



WILLIAM & MARY

CHARTERED 1693

Training & Technical Assistance Center

P.O. Box 8795

Williamsburg, VA 23187-8795



Classroom Interventions for Attention Deficit/ Hyperactivity Disorder Considerations Packet

For more information contact:

E-mail: ttacwm@wm.edu

Phone: 757-221-6000 or 800-323-4489

Website: <http://education.wm.edu/centers/ttac/index.php>

Classroom Interventions for Attention Deficit/Hyperactivity Disorder

This packet focuses on classroom intervention strategies to enhance the learning environment for students with attention deficit/hyperactivity disorder (ADHD). An overview of ADHD is presented along with a brief description of the challenges students with ADHD typically demonstrate in the classroom. Strategies for academic interventions, behavior management, and home-school collaboration and communication are also included.

Definition

ADHD is one of the most commonly diagnosed conditions of children (Centers for Disease Control and Prevention, 2015). The diagnostic term *attention deficit/hyperactivity disorder* (ADHD) refers to individuals who display patterns of inattention, impulsivity, and overactive behavior that interfere with daily functioning (American Psychiatric Association [APA], 2013). The *Diagnostic and Statistical Manual* (DSM) V (APA, 2013) criteria for diagnosing ADHD list three types of ADHD and the accompanying characteristics.

- **Predominantly inattentive type.**

The student may:

- submit inaccurate or incomplete work,
- have difficulty attending to conversations, activities, or tasks,
- be easily distracted,
- have difficulty following directions,
- frequently lose materials, and/or
- have difficulty organizing tasks and materials.

- **Predominantly hyperactive/impulsive type.**

The student may:

- appear to be in constant motion,
- frequently fidget or move in his or her seat,
- become restless during quiet activities,
- leave his or her seat when expected to remain seated,
- interrupt others and classroom activities,
- talk excessively, and/or
- fail to follow classroom procedures (e.g., blurt out answers without raising hand).

- **Combined type.**

The student may exhibit symptoms that include behaviors from both categories above.

In order for a student to be diagnosed with ADHD, symptoms must appear before age 12 and be exhibited across at least two settings. They must also have adverse effects on academic performance, occupational success, or social-emotional development (APA, 2013). To add to the complexity of the diagnosis, children with ADHD are likely to have co-existing emotional, behavioral, developmental, learning, or physical conditions (Wolraich & DuPaul, 2010). As a

result of the behaviors listed above, students with ADHD are at greater risk of academic difficulties, social/emotional issues, and limited educational outcomes.

The degree to which attention impacts a student's academic and social performance is related to the interactions between the student's academic and behavioral needs and the environmental demands. Therefore, it is not unusual for the student to perform differently across settings. For example, a student with ADHD may experience academic success in elementary school; however, when he enters middle school, the increased academic and organizational demands may increase his need for additional academic and behavioral supports.

Intervention Goals

School interventions should include a team approach across multiple settings, consisting of both preventive and intervention strategies. Interventions must be based upon assessment data that includes information about the student's strengths and needs as well as the environmental conditions in which her characteristics of ADHD occur. Progress monitoring and strategy adjustments are critical to the success of any intervention plan (Wolraich & DuPaul, 2010).

Academic Interventions

The first step in creating classroom supports for students with ADHD is understanding the students' strengths and needs. This involves formal and informal assessment, as well as collaboration among educational professionals and the students' families. If a student is not responsive to behavioral strategies and interventions, more intensive interventions, such as functional behavior assessment and behavior intervention plans, should be considered (see [Practical FBA](#)). **No one intervention is universally effective for all students with ADHD. A combination of research-based and promising practices is recommended.** Several of these practices are described below.

- **Giving Directions**

Many students with ADHD have trouble following directions. The guidelines below help address this problem.

- **Number of Directions:** Give a minimal number of directions or steps at a time. If necessary, have students repeat the directions to the teacher or a peer partner.
- **Form of Directions:** Provide written directions or steps, or a visual model of a completed project. Teach students how to refer to these items as reminders of process steps to complete tasks. This strategy is particularly helpful for long-term projects.

- **Written Assignments**

Many students with ADHD have particular challenges with written work due to fine-motor skills difficulties, motor planning issues, and difficulty alternating their attention

from a book to their written responses. Students with ADHD may also need assistance breaking a larger task or project into smaller, more workable units.

The following strategies can be used to address these needs.

- **Deconstructing Tasks:** Break tasks into smaller units.
 - Limit amount of work per page.
 - Cover up part of the work on a page.
 - Allow extra time for completing tasks.
 - Provide work breaks.
 - Allow student to use a computer to type or to use speech-to-text software.
 - Reduce the length of written assignments.

- **Organization**

Many students with ADHD have significant difficulties with organization. They are more likely to respond positively when teachers establish class routines and set procedures and maintain a well-organized learning environment. Clear rules and advanced planning are keys to success for teachers of students with ADHD.

The following organizational supports are particularly useful. Students should be taught to use these tools through teacher modeling and guided practice with feedback before being expected to use them more independently.

- **Assignment Notebook:** Provide the student with an assignment notebook to help organize homework and seatwork.

- **Color-Coded Folders:** Provide the student with color-coded folders to help organize assignments for different academic subjects.

- **Homework Partners:** Assign the student a partner who can help record homework and other seatwork in the proper folders and assignment book.

- **Clean Out Dates:** Periodically ask the student to sort through and clean out his or her desk, book bag, and other special places where written assignments are stored.

- **Extra Books:** Provide the student with an extra set of books or electronic versions of books for use at home. This eliminates the student having to remember to bring books back and forth.

- **Use of Calendars:** Teach the student to use a calendar for scheduling assignments. Tape a schedule of planned daily activities to the student's desk to help with time management and transitions.

- **Checklist of Homework Supplies:** Give the student a checklist that identifies categories of items needed for homework assignments. The checklist can be taped to the inside of the student's locker or desk.

Classroom Considerations

The culture of the classroom can either support or create barriers to student success (Piffner, 2011). Factors that foster attention, positive behavior, and academic and social success include establishing positive relationships with students, adopting classroom management techniques, and creating a physical arrangement that facilitates learning.

It is often a positive relationship with one teacher that facilitates school success for a student with ADHD (Piffner, 2011). When teachers connect with students and appreciate their unique skills and interests, students are more likely to strive for achievement and positively respond to classroom rules and procedures.

When using a proactive approach to classroom management, teachers support all students and create conditions that prepare them for learning (Piffner, 2011). Some strategies for positive management include clear directions, meaningful feedback, and opportunities for collaboration with peers. Additional strategies are noted below.

- **Opportunities to Respond**

Students with ADHD often have the most trouble attending during drill-and-practice assignments because of the repetitive nature of the tasks. Peer-mediated approaches such as those enumerated below are particularly effective for students with ADHD in such cases, because they increase students' opportunities for engagement and active learning (Piffner, 2011). In creating peer-mediated activities, the teacher may need to choose students whose skill levels complement each other. Students with and without attention difficulties and impulsivity should be considered for peer partnerships.

- **Peer Tutoring:** Peer tutoring is one of the more effective strategies for students with ADHD, because it provides many of the same supports as one-to-one instruction. It facilitates the acquisition of both academic and social skills. Peer tutoring is most effective when training is provided to participating students (Piffner, 2011). Tutors need to be taught how to be prepared with materials needed for the session and how to give positive and corrective feedback to their partner (Greenwood & Delquadri, 1995).
- **Cooperative Learning:** Carefully structured cooperative learning groups in which each student is assigned a role and has clear expectations for desired outcomes are very helpful for students with ADHD. The more structured the cooperative activity, the more likely it is that these students will succeed.
- **Sharing Strategies: Think, Pair, Share/Square Share/Group Share:** Using this approach, students work with peer partners to discuss the lesson, check each other's work, and share strategies.

- **Partner Reading:** Student partners take turns reading orally and listening to each other. Peer partners can also be helpful with discussing answers to comprehension questions, spelling, proofreading, and solving math problems.
- **Self-Correction Opportunities:** Students use calculators or a key provided by the teacher to check their answers.
- **Learning Games:** Students play board games that reinforce skills such as sight vocabulary, phonics, grammar rules, and basic math facts. For example, *Bingo* can be used to review basic facts and concepts. Students who require more immediate feedback and recognition of their efforts might begin with a *Bingo* board that has only three cells across and three cells down. The number of cells can be gradually increased to four across, four down, then five, and so forth.
- **Computer Games:** Computer games increase opportunities for responding and active engagement and provide immediate feedback about accuracy. In addition, many students with ADHD find computer learning games highly reinforcing.
- **Student-Created Reviews:** Students can create ways of reviewing previously taught content. For example, they may create questions and answers for a card game such as *Go Fish* or *Concentration*.
- **Frequent Redirection:** Learning partners can be assigned to help each other stay on task.
- **Transition Buddies:** Transition buddies are helpful for students with ADHD who have trouble refocusing their attention as they transition from one academic lesson to the next. Further, verbal or nonverbal teacher cues signaling upcoming transitions help prepare students for changes in activities or lessons.
- **Seating Arrangements:** Seat the student with ADHD away from distractions and close to the teaching action.
 - Place the student in close proximity to instruction so the teacher can monitor the student's work.
 - Place the student by peers who are attentive workers.
 - Place the student away from distractions such as windows, the pencil sharpener, the door, and other high-traffic areas.
 - Add distance between student desks.
 - For independent work, use desks with attached chairs rather than tables where several students are seated.

- If the student has a high need for movement, seating her near the back of the room may provide opportunities to move without distracting peers.

Behavior Management Strategies

The goal of behavior management strategies is to help students learn to manage their own behavior. The following strategies are most effective when used in conjunction with evidence-based instructional strategies.

Prevention Strategies

The following are preventive measures that support students in demonstrating positive behavior.

- **Nonverbal Supports:** Together with the student, develop inconspicuous, nonverbal messages such as eye contact, hand gestures, or other signals that teach students to recognize the conditions that trigger specific behaviors. Once the system is developed, students can learn to manage their behavioral responses before they occur. For example, creating a signal and routine for “taking a five-minute break” at a specified classroom location provides an opportunity for the student to recognize when he is becoming restless or frustrated and prevents behavior from escalating. This system is most effective if used before the behavior escalates or intensifies.
- **Choice as Reward:** Choice in and of itself appears to be highly reinforcing. Provide choices of activities between assignments or embed choices within assignments (e.g., choice of materials, readings, response modes, peer partners). Choices also provide students practice in decision making.
- **Checking With Chimes:** In order to teach students to monitor their attention to task, set reminders at random intervals on an electronic device, such as a smartphone or kitchen timer. Time intervals should be set based on the student’s attention span and the pace of the lesson (typically 3 to 5 minutes). When the tone sounds, the student charts or marks whether she is engaged in learning. A simple yes or no checklist works well. Students can monitor their own behaviors by giving themselves points or checkmarks for appropriate behavior. Extra points may be awarded when student and teacher ratings match. The student could then chart her score using a computer program, tablet, smartphone, graph paper, or poster board.
- **Visual and Environmental Prompts:** Use behavioral and environmental prompts to increase desired classroom behaviors. For example, pictorial prompts of students attending in class serve as a reminder of the teacher’s expectations for learning and behavior. Electronic visual aids such as interactive whiteboards and document cameras are helpful for capturing the attention of students with ADHD

(Piffner, 2011). Additionally, the use of tablets and computers may engage students more fully in learning activities.

- **Priming Procedure:** Prime the student before an assignment or lesson by reviewing a list of student-identified privileges or reinforcements that can be earned following a specified work period.
- **Proximity Control:** Teacher proximity is highly effective for helping students with ADHD maintain attention. For example, the teacher may move closer to the student when giving directions and monitoring seatwork.
- **Timers:** Set a timer to indicate how much time remains in the lesson or work period. The timer should be clearly visible so students can check remaining time and monitor their progress.
- **Wristwatch or Smartphone:** Teach the student to use a wristwatch or smartphone to manage time when completing assigned work. Many watches and smartphones have built-in timers that can be programmed to beep at set intervals.
- **Music:** Play different levels and tempos of music to help students understand the activity level appropriate for particular lessons. For example, using quiet classical music for individual learning activities helps block distractions and creates a calm classroom environment (U.S. Department of Education, 2006).
- **Reinforcement Strategies**

Children with ADHD require specific and frequent feedback and/or reinforcement immediately following the demonstration of desired behaviors. When students are learning new behaviors, it is generally important to reinforce close approximations first as a way to shape behavior. Once a behavior is established, the frequency of reinforcement can be gradually decreased. Students with ADHD tend to quickly lose interest with repetition, so a variety of easy-to-implement reinforcers should be considered.

 - **Praise, Praise, Praise:** Attentiveness and appropriate classroom behavior are prerequisites for learning; therefore, interventions that promote these behaviors should be an integral part of the teaching process for all students. When teachers are attentive to positive behavior and specifically praise students for these behaviors, they can engage students before their attention drifts while highlighting desired behavior (U.S. Department of Education, 2006). Effective praise statements (a) are contingent on the demonstration of desired behavior, (b) specifically describe the positive behavior, and (c) are provided immediately and enthusiastically following the desired behavior (Scheuermann & Hall, in press).
 - **Home-School Reinforcement System:** One of the most reinforcement effective strategies is collaboration with students' parents. Communicate as frequently as possible (daily is optimal) about the amount and quality of work, as well as the

increase or decrease in appropriate behavior to help parents coordinate their reinforcement system with the school's system. A simple checklist consisting of a list of the desired behaviors and a place for assignments that can be checked off, along with space for special notes, works best.

- **Verbal Feedback**

Verbal feedback is comprised of both praise and corrective statements. Consider the following when designing a behavioral plan.

- **Verbal Praise:** Use simple, but specific, praise phrases that clearly identify the desired behaviors. For example, "Larry, thank you for raising your hand before answering the question" lets the student know the specific behavior and condition for which he was praised. General praise (e.g., "good job") is less meaningful for students.
- **Verbal Redirection:** Many students with ADHD require frequent redirection. Redirect students using clear, concise, and inconspicuously delivered verbal cues to remind students of desired behaviors, rather than long explanations.
- **Corrective Feedback:** Some students with ADHD require brief, simple correction for disruptive behaviors. Correction should be directed at the student's behavior, not the student (e.g., "No shout-outs. Please raise your hand before answering the question" vs. "stop being disruptive!"). Provide the feedback immediately following the behavior. Provide correction in a calm manner and in close proximity to the student (Piffner, 2011). Avoid humiliating the student when correcting his behavior.
- **Options for Students:** When providing corrective feedback or redirecting the student, it is often helpful to provide the student with options. For example, "Sue, you can do the assignment now, during lunch, or after school."

Home-School Collaboration and Communication

Families are invaluable resources for teachers. Ongoing communication with their child's teacher allows parents to become familiar with classroom expectations and allows them to follow up at home. Communication also lets teachers know techniques that are working in the home setting. The following strategies are designed to increase home-school communication.

- **Daily Notes:** Make use of checklists and charts to keep parents informed of the student's progress on a daily basis. Note the effective reinforcement techniques used in the classroom.

- **E-mail:** Provide parents with an e-mail address to increase timely communication. If they do not have easy access to e-mail, provide them with telephone numbers and optimal times for calling.
- **Websites:** A homework website that provides assignments for the week is very helpful to parents and guardians of students with ADHD. Class news regarding projects and the week's instructional topics can also be posted.
- **Homework Hotline:** A homework hotline that gives the assignments for the night and also provides helpful suggestions for completing them can help families support their children's work completion.

Word of Caution

Medications are often part of the treatment plan for students with ADHD. Only medical professionals can diagnose ADHD and prescribe medications. Educators should share the behaviors they are observing in the classroom with family but refrain from suggesting medical conditions such as ADHD or recommending medications to treat them.

Conclusion

Addressing the needs of students with ADHD is complex and requires teachers to assess not only the student's unique needs but also the demands of the environment. Prevention strategies that address environmental variables should always be the first consideration when designing interventions for students with ADHD. Most successful interventions are a combination of classroom supports and strategies taught directly to students to help them become more academically and behaviorally successful.

References

- American Psychiatric Association. (2013). *Diagnostic and statistical manual for mental disorders* (5th ed.). Washington, DC: Author.
- Centers for Disease Control and Prevention. (2015). *Attention deficit and hyperactivity disorder*. Retrieved from <http://www.cdc.gov/ncbddd/adhd/facts.html>
- Greenwood, C. R., & Delquadri, J. (1995). Classwide peer tutoring and the prevention of school failure. *Preventing School Failure*, 39(4), 21-25.
- Piffner, L. J. (2011). *All about ADHD: The complete practical guide for classroom teachers* (2nd ed.). New York, NY: Scholastic.
- Scheuermann, B. K., & Hall, J. A. (in press). *Positive behavioral supports for the classroom* (3rd ed.). Boston, MA: Pearson.

U.S. Department of Education. (2006). *Teaching children with attention deficit and hyperactivity disorder: Instructional strategies and practices*. Retrieved from www.ed.gov/about/offices/list/osers/osep

Wolraich, M. L., & DuPaul, G. J. (2010). *ADHD diagnosis and management: A practical guide for the clinic and classroom*. Baltimore, MD: Brookes.

Additional Resources

Resources are available for loan through the T/TAC W&M library. Visit our website at <http://education.wm.edu/centers/ttac/> for a complete listing of materials. Select the Library link off the home page and enter ADHD as the subject of your search.

This *Considerations Packet* was prepared by Denyse Doerries, June 2001, and updated by Debbie Grosser, July 2015.