

Executive Functioning: Tips and Techniques for Everyday Life

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Executive Functioning: What is it?

- * Umbrella term used to identify a set of specific cognitive functions
- * Many different definitions or opinions on what these functions are

Executive Functioning: What is it?

- * Definitions:

- * “those mental capacities necessary for formulating goals, planning on how to achieve them, and carrying out the plans effectively” (Lezak, 1982)
- * “... ability to maintain an appropriate problem-solving set for attainment of a future goal” (Welsh & Pennington, 1988)

Executive Functioning: What is it?

- * Includes cognitive functions that are necessary for goal-directed behaviour
 - * Goal-directed thought
 - * Goal-directed behaviour
 - * Regulation of behaviour
- * Metacognitive skills and regulatory skills

Executive Functioning: What is it?

- * Example of hosting a party:
 - * Decision to have party
 - * Planning: date, theme, guest list, menu, entertainment
 - * Organizing: send invitations, purchase and prepare food, arrange entertainment, party favours
 - * Day of party: initiate and oversee activities, carry out plans, “trouble shoot” as problems arise
 - * Following party: evaluate and use this information to alter plans for next party

Executive Functioning: What is it from a functional perspective?

- * Awareness/self-appraisal of one's strengths and weaknesses
- * Ability to:
 - * set realistic goals for oneself based on self-appraisal
 - * plan and organize behaviour designed to achieve the goals
 - * self-initiate behaviour in pursuit of the goals

Executive Functioning: What is it from a functional perspective?

- * **Self-inhibit** behaviour incompatible with the goals
- * **Self-monitor** performance in relation to the goals
- * **Self-evaluate** performance in relation to the goals
- * **Solve problems (i.e., think strategically)** in the event of obstacles to achieving the goals
- * **Flexibly shift sets, strategies, and solutions** if necessitated by task demands

Executive Functioning: What is it?

- * Initiation
- * Planning
- * Organization
- * Problem-solving/reasoning
- * Mental flexibility/shifting
- * Inhibition
- * Self-regulation
- * Self-monitoring

Why talk about executive functioning?

- * Effective executive functioning is a critical factor in:
 - * social success
 - * academic success
 - * vocational success
 - * independent living

Why talk about executive functioning?

- * Important in the context of spina bifida and/or hydrocephalus given that it is a common area of concern
 - * Particularly an issue as children become adolescents and adults and the expectations related to management of care
- * Some question in the literature if it is attention or executive functioning that is at the root of some of the difficulties more common in those living with spina bifida and/or hydrocephalus
 - * Never clear-cut or just one thing
 - * Important to consider both as strategies used to assist with one can help the other

Why talk about executive functioning?

- * Need to consider developmental trajectory
 - * Precursor skills seen in preschoolers
 - * Skills develop throughout childhood
 - * Environmental demands/expectations shift as children reach teen years
 - * Expectation is that these skills are fully developed by the end of adolescence
 - * This is not always the case for individuals with various developmental or medical conditions

What can we do when there are deficits in executive functioning?

- * The “external brain”
 - * Idea is that we need to modify the environment and provide the structure needed to help the individual compensate for the area of difficulty
 - * Always begin with changing the external world before trying to move to the internal world
 - * Example of learning and becoming independent with a bedtime routine
 - * Changing the external world includes changes to the environment, the task, or the way that you interact with the individual

What can we do about deficits?

- * Teach the skill, don't expect the individual to just "get it"
 - * Like learning to read – a small percentage of people will learn on their own, but most of us have to be taught
- * Keep the individual's developmental and cognitive level in mind
 - * Differing expectations for a 5 year-old versus an 11 year-old versus a 15 year-old
 - * Differing expectations for someone who has other cognitive or learning differences versus someone who is typically developing

What can we do about deficits?

- * Identify a specific area to work on and concentrate on that
- * Provide just enough support for the individual to be successful
 - * Be positive and collaborative
 - * Make support part of everyday interactions
- * Keep support in place for as long as needed
- * Gradually reduce supports as the individual masters the skill

What can we do about deficits?

- * Take each of the component functions listed earlier and discuss strategies for dealing with specific difficulties
- * Note that there is overlap and that strategies targeting one function will likely assist with another
- * Not every strategy works for every person – need to try a variety before finding a good “fit”

What can we do about initiation?

- * Initiation is not just having the idea, but acting on it
- * Reinforce instances of initiation throughout the day
- * Make as much routine as possible, so less initiation is needed
- * Break larger tasks into smaller components so they are less overwhelming
- * Use cues – verbal or visual or electronic
- * Involve the individual – how do they want to be cued?

What can we do about planning?

- * Verbalize any chance you have – show the individual how you plan
- * Create step-by-step plans on paper
- * Demonstrate how you prioritize
- * Use a visible calendar or agenda
- * Embrace routine

What can we do about organization?

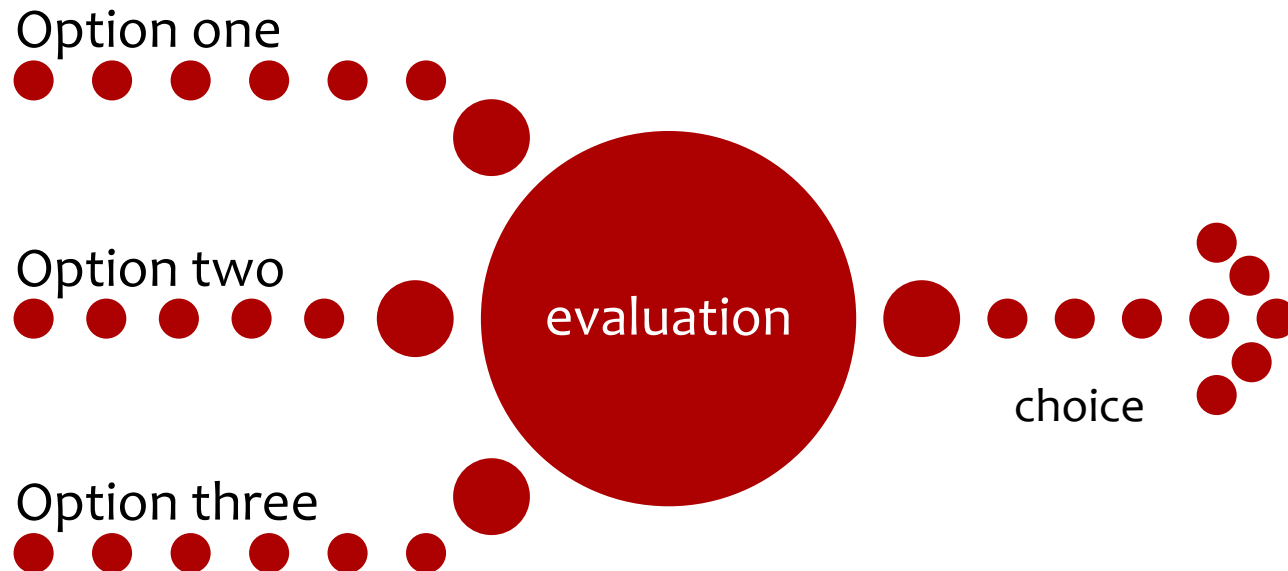
- * A place for everything and everything in its place
- * Devise a system for each problem area
 - * backpack with specific pockets to keep specific items
 - * Colour-coded binders for specific subjects or to distinguish complete from incomplete work
- * Keep expectations reasonable
- * Use routine

What can we do about problem-solving and reasoning?

- * Break larger problems or tasks into component steps
- * Help the individual to “brainstorm” ideas and then evaluate these with them
- * Teach an approach to problems:
 - * Is this a problem?
 - * What are the options or solutions?
 - * Which of these options or solutions is best?
 - * What steps are necessary to implement the solution?
 - * Implement the solution
 - * Monitor progress and alter as necessary
 - * Evaluate the outcome

What can we do about problem-solving and reasoning?

* Use decision-trees:



What can we do about mental flexibility or shifting?

- * Provide options when individual has become “stuck”
- * Give choices whenever possible
- * Discuss real-life situations and what alternative choices or actions might have been
- * Plan ahead or practice if situations might provoke anxiety – anxiety can lead to rigid thinking
- * Help the individual realize when they are being inflexible

What can we do about inhibition?

- * Clear and consistent feedback
- * Develop a signal or key phrase
- * Teach strategies to “think first”
- * Practice

What can we do about self-regulation?

- * Teach individual to recognize emotions and triggers
- * Teach strategies to assist with emotional control
 - * Breathing techniques
 - * Counting
- * Provide immediate feedback
- * Use real-life experiences as “teachable moments”
- * Plan ahead for new situations – practice
 - * Use social stories

What can we do about self-monitoring?

- * Provide clear feedback
 - * When possible, do in the moment
- * Use real-life examples to teach
 - * observations
 - * videotaping
- * Provide structure for self-evaluation

What can we do about executive dysfunction?

- * The “external brain”
- * Model and practice
- * Change expectations
- * Don’t expect generalization
- * Remember that dysfunction is a matter of degree
- * Accept there can be a disconnect between “knowing” and “doing”

Is it “can’t” or “won’t”?





Dr. Petrina Pelletier - Executive Functioning - SBHA Conference

Some suggested resources:

- * *Smart but Scattered* by Peg Dawson and Richard Guare (2009)
- * *Executive Skills in Children and Adolescents: A Practical Guide to Assessment and Intervention (2nd Edition)* by Peg Dawson and Richard Guare (2010)
- * Social Stories – developed by Carol Gray:
www.thegraycenter.org

Thank you for your attention!

- * Questions?

- * Contact:

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