



In a National Survey of Children's Health conducted in 2016, 9.4% of children from ages two to 17 years were currently diagnosed with Attention Deficit Hyperactivity Disorder (ADHD). This means that most teachers are likely to have in every class they teach, on average, at least a couple of students with ADHD. The understanding of this diagnosis has changed significantly over recent years and continues to evolve thanks to new scientific and education research.

ADHD is a persistent disorder characterized by two major clusters of challenges: inattention/disorganization and hyperactivity/impulsivity. These difficulties are considered to be excessive or extreme for one's age, and cause significant impairment in the social, emotional, and academic functioning of students. In many cases, children with ADHD struggle academically, suffer from low self-esteem, and have difficulty with relationships. Combined treatments including medication, academic supports, and behavioral interventions may help improve the success of students with ADHD.

It is still a widely held belief that ADHD is essentially a behavior disorder. There are often students who are unwilling or unable to sit still, listen to the teacher, and follow classroom rules. Researchers have recognized that ADHD is not so much a behavior disorder as it is inherited, impacting such things as the development of executive functions and the management system of the brain. Students encounter different challenges as they progress through school.

For some children, ADHD characteristics are obvious early in development, while others may have less extreme symptoms. Academic difficulties begin to appear and may not become noticeable until later grades when more sustained attention and self-management is expected.

The significant increase in demands on executive functions and increased expectations for planning and self-management are two of the primary reasons for the increased academic struggles at this level. Children and teenagers with ADHD generally experience the most difficulty in the school setting. In school, students with ADHD may struggle with academic performance, behavior, and forming social relationships with peers. It is critical that districts have effective policies, processes, and training in place to support these students. Not only is the school setting the place where students with ADHD experience the most difficulty, but it is also the place where these children spend most of their day. Teachers can have a significant impact on the day-to-day and long-term success of these students.

“Many students with ADHD are still experiencing academic and behavioral challenges in the educational setting, and policy guidance is needed to ensure that those students are receiving a free appropriate public education (FAPE).”

U.S. Department of Education Dear Colleague Letter and Resource Guide on Students with ADHD. (July 26, 2016).

Observable ADHD Symptoms in the Classroom

Attention	Disorganized/Forgetful	Restless	Impulsive	Work Habits
<ul style="list-style-type: none"> ● Easily distracted ● Tunes out of lessons ● Daydreams ● Trouble staying seated 	<ul style="list-style-type: none"> ● Forgets to bring books/materials home ● Forgets assignments or forgets to turn them in ● Loses homework, pencils, materials, etc. ● Messy desk, backpack, papers 	<ul style="list-style-type: none"> ● Fidgeting ● Fiddles with nearby objects ● Trouble waiting or taking turns ● Trouble staying seated 	<ul style="list-style-type: none"> ● Talks excessively, blurts out, or interrupts frequently ● May disrupt class ● Trouble following rules ● Careless errors 	<ul style="list-style-type: none"> ● Trouble starting and finishing work ● Incomplete, late, or missing assignments ● Trouble following rules ● Doesn't follow instructions ● Easily frustrated

Not all students with ADHD exhibit all of the characteristic symptoms that can be recognized in the classroom. These symptoms can change over time, so children may exhibit different behaviors as they age.

“ADHD is not a damaged or defective nervous system. It is a nervous system that works well using its own set of rules.”

www.ADDitudemag.com/adhd-truth/

Academic & Behavioral Strategies to Support Students with ADHD

Seating	Organization	Classroom Management	Information Delivery	Student Work
<ul style="list-style-type: none"> ● Away from distractions, but not isolated ● Offer flexible seating options ● Near teacher or role model 	<ul style="list-style-type: none"> ● Assignment notebook ● Backup way to obtain assignments ● Practice organization skills such as color coding, using calendar, etc. ● Notify parents of important deadlines 	<ul style="list-style-type: none"> ● Teach and reinforce good listening ● Be specific about what to do (eye contact, not interrupting) ● Positive reinforcement ● Use procedures and routines consistently ● Allow fidget objects ● Give at least three times more positive feedback than negative 	<ul style="list-style-type: none"> ● Add written or pictorial directions ● Use graphic organizers ● Use note taking outlines ● Give multisensory instruction ● Give directions one at a time ● Break large projects into small tasks with deadlines for each 	<ul style="list-style-type: none"> ● Visual prompts, cues, and frequent redirection to task ● Use task cards to reinforce directions ● Match independent assignments to student ability ● Shorten assignments ● Reduce handwriting ● Provide copies of notes ahead of time

ADHD & Working Memory: Impact on Performance & Assessment

Students with ADHD often have adequate or exceptional memory for things that happened long ago but great difficulty in remembering where they just put something or what they were about to say. These students often complain that they cannot pull information from their memory when needed, and stored memories cannot be activated and integrated with current information to guide their thoughts and actions.

Working memory challenges impact a student's ability to withhold information and manipulate it while writing an essay or completing complex math problems. Students with ADHD also experience memory retrieval problems when they are tested. They may appear to have mastery of the material and be able to give correct answers when quizzed by parents or classmates while studying, yet when it is time to take the test, significant portions of what they knew are forgotten. Hours or days later, something may jog their memory, and the missing information becomes available once again. The information is in there, but they cannot retrieve it when needed.

Reducing the Impact of Working Memory

1 Catch working memory failures/errors that look like:

- Forgetting some or all of the words in a sentence.
- Not following directions or only partially following directions.
- Repeating or skipping letters (place keeping errors).
- Task abandonment.

2 Monitor the student.

- Look for warning signs.
- Ask the student to identify what they are or will be doing.
- Repeat directions as needed; have student repeat directions.
- Break down tasks into smaller segments.

3 Evaluate demands and accommodate.

- Provide multi-step directions. (Limit to one at a time.)
- Copy material from the board. (Provide filled in notes.)

4 Reduce working memory demands.

- Use mnemonics to assist in remembering material.
- Simplify verbal demands.
- Provide memory aides (e.g., number lines, fact charts, etc.).

Understanding ADHD and Individualized Education Plan (IEP), Section 504, or Medical Support

	Medical Diagnosis & Treatment	Section 504: Plan & Accommodations	IDEA Special Education: IEP
Purpose	The American Academy of Pediatrics has published guidelines for diagnosing and treating ADHD focused on a collaborative care model.	Provides services and changes to the learning environment to meet the needs of the child as adequately as other students. These services are provided at no cost to parents.	After a student is evaluated and qualifies as a student with a disability, individualized special education and related services are provided to meet the unique needs of the child. These services are provided at no cost to parents.
Criteria	The diagnosis of ADHD requires that a child meet DSM-IV criteria. The assessment of ADHD requires evidence directly obtained from parents or caregivers, and in many cases, school staff, regarding the core symptoms of ADHD.	A student with a disability is one who meets any of the following criteria: -has a physical or mental impairment that substantially limits one or more major life activities; -has a record of such an impairment; or -is regarded as having such an impairment.	There are two requirements to be eligible for an IEP: 1. A child has one or more of the 13 specific disabilities listed in IDEA. Learning and attention issues may qualify. 2. The disability must affect the child's educational performance and/or ability to learn and benefit from the general education curriculum.
Law		Schools must develop procedures to implement Sec. 504, including child find, evaluations, meetings of knowledgeable individuals to determine eligibility and develop the 504 plan, and the provision of a notice of procedural rights and an opportunity for a hearing. Procedures similar to those under the IDEA should be utilized.	There are strict legal requirements regarding eligibility and IEP development. An IEP is created by an IEP team. The IEP sets learning goals for a child and describes the services the school will provide.

Meeting the Needs of Students with ADHD (Edutopia)

- Make learning child-centered.
- Integrate personal development into lessons.
- Integrate movement and mindfulness meditation.
- Create a positive, supportive learning environment.
- Document whenever possible.



References

- CHADD Educator's Manual on Attention-Deficit/Hyperactivity Disorder (ADHD): An In-Depth Look from an Educational Perspective by CHADD (2006-08-02) . (2006). Lynchburg, VA: Progress Printing.
- Gathercole, S. E., and T.P. Alloway. Understanding Working Memory: A Classroom Guide. London: Harcourt Assessment, 2007.
- Katz, M. (2011). Classroom Strategies for Improving Working Memory. Attention Magazine, (February).
- Leslie, L. K. (2002). The Role of Primary Care Physicians in Attention Deficit Hyperactivity Disorder (ADHD). Pediatric Annals, 31(8), 475– 484.
- Lipsett, A. (2011). Supporting Emotional Regulation in Elementary School: Brain-Based Strategies and Classroom Interventions to Promote Self-Regulation. LEARNING Landscapes, 5(1), Autumn.
- NICHQ, American Academy of Pediatrics, McNeil Published: 2002.
- U.S. Department of Education, Office for Civil Rights, Students with ADHD and Section 504: A Resource Guide (July 2016).



This edition of the Spread the Word series was developed in partnership with CHADD and the National Resource Center for ADHD, specifically with regard to content development:



This Information is supported by Cooperative Agreement Number NU38DD0053756 from the Centers for Disease Control and Prevention (CDC). The contents are solely the responsibility of the authors and does not necessarily represent the official views of CDC.

Websites

- [Centers for Disease Control and Prevention, Data and Statistics About ADHD](#)
- [Know Your Rights: Students with ADHD](#)
- [Article 7](#)