

Attention Deficit Hyperactivity Disorder: What Educators Need To Know

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HAVE YOU EVER. . .

- Thought a child was lazy because they seemed to never start an assignment?
 - Gotten mad at the child who kept getting out of their seat?
 - Become so frustrated with the child in the back of the room banging his pencil on his desk over and over and over again?
 - Reminded a child to take home their book at least five times and then they still forget it?
 - Been in the middle of a lesson when a child blurts out some random information irrelevant to the lesson?
 - Had a child listen to you talk and then not know what you just said?
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IF YOU ANSWERED YES...

You are not alone!

Today, in every classroom across the country there are several students who are diagnosed with ADHD.

It is vital for teachers to understand ADHD so you don't feel frustrated, upset, or defeated.



WHAT IS YOUR DEFINITION OF “DISABILITY?”

Write your own definition of disability on a sheet of paper.

Be as descriptive as possible (without Google)!

Turn and talk to your neighbor and share your definition.



ADA/SECTION 504 DEFINITION OF DISABILITY

The term "disability" means, with respect to an individual

(A) a physical or mental impairment that substantially limits one or more major life activities of such individual;

(B) a record of such an impairment; or

(C) being regarded as having such an impairment

IDEA'S DEFINITION OF A CHILD WITH A DISABILITY

Child with a disability means a child evaluated in accordance with Sec. 300.304 through 300.311 as having mental retardation, a hearing impairment (including deafness), a speech or language impairment, a visual impairment (including blindness), a serious emotional disturbance (referred to in this part as "emotional disturbance"), an orthopedic impairment, autism, traumatic brain injury, an other health impairment, a specific learning disability, deaf-blindness, or multiple disabilities, and who, by reason thereof, needs special education and related services.

NORTH CAROLINA'S DEFINITION OF A CHILD WITH A DISABILITY

Child with a disability means a child evaluated in accordance with NC 1503-2 through NC 1503-3 as having autism, deaf-blindness, deafness, developmental delay (applicable only to children ages three through seven), hearing impairment, intellectual disability, multiple disabilities, orthopedic impairment, other health impairment, serious emotional disability, specific learning disability, speech or language impairment, traumatic brain injury, or visual impairment (including blindness), and who, by reason of the disability, needs special education and related services.



DEFINITION OF ADHD

The American Psychiatric Association in the DSM-V defines three main types of Attention Deficit Hyperactivity Disorder. Individuals can have predominately inattentive ADHD, predominately hyperactive-impulsive ADHD, or combined type depending on the presenting symptoms.



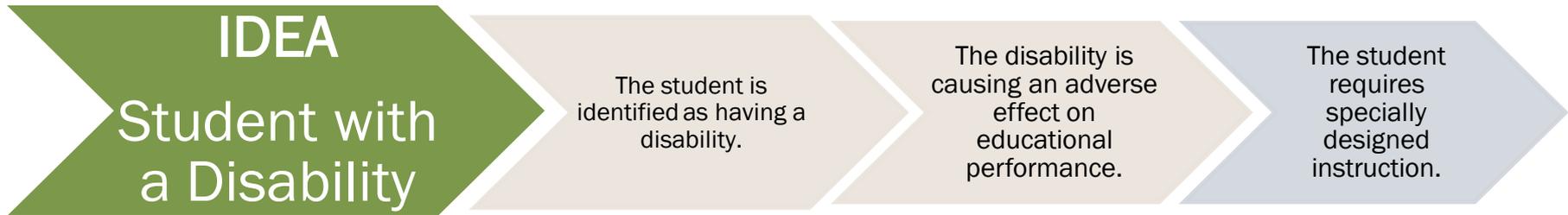
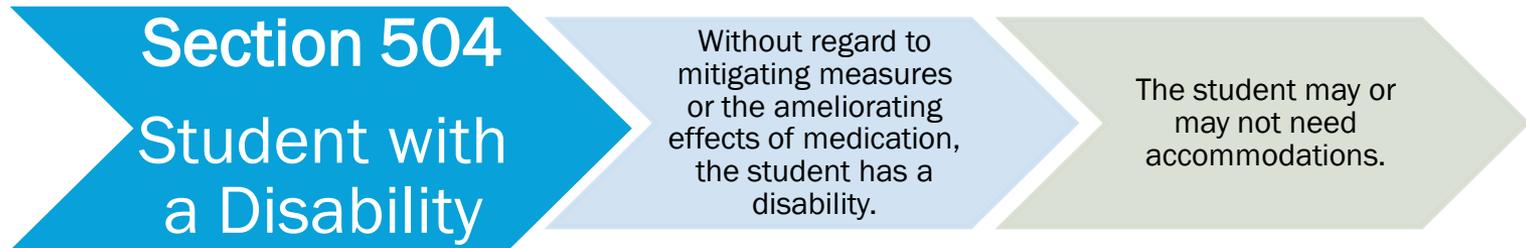
Hyperactivity and Impulsivity: Six or more symptoms of hyperactivity-impulsivity for children up to age 16, or five or more for adolescents 17 and older and adults; symptoms of hyperactivity-impulsivity have been present for at least 6 months to an extent that is disruptive and inappropriate for the person's developmental level:

- Often fidgets with or taps hands or feet, or squirms in seat.
- Often leaves seat in situations when remaining seated is expected.
- Often runs about or climbs in situations where it is not appropriate (adolescents or adults may be limited to feeling restless).
- Often unable to play or take part in leisure activities quietly.
- Is often "on the go" acting as if "driven by a motor".
- Often talks excessively.
- Often blurts out an answer before a question has been completed.
- Often has trouble waiting his/her turn.
- Often interrupts or intrudes on others (e.g., butts into conversations or games)

Inattention: Six or more symptoms of inattention for children up to age 16, or five or more for adolescents 17 and older and adults; symptoms of inattention have been present for at least 6 months, and they are inappropriate for developmental level:

- Often fails to give close attention to details or makes careless mistakes in schoolwork, at work, or with other activities.
 - Often has trouble holding attention on tasks or play activities.
 - Often does not seem to listen when spoken to directly.
 - Often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace (e.g., loses focus, side-tracked).
 - Often has trouble organizing tasks and activities.
 - Often avoids, dislikes, or is reluctant to do tasks that require mental effort over a long period of time (such as schoolwork or homework).
 - Often loses things necessary for tasks and activities (e.g. school materials, pencils, books, tools, wallets, keys, paperwork, eyeglasses, mobile telephones).
 - Is often easily distracted
 - Is often forgetful in daily activities.
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SO, WHERE DOES THE CHILD WITH ADHD FIT?



WHAT WE NEED TO REMEMBER:

According to Schuck & Crinella (2005), “the most worrisome deficits of children with ADHD are not the product of low IQ, but rather of instability of control processes that govern everyday applications to the environment”.

The ADHD student is not dumb, lazy, or out of control. They are smart kids who need our help to gain the proper strategies to be successful!



WHAT CAUSES ADHD?

There is significant evidence that ADHD occurrences are due to biological factors.

Other factors may include: difficulties during pregnancy, prenatal exposure to alcohol or tobacco, low birth weight, high lead levels, and prenatal injury to the prefrontal lobe of the brain.

A study published in Pediatrics by scientists at Texas Tech. University shows that there is no link between ADHD and television. This is however still heavily controversial.



CAUSES CONTINUED. . .

Research suggests that ADHD is present with dysfunctions in the prefrontal lobes of the brain. Prefrontal lobes control executive functions which children with ADHD are lacking (Dawson & Guare, 2004). These dysfunctions being studied include size differences in prefrontal regions, basal ganglia, and cerebellum. This can lead to abnormal activation patterns in the brain.

Other research still not concluded at this time states that ADHD children have abnormal dopamine and norepinephrine levels in the brain.

Another neurological cause is related to lower glucose levels affecting neurotransmitter activity in parts of the brain (ADDA, <http://www.add.org/articles/index.html>).

WHAT ARE EXECUTIVE FUNCTIONS?

An executive function is “a neuropsychological concept referring to the cognitive processes required to plan and direct activities, including task initiation and follow through, working memory, sustained attention, performance monitoring, inhibition of impulses, and goal-directed persistence.”



WHY ARE EXECUTIVE FUNCTIONS IMPORTANT?

These skills allow us to organize our behavior over time and override immediate demands in favor of longer-term goals.

They also allow for the management of emotions and effective thought monitoring.

Children with problems in a particular executive function area have a deficit in that skill area.



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DEFICIT: RESPONSE INHIBITION

This is “the capacity to think before you act.”

Children with this deficit tend to be impulsive. They will say things without thinking about what it is that they are saying.



DEFICIT: WORKING MEMORY

This is the ability to hold information while performing complex tasks.

Students with this deficit tend to forget easily. They may forget their homework or books at school on a regular basis.



DEFICIT: SELF-REGULATION OF AFFECT

This is the ability to manage emotions in order to achieve goals, accomplish tasks, or control and direct behavior.

These students tend to become upset quickly with situations, unable to control their emotions. These students tend to have outbursts that disrupt daily functioning.



DEFICIT: SUSTAINED ATTENTION

This is the capacity to maintain attention to a situation or task in spite of distractibility, fatigue, or boredom.

Students with this deficit tend to have a hard time getting started on a task. These students will get up often when a task is given. They talk to other students when they shouldn't. Their attention is on everything in the room other than their work.



DEFICIT: TASK INITIATION

This is the ability to begin a task without undue procrastination, in a timely fashion.

These students tend to put off doing work that they need to complete. They lack the processes to start the task.



DEFICIT: PLANNING

This is the ability to create a roadmap to reach a goal or to complete a task. It also involves being able to make decisions about what's important to focus on and what's not important.

These students tend to wait until the last minute to complete tasks and then not know what to do when they go to complete them.



DEFICIT: ORGANIZATION

This is the ability to arrange or place things according to a system.

These students tend to have messy desks or cubbies.

They lose papers often and frequently shove papers instead of placing them in appropriate spots.



DEFICIT: TIME MANAGEMENT

This is the capacity to estimate, allocate, and execute within time constraints.

These children get work done at the last minute and frequently ask for assignment extensions. Also, they often use excuses for not having work.



DEFICITS: GOAL-DIRECTED PERSISTENCE

This is the capacity to have a goal, follow through to the completion of the goal, and not be put off by or distracted by competing interests.

These students are able to create goals for themselves but are not able to achieve them. They are not able to understand the necessary steps to reach a goal and often become distracted with outside stimuli negatively impacting their task completion.



DEFICIT: FLEXIBILITY

This is the ability to revise plans in the face of obstacles, setbacks, new information, or mistakes.

These students have difficulty in transitions and new situations. These students struggle longer than others at the beginning of each year. They also are thrown off by changes in daily schedules. These students have limited problem solving strategies.



DEFICIT: METACOGNITION

This is the ability to stand back and take a bird's-eye view of oneself in a situation. It is an ability to observe how you problem solve. It also includes self-monitoring and self-evaluative skills.

These students make careless mistakes frequently. They also will complete one step then stop instead of finishing the series of steps. For example, these students may add instead of subtract over and over again while failing to review their work and realizing their mistake. Also, these students will do one step of long division and then stop, not reflecting on the whole process needed to complete the task.



Solutions, strategies and accommodations



CLASSROOM SETUP

- The student with ADHD should typically sit front and center.
- Try to locate the student away from distractions. Windows, doors, hallways, other active students, air/heat vents, and strong smells are all sources of distraction.
- Seat student near a good role model.
- Increase distance between desks to decrease distractions.



ASSIGNMENTS

- Allow extra time to complete assigned work and/or tests.
- Break longer assignments into smaller parts.
- Shorten assignments or work periods.
- Pair written and oral instructions.
- Explicitly teach students to underline/highlight important information.



DISTRACTIBILITY

- Provide peer assistance in note taking
- Frequently ask student questions to encourage participation
- Seek to involve the student in lesson presentation
- Develop a private signal to remind the student to stay on task
- Designate time for the student to check over their work
- Allow the student to wear headphones to minimize noise distractions
- Provide study carrels or private offices
- Most importantly . . . Be an “EDUTAINER!”



BEHAVIOR

- Ignore minor inappropriate behavior
- Increase the immediacy of rewards and consequences
- Acknowledge correct answers only when the student is called upon
- Frequently send progress reports home
- Establish a “cool down” area in advance



ORGANIZATION/PLANNING

- Create “to do” lists for the student
- Put luggage tags on book bag to remind students of what to bring home
- Color code textbooks and corresponding notebooks
- Use binders with dividers and pocket folders
- Provide student with assignment book and supervise writing down the assignment
- Allow the student to have an extra set of books at home



RESTLESSNESS



- Allow the student to run errands
- Find opportunities for movement during each lesson
- Place a strip of soft Velcro under the student's desk for fidgeting
- Put sponges or mouse pads on desks for students that like to tap
- Provide short breaks between assignments
- Use manipulatives such as Koosh balls for hand exercisers
- Allow the student to stand (at times) while working

MOODS/SOCIALIZATION

- Implement a reward program to encourage appropriate social behavior
- Encourage cooperative learning tasks
- Assign special responsibilities in presence of peers
- Plan teacher-directed group activities
- Play soft music



CONSIDER GENERAL ACCOMMODATIONS

Time

Format

Setting

Presentation

Response



WHAT ABOUT THE “MEDS?”

- Doctors cannot prescribe IEPs and 504 plans, and educators cannot prescribe, recommend or suggest medication.
 - Educators can collect information about a student’s behavior that can be shared with a physician.
 - School personnel and/or parents can complete rating scales to determine if a student has at-risk behaviors, but a student can only be diagnosed by a medical professional.
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COMMONLY USED MEDICATIONS

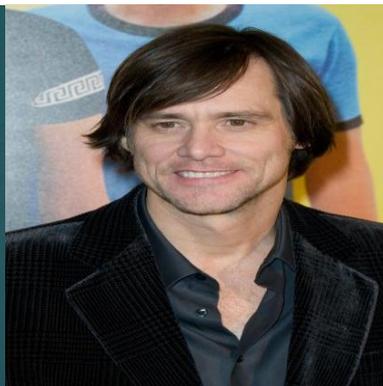
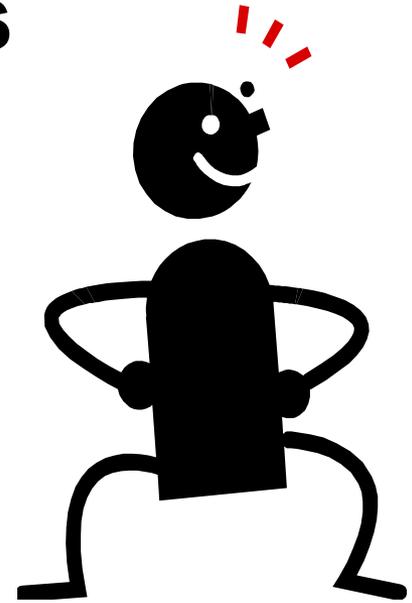
Stimulants

- *Ritalin, Concerta, Metadate, Focalin, Adderall, Vyvanse*
- These medicines help those with ADHD to focus their thoughts and ignore distractions. Stimulant medications are effective in 70% to 80% of patients.
- Given in short-acting (4-6 hours) or long-acting (6-12 hours) doses
- Side Effects: difficulty sleeping, lack of appetite, fatigue, headache, stomach-ache, possible occurrences of motor tics

Nonstimulants

- *Strattera, antidepressants such as Zoloft or Celexa*
- Affect dopamine and norepinephrine levels in the brain
- Side Effects: difficulty sleeping, lack of appetite, fatigue, headache, stomach ache

Don't pull your hair out! There is hope. Students with ADHD need your support and encouragement..



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