Developing Your Children’s Organizational Skills & Executive Functioning

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What are Executive Functions?

- Inhibiting
- Initiating
- Self-Monitoring
- Shifting/Flexibility
- Learning/Adapting From Past Successes & Mistakes
- Coping with Novelty
- Working Memory
- Planning
- Organizing
- Time Management
- Problem Solving
- Emotional Control
- Frustration Tolerance
- Delay of Gratification
Executive Functions Help Us....

- Make plans and carry them out over time (i.e., “goal directed behavior”)
- Organize ourselves (mentally, behaviorally, and materially)
- Accurately judge, estimate, and keep track of time
- Learn and adapt based on past experiences (i.e., learn from past successes and failures)
- Keep track of more than one thing at a time
- Remember to carry-out future plans, directions, or intentions
- Recognize when additional information is needed
- To put the proper amount of effort and pacing into work related tasks
- Change our mind and make mid-course corrections while thinking, acting, or writing
- Motivate ourselves in the absence of ‘external motivators’

- Engage in group interactions by allowing us to:
  - Stop and think before acting or talking
  - Wait until it’s our turn to speak
  - Follow rules (‘Rule-Governed Behavior’)
  - Have empathy and take-on perspectives other than our own (‘flexibility’)
  - Self monitor ourselves (allowing for self-error detection and self-correction)
  - Delay gratification
  - Tolerate frustration
  - Manage/Control our emotions (to fit social, situational, and task-related demands)
Executive Functions and Development

• Frontal lobes of the brain are the seat of executive functioning.

• Frontal lobes are very undeveloped in children (start to develop seriously in adolescence) and are the final portion of the brain to reach full adult maturity (during mid to late 20s).

• Thus, elementary school aged children, parents and teachers act as the frontal lobes, teaching, providing, and imposing ‘executive skills’ on them.

• As with all developmental milestones, there is a ‘normal level of variability’ in the attainment of executive functioning skills (roughly 1 to 1.5 years) – So not all ‘normal children’ develop EFs at the same time or pace.

• As children grow, there is an expectation for less need for externally-provided structure and support from others. However, in some cases, conventional expectations may not be neurologically and developmentally realistic for a given child or group of children.
Executive Functions and Development

• If your child has a diagnosis of ADHD (and/or LD), his/her EF development may be on a delayed trajectory (Barkley’s “70% Rule”).

• EF delays tend to become most apparent academically and socially upon a child’s entrance into – middle school, high school, and college.

• Whether or not your child has difficulty with EF, you can be proactive about working on these skills.
Executive Functions and Development

• American school System – Based on 100 year old system

• Based on a Standardized/Homogenized Teaching Curriculum of “what children should learn all together at what age” to produce an ‘educated person’ by the end of the line (High School).

• Yet “one size/one production schedule does not necessarily fit all”
So What Can Parents and Teachers Do?

• Starting at the first grade level, we need to consciously begin teaching and modeling necessary EFs for our children – gradually pulling away and removing this structure over time to help them plan, organize, problem solve, and self-regulate for themselves ["Scaffolding"]

• Note: You need to tailor the type, intensity, and timing of this help to each of your children, as they won’t all be the same.

• So What EFs Are Expected At What Ages?
Developmental Tasks Requiring Executive Skills
(From Dawson & Guare)

Pre-School Age:

- Follow immediate one-step directions (e.g., “Get your shoes from bedroom”).

- Tidy bedroom or playroom with assistance.

- Perform simple chores and self-help tasks with reminders (e.g., clear dishes from table, brush teeth, get dressed).

- Inhibit certain behaviors: don’t touch a hot stove, run into street, grab a toy from another child, hit, bite, push, etc.).
Developmental Tasks Requiring Executive Skills

(From Dawson & Guare)

Kindergarten Through Second Grade:

• Follow 2 to 3-step directions.

• Tidy bedroom or playroom (with inspection after the fact)

• Perform simple chores, self-help tasks that take less than 10-minutes to complete -- with reminders (“make bed”)

• Bring papers to and from school

• Complete homework assignments (20 minutes, maximum)

• Decide how to spend money for small purchases (allowance)

• Inhibit (slightly broader and more subtle) range of behaviors (e.g., follow safety rules, don’t swear, share and take turns, raise hand before speaking in class, keep hands to self).
Developmental Tasks Requiring Executive Skills
(From Dawson & Guare)

Grades 3 through 5:

- Run errands and follow directions (may now involve less ‘immediacy’ of proximity and/or time (i.e., as going to a nearby store/friend’s house; or remembering to do something later on/after school)
- Tidy bedroom or playroom (may now involve more than just “pick-up/put things away” – i.e., vacuum or dust)
- Perform chores that take 15 to 30 minutes (e.g., clean-up after dinner, rake leaves)
- Bring books, papers, assignments to and from school
- Keep track of belongings when away from home
- Complete homework assignments (up to 1 hour)
- Plan simple school project such as a book report (e.g., select book, read book, write report based on a model provided by teacher)
- Keep track of changing daily schedule (i.e., different activities on different days after school)
- Save money for desired objects over time; plan how to earn money
- Inhibit/self-regulate on own – i.e., behave when teacher is out of the classroom; refrain from rude comments, temper-tantrums, bad manners.
Developmental Tasks Requiring Executive Skills
(From Dawson & Guare)

Grades 6 through 8:
• Help out with chores around the home – including both daily responsibilities and occasional/non-regular tasks (e.g., emptying dishwasher, raking leaves, shoveling snow) – **Tasks may take up to 90 minutes to complete**

• Babysit younger siblings or for pay

• Use system for organizing schoolwork; including assignment book, notebooks, etc. (semi-independently with occasional inspection/supervision by adults)

• Follow complex school schedule involving changing teachers and classes during different periods

• Plan and carry out long-term projects, including tasks to be accomplished and reasonable timeline to follow; may involve planning multiple large projects simultaneously (requires EF skills of: “analysis & reconstitution skills” as well as “planning/thinking-ahead”, “strategic thinking”, “time-estimation”, and “time-management”)

• Plan/schedule activities -- including after-school activities, homework, family responsibilities, estimate how long it takes to complete individual tasks and adjust schedule to fit (requires all EF skills above plus “self-monitoring” and “flexibility/transitioning”)

• Independent self-regulation and rule-governed behavior – i.e., inhibiting rule breaking -- even in the total absence of visible authority
Developmental Tasks Requiring Executive Skills

(From Dawson & Guare)

• **High School:**

  Manage schoolwork effectively on a day-to-day basis, including completing and handling assignments on time, studying for tests, creating and following timelines for long-term projects, making adjustments in effort and quality of work in response to feedback from teachers and others (e.g., grades on tests and papers).

  Establish and refine long-term goal and make plans for meeting that goal. If the goal beyond high school is college, the youngster selects appropriate courses and extracurricular activities, signs up for and takes SATs or ACTs at the appropriate time and carries out the college application process. If the youngster does not plan to go to college, he or she pursues vocational courses and, if applicable, employment outside of school to ensure the training and experience necessary to obtain employment after graduation.

• Make good use of leisure time, including obtaining employment or pursuing recreational activities during the summer.

• Inhibit reckless and dangerous behaviors (e.g., use of illegal substances, sexual acting-out, shoplifting, vandalism).
3 Primary Ways to Help Youngsters Achieve Effective Executive/Organizational Functioning:

• Change their actual brain functioning

• Change the environment (‘Environmental Management’)

• Teach Executive Functioning skills through direction instruction and modeling
Changing Actual Brain Functioning

- **Sleep**
  - 10-12 hours a night for ES
  - 9.25 hours a night for MS/HS
  - Consolidates the day’s learning
  - Minnesota Study

- **Nutrition**
- **Exercise**
- **Nature/Outdoors**
- **Allow Time**
- **Neurofeedback**
- **Medication**
Change the Environment
(“Environmental Management”)

- Creating systems for material organization (shelves, bins, labels, de-clutter)

- Using external timers and reminders (i.e., clocks, timers, buzzers, electronic devices, etc.)

- Creating (and maintaining) daily routines and schedules (‘Morning’, ‘Afternoon’, and ‘Evening’) -- that are externalized/printed on sheets and/or calendars hung in a visible place -- [Monthly, Weekly, and Daily]

- Creating (and regularly using) step-by-step checklists (for completion of multiple tasks throughout day or for completion of ‘multiple-step’ tasks). Use of pictures can be good for younger children

- Making certain child has a quiet, organized, and well-stocked study place for homework completion
Changing Behavior (Teaching EF)

Teaching/Modeling Problem Solving Skills and Routines:

-- “What is the problem? What are we even trying to accomplish?”

-- “Have you ever done/experienced something like this before to tell you what to do this time?”

-- Brain-storm possible solutions with child and discuss/predict the ‘Pros and Cons’ of each before doing anything else. Offer suggestions.

-- Experimentation
  • “Try that and tell me how it works out”.
  • “What might have made it work out better for next time?”

-- Occasionally let child fail and learn from experience (when safe)
Questions To Ask Child To Help With Task Planning, Organization, and Self-Monitoring:

• “How are you going to know when to be ready?”
• “How are you going to stop yourself from…?”
• “What is your goal/What is the main point in doing this?”
• “What do you want it to look like when you’re done?”
• “How long do you think it will take?”
• “How much time did it take last time?”
• “Have you done anything like this before?”
• “What is/are the most important part(s)?”
• “What do you think you should do first, second, third…?”
• “How will you know when you are finished?”
• “How will you continue to work when you get tired, bored, frustrated?”
• “How long do you think that took?”
• “Would you want to do anything differently next time?”


Changing Behavior (Teaching EF)

Teaching EF Skills of — Analysis & Reconstitution; Planning; Time-Estimation, Time-Management; Self-Monitoring & Self-Correction:

a) Help child break-down larger tasks into smaller steps which (when completed successively over time) will lead to the accomplishment of the ultimate goal

b) Write each of these steps down in a sequential/checklist-type fashion

c) Estimate/predict with child how long it will take to complete each step or task

d) (Based on above time-predictions) write each step of overall task into a daily or weekly schedule/calendar -- calendar and ‘work/plan backwards’ (i.e., start with “time or date” task needs to be completed and successively ‘plug-in’ steps working backwards in time to determine the ‘latest’ each step can afford to be started)

e) Refer back to this schedule/calendar regularly and check-off each step as it is completed

f) Compare ‘predicted’ to ‘actual’ completion times (and make adjustments as necessary)
Changing Behavior (Teaching EF)

- Teaching EF Skills of:
  Analysis/Reconstitution & Planning

- Use of Technology:
  - ‘Kidspiration’ and/or ‘Webspiration’ ‘Webbing software
    - [www.kidspiration.com](http://www.kidspiration.com)
    - [www.webspiration.com](http://www.webspiration.com)
Example of Webbing
Changing Behavior (Teaching Skills):

‘Making Choices’ -- Helping with Problem-Solving and Flexibility Skills

- Choices can help with transitions, gives kids practice in decision making, and also gives them a needed sense of control.

- Start by providing child with ‘Forced-Choices’:
  - “Are you ready now or do you need 5 more minutes?”
  - “Do you want to brush your teeth or take a bath first?”
  - “Do you want to do your reading or math first?”
Changing Behavior (Teaching EF)

**Delaying Gratification** – A Crucial EF Skill!
Strongly Related to Academic, Vocational Emotional, & Life Success:

“Marshmallow Study”

Upon 18 and 40 year follow-ups:

**Kids able to delay gratification for greater delayed rewards:**
- Were less likely to be overweight as adolescents and adults
- Were less likely to abuse drugs and alcohol
- Had significantly better school grades; SAT scores; and academic attainment levels
- Were more vocationally and financially successful
- Had significantly lower rates of anxiety and depression
- Had significantly better self-esteem

**Kids unable to delay gratification for greater delayed rewards:**
- Had higher body mass indexes
- Were more likely to be a substance abusers
- Had lower educational levels
- Were less successful in their careers
- Were more likely to be seriously in debt
- Were more likely to struggle with low-self-esteem, anxiety, and depression
Delay of Gratification; Frustration-Tolerance; Emotional Self-Control:

Help kids develop crucial “delay of gratification”; “frustration-tolerance”; and ‘emotional-control” skills by modeling and teaching them how to use:

• Self-calming and strategizing self-talk skills
• Visual imagery skills
• Deep-breathing and relaxation skills
• Self-distraction skills
• Regular practice with delaying gratification
• Empathy discussions and exercises
  o “What do you think the other person would feel or do?”
Changing Behavior (Teaching Skills)

Consequences:

- Offer rewards for specific behavior that you want to encourage.

- Gradually decrease the rewards as the new behaviors become habits.

- Create or allow negative consequences when they make poor choices (‘natural consequences’ are best when possible).
One More Time...

- Change Actual Brain Functioning
- Change the Environment
- Change Their Behaviors (Teach/Model Skills)
- Be Proactive and Positive!
- Have fun!
References/Resources

1) Dr. Donna Henderson – Improving Your Child’s Executive Functioning (Talk) (drdonnahenderson.com)

2) Rhona M. Gordon: *Thinking Organized For Parents and Children – Helping Kids Get Organized For Home, School, & Play*

3) Drs. Joyce Cooper-Kahn and Laurie Dietzel: *Late Lost and Unprepared – A Parent’s Guide to Helping Children with Executive Functioning*

4) Peg Dawson and Richard Guare: *Executive Skills in Children and Adolescents – A Practical Guide to Assessment and Intervention*