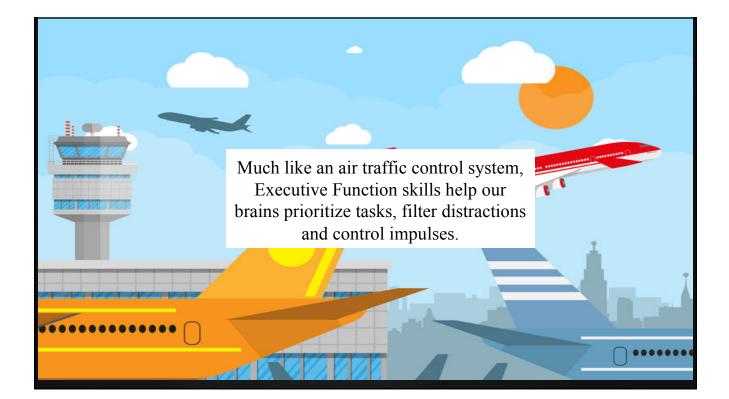


## What is Executive Functioning

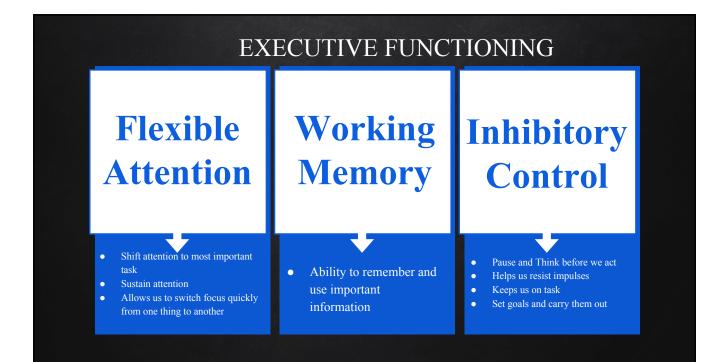
A set of cognitive processes and mental skills that help an individual plan, monitor, and successfully execute their goals.

Frontal Lobe

Psychology Today (2020)







## When do Executive Functioning Skills Develop?

- $\rightarrow$  As essential as they are, we aren't born with the skills.
- $\rightarrow$  These skills typically develop most rapidly between ages 3 and 5.
- → It takes a long time and a lot of practice to grow executive functioning skills.
- $\rightarrow$  There is another spike during the adolescent and early adult years.



## What might we see with EF deficits?

- → Behavior:
  - The child's actions--usually in relation to their environment or task demands.
- → Self regulation:
  - The ability to obtain, maintain and change one's emotion, behavior, attention and activity level appropriate for a task or situation in a socially acceptable manner.
- → Social skills:
  - Determined by the ability to engage in reciprocal interaction with others
  - To compromise with others
  - To be able to recognize and follow social norms.
- → Attention and concentration:
  - Sustained effort
  - ◆ Doing activities without distraction
  - Being able to hold that effort long enough to get the task done.



# EF deficits are strongly associated with components of...

| Attention Deficit Disorders       | Anxiety                | Autism                        |
|-----------------------------------|------------------------|-------------------------------|
| Depression                        | Fetal Alcohol Syndrome | Intellectual Disability       |
| Obsessive Compulsive<br>Disorders | Schizophrenia          | Social Communication Disorder |
| Specific Learning Disability      | Tourette's Syndrome    | Traumatic Brain Injury        |

#### A child does NOT have to have a disability to have challenges with EF!

Wilkins & Burmeister (2015)

#### How do I know if my child has trouble with Executive Functioning?

- Shows little awareness of the process involved in how things happen.
- Have difficulty getting started on a task.
- Live in the current moment and not think for the future or about consequences.
- Be unable to reflect on past experiences to plan for the future.
- Use the same strategy to solve a repeated problem, even if proven ineffective.
- Have difficulty adapting to change.
- Rarely match a strategy to a problem.
- Have low self esteem
- Have difficulty overriding an emotion in order to behave appropriately.
- Locate the source of their troubles outside their control.
- Have a low tolerance for failure.
- Skip steps in a procedure and is baffled when the outcome is not reached.
- Have difficulty putting a sequence of steps in order
- Have difficulty shifting perspectives.
- Need prompting to consider the feelings of others.
- Fail to see the 'big picture' of a task or situation.

Some of these are developmentally appropriate--Why should I worry?



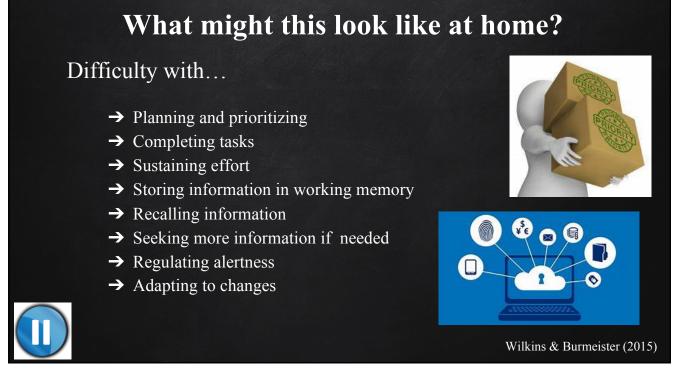
## How does this impact learning and behavior?

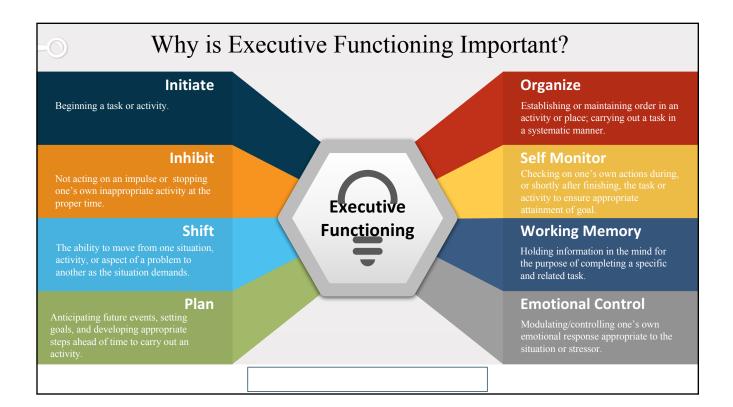
During the day a child must...

- $\rightarrow$  Listen to the teacher/parent
- → Keep focused despite distractions
- → Redirect themselves back to task
- $\rightarrow$  Ask for help when needed
- → Remember prior knowledge to complete activity
- → Engage appropriately in group setting
- $\rightarrow$  Wait to speak until called on
- $\rightarrow$  Be flexible with changes in activities or schedule
- $\rightarrow$  Control emotions about all of the above



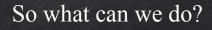
Wilkins & Burmeister (2015)





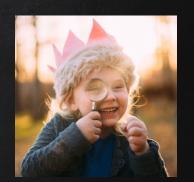






## PRETEND PLAY And Role Play

- → Children must determine what is needed, hold this information in mind, and then follow through without getting distracted.
- → They also exercise selective attention, working memory, and planning.
- → If the original plans don't work out, children need to adjust their ideas and try again, challenging their cognitive flexibility.



THE Thoughtful Parent

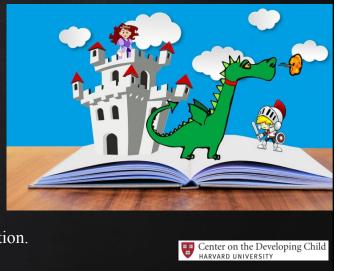


### Encourage Children to tell you stories!

Write them down to read with the child.

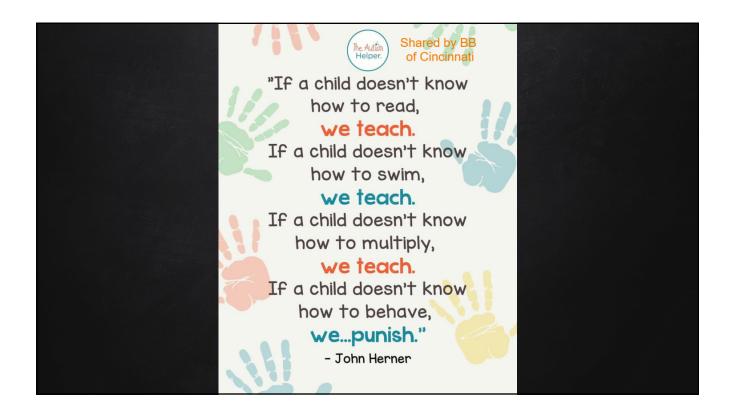
Children can also make pictures and create their own books.

Revisiting the story, either by reviewing pictures or words, supports more intentional organization and greater elaboration.



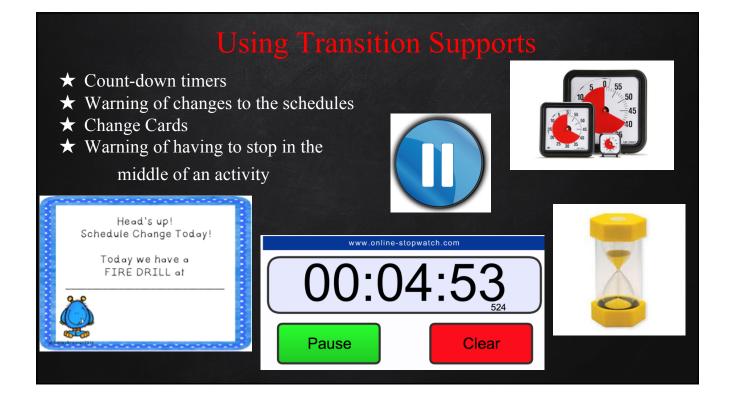


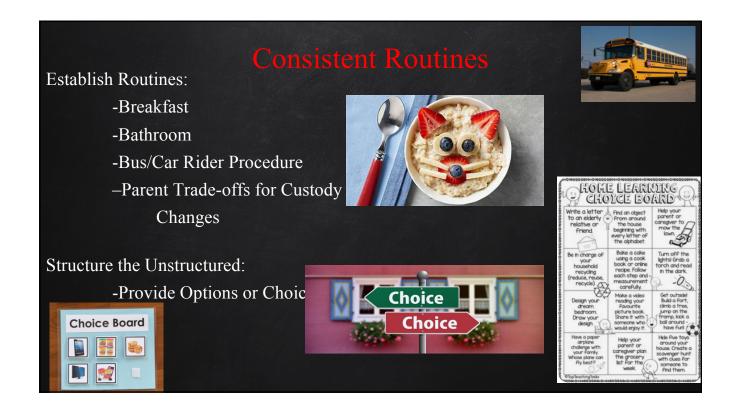




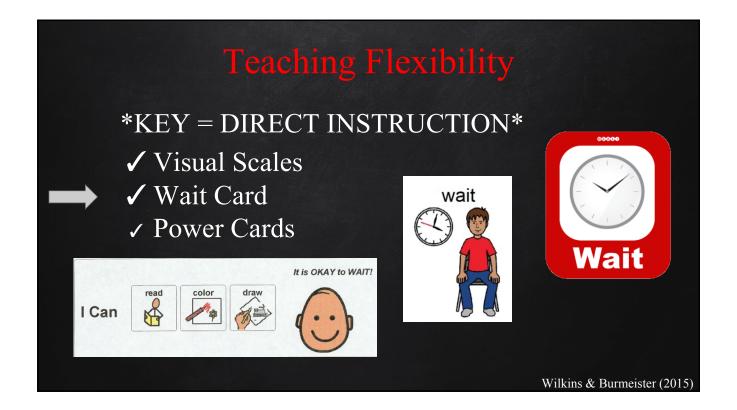


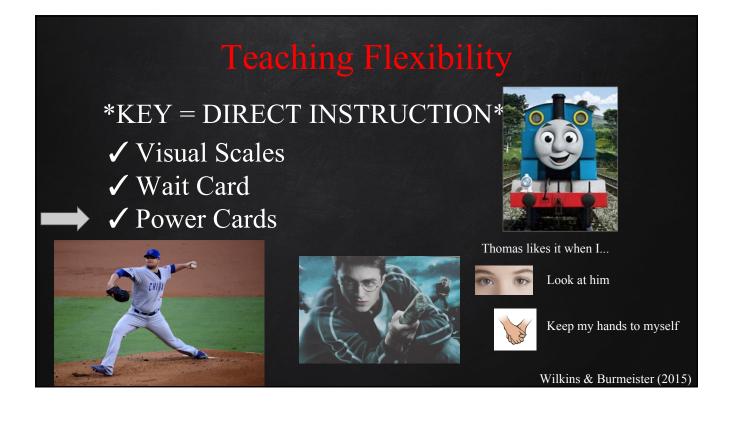






| <ul> <li>*KEY = DIRECT INSTRUCTION;</li> <li>✓ Visual Scales</li> <li>✓ Wait Card</li> <li>✓ Power Cards</li> <li>✓ Power Cards</li> </ul>  | Teaching Flexibility         |                                  |   |
|---|------------------------------|----------------------------------|---|
| <ul> <li>*KEY = DIRECT INSTRUCTION:</li> <li>✓ Visual Scales</li> <li>✓ Wait Card</li> <li>✓ Power Cards</li> <li>✓ Ware Cards</li> </ul>   |                              |                                  | What I can do   |
| <ul> <li>Visual Scales</li> <li>Wait Card</li> <li>Power Cards</li> <li>This test is so hard!</li> <li>Breathe and relax.</li> <li>Chay-I have curefully and</li> <li>Slow down!</li> </ul> | $Y = DIRECT INSTRUCTION^{2}$ | a 2                              | minute walk in the  |
| ✓ Power Cards<br>4<br>→<br>4<br>→<br>4<br>→<br>4<br>→<br>4<br>→<br>5<br>4<br>→<br>5<br>4<br>→<br>5<br>4<br>→<br>5<br>4<br>→<br>5<br>4<br>→<br>5<br>5<br>5<br>5<br>5<br>5<br>5<br>5<br>5     |                              | but I can't pen<br>remember. dov | wn and breathe for  |
| Z Okay-I have Slow down!  | ✓ Power Cards                | This test is <u>so</u> B         | Breathe and try to relax.                                 |
| 3 I hings I kn  | talk nicely                  | questions I might car            | Slow down! Read<br>refully and look for<br>things I know. |
| How do you feel?<br>Calm angry  | whisper                      | 1 Calm- I know this              | Keep going!   |
| $ \begin{array}{c}   \end{array}   \qquad \qquad$                                  |                              |                                  |   |

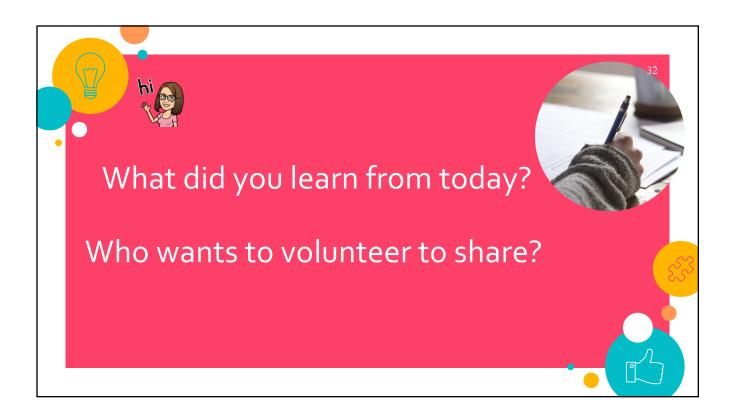








| Teaching Impulse Control  | 1 | BLURT<br>(self-control, metacognition)              |
|---|---|---|
|   | 2 | SCRABBLE<br>(planning, organization)                |
|   | 3 | PICTIONARY<br>(flexibility, time management)        |
| IO GAMES  |   | DISTRACTION<br>(working memory, attention)          |
| to improve  | 5 | 5 SECOND RULE<br>(time management, task initiation) |
| EXECUTIVE FUNCTIONING   | 6 | FREEZE<br>(self-control, attention)                 |
| SKILLS  | 7 | JENGA<br>(self-control, flexibility, planning)      |
| https://www.thepathway2success.com/12-<br>games-to-practice-self-control/ |   | BRAINTEASERS<br>(perseverance, flexibility)         |
|   |   | CHESS<br>(planning, flexibility, working memory)    |
|   |   | SODUKU<br>(perseverance, working memory)            |





## Resources

- Bellini, S. (2017) Building Social Relationships--2nd Edition.
- Carlson, Stephanie. (2016). Why Goldilocks Parenting Builds Executive Functioning Skills. https://www.understood.org/en/community-events/blogs/expert-corner/2016/11/23/why-parenting-helps-build-executive-function-skills? ul=1\*1j1g9iq\*domain\_userid\*YW1wLVFrd3IoMjMtcUZTcG9YVWFfNEhCX1E.
- Center on the Developing Child at Harvard University (2011). Building the Brain's "Air Traffic Control" System: How Early Experiences Shape the Development of Executive Function: Working Paper No. 11. www.developingchild.harvard.edu
- Fun and Effective Executive Functioning Activities for Preschoolers (2019). The Thoughtful Parent.
- Graziano, P.A., Reavis, R.D., Keane, S.P., & Calkins, S.D. (2007). The role of emotion regulation and children's early academic success. Journal of School Psychology, 45(1), 3-19.
- Kidsense (2020). <u>https://childdevelopment.com.au</u> PsychCentral Resource Page. <u>https://www.psychcentral.com/blog/childhood-behavioral/2020/01/emotional-dysregulation-in-</u>
- The Functional Parent. https://hes-extraordinary.com/self-regulation-strategies
- The Left Brain Buddha. https://leftbrainbuddha.com/10-fun-activities-that-teach-executive-functioning-kids-teens/#:~:text=%20For%20Toddlers%20and%20Preschoolers%20%201%20Sorting,working%20memory%20to%20search%20for%2 •
- The OT Toolbox. <u>www.theottoolbox.com</u>
- The Pathway2Success Website. https://www.thepathway2success.com/12-games-to-practice-self-control/
- Wilkins, S. and Burmeister, C. (2015). FLIPP The Switch: Strengthen Executive Function Skills. AAPC Publishing: Shawnee Mission, Kansas.