

## Attention, Class!

As ADHD diagnoses rise, teachers find strategies that can help all students

by LAURA PAPPANO

When it comes to getting his students' attention, Kartal Jaquette relies on his go-to stunt: Toss a magic marker into the air—and try to catch it in his shirt pocket.

He never succeeds, but the routine works. "You use 10 seconds of being silly and then you have the kids' attention again," says Jaquette, a third-grade teacher at the Denver Green School in Colorado.

Diagnosed with attention deficit hyperactivity disorder (ADHD) as an eighth-grader, Jaquette is particularly attuned to signs of student inattention—the eyes go down, the head dips to the desk, or they stare right through him.

He is also particularly committed to responding. "I am the one who is in control of balancing attention spans in my class," he says. Whether or not someone has a formal diagnosis, says Jaquette, "I view ADHD as a tendency we can all have."

### Increasingly Prevalent

ADHD is not new. Yet, not all teachers embrace it the way Jaquette does, building his classroom practice with the neurodevelopmental disorder at the top of his mind. That could change, however, with the growing recognition that ADHD is strikingly prevalent—one in five high school boys and 11 percent of all school-aged children have had an ADHD diagnosis—and seems to be increasing. Using Centers for Disease Control data, the New York Times reported recently that an estimated 6.4 million children ages 4 to 17 had been diagnosed with ADHD, up from 5.4 million in 2007 and 4.4 million in 2003. These numbers, based on phone surveys of parents, indicate a 16 percent increase in diagnoses since 2007 and a 41 percent increase in the last decade.

The numbers could rise higher, making it even more critical for educators to help students with ADHD better manage in school. In May, the American Psychiatric Association expanded the definition of ADHD, moving from 7 to 12 the age by which the symptoms of the disorder may appear and ADHD is diagnosed. In addition, it now recognizes that about 4 percent of adults also have ADHD.

Students with ADHD don't all have the same symptoms, but they do fall into two broad categories: problems with attention and with hyperactivity or impulsivity. In school, students with ADHD may have trouble paying attention, focusing on details, planning projects, and following instructions (see sidebar, "Understanding ADHD"). They may talk excessively, fidget, or have difficulty sitting still. On the other hand, they may also be brilliant, creative, and energetic. Understanding ADHD

Why do children with ADHD have difficulty in school? Although its causes are as yet unknown, research suggests that students with ADHD often have problems with these cognitive processes:

- Executive function. Including the ability to plan, set goals, self-monitor, and evaluate progress.
- Working memory. Including the ability to keep events, information, or rules in mind to guide actions or complete tasks requiring sequential steps.
- Speed of information processing. The ability to process information and respond to questions or complete tasks.

Source: TeachADHD: <http://research.aboutkidshealth.ca/teachadhd>

The diagnosis and treatment of ADHD is notoriously slippery because it relies on observations made both at school and at home and then reported to a physician. But when left unaddressed, those with ADHD are more prone to school failure, suicide, and substance abuse, and as adults, they may struggle to keep jobs and maintain relationships. When ADHD is properly identified as more than a case of marginal difficulty paying attention, says Dr. William J. Barbaresi, director of the Developmental Medicine Center at Boston Children's Hospital, "the vast majority" benefit from treatment that includes strategies for managing behavior, addressing any learning issues, and medication.

Despite the focus on the increasing diagnosis of ADHD, Barbaresi believes the actual incidence is no greater than it's ever been. Rather, he says, the negative effect on those who have the disorder is far greater than it was years ago, and it's those effects that are behind the increasing numbers.

In the past, he says, "the impact of ADHD on the things that were required to be a successful person were arguably less when, as a society, you could be successful with jobs requiring far less education. My dad worked in a factory. He made a good living. He could support a family as a factory worker."

If those who could once manage with ADHD now need a diagnosis, they may also be candidates for medication, which has spurred public worry that potent medicines like Adderall and Ritalin are being too liberally and too easily dispensed. Barbaresi, however, sees such concern as “misplaced angst,” with the bigger problem being that many with the disorder are never identified and helped. Among poor minority and inner-city students, he says, “ADHD is not diagnosed when it should be.” Compounding matters, says Barbaresi, is that about two-thirds of children with ADHD also have a learning disability that must be diagnosed separately. Says Barbaresi, “We have problems with the accuracy of diagnosis.”

This is not surprising to Stephen Hinshaw, a psychology professor at the University of California, Berkeley, and co-author of *The ADHD Explosion* to be published by Oxford University Press. Hinshaw says that children are often evaluated quickly and diagnosed with ADHD after a 10-minute visit to a pediatrician. Equally problematic, he says, is that a child with ADHD “will hold it together for 10 minutes” and not be diagnosed. “Ten minutes is not nearly enough time to tell if it is actually ADHD, a seizure disorder, if this is an abused kid, if the parents are arguing,” he says, adding that it can take hours of work and involve a physician, teachers, and parents, including a detailed history and a comparison to a normed rating scale, to make a diagnosis.

### **A Policy Effect?**

Rates of diagnosis may also be shaped by other factors, including testing policies, argues Hinshaw, who, with co-author Richard M. Scheffler, examined national data and found big differences in rates of ADHD diagnosis among states. For example, between 2003 and 2007, rates of ADHD rose by 63 percent in North Carolina but by only 16 percent in California. In 2007, 15.6 percent of children in North Carolina were diagnosed with the disorder, compared with 6 percent in California.

When Hinshaw and Scheffler analyzed state-by-state data and controlled for differences in demographics and access to health care, they found that early adopters of mandatory high school exit exams had higher rates of diagnosis. “Educational policy is driving rates higher,” says Hinshaw. “Any problem related to school gets a ‘Pfff, that must be ADHD.’”

### **Learning over Compliance**

Whether or not a child has been diagnosed, having ADHD can make it harder to perform in school at a time when life success is especially linked to academic success. That’s why George DuPaul, school psychologist, chair of the Department of Education and Human Services at Lehigh University’s College of Education, and author of *ADHD in Schools*, says educators must look anew at teaching practices.

“The traditional classroom with kids sitting at desks, sitting still, hands folded, face forward—we couldn’t design a worse environment for kids with ADHD. That is torture,” he says. DuPaul suggests that schools and teachers be flexible about behavioral expectations, emphasizing learning over compliance. Teachers, he says, should prioritize. “What is most important?” he asks. “For most teachers, whether their butt is in the chair is less critical than that they are working and engaged in their work.”

Teachers, he says, must make expectations very clear. Children with ADHD also benefit from immediate feedback about their performance, which is one reason why many experts favor peer-to-peer work in class. DuPaul and others say giving students immediate and positive reinforcement for reaching goals is key, and research shows that reward systems that give students stickers or points throughout the day are particularly effective. Timing also matters: If a student is disruptive or inattentive during math class from 10:00–10:45 a.m. on Mondays, that is the critical time to intervene, not earlier or later. “The point of performance is where we want to be for these students,” says DuPaul.

In addition to responding to behaviors like impulsivity, DuPaul urges teachers to “think preventatively,” including giving students a say in how they demonstrate their learning. “Give students a menu: ‘Here are three possible assignments for these skills,’” he says, adding that research shows students with ADHD are more engaged and less disruptive when they have a stake in the schoolwork.

Barbaresi of Boston Children’s Hospital says schools could also dramatically aid students with ADHD who do not have a learning disorder simply by checking in and helping them be organized. “What it means is [these students] need a few minutes of adult time every day to make sure they have written things down, they have the materials they need to complete their homework,” says Barbaresi. “All the time we have kids with ADHD who are perfectly capable of doing grade-level work [but] who are failing because they are missing 30 percent of their assignments.”

### **Pacing and Routine**

Jaquette has designed his third-grade classroom at the Denver Green School, a public “innovation school” in the district, with his own ADHD experience in mind. Specifically, he recalls the frustration of struggling to achieve, falling behind, and feeling that it was his fault. The critical thing he brings to his students with ADHD, he says, “is an overall mindset. If something isn’t working in my lesson, if someone is confused by the directions, it is *my fault*—not theirs.” Even if students don’t have a diagnosis, he says, many struggle to pay attention.

That’s why he sets a timer when he is about to start talking. “When the timer goes off, I’m done,” he says, adding that he rarely exceeds eight minutes and tries not to exceed two minutes of straight listening time. He also keeps the pace of class moving, which gives a sense of urgency to the learning.

One area he pays special attention to is directions. “Directions are the Achilles’ heel of ADHD. They are really boring. There is no fun

way to do directions. But you need directions,” he says, recalling how, as a student, he was often confounded by the barrage of instructions, so that by the time the teachers said, “Set, go,” he was lost.

His strategy? Embrace routine so that students know what to do without being told. For example, he says, each day after recess students have a “do now” math problem that they put in their journal. He then calls up four students to explain their work. The students know the drill, he says, “there is no listening time.”

The same predictable approach applies to homework. “Every homework is on the same sheet; it is the same color; it goes in the same folder,” he says. It is always online if they need another copy. And—again, given his own experience (“I lost stuff all the time,” he recalls)—Jaquette gives students a stack of anytime math problems to keep at home and do if they forget the assigned homework.

### **Giving Kids Their Space**

Behavioral challenges associated with ADHD—impulsivity, hyperactivity, and difficulty focusing, organizing, and planning, for example—are familiar enough. But not every child struggles in the same way or to the same degree.

At the Tremont School in Weston, Mass., a small private school for students in grades 5–8, teacher Nina Alberg wants her students, many of whom have ADHD, to learn what strategies work best for them. “They all need different stuff,” says Alberg, who was diagnosed with ADHD in high school.

While medication can be critical, she says, it’s equally important to learn skills to feel capable and in charge of schoolwork. Students “can get tricked into thinking ‘the chemical will solve everything’” when it’s equally critical to build self-awareness and skills.

This past year, Alberg says, students in one class were assigned to design their own workspace. Some chose tall tables and straight chairs. “Other kids preferred to work on the floor,” she says, adding that “once the kids were given that sense of ownership their output increased.”

Having flexibility and building self-awareness are central to the school culture, says Head of School Bill Wilmot, who wants students “to get to the point where they figure out what solutions work for them.” That’s why students may walk up and down the hallway while reading, take breaks during class to run in the gym or step outdoors, slip into a quiet room, or do breathing exercises before rejoining a lesson.

This is no different than what adults do when they work in an office, says Wilmot. “Some people learn they need to go running every morning to be at their best,” he says. “We are just giving kids the space to do what humans need to do to function.”

*Laura Pappano is an education journalist based in New Haven, Conn.*



## Also By This Author

- The "New PE" Aims to Build Bodies and Brains
- Charters and Districts (Begin to) Collaborate
- Computer Science for Everyone?
- "Trauma-Sensitive Schools"
- Engaging Young Minds with Philosophy
- Changing the Face of Math
- "Grit" and the New Character Education
- The Algebra Problem
- From Math Helper to Community Organizer
- Waldorf Education in Public Schools
- Using Research to Predict Great Teachers
- Differentiated Instruction Reexamined
- Kids Haven't Changed; Kindergarten Has
- Scenes from the School Turnaround Movement
- Bonding and Bridging
- Answers and Questions
- The Power of Family Conversation
- Small Kids, Big Words
- Meeting of the Minds
- More Than "Making Nice"

## For Further Information

### For Further Information

W. J. Barbaresi et al. "Mortality, ADHD, and Psychosocial Adversity in Adults with Childhood ADHD." *Pediatrics* 131, no. 4 (April 2013): 22.

T. E. Brown. *A New Understanding of ADHD in Children and Adults: Executive Function Impairments*. London: Routledge, 2013.

G. DuPaul and G. Storer. *ADHD in the Schools: Assessment and Intervention Strategies*, 2nd ed. New York: Guilford Press, 2004.

G. DuPaul and L. Kern. *Young Children with ADHD: Early Identification and Intervention*. Washington, DC: American Psychological Association, 2011.

S. P. Hinshaw and R. M. Scheffler. *The ADHD Explosion and Today's Push for Performance*. Oxford: Oxford University Press, forthcoming.

National Resource Center on AD/HD: <http://help4adhd.org>

N. A. Neef et al. "Behavioral Assessment of Impulsivity: A Comparison of Children with and without Attention Deficit Hyperactivity Disorder." *Journal of Applied Behavior Analysis* 38, no. 1 (Spring 2005): 23–37.

TeachADHD: <http://research.aboutkidshealth.ca/teachadhd>