A STEP-BY-STEP GUIDE FOR EDUCATORS

Classroom Management Techniques for Students With ADHD

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Step 1

Reviewing Your Current Knowledge of Students With ADHD

Overview of ADHD

Attention Deficit Hyperactivity Disorder (ADHD) is a neurological condition that involves problems with inattention and hyperactivity-impulsivity that are developmentally inconsistent with the age of the child. This condition becomes apparent in some children in the preschool and early school years (National Institute of Mental Health [NIMH], 2006). We are now learning that ADHD is not a disorder of attention, as had long been assumed. Rather it is a function of developmental failure in the brain circuitry that monitors inhibition and self-control. This loss of self-regulation impairs other important brain functions crucial for maintaining attention, including the ability to defer immediate rewards for later gain (Barkley, 1998a). Behavior of children with ADHD can also include excessive motor activity. The high energy level and subsequent behavior are often misperceived as purposeful noncompliance when, in fact, they may be a manifestation of the disorder and require specific interventions. Children with ADHD exhibit a range of symptoms and levels of severity. In addition, many children with ADHD often are of at least average intelligence and have a range of personality characteristics and individual strengths.

ADHD was first described by Dr. Heinrich Hoffman in 1845. Dr. Hoffman, a physician who wrote books on medicine and psychiatry, was also a poet who became interested in writing for children when he could not find suitable materials to read to his three-year-old son. The result was a book of poems, complete with illustrations, about children and their characteristics. "The Story of Fidgety Philip" was an accurate description of a little boy who had ADHD. Yet it was not until 1902 that Sir George F. Still published a series of lectures to the Royal College of Physicians in England in which he described a group of impulsive children with significant behavioral problems, caused by a genetic dysfunction and not by poor child rearing—children who today would be easily recognized as having ADHD. Since then, several thousand scientific papers on the disorder have been published, providing information on its nature, course, causes, impairments, and treatments (NIMH, 2006).

Inattention, hyperactivity, and impulsivity are the core symptoms of ADHD. A child's academic success is often dependent on academic skills that enable a student to acquire necessary information, complete assignments, and participate in classroom activities and discussions (Forness & Kavale, 2001).

To acquire academic achievement, a child with ADHD faces a difficult but not insurmountable task of forming relationships. In order to achieve his or her full potential, he or she should receive help, guidance, and understanding from parents, guidance counselors, and the public education system (NIMH, 2006).

Prevalence of ADHD

ADHD is one of the most commonly diagnosed behavioral disorders of childhood (Gargiul, 2004). The disorder is estimated to affect between three and seven of every one hundred school-age children (American Psychiatric Association [APA], 2000). In the United States, an estimated 1.46 to 2.46 million children (Anderson, Williams, McGee, & Silva, 1987; APA, 2000; Bird et al., 1988; Esser, Schmidt, & Woemer, 1990; Pastor & Reuben, 2002; Pelham, Gnagy, Greenslade, & Milich, 1992; Shaffer et al., 1996; Wolraich, Hannah, Pinock, Baumgaertel, & Brown, 1996).

Although for years it was assumed to be a childhood disorder that became visible as early as age three and then disappeared with the advent of adolescence, the condition is not limited to children (Friend, 2005). It is now known that while the symptoms of the disorders may

change as a child ages, many children with ADHD do not grow out of it (Mannuzza, Klein, Bessler, Malloy, & LaPadula, 1998).

Boys are four to nine times more likely to be diagnosed, and the disorder is found in all cultures, although prevalence figures differ (NIMH, 2006).

Causes of ADHD

ADHD is a very complex, neurobiochemical disorder. Researchers do not know ADHD's exact causes, as is the case with many mental and physical health conditions. As researchers continue to learn more about ADHD, scientists are making great strides in unlocking the mysteries of the brain. Recent technological advances in brain study are providing clues as to both the presence of ADHD and its causes (NIMH, 2006). In people with the disorder, these studies suggest that certain brain areas have less activity and blood flow, and that certain brain structures are slightly smaller in the prefrontal cortex, the basal ganglia, and the cerebellum (Castellanos & Swanson, 2002). These areas are known to help us inhibit behavior, sustain attention, and control mood.

ADHD has traditionally been viewed as a problem related to attention, stemming from an inability of the brain to filter competing sensory inputs such as sight and sound (Heward, 2006). Recent research, however, has shown that children with ADHD do not have difficulty in that area. Instead, some researchers now believe that children with ADHD are unable to inhibit their impulsive motor responses to such input (Barkley, 1997, 1998a; Pierangelo & Giuliani, 2006).

It is still unclear what the direct and immediate causes of ADHD are, although scientific and technological advances in the field of neurological imaging techniques and genetics promise to clarify this issue in the near future. Most researchers suspect that the cause of ADHD is genetic or biological, although they acknowledge that the child's environment helps determine specific behaviors (Pierangelo & Giuliani, 2007).

There is also strong evidence to suggest that certain chemicals in the brain—called neurotransmitters—play a large role in ADHD-type behaviors. Neurotransmitters help brain cells communicate with each other. The neurotransmitter that seems to be most involved with ADHD is called dopamine. Dopamine is widely used throughout the brain. Scientists have discovered a genetic basis for part of the dopamine problem that exists in some individuals with ADHD.

Step II

Identifying Characteristics of Students With ADHD in Your Classroom

The principal characteristics of ADHD are *inattention, hyperactivity*, and impulsivity. These symptoms appear early in a child's life. *Because* many normal children may have these symptoms, but at a low level, or because the symptoms may be caused by another disorder, it is important that the child receive a thorough examination and appropriate diagnosis by a well-qualified professional (Pierangelo & Giuliani, 2006).

Symptoms of ADHD will appear over the course of many months, often with the symptoms of impulsiveness and hyperactivity preceding those of inattention, which may not emerge for a year or more. Different symptoms may appear in different settings, depending on the demands the situation may pose for the child's self-control. A student who "can't sit still" or is otherwise disruptive will be noticeable in school, but the inattentive daydreamer may be overlooked. The impulsive student who acts before thinking may be considered just a "discipline problem"; while the child who is well behaved but inattentive may be viewed as merely unmotivated. Yet, both may have different types of ADHD. All children are sometimes restless, act without thinking, or daydream the time away (Friend, 2005). When the student's hyperactivity, distractibility, poor concentration, or impulsivity begin to affect performance in school, social

relationships with other children, or behavior at home, ADHD may be suspected. But because the symptoms vary so much across settings, ADHD is not easy to diagnose. This is especially true when inattentiveness is the primary symptom (National Institute of Mental Health [NIMH], 2006).

Subtypes of ADHD

There are three subtypes of ADHD:

1. Predominantly Inattentive Type
2. Predominantly Hyperactive-Impulsive Type
3. Combined Type (inattention, and hyperactivity-impulsivity)

Of course, from time to time, practically every person can be a bit absentminded, restless, fidgety, or impulsive. So why are those same patterns of behavior considered normal for some people and symptoms of a disorder in others? It is partly a *matter of degree*. With ADHD, these behaviors occur far more than occasionally. They are the rule and not the exception (Pierangelo & Giuliani, 2007).

Not all students have the same type of ADHD. Because the disorder varies among individuals, children with ADHD will not have all the same problems. Some may be hyperactive. Others may be underactive. Some may have great problems with attention. Others may be mildly inattentive but overly impulsive. Still others may have significant problems in all three areas (attention, hyperactivity, and impulsivity; National Dissemination Center for Children with Disabilities [NICHCY], 2004).

Inattention

Attention is a process. When we pay attention,

- we *initiate* (direct our attention to where it is needed or desired at the moment);
- we *sustain* (pay attention for as long as needed);
- we *inhibit* (avoid focusing on something that removes our attention from where it needs to be); and
- finally, we *shift* (move our attention to other things as needed).