

**Evidence Based Practices in School Mental Health:  
Attention Deficit Hyperactivity Disorder (ADHD)****Background Information**

Attention problems during classroom instruction and schoolwork are among the most common difficulties exhibited by students (DuPaul, G.J., Stoner, G., & O'Reilly, M.J., 2002). Students with attention difficulties or ADHD often struggle with maintaining attention, impulsive behaviors, organization, transitions, acting as if rules do not apply to them, negative attitude, low self-esteem, peer isolation, and poor grades (Pledge, 2002).

Although the set of behaviors, which are symptomatic of ADHD, are different in each child, there are some generalities. According to the DSM-IV some symptoms of ADHD are:

**Inattention**

- often fails to give close attention to details or makes careless mistakes in schoolwork, work, or other activities
- often has difficulty sustaining attention in 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 (not due to oppositional behavior or failure to understand instructions)
- often has difficulty organizing tasks and activities
- often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort

**Hyperactivity**

- often fidgets with hands or feet or squirms in seat
- often leaves seat in classroom or in other situations in which remaining seated is expected
- often runs about or climbs excessively in situations in which it is inappropriate (in adolescents, feelings of restlessness)
- often has difficulty playing or engaging in leisure activities quietly
- is often "on the go" or often acts as if "driven by a motor"
- often talks excessively

**Impulsivity**

- often blurts out answers before questions have been completed
- often has difficulty awaiting turn
- often interrupts or intrudes on others (e.g., butts into conversations or games)

Doctor prescribed stimulant medication is one method for treating ADHD symptoms; however, some parents decide not to place their children on medication. In other instances, medication alone may not be the only support that the student needs to achieve classroom success.

A literature review revealed that a limited amount of formal research has been conducted with ADHD students in the classroom. Therefore, on the following page there is a list of challenges, supported by research, that students with ADHD face and suggested interventions for the identified challenges.

**Disclaimer**

The information gathered for this evidence-based practice sheet is a summary of common practices and/or programs with a strong research base and definitions found in recent literature. This summary is by no means a comprehensive representation of all information, definitions, programs, and standards to be found. In addition this information is not intended to provide any type of professional advice nor diagnostic service. The listing of a specific program within this sheet does not constitute as an endorsement from CDE for the program.

**Reference**

- DuPaul, G.J., Stoner, G. & O'Reilly, M.J. (2002). Best practice in classroom interventions for attention problems. In *Best Practice in School Psychology IV*, Volume 2. Eds A. Thomas & J. Grimes. (1115-1127)
- DuPaul, G.J. & White, G.P. (2004). *An ADHD Primer. Principal Leadership Magazine*, 5(2).
- Pledge, D.S. (2002). ADD and ADHD: An overview for school counselors. *ERIC Digest*.

Program/Intervention	Publisher/Resources	<div> <div>Level of Intervention</div> <div> <div>Intensive</div> <div>Targeted</div> <div>Universal</div> </div> </div>	Target Population	Type of research conducted (Stringent research-research design, random assignment; Research – mixed method, random sampling; <b>Applied with Fidelity</b> – outcome measures, case studies*)	Research Sample
<b>ADHD Classroom Kit</b> <i>Summary:</i> This is a whole-classroom reinforcement program that uses consequences for appropriate and inappropriate behavior and peer-mediated interventions.	Center for Applied Psychology: 1-800-962-1141	Universal	Regular education classrooms, K through 6 <sup>th</sup> grade	Applied with Fidelity	1 - 6 year old Caucasian female
<b>Child Social Skills and Parent Training</b> <i>Summary:</i> Parents and children attended separate 10 week trainings. The focus of the children's training was social entry, maintaining interactions, and solving problems. The parents' training focused on interacting with their children in a supportive manner, helping their child problem solve, setting goals for themselves, and using the social skills they had learned in their separate training.	Sheridan & Dee, 1996	Targeted	Children and parents	Applied with Fidelity	5 caucasian males, ages 8-10, who met the criteria for ADHD and were on stimulant medication
<b>Classwide Peer Tutoring (CWPT)</b> <i>Summary:</i> This intervention has been shown to improve the behavior and academics of students with diagnosed ADHD and without diagnosed ADHD. CWPT includes the following: pairing every student with another student, teacher written lessons that one student teaches the other student, the student teacher explains the work, asks his/her partner questions, and tells the student if his/her answers are correct. Although research has been conducted specifically with CWPT, all models of peer tutoring have characteristics that are effective in supporting students with ADHD (Pffner & Barkley, 1990).	<u>Classwide Peer Tutoring</u> (Greenwood, Delquadri, & Carta, 1988). Educational Achievement Systems, 206-820-6111	Universal Targeted	School age students	Applied with Fidelity	16 boys and 3 girls in 1 <sup>st</sup> through 5 <sup>th</sup> grade general education classrooms diagnosed with ADHD
<b>Token Economy</b> <i>Summary:</i> Token economies can be set up to reinforce certain student behaviors. The system may be for an individual child or class wide. When a student is caught exhibiting a target behavior s/he receives a token (i.e. marble, play money, etc). The tokens can then be exchanged for prizes.	An overview of how to set up a token economy: <a href="http://www.uams.edu/add/token.htm">http://www.uams.edu/add/token.htm</a>	Universal Targeted Intensive	School Age Students	Research	18 3 <sup>rd</sup> grade boys, 5 on medication for hyperactivity, in a reading and vocabulary class  5 boys, between 4 and 7 years old, in a 3 week program for children diagnosed with ADHD. 3 of the children on a trial of stimulant medication.

## Resources

U.S. Department of Education. (2003). *Identifying and implementing educational practices supported by rigorous evidence: A user friendly guide*. [Brochure]. Washington, D.C.: Author.

Colorado Advisory Network  
(303) 721-0648  
Email: [canindiv@aol.com](mailto:canindiv@aol.com)  
Web: [www.localsonsors.com/denver/can](http://www.localsonsors.com/denver/can)

Promising Practices Network:  
<http://www.promisingpractices.net/>

What Works Clearinghouse: <http://www.w-w-c.org/>

Center for Attention Deficit  
5835 Lehman Drive  
Colorado Springs, CO 80918  
(719) 531-9211

Children and Adults with Attention Disorders (CHADD)  
499 N.W. 70 Ave. Suite 101  
Plantation, FL 33317  
(800) 233-4050 Rocky MT. CHADD (303) 761-5024  
Web: [www.chadd.org](http://www.chadd.org)

National Information Center for Children  
and Youth with Disabilities  
P.O. Box 1492  
Washington, DC 20013  
(800) 695-0285 (202) 884-8200  
Email: [mail@aed.org](mailto:mail@aed.org)  
Web: [www.nichcy.org](http://www.nichcy.org)

Parent Education and Assistance for Kids (PEAK)  
611 N. Weber, Suite 200  
Colorado Springs, CO 80903  
(800) 284-0251 (719) 531-9400  
Web: [www.peakparent.org](http://www.peakparent.org)

National Attention Deficit Disorder Assoc.  
1788 Second Street, Suite 200  
Highland Park, IL 60035  
847-423-ADDA  
Email: [mail@add.org](mailto:mail@add.org)  
Web: [www.add.org](http://www.add.org)

Parent to Parent of Colorado  
2200 S. Jasmine Street  
Denver, CO 80222  
(877) 472-7201 (toll free) (719) 336-2389  
Email: [parents@ucpc.org](mailto:parents@ucpc.org)

## Program References

Anhalt, K., McNeil, C.B., & Bahl, A.B. (1998). The ADHD Classroom Kit: A whole-classroom approach for managing disruptive behavior. *Psychology in the Schools*, 35(1), 67-79.

Center for Effective Collaboration and Practice (2005). *Classwide Peer Tutoring: Information for Families*. Retrieved from Center for Effective Collaboration and Practice website: <http://cecp.air.org/familybriefs/docs/PeerTutoring.pdf>

DuPaul G.J. & Eckert, T.K. (1998). Academic interventions for students with AD/HD: A review of the literature. *Reading and Writing Quarterly*, 14, 59-82.

DuPaul, G.J., Stoner, G., & O'Reilly, M.J. (2002). Best practices in classroom interventions for attention problems. In A. Thomas and J. Grimes (Eds.), *Best Practices in School Psychology IV* (pp. 1115-1127). Bethesda, MD: The National Association of School Psychologists.

Hupp, S.D.A., Reitman, D., Northup, J., O'Callaghan, P., & Leblanc, M. (2002). The effects of delayed rewards, tokens, and stimulant medication on sportsmanlike behavior with ADHD-diagnosed children. *Behavior Modification*, 26 (2), 148-162.

Pfiffner, L.J. & Barkley, R.A. (1990). Educational placement and classroom management. In R.A. Barkley (Ed.), *Attention Deficit Hyperactivity Disorder: A Handbook for Diagnosis and Treatment* (pp. 498-539). New York: Guilford Press.

Robinson, P.W., Newlay, T.J., & Ganzell, S.L. (1981). A token system for a class of underachieving hyperactive children. *Journal of Applied Behavior Analysis*, 14(3), 307-315.

Sheridan, S.M., & Dee, C.C. (1996). A multimethod intervention for social skills deficits in children with ADHD and their parents. *School Psychology Review*, 25(1).

University of Arkansas for Medical Sciences (2005). *Classroom Interventions for Children with Attention Deficit Disorder*. Retrieved from University of Arkansas for Medical Sciences website: <http://www.uams.edu/add/token.htm>