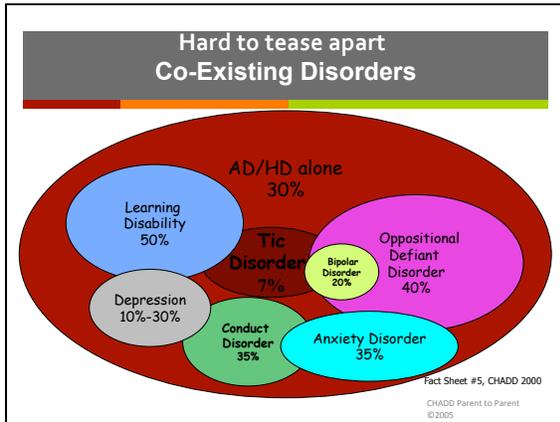


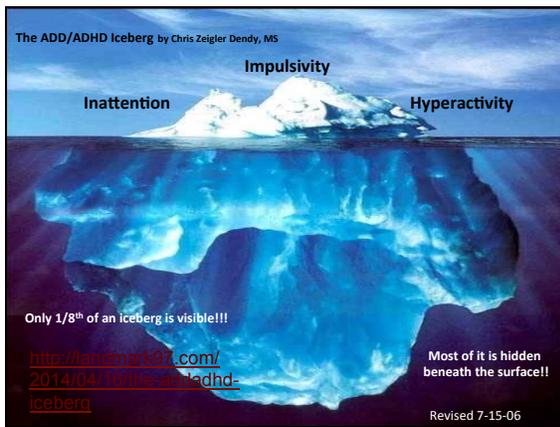
Deficits in Executive Functioning

- Deficits in Executive Functioning (EF) undermine the child's ability to use *internal* control to regulate behavior.
- Therefore, the behavior of children with AD/HD is more *externally* controlled than children without AD/HD.
- Children with AD/HD are strongly influenced by the:
 - Conditions of the immediate environment
 - Availability of immediate rewards



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- ### Executive Functioning difficulties affect...
- ★Communication
 - ★Pragmatics & Social Interaction
 - ★Processing & Reasoning
 - ★Problem Solving & Learning
 - ★Memory

Communication difficulties...

- Disorganized conversation
- Unrelated thought patterns
- Difficulty understanding the main idea
- Reduced ability to use self-talk
- Inattentive and impulsive listening
- Lack of initiation

Pragmatics & Social Interaction

Difficulty with...

- the ability to take others' perspective
- transitioning
- ability to understand nonverbal cues
- judgment of situations (inappropriate, impulsive, and dangerous)

Processing & Reasoning

Difficulty with...

- abstract reasoning
- recognizing relevant vs. irrelevant information
- drawing conclusions and making inferences
- thinking differently
- predicting consequences or outcomes

Problem Solving & Learning

Difficulty with...

- strategic thinking
- ability generate multiple solutions
- generalizing to other concepts
- learning from consequences
- carrying out instructions or tasks to completion
- recognizing failure or the need to choose other strategies

Memory

Difficulty with...

- retaining information long enough to complete steps
- accomplish tasks and being on time
- recalling information (out of sequential order, including verbal directions)
- integrating long-term memories

How Teachers Describe Children

“Needs to be told exactly what to do”
“Overwhelmed and frustrated”
“Trouble transitioning”
“Lazy and doesn’t try”
“Forgetful”
“Doesn’t listen”

What does it look like in school? ↗

Deficits in...

- working memory and recall (including memorizing words, multiplication tables, facts)
- activation, alertness and effort
- analyzing, problem solving, organizing and planning (math word problems and writing essays)
- controlling emotions
- organization
- shifting and inhibiting attention

Difficulties in Reading... ↗

- Planning, recalling, and using decoding strategies
- Reading words fluently
- Understanding and using information read in a sentence, passage, or longer article
- Making inferences or using strategies for reading comprehension

Written Language difficulties... ↗

- Motor control
- Planning how written information will fit on a page
- Writing automatically
- Organizing content in written material
- Retrieving and using ideas when writing
- Holding and manipulating thoughts, retrieving ideas, and executing written material

Math difficulties...

- Monitoring progress and self-correction when doing calculation
- Maintaining an idea, organizing a strategy, and retrieving steps accurately when calculating
- Organizing, storing information, retrieving information, and executing steps when learning and applying memorized information, such as addition facts

Study Skills difficulties...

- Organizing desk, backpack
- Completing homework
- Reading a text and gleaning needed information
- Listening and gleaning needed information
- Turning completed homework in on time
- Interpreting assignments correctly
- Using study strategies in the classroom

Skills Needed by Students with AD/HD to Experience Success in School

1. Increase Attention to Task
2. Improve Listening Skills
3. Increase Work Production
4. Build Organization and Study Skills
5. Control and Minimize Problems Caused By:
 - Excessive Hyperactivity
 - Impulsivity
 - Immature Social Skills



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What can we do about it?

Students' Need:

- Assistance
- Monitoring
- Structure
- Support

It is critical for teachers and parents to provide students with AD/HD the assistance they need, so they do not get behind in their classwork or homework!!!

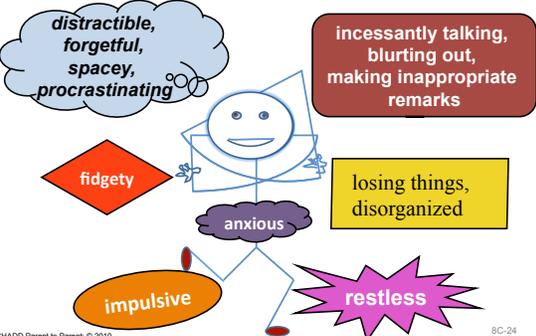


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Games to Play

- Legos
- Scattgories
- Pictionary
- Taboo
- Outburst Jr.
- Apples to Apples
- Charades
- Role Playing (make believe)

What does AD/HD look like in today's classroom? Teachers will see one or more of the following:



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Role of the Classroom Teacher Regarding Students with AD/HD

➤ Know and understand what AD/HD is.

- Describe classroom behaviors that are limiting a student's access to the general curriculum.
- Employ behavioral interventions and educational techniques to best meet the student's needs.



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Rethinking AD/HD...

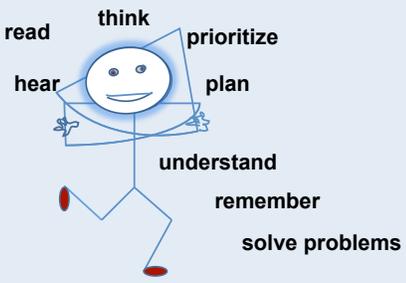
...From a Cognitive Perspective



- **Executive functions** refer to a set of cognitive processes that enable us to:
 - Get started – make and carry out plans
 - Direct our attention
 - Focus
 - Organize school possessions and academic material
 - Manipulate information in our heads
 - Be able to switch from one task to another
 - Control our impulses and emotions

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Executive Functions are essential learning tools that must function for any student to successfully...



read think prioritize
hear plan
understand
remember
solve problems

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Rethinking AD/HD...

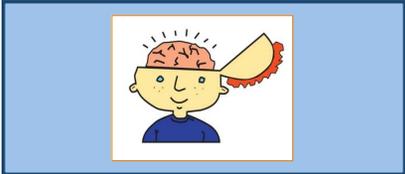
...From a Cognitive Perspective (cont'd.)

- **Executive functions** play a key role in our ability to self-regulate our behavior, our thoughts and our emotions.
- Weaknesses in the cognitive processes (executive functions) can cause: **behaviors, thoughts and emotions.**



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Executive Functions (EF)



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1. Regulating Actions	Indicators of Weak EF Skills
 <p>Managing and regulating one's actions by inhibiting impulsive behaviors</p>	<ul style="list-style-type: none">• <i>Jumps to conclusions</i>• <i>Says things without thinking</i>• <i>Unaware of the impact of his behavior on others</i>• <i>Begins worksheet without reading instructions</i>• <i>Believes work is good despite evidence to the contrary</i> 

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<p>2. Focusing, Shifting Attention to Tasks</p>  <p>Tuning in, resisting distractions, sustaining focus, shifting attention when appropriate</p>	<p style="text-align: center;">Indicators of Weak EF Skills</p> <ul style="list-style-type: none"> • <i>Loses track of activities</i> • <i>Easily distracted by environment</i> • <i>Difficulty shifting attention when school subject changes</i> • <i>Poor reading comprehension</i>
--	---

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<p>3. Getting Started</p>  <p>Organizing, prioritizing and starting work tasks</p>	<p style="text-align: center;">Indicators of Weak E F Skills</p> <p><i>Difficulty:</i></p> <ul style="list-style-type: none"> • <i>Initiating work tasks</i> • <i>Generating ideas and beginning work</i> • <i>Finding the main idea</i> • <i>Starting work requiring mental effort</i> • <i>Organizing verbal output and often changing topics mid-sentence</i>
---	--

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<p>4. Accessing and Recall</p>  <p>Holding information in mind for the purpose of completing a task</p>	<p style="text-align: center;">Indicators of Weak E F Skills</p> <p><i>Difficulty:</i></p> <ul style="list-style-type: none"> • <i>Remembering and following verbal directions</i> • <i>Retrieving information from memory when taking tests</i> • <i>Retaining Information in the brain to complete complex math problems or lengthy writing assignments</i> • <i>Recalling what was read to be able to summarize.</i>
---	--

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5. Organizing and Schoolwork	Indicators of Weak EF Skills
 <p>Organizing schoolwork and personal space</p> <p>Planning and executing schoolwork and planning for the future</p>	<p><i>Difficulty:</i></p> <ul style="list-style-type: none"> Organizing possessions and materials Knowing, understanding, organizing and turning in school assignments Managing or pacing time Sequencing a complex task Analyzing and problem solving

6. Self-Monitoring	Indicators of Weak E F Skills
 <p>Monitoring one's own performance and measuring it against some standard of what is needed or expected</p>	<p><i>Difficulty:</i></p> <ul style="list-style-type: none"> Reviewing school work to check for errors Understanding that the rough draft is not the final draft Persisting or following through on a task because it requires so much effort Failing to adjust behavior based on feedback.

7. Controlling Emotions	Indicators of Weak EF Skills
 <p>Managing frustration and regulating emotions <i>(Not in DSM-5 Criteria)</i></p>	<p><i>Difficulty:</i></p> <ul style="list-style-type: none"> Poor control of emotions Low threshold for frustration May lash out when frustrated by peers Emotionally over-reacts to difficult situations Gives up easily and has excessive worry

Weak EF Skills
Poor Self-Regulation

HELP!

Finish Line

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The graphic shows a group of six diverse children standing in a line. To their right, a stick figure is holding a sign that says 'HELP!'. Above the stick figure is a red banner with the text 'Weak EF Skills' and 'Poor Self-Regulation'. The children are standing on a blue line labeled 'Finish Line'. The background has a colorful gradient bar at the top.

Executive Functioning: Instructional Supports

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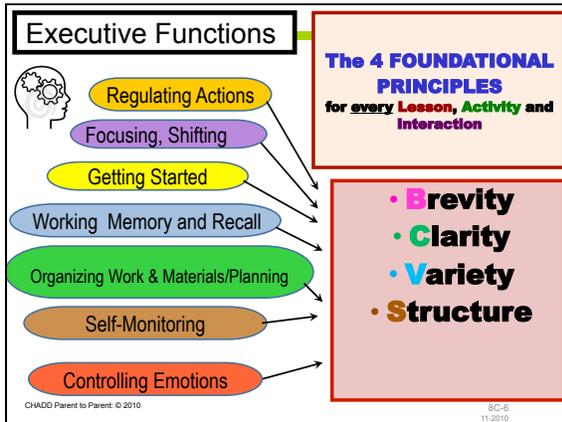
The slide features a dark grey header with the text 'Executive Functioning: Instructional Supports' and a small arrow icon. Below the header is a large white area with a thin grey line at the bottom.

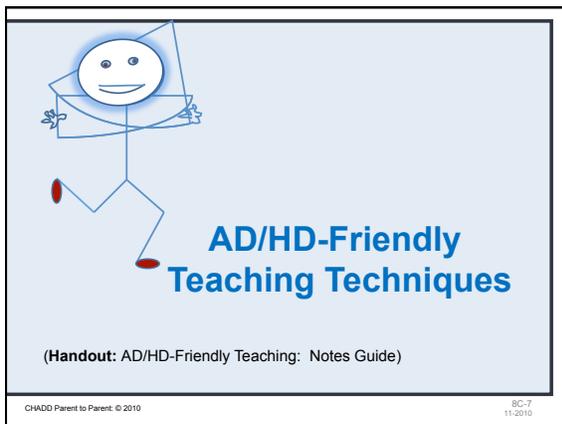
THE FOUR FOUNDATIONAL PRINCIPLES
for every Lesson, Activity and Interaction

B-C-V-S

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The graphic includes a maze icon on the left. The text 'THE FOUR FOUNDATIONAL PRINCIPLES' is in red, and 'for every Lesson, Activity and Interaction' is in black. Below this, the letters 'B-C-V-S' are displayed in large, colorful font (B is pink, C is green, V is blue, S is brown). The background is a light pinkish-red.





Technique #1: Meet and Greet

- Be at the classroom door as class begins
- Say "hello" with a high five, handshake, or fist bump
- Make a personal connection through a comment or question

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Technique #2: Agendas/ Checklists

- ◇ Instructions
- ◇ Assignments
- ◇ Lists of Events

component:
PRIORITIZATION!

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Sample Agenda for a Math Lesson:

- Bell activity: "Meet Someone New"
—Go mingle! ☺
- Correct HW pg. 53, odds
- Lesson on dividing integers
- Work on HW: Blue "Let's Divide" page
—Due Thursday, 10/14
- Calculation game (if time)

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I'm finished, what should I do?

1. Read
2. Think
3. Draw
4. Finish other assignments
5. Work on the computer
6. Write
7. Straighten desk
8. Practice flash cards
9. Practice cursive
10. Pass back corrected work

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**Technique #3:
Foldables
and
Graphic
Organizers**

CHART
TABLE

Tables are organized along vertical and horizontal axes, while charts are organized along one axis, either horizontal or vertical.

Use the fold-in the chart or table as guides to draw easy, straight vertical and horizontal lines.

VENN DIAGRAM!

A B
both A & B

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**Graphic Organizer Example:
Visual Wheel Strategy**

Subject

Supporting Information

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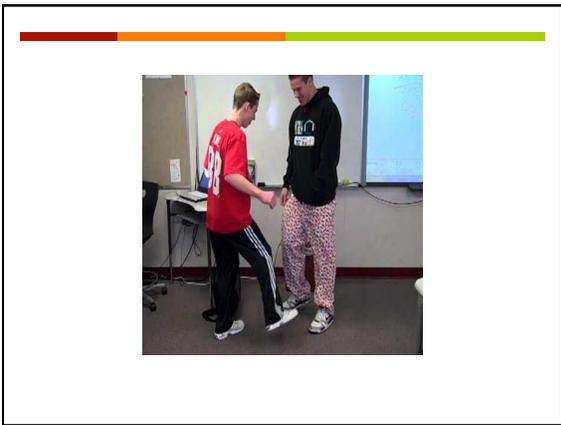
**Technique #4:
Brain
Breaks**

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Brain Breaks

Toe Tapping Energizing Brain Break

1. Stand Up.
2. Face your partner.
3. Both you and your partner put out your right leg and tap your right feet together 1 time and say "1" out loud.
4. Tap your left feet together 3 times and say "3" out loud.
5. Tap your right feet together 2 times and say "2" out loud.
6. Continue the 1,3,2 toe tapping pattern alternating feet.
7. See how fast you can go.



Can You SAY it and MOVE it?						
	Right	Left	Up	Down		
SAY IT!						
MOVE IT!						
SAY Opposite and MOVE It!						
SAY it and MOVE Opposite!						
SAY it and MOVE It!						

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Technique #5:

Think-Pair-Share®

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Think-Pair-Share®

Step 1: Think for **32 seconds** of the 5 teaching techniques that have been presented. Choose one technique that might help build a missing executive skill in your "selected student."

Step 2: Pair with your neighbor for **50 seconds**. Discuss some simple steps that you can take to implement this technique in your classroom.

Step 3: Share this information as a class for **66 seconds**.

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Technique #6: Timers

- Time Timer** (www.timetimer.com)

(iPad version .99-2.99 on iTunes or in App Store)
 one FREE pre-installed as well on the clock app
- Jeff Ertzberger's Power Point Timer
http://people.uncw.edu/ertzbergeri/ppt_timers.html
- Play music during a break—when the song ends, students know learning will resume.

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See-through Highlighter Tape

Manchester University Shotokan Karate Club

Color Code Classroom Information

Technique #7: COLOR

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Technique #8:
Read
to
the
Clip

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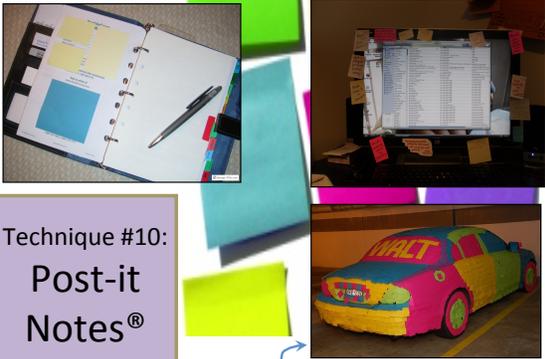
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Technique #9: Mnemonics

- "Thirty days hath September..."
- **H-O-M-E-S** (the Great Lakes are **H**uron, **O**ntario, **M**ichigan, **E**rie, and **S**uperior)
- "Every **G**ood **B**oy **D**oes **F**ine" for the notes on the lines of the treble clef
- 1-800-CAT-HELP for 1-800-228-4357

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Technique #10:
Post-it Notes®

(Okay, don't get carried away!)

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AD/HD-Friendly Teaching Motto:

"Basically, if the child cannot learn in the way we teach, we must teach in the way he learns."
Rick Lavoie

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Build Executive Skills by incorporating . . . ← **Weak EF Skills**
Poor Self-Regulation

AD/HD-Friendly Strategies That Work for All Students



Finish Line

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Resources for Teaching Students with AD/HD

- **CHADD Educator's Manual on AD/HD: An In-Depth Look from an Educational Perspective.** This is "the" manual for managing students with ADHD available at the online store of National CHADD at www.chadd.org
- **Teaching Teens with ADD/AD/HD** by Chris Zeigler Dendy

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Resources for Teaching Students with AD/HD (cont'd.)

- **United States Department of Education web site:**
<http://www2.ed.gov/rschstat/research/pubs/adhd/adhd-teaching-2008.pdf>
Downloadable Booklet titled "Teaching Children with Attention-Deficit Hyperactivity Disorder: Instructional Strategies and Practices"
- **Foldables websites:** wrhs.pasco.k12.fl.us; wik.ed.uiuc.edu; www.dinah.com
- **21st Century Resources:** <http://learningworksforkids.com/apps>

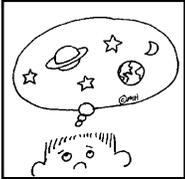
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Thank you!

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AD/HD-Friendly Teaching: Table of Symptoms – Page 1

<p>DSM-IV-R Symptoms— Primarily <u>INATTENTIVE</u> Subtype:</p> <p>(Individual must exhibit at least six of these behaviors to a developmentally inappropriate level for at least six months)</p> <p>The student...</p>	<p>What related behaviors might these students exhibit at school?</p>  <p>He/she frequently...</p>	<p>List the Executive Functions that appear to align with of each symptom of AD/HD</p>	 <p>Executive Functions:</p> <ol style="list-style-type: none"> 1) Regulating actions 2) Focusing, shifting attention to tasks 3) Getting started 4) Accessing working memory & recall 5) Organizing & planning schoolwork 6) Self-monitoring 7) Controlling emotions (not in DSM-IV) <p>CHADD Parent to Parent © 2010</p>
<p>--Often does not give close attention to details or makes careless mistakes in schoolwork or other activities.</p>	<p>--Forgets name on assignments --Produces sloppy, poor quality work --Hurries through tasks</p>		
<p>--Often has trouble keeping attention on tasks or play activities.</p>	<p>--Stares off into space --Is off-task, perhaps disturbing others --Drifts away from planned activities</p>		
<p>--Often does not seem to listen when spoken to directly.</p>	<p>--Doesn't respond to questions/directions --Seems "spacey", Clowns around --Can't repeat back instructions</p>		
<p>--Often does not follow through on instructions and fails to finish schoolwork</p>	<p>--Skips steps on multi-step tasks --Has missing or incomplete assignments --Needs persistent prodding to persevere</p>		
<p>--Often has trouble organizing activities.</p>	<p>--Maintains a cluttered backpack or desk --Doesn't know what to do next in a task --Fails to envision the end result</p>		
<p>--Often avoids, dislikes, or doesn't want to do things that take a lot of mental effort for a long period of time (such as schoolwork or homework).</p>	<p>--Wanders around, failing to get started --Needs redirection back to the task at hand --Finds anything else to do other than the assigned task</p>		
<p>--Often loses things needed for tasks and activities (e.g. toys, school assignments, pencils, books, or tools).</p>	<p>--Never seems to have a pencil or paper --Borrows from peers --Searches for assignments and tools, unable to locate them most of the time</p>		
<p>--Is often easily distracted.</p>	<p>--Shifts focus around, watching peers --Looks out the window or into the hall --Gets interrupted mid-task --Often at pencil sharpener</p>		
<p>--Is often forgetful in daily activities.</p>	<p>--Forgets when assignments are due --Neglects to write important info down and doesn't turn in classwork or homework</p>		

AD/HD-Friendly Teaching: Table of Symptoms – Page 2

<p>DSM-IV-R Symptoms— Primarily <u>HYPERACTIVE/IMPLUSIVE</u> Subtype:</p> <p>(Individual must exhibit at least six of these behaviors to a disruptive and developmentally inappropriate level for at least six months)</p> <p>The student...</p>	<p>What related behaviors might these students exhibit at school?</p>   <p>He/she frequently...</p>	<p>List the Executive Functions that appear to align with of each symptom of AD/HD</p>	 <p><u>Executive Functions:</u></p> <ol style="list-style-type: none"> 1) <i>Regulating actions</i> 2) <i>Focusing, shifting attention to tasks</i> 3) <i>Getting started</i> 4) <i>Accessing working memory & recall</i> 5) <i>Organizing & planning schoolwork</i> 6) <i>Self-monitoring</i> 7) <i>Controlling emotions (not in DSM-IV)</i> <p><small>CHADD Parent to Parent © 2010</small></p>
<p>--Often fidgets with hands or feet or squirms in seat when sitting still is expected.</p>	<p>--Drums fingers, taps a pencil or a foot, bounces head, or swings a legs back and forth --Turns around or kneels up in seat</p>		
<p>--Often gets up from seat when remaining in seat is expected.</p>	<p>--Seems to be out-of-seat—perhaps at the pencil sharpener, a bookshelf, or teacher’s desk—every time you look up</p>		
<p>--Often excessively runs about or climbs when and where it is not appropriate (adolescents or adults may feel very restless).</p>	<p>--Prefers to wander the room or stand at the back during seatwork times --Seems to have “ants in his/her pants”</p>		
<p>--Often has trouble playing or doing leisure activities quietly.</p>	<p>--Sings, mumbles, hums, or talks to self loudly during quiet tasks --Fails to adjust voice volume to the setting</p>		
<p>--Is often "on the go" or often acts as if "driven by a motor."</p>	<p>--Reminds you of the “Road Runner,” always rushing from one place to another --Seems to be constantly in motion</p>		
<p>--Often talks excessively.</p>	<p>--Chatty to the point of keeping others from working, doesn’t know when to stop --Doesn’t know when it is time to end a story, rambles on and on</p>		
<p>--Often blurts out answers before questions have been finished.</p>	<p>--Forgets to raise his/her hand --Struggles with listening—seems to be preoccupied with how he/she will respond</p>		
<p>--Often has trouble waiting one's turn.</p>	<p>--Butts in front of others in line, often rude --Is antsy, aggressive, or disruptive during times when patient waiting is required</p>		
<p>--Often interrupts or intrudes on others (e.g., butts into conversations or games).</p>	<p>--Cuts off others who are talking --Annoys peers with inappropriate comments --Demonstrates poor social awareness, often appears to be rude</p>		



<p>1) M _____ and  G _____</p>	<p>B C V S</p>	<p>The Four Foundational Principles:</p> <p>BREVITY</p> <p></p>
<p>2) A _____ /C _____</p>	<p>B C V S</p>	<p><i>Keep It Short and Sweet</i></p> <p>*****</p> <p>CLARITY</p> <p></p>
<p>3) F _____ and G _____ O _____</p>	<p>B C V S</p>	<p><i>Be Crystal Clear</i></p> <p>*****</p> <p>VARIETY</p>
<p>4)  B _____ B _____</p>	<p>B C V S</p>	<p> </p> <p></p> <p><i>Change-it-Up</i></p> <p>*****</p>
<p>5) T _____ -P _____ -S _____ ©</p>	<p>B C V S</p>	<p>STRUCTURE</p> <p></p> <p><i>Provide the framework</i></p>

6) T_____	B	The Four Foundational Principles: BREVITY 
	C	
	V	
	S	
7) C_____ 	B	<i>Keep It Short and Sweet</i> *****
	C	
	V	
	S	
8) R_____ to t_____ C_____	B	<i>Be Crystal Clear</i> *****
	C	
	V	
	S	
9) M_____ 	B	VARIETY    <i>Change-it-Up</i> *****
	C	
	V	
	S	
10) P_____ -it N_____®	B	STRUCTURE  <i>Provide the framework</i>
	C	
	V	
	S	