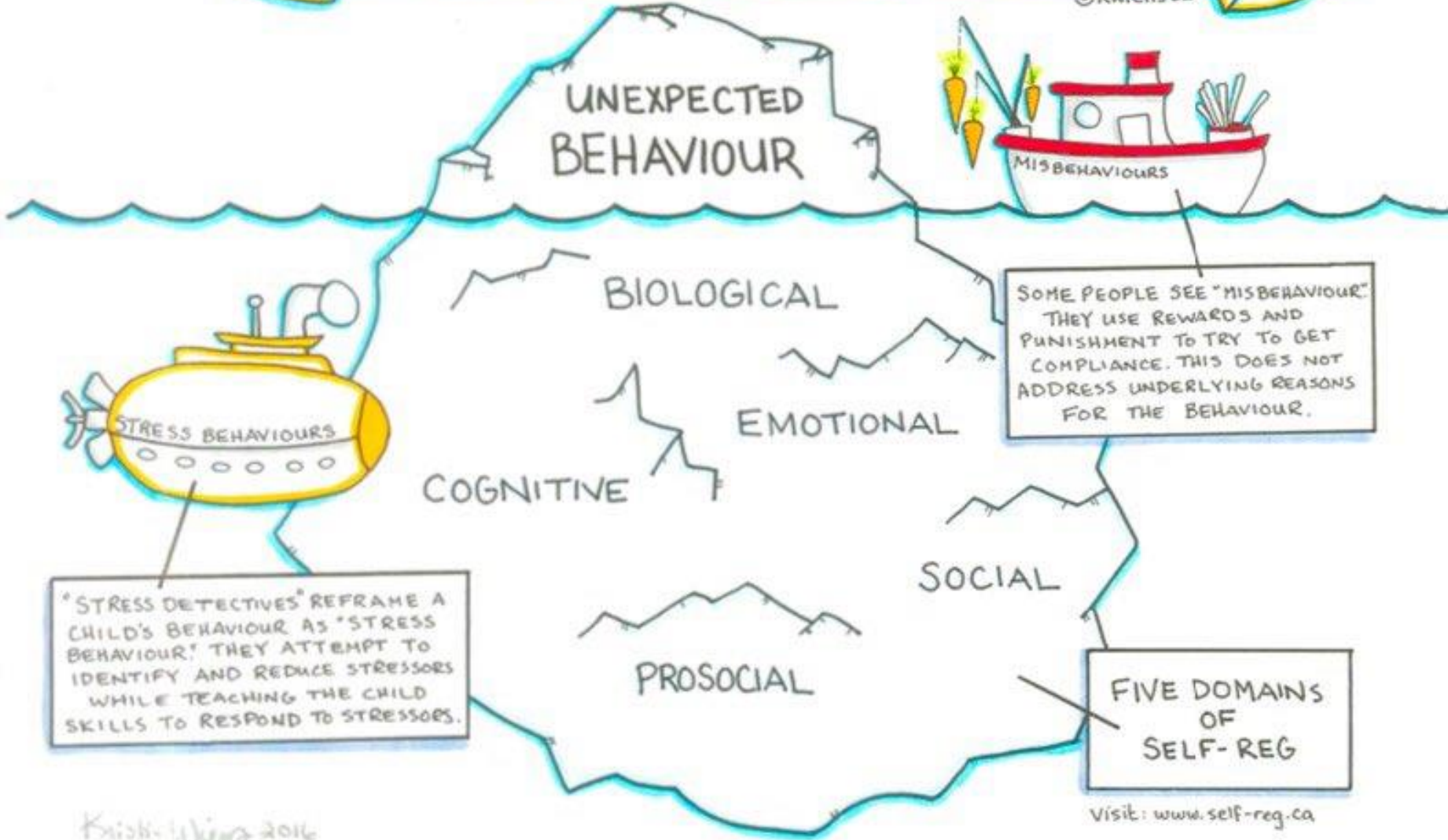
# Scenarios



- It's early in the morning.
- You need to get to work and drop your kid off at school.
- Breakfast is finished.
- You say "Let's go! We need to leave!".
- What EF skills are important here?

# BEHAVIOUR IS COMMUNICATION

@kwiens62

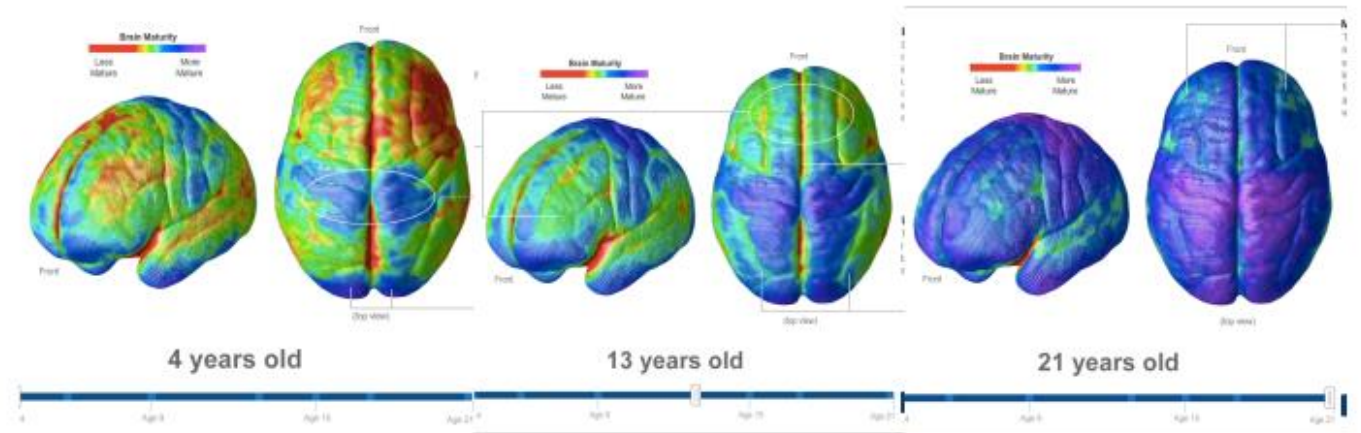


Kristin News 2016

EF  
challenges –  
likely  
heritable

90% of children with ADHD have EF challenges, and not all children with EF challenges have ADHD

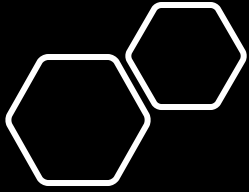
"For children with attention disorders, these skills tend to develop even more slowly. The MRI images below reveal how slowly the frontal lobes of the brain mature (with the color purple representing full maturation)."



Source: Peg Dawson, Coaching Students with Executive Skills Deficits







# Strategies to support EF

Begin with your relationship

and choose collaboratively



Start the day in a calm way



Practice problem-solving



Build a strong relationship



Use planners and calendars



Teach EF skills explicitly



Teach study skills and habits



Give clear and concise instructions



Give think time for processing



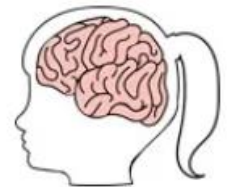
Use checklists



Establish routines



Incorporate movement



Model "think alouds"

# What to do to support?

Scaffolding

Don't leave expectation for child

Parents play the role of supporting your child's decisions/lending your prefrontal cortex

Keep trying to pass on the baton

# Supporting EF as parents/adults

- Scaffolding
  - Scaffolding is a learning technique in which the adult relinquishes control of a task to the child over time.
  - The effectiveness of scaffolding hinges on the contingency rule: when the child struggles, the adult should increase the level of support provided, and when the child succeeds, the adult should gradually decrease the level of support.
  - Make learning physical (kids live in a 3D world)
  - Keep trying to pass the baton

Review > [Br J Educ Psychol](#). 2017 Jun;87(2):241-254. doi: 10.1111/bjep.12147. Epub 2017 Feb 21.

## Parent-child learning interactions: A review of the literature on scaffolding

Roni Mermelshine <sup>1 2</sup>

Affiliations + expand

PMID: 28220477 DOI: [10.1111/bjep.12147](#)





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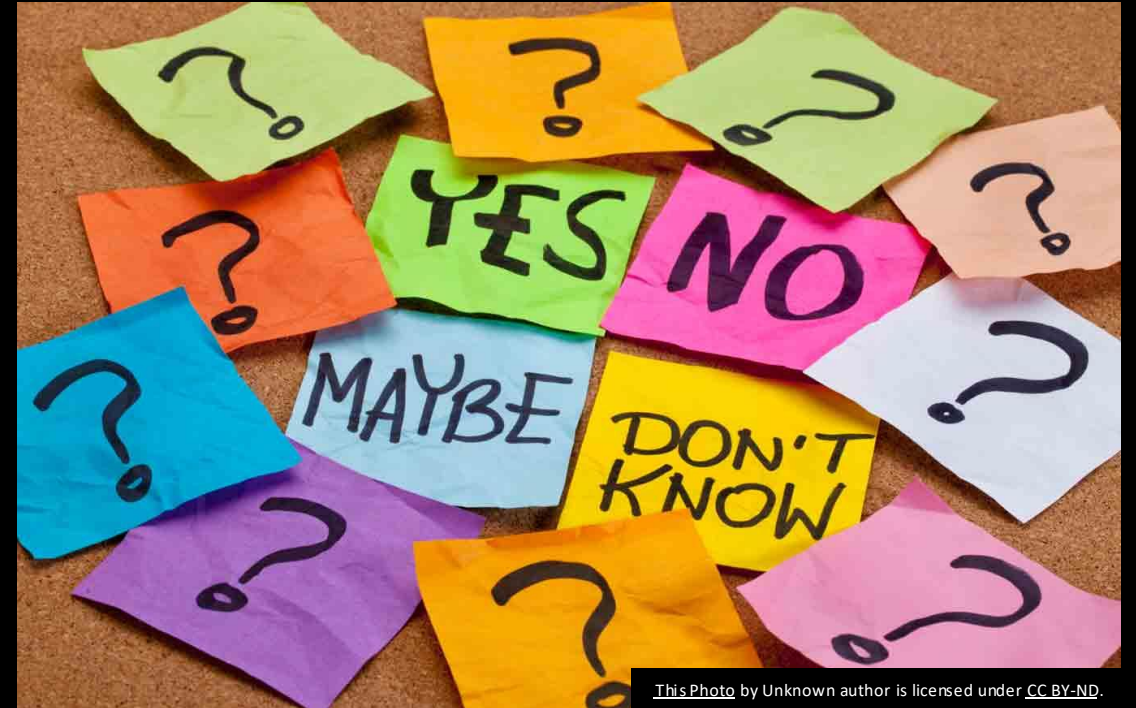
## Supporting EF as parents/adults

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- Clear expectations
  - Clear, achievable tasks reduce anxiety
  - Provides the child with a framework to practice in.
    - Write things down!  
Make learning visible
    - Setting time-limits, make time external
    - Making a checklist
  - Can help redirect if the child becomes lost.

# Supporting EF as parents/adults

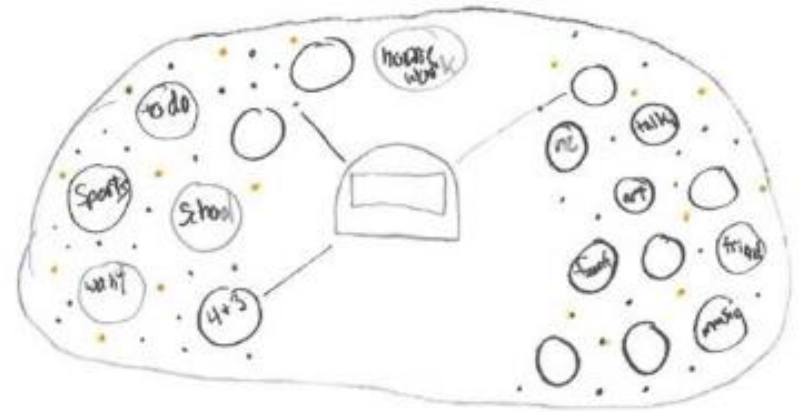
- Support your child's decisions
  - Providing rational for decisions.
  - Providing rewards:
    - External rewards can provide dopamine which strengthens the connection between the tasks you want your child to succeed in.
  - Be compassionate and understanding.
  - Take breaks.
  - Enforce responsibility.
- You are lending your brain to your child!



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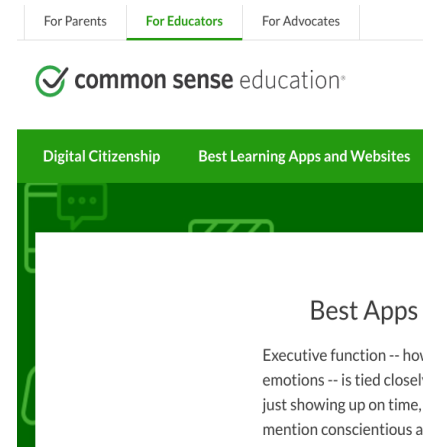
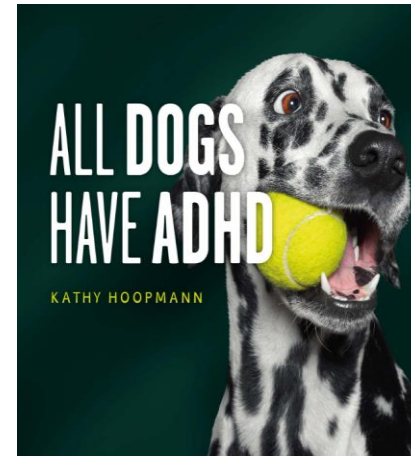
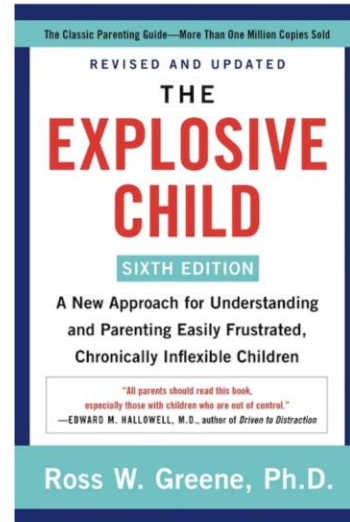
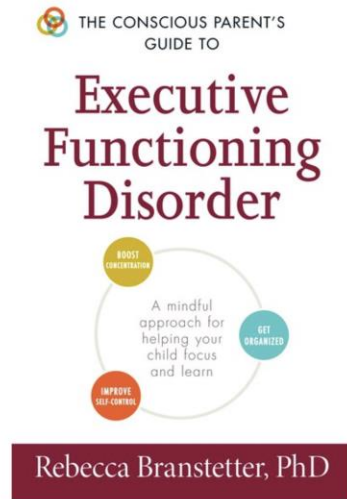
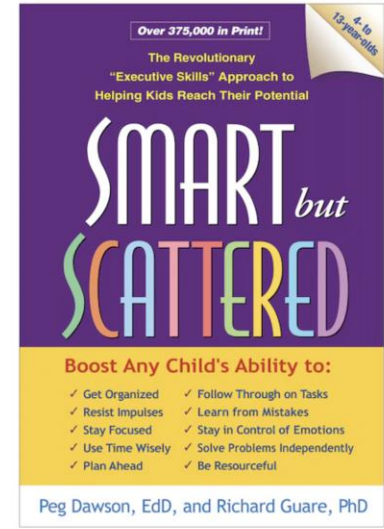
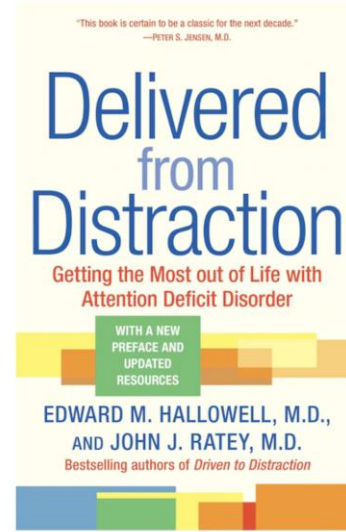
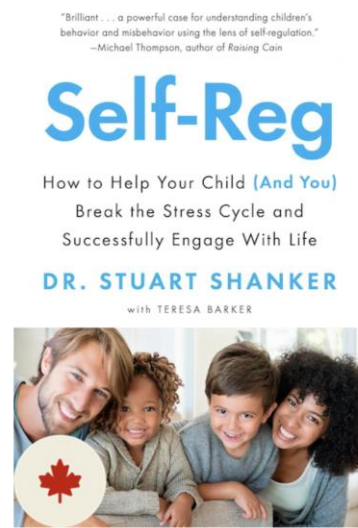
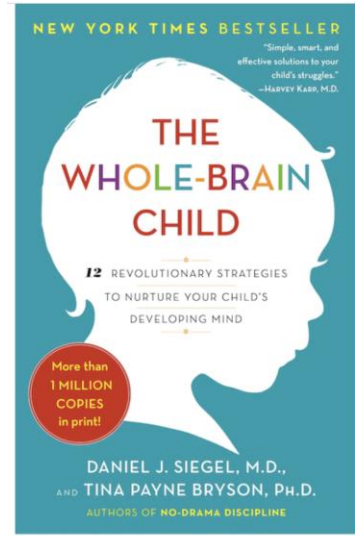
# Example Method

- It's all about building metacognition.
- Before I begin:
  - What do I need before I start my task?
- Challenges:
  - If things get too hard or I get stuck, what can I do?
- End Evaluation:
  - How did my plan go? (older children)
  - When can I use my plans again?



My Thinking about  
Thinking

# Other Resources and Books



<https://www.commonsense.org/education/top-picks/best-apps-and-sites-for-improving-executive-function>