

Research for ADD/ADHD Wheel

The *ADD/ADHD Wheel* is an educational resource to assist teachers, parents, and specialists as they collaboratively make decisions to help students with attention and behavior difficulties become successful in school. The selection of appropriate strategies allows learners with ADD/ADHD to participate meaningfully with other students in the classroom and school-wide environment so educators view them as positive learners. Often ADHD children/teens/adults are identified as creative, intelligent, and gifted in areas including music, art, and athletics. The academic success of students is often dependent on the ability of adults who: have sufficient knowledge of ADD/ADHD, recognize the need for stability of routine yet variation within, are flexible rather than complacent, display a high level of sensitivity, and are willing to cope with impulsive urges (Flick, 1998).

Two federal laws protect students with disabilities, including those students with ADD/ADHD: Individuals with Disabilities Education Improvement Act (IDEA, 2004) and Section 504 of the Rehabilitation Act (1973). Some students with disabilities need accommodations made to their educational program in order to participate in the general curriculum and to be successful in school. Should a school-based assessment determine that the ADHD adversely affects the student's learning or educational performance, then that student would receive accommodations accordingly. Section 504 of the Rehabilitation Act (1973) directs the provision of accommodations to attention deficit disorder (ADD) or attention deficit hyperactivity disorder (ADHD) students even though they may not qualify for special services under IDEA if there is a significant negative effect of ADHD on the learning or behavior of the student. Students who qualify under Section 504 are required to have a plan that specifies classroom accommodations. Needed accommodations for students in Special Education should be written into a student's Individualized Education Program (IEP).

The National Resource Center on AD/HD (NRC) reports: "Attention-deficit/hyperactivity disorder (AD/HD) is a condition affecting children and adults that is characterized by problems with attention, impulsivity, and overactivity. It affects between 3-7 percent of school age children, and between 2-4 percent of adults." The Report of the U.S. Surgeon General on Mental Health Report, provided by the U.S. Public Health Service (PHS, 1999), states that 3-5% of school age children have AD/HD. The American Academy of Child and Adolescent Psychiatry (AACAP) noted the same percentage. The January 2001 U.S. General Accounting Office (GAO) report stated that out of 46.6 million public school students, there were no less than between 1.398 million (3%) and 2.330 million (5%) of school-age children with AD/HD.

Rief (1998) also reported "approximately 2 million children in the United States have been diagnosed with ADHD" and estimated "approximately 3-5% of the

student population has ADHD.” Rief (1998) noted that this number is more than likely too low since many female students go undiagnosed. Barkley (1995) surmised that 25% or more of ADHD students are expelled from high school because of serious misconduct; 35% of teens may fail to complete high school standards; and approximately 30-50% of ADHD children are retained at least once. DuPaul and Stoner (1994) noted that oppositional-defiant disorder was perhaps the most common disorder accompanying ADHD.

Research appears to be conclusive that 5% of school-age children or one child in each classroom of 25 to 30 children will likely have ADHD (National Institute of Mental Health (NIMH)). When these students are told to cease talking, remain still, be attentive (particularly with worksheets), and stay on task, difficulty usually surfaces. Tasks such as the ones previously mentioned do not come easily for students with Attention Deficit Hyperactivity Disorder. Thus, ADD/ADHD seems to be a significant problem and must be addressed in all school districts, on each campus, and by every teacher. The *ADD/ADHD Wheel* benefits any educator since ADD/ADHD students are apt to experience difficulty in classroom settings.

Serious social, emotional, behavioral, and academic problems can surface without interventions. Problems in school increase without knowledgeable personnel and problems improve if personnel are educated. A review of the literature revealed characteristics of classrooms and those of ideal teachers that promote success for students with ADD and ADHD (Rief, 2005; USDOE, 2004; Boring, 2002; Armstrong, 1999; Flick, 1998; Rief, 1998; Armstrong, 1995). Students with ADD/ADHD are able to achieve school success when appropriate teaching strategies, supports, and management techniques are incorporated into the school environment. The *ADD/ADHD Wheel* was created to help teachers understand how the diagnosis of ADD/ADHD interferes with the ability of students to learn and remain on task. The information and strategies on the wheel assist teachers in managing problem behaviors.

A study of the literature revealed that inappropriate behaviors were generally not displayed deliberately. Often, students with ADD/ADHD are not aware of the impact of their behaviors on others. They do not recognize the behaviors they exhibit are annoying and distracting. These behavioral distractions can lead to students with ADD/ADHD being ridiculed, rejected, and sometimes punished.

Educating parents and providing training for parents of ADD/ADHD students is crucial. For parents to become effective advocates they need to learn as much as possible (Rief, 1998). To enable educators to work productively with parents, a section entitled “Parent Success” is addressed on the face of the wheel. A knowledge base must be built with all professionals who work with ADD/ADHD students and their families (Rief, 1998). Teacher knowledge is possibly the most significant factor in dealing with students with ADD/ADHD (Flick, 1998). Dunne (2002) noted that teachers who understand the difficulties of students with ADD/ADHD can better assist the students within the classroom. Teachers, who

are open to adjusting for the problems, experience more success in dealing with such behaviors. Acquisition of ADD/ADHD knowledge leads educators to focus on the issues using a positive approach. Thus, other sections identified on the face of the wheel, "ADD/ADHD Characteristics", "Core Behaviors", "What is Add/ADHD?", "Homework Success", and the section "In order to create student success, teachers should:" provide insight and a better understanding of children or teenagers with ADD/ADHD.

A review of the literature and the combined teaching experiences of the Product Development Team yielded the informational content on the *ADD/ADHD Wheel*. The information gleaned from the literature and the experiences of educators offers an abundance of knowledge to help educators learn more effective ways to teach and how to connect with students who learn differently. The purpose of the *ADD/ADHD Wheel* is to provide the support and intervention that is necessary for the success of students. In summary, the *ADD/ADHD Wheel* offers strategies for reaching and teaching these students. The wheel is designed in a simple, concise, easy-to-read format that addresses twelve different categories. Suggested strategies are designed for meeting the needs of ADD/ADHD learners yet are relevant for all students.

Capturing Students' Attention

An enthusiasm for learning must be demonstrated by the teacher. Students must see a teacher's genuine desire to motivate and inspire. Students have to be taught to attend in order to accurately process information. Teachers should be aware of the attention span of students and employ frequent checks to determine if what the message perceived by the student is the actual message sent (Flick, 1998). A focus on communication is essential. Rief (2005; 2003; 1998) advocates auditory and visual ideas for gaining and holding the attention of students in positive ways. Sustaining the attention requires active, engaged learning.

Keeping Students on Task

Students need to be taught how to self monitor on- task behavior in order to use class time effectively to accomplish work or complete tasks that need to be completed. Distractions can likely lead to off-task behavior noted Flick (1998) so it is imperative to develop improved on-task behavior. A variety of strategies are noted (Flick, 1998; Rief, 2003 ; Rief and Heimburge,1997) to maintain the focus of students ranging from the use of timers, color, seating, to smaller segments of work.

Organization Skills

Teachers must provide assistance and structure to help students organize their work and materials. Lack of organization can contribute to loss of materials or important things and difficulty in completion of tasks. Students are taught skills to help change an internal process (Flick, 1998; Rief, 1998). These strategies build organizational and study skills to allow students a greater opportunity for success in life.

Classroom Management

Rief (2003) and Rief and Heimburge (1997) stress that smooth classroom management is dependent upon the teaching of precise, consistent procedures and routines. All expectations should be clear, taught, practiced, and often revisited throughout the year. Visual and auditory prompts must be repeated throughout the day. The best management strategy involves a focus placed on problem prevention coupled with careful planning.

Lesson Presentation

The United States Department of Education (USDOE, 2004) recommends a variety of strategies for the introduction, delivery, and closure of lessons. The Department of Education concludes that effective teachers also individualize instruction in accordance with the different subjects and the needs of students. Teachers who make determined efforts to meet the needs of students utilize varied teaching strategies and delivery systems as they display a conscientious effort to address the range of learning styles in the classroom (Boring, 2002; Flick, 1998; Rief, 1998; 2005).

Physical Environment

Interventions offered are positive, student-centered, nurturing, and success-oriented. Opportunities for movement help easily distractible students. Strategies noted show that teachers must commit to and believe in learning style differences. Many environmental classroom interventions are recommended that are greatly beneficial to ADD/ADHD students. Cowan (2004b) stressed increasing personal interactions, minimizing distractions, and investigating different seating arrangements to create optimal experiences for learning.

Behavior Management

Strategies are provided to enable a teacher to establish an environment where expectations, rules, and procedures are well-defined, practiced, and reinforced by all. Skills that enable students to regulate their own personal behaviors are also recommended. When teachers are familiar with behavioral techniques, they can manage difficult behaviors, be more helpful in student interactions, and promote effective learning (Flick, 1998). Jaelline, Benedictis, Segal, and Segal (2006) suggested setting clear, specific personal goals. The provision of rewards (positive reinforcement) for desired behavior and a consequence for failure to meet the goal is stressed. To shape behavior in a positive direction, these researchers concluded that rewards and consequences must be applied consistently over a period of time.

Time Management

Cowan (2004) stated time on task should be emphasized and recognized consistently. Sustaining attention to tasks over time is difficult for ADD/ADHD students. Therefore, it is necessary to create an awareness of time and help students learn to manage time. Greene (2006) concluded that students do not

realize the passing of time. For example, often when students with ADD/ADHD have been watching television for an extended period, they may think that only a few minutes have passed. This false perception makes it difficult for students to complete tasks and move onto the next.

Instructional Strategies

Instructional strategies provide balance, give options, employ variety, and allow choices. The utilization of multiple strategies demonstrates the commitment of teachers to the individual academic and emotional needs of students. To select and implement successful instructional strategies and practices, it is paramount that characteristics of ADHD students are understood. Evidence-based instructional strategies that have proven successful with ADHD students are identified by the United States Department of Education (2004). It should be noted that these strategies are advantageous for all students.

Giving Directions

Cowan (2004) noted that attention deficit students work more successfully when directions are presented one step at a time. Making small adjustments in the presentation of directions benefits students since retention is difficult after the first direction is given in a series. Multiple ways of describing the task to be undertaken increases the opportunity that it is actually completed accurately. Cowan, a family therapist who works with ADHD children and families, suggests incorporating verbal directions with illustrations or demonstrations that precisely indicate what is expected of students to increase the likelihood that the task will be accomplished.

Social Skills

Belonging in today's world is a challenge for many but most particularly for those with ADD/ADHD. A review of literature shows that many people with ADD/ADHD are not skilled at reading social cues. Trouble arises when applying what they know about social skills to the real world; they are too impulsive. Social skills target helping students interact more successfully with others. Students are taught social and coping skills to learn how to handle stress, loss of self-esteem, and to solve other problems. Such skills teach students responsibility for social experiences which can benefit them throughout life. Rief (1998) concluded that social-skill awareness and application of appropriate behaviors be deliberately and directly taught, modeled, and practiced to develop competency. Flick (1998) noted that teachers must manage, control, and gradually eliminate inappropriate social behaviors of students; and, at the same time establish, develop, and maintain appropriate social skills.

Incentives/Reinforcers

Suggestions that provide positive attention and recognition for the talents, strengths, and abilities of all students are given. Jaelline, Benedictis, Segal, and Segal (2006) advocate that rewarding the efforts of the student toward the desired change encourages the new or expected behavior. However, teachers must recognize that students can perform as wanted and then drop back into

unacceptable patterns. Students with ADHD have more off-days than do students who do not have ADD/ADHD. Incentives and reinforcers over time can improve the behavior.

The United States Department of Education (2004) identified three components of a successful strategy when educating children with ADHD: *academic instruction, behavioral interventions, and classroom accommodations*. These areas are dispersed among the twelve categories on the *ADD/ADHD Wheel*. By integrating these techniques into daily instructional and classroom management routines, teachers will be encouraged to improve both the academic performance and the behavior of students with ADD/ADHD. In turn, teachers will create an heightened learning environment for all students.

Through the initiation of suggested, easily implemented interventions and by utilizing the supports identified on the *ADD/ADHD Wheel* with students early on, the Mentoring Minds' Product Development Team hopes that frustration, failure, and loss of self-esteem can be avoided. Significant improvement can result for any student when we, as educators, provide a change in structure, guidance, encouragement, and support. With the *ADD/ADHD Wheel* as a teaching and learning tool, assistance can be provided to students in need to help them succeed in spite of challenges.

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