

Grade Related Effects

EXECUTIVE FUNCTIONS Impairment in ADHD

Non-ADHD or ADHD?



Grade 1 or 3-5?:
Inhibitory Control
Working Memory



Grade 3-5 or 8-12?:
Task Related EF's
Response Inhibition
Selective Attention
Spatial Spanning
Emotional Regulation
Verbal Working Memory

Grade 8-12 or Age 20-29yrs:
EF's More Integrated & Consistent
(esp. task oriented E.F.'s, & Spatial Spanning)

Age 20-29yrs or Age 30-35: EF's Peak



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Spatial Spanning Typical

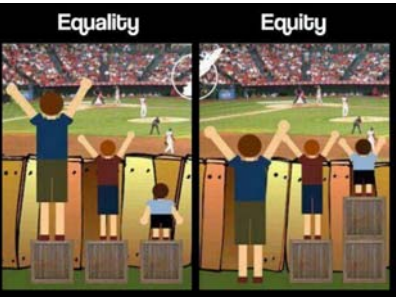


Spatial Spanning ADHD





Some people have to work harder to produce less; oddly, the harder worker is sometimes called “lazy” based on lower production



Equality:
 Emphasis: “what we provide”
 Provisions: Standardized
 Access: Depends on Abilities

Equity:
 Focus: “effort expected”
 Provisions: Tailored to Individual
 Access: Individually Maximized

A.D.H.D. Inside Out Seminars

Building ADHD Strategies Tasks / Study / Emotions

ADHD Inside Out
 Coach Dan Duncan, ACC



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STRATEGIES COMPONENTS for Tasks

I. Reduce Distractions (selective attention)

- silence or noise/music (avoids random noises)
- alone or with friends/strangers (people keep student “present”)
- online or paper copy (internet issues?)
- tactile: fabric choice, uncomfortable chair, sticky keyboard, etc
- “learn to put up with it!” ... multiply what irritates/distractions you by 10x and decide if you would “put up with it!”

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STRATEGIES COMPONENTS for Tasks

2. **Add Interest** (selective attention / motivation)

- dopamine: preferred motivation towards positive opportunity
- baiting the brain's attention
- “distractions” may hold a key for adding interest
- imminent rewards (sparingly)
- appealing content: select novel for book report, apply problem solving to hobby/craft, etc
- appealing process: written/verbal/demonstrate, pen/pencil, moving while thinking, color code topics, etc
- appealing environment: indoor/outdoor, busy/quiet, table/desk/ lazy boy, room size/color/windows/brightness, etc



STRATEGIES COMPONENTS for Tasks

3. **Add Pressure** (motivation / time circle)

- norepinephrine: provides motivation to avoid a negative consequence
- each chunk of a large assignment has a due date
- study buddy (social pressure)
- natural consequences
- mismatched consequences (use very sparingly)
 - self-imposed is best
 - must be fresh in mind ahead of action
 - size of consequence must match the size of the “failure”



STRATEGIES COMPONENTS for Tasks

4. **Reduce Duration** (time circle)

- use if you can't add enough interest/pressure to capture attention
- multiple Work/Fun sequences ... eg. 20/10
- work sequence short enough ...
 - to feel the end from the beginning
 - to accomplish without energy/focus drain ... otherwise, the feeling of returning to the next work sequence will be associated with the drained feeling when the previous work sequence ended
- Work & Fun should ideally be in slightly different locations so that a literal “switch” of some sort is required



20

10

20

10

20

10

START (time circle): focus on the 20 seconds it will take to START... eg "walk over to the desk, sit in the chair, open the book, and just start reading"

STARTING is non-negotiable (Option: After I START, I can decide to stop, but I have to START again next interval)

Tell Yourself: "I can have fun again in 20 minutes, and when I'm having fun again, it won't feel like I worked for 20 minutes"

FEEL (dopamine): take 20 seconds to FEEL good about the work you did, and to get a FEELING of where you stopped so you don't lose your place when you return

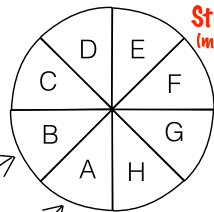
DISTRACTION PAD (working memory): jot down things that come to mind that you want to remember for later (eg what you want to do for the 10 minute break)

TIMER APP? (time circle): 30/30/ or Pomodoro (keeps looping 20/10 cycles (or whatever cycle you set) ... (ourpact.com for parental control)

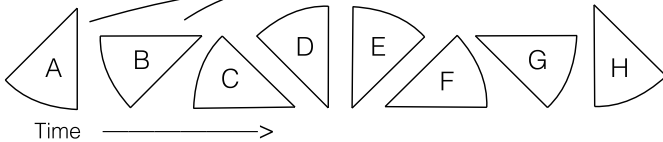
Information Storage by Assembly

- Deliver each detail as its own component
- Assumes student can store each detail by itself and "put it all together" at the end

Storage (memory)



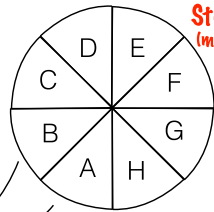
Teaching by Assembly



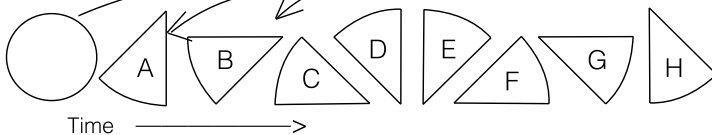
Information Storage by Dissecting

- Start with a "sketch" of the whole picture (concept); take time
- Deliver each detail as it relates to the whole "sketch", and as it relates to the other details

Storage (memory)



Teaching by Assembly





Applies to Conversations

BIG PICTURE FIRST

Input

Output

Fill Gaps

BIG PICTURE FIRST
ADHD stores information by association as one large picture of knowledge... not by "1. Point, 1) sub-point, a) detail"
- can't "park" details until they have a BIG PICTURE in which to place the detail

INPUT

- read/teach/say only a small section ... subsection, page, etc

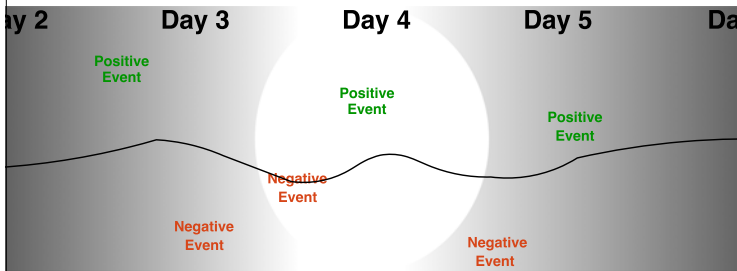
OUTPUT

- explanation to self, or ask for feedback on that section; forces the information into a cohesive section of BP
- refer to where this section fits in BP, and in relation to previous sections

FILL GAPS (mastery)

- only a small section to review to find missing information (low effort)
- builds clearer (not fuzzier) picture for next section to build upon

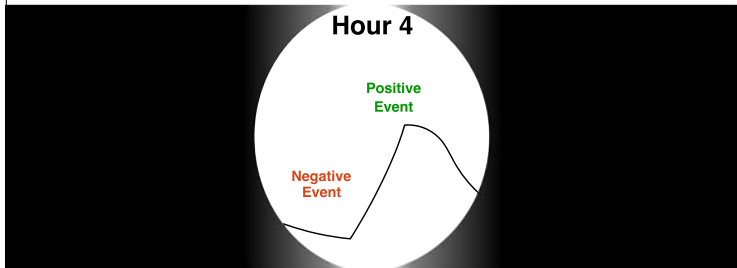
Time & Emotional Regulation Typical Spatial Spanning



Past emotions tend to blend with current emotions (smoother overall)

Eg. yesterday's good news helps to buffer today's bad news, or Friday's struggle is easier to tackle because fun is planned for the weekend (or vice versa)

Time & Emotional Regulation ADHD Spatial Spanning



Emotions DO NOT span over time; current emotions are almost entirely reflective of current events (more volatile range, quicker transitions)

Eg. the frenzied rage 10 minutes ago is replaced with hilarious laughter at a joke just told, or days of fun enjoyed with a friend is forgotten if they tease me (or vice versa)

Setting the Stage for Strategies
Understand Preferred Functions

Processing: (balanced or overweighted)

-Kinaesthetic (tactile)

... movement while struggling or while focusing, feels capable when in motion, walks while on the phone, animated gestures in conversation, tapping, fidgeting, rocking while concentrating, touches when excited (sometimes intrusively)

-Visual

(graphic) - "the way I see it" or "I imagined it like..."

(linguistic) - "it wasn't on the list", "you have to spell it out for me", loves definitions and distinctions

-Auditory (verbal)... talks a lot, circles a topic before making sense, sensitive to and good at voice inflections

-OTHERS?

Setting the Stage for Strategies
Understand Preferred Functions

2. Seek to Understand Abilities: Strengths & Challenges

(NOT Conquering Behaviours & Attitudes)

- which Executive Functions were working/struggling this time?
- what does your hindsight teach you about your own processing, preference, priorities, or perspective?
- what do the 4 p's tell you about what, how, and why you do certain things?

Setting the Stage for Strategies
Understand Preferred Functions

Preference: (indicated WHAT & HOW)

- do fun things one way, boring things another?
- best time? e.g. morning or evening? (homework, communicating, chores)
- quiet or noisy? (entertainment? study?)
- all at once or piece by piece?
- wants direction or wants choice?
- do hard task first? or easy? or fun? or boring?

Priorities: (or values... indicate WHY)

- alone or with someone? - quickly or perfectly?
- stand out or fit in? - safety or adventure?
- strength or compassion? - smart? funny? attractive?
- OTHERS?

Setting the Stage for Strategies
Understand Preferred Functions

Perspective:

- inside box (rules), outside box (explorer), or no box (ADHD)?
- "I'm capable/incapable"
- "I'm being supported" or "I'm being measured/judged"
- pay attention to energy level of emotions; higher energy suggests flipping the context (question are statements, and statements are questions)
 - "Go away, I wanna be alone!" ⇔ "do you like being around me?"
 - "Everyone thinks I'm a loser!" ⇔ "am I capable?"
 - "Why are you so demanding?" ⇔ "I feel overwhelmed!"
 - "When do *I* get to have it *my* way?" ⇔ "I feel controlled, voiceless, overlooked, etc"
- don't take the bait of emotional questions or statements... reassure, stay curious, explore

Setting the Stage for Strategies
Build Social Supports

3. Supports: Join the Journey as a Partner

- remain curious & explore with the individual
 - ask more; tell less
 - e.g. "I wonder if..." is better than "you should have..."
- assist the individual to wonder about (observe and reflect)
 - the four "p's": processing, preferences, priorities, and perspectives; (later slide)
 - Executive Functions

Setting the Stage for Strategies
Address ADHD Symptoms

4. ADHD Symptoms: Invent Strategies to Overcome

- don't harp on "this failure", & esp not "previous failures"
- optimistically switch focus to "next time"
- collaborate... what I need / what you need
- be creative & adventurous... "let's test another way"
- externalize executive function challenges (use a tool or person)
- include discoveries... 4 p's & EF's
- include proximity, practice, & props (externalized tools)
- consequences or rewards?
 - best if invented by individual AND are related to the action
 - only work if they are in mind before the decision to act
 - consequences train negative motivation (avoiding failure)
