Attention Deficit and Reading Instruction

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The authors wish to dedicate this fastback to Tom and Robin, Christopher and Emily, and the students and staff of the Bowling Green State University Reading Center.

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Attention Deficit and Reading Instruction

by
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Introduction

"Johnny seems to be a bright boy, but he is in a state of continual motion — out of his seat, fidgeting, talking out, off task. He is unable to follow along while someone reads from a textbook. I asked him to follow along with his finger so that I could tell he was tuning in. This helped but did not solve the problem. I still need to remind him with my finger as a cue to do this.

"Johnny often complains of noise distraction. At times he works at a table with a board divider, but I took the board down when he went for a week without using it.

"Johnny is unable to attend to or follow oral directions. For one week I told him that whenever I put on a top hat, that was a cue for eye contact and total attention. This had promising results; and when I quit wearing the hat, he continued to give better eye contact during direction time. At this point, he is making good efforts toward eye contact, but that alone is not solving his problems.

"Two recent episodes have been of particular concern:

"I worked with Johnny on a worksheet involving a map and directions. I read the directions orally and we discussed them. I then reread the directions and named two cities for him to locate on the map. He located the first and then looked at me as if he was finished. I asked him about the second city by name. Johnny said that I had asked him to find only one city.

"During a class discussion about vocabulary words, Johnny maintained eye contact with whomever was talking, and he was leaning for-
ward as he listened to the discussion. However, he then raised his hand and said that we had skipped the word we had just discussed. Three students and I had made comments about the word, but he didn’t remember any of it. He was quite adamant that we had forgotten the word.”

These comments, written by a teacher in a referral letter to the Reading Center at Bowling Green State University, capture the essence of one boy’s struggles to learn in a regular third-grade classroom.

After we received this letter at the center, we evaluated Johnny’s reading. In the preliminary interview, Johnny described his likes and dislikes about school. He stated that he “hated” detentions. When asked why he received detentions, he gave the following list of reasons:

- ramming his worst enemy into a door,
- getting his name on the board,
- missing homework assignments,
- going to the principal’s office.

When asked what he liked, Johnny said recess and math. In regard to reading, he added, “I hate reading long books.” He said that he did not have time to read at home and that he liked to spend his spare time playing computer games and Nintendo. He said that he had used the computer to write only once, when he wrote a letter about Hurricane Andrew to his uncle.

Among the formal assessments administered that day was the Woodcock Reading Mastery Tests-Revised (1987). Johnny’s reading profile showed a comprehension score higher than his scores in letter recognition and word attack. Although Johnny’s sight-word level was at the expected age and grade levels, he was generally failing to develop basic competencies in reading — especially in word attack. Further, his visual-auditory learning score — a measure of reading potential — placed Johnny in the first-grade range, rather than in the third-grade range of functioning.

In speaking to Johnny and his parents, it became apparent that his inability to focus his behavior and maintain attention in school was a
major detriment to learning. In speaking about their son, Johnny's parents said that he did not have any friends, that he talked excessively, and that he was unable to work without constant supervision. But they also said that they thought he would outgrow his disruptive behavior.

Johnny was referred to a local family-practice doctor who is knowledgeable about attention deficit. Medical treatment was initiated, which included prescribing methylphenedate (Ritalin). At the same time, Johnny began working in an intervention program at school and at the Reading Center.

Johnny's case is not unusual. Classroom teachers encounter children with similar problems every year. Attention deficits place many children at risk of school failure. Incidence of attention deficits may occur in as many as 20% of school-age children (Shaywitz and Shaywitz 1991).

This fastback looks at attention deficit disorder (ADD) specifically from the standpoint of teaching reading and offers strategies that may help teachers and parents work more effectively with youngsters whose learning to read is hampered by ADD. For a general treatment of ADD, readers can turn to fastback 354 A Primer on Attention Deficit Disorder by Beth Fouse and Suzanne Brians.
Defining Attention Deficit Disorder

In making diagnostic criteria accessible for teachers and other educators, checklists and survey instruments generally address four factors of ADD behavior: inattention, disorganization, motor hyperactivity, and impulsivity. The following summary of attention deficit symptoms is drawn from various sources (Barkley 1991; Lahey and Carlson 1991; Levine 1992).

Symptoms consistent with inattention and disorganization often cause children to underachieve and may even lead to failure of academic subjects. These include:

- difficulty following through on instructions;
- difficulty organizing things — does things the hard way, lacks a personal organizational system;
- difficulty finishing tasks;
- often loses things;
- easily distracted;
- does not seem to listen;
- needs a lot of supervision;
- difficulty concentrating/sustaining attention (excessive personal effort);
- feels “bored”;
- exhibits superficial concentration and inactive (passive) learning;
- inconsistent performance;
- careless errors.
Symptoms consistent with hyperactivity and impulsivity often affect a child’s self-esteem and behavior records, because they can cause the child to get into trouble and lose privileges. These symptoms include:

- excessive running and climbing,
- difficulty playing quietly,
- talks excessively,
- acts before thinking,
- calls out in class,
- difficulty staying seated,
- fidgets and squirms,
- interrupts or intrudes,
- difficulty waiting for turn,
- blurts out answers,
- always on the go — appears driven,
- excessive need for high motivational intensity of stimuli or experience,
- actions that alienate peers.

Simply stated, an attention deficit is a breakdown in the attentional regulatory system. In terms of learning to read, such a breakdown can result in low achievement grades and erratic performance. ADD also may be symptomatic of other disorders, such as dyslexia (Elbert 1993). Children who exhibit attention deficits may fail to learn efficient reading skills as well. Further, as noted by Fouse and Brians (1993), attention deficits can coexist with a wide range of intellectual levels, from disabled to gifted. Although most texts will now cite the DSM-IV diagnostic criteria for attention deficit, Levine (1992) provides a useful model of attention deficit as a systematic failure of one or more of the following attentional systems. According to Levine, a breakdown in any of these systems (or any combination) can adversely affect reading development and achievement:

1. Mental Effort. For some students, maintaining an alert mental disposition in the classroom is difficult because of the sheer amount
of effort it takes for them to pay attention. These students may appear alert before school or between classes; but when instruction begins, they appear fatigued or “lazy.” In reading classes, they may drift off during sustained silent reading or lose their place when following along in reading groups. For these students, the seemingly simple act of trying to pay attention can lead to sheer exhaustion and classroom burnout.

2. Planfulness. Many students approach the school day with the ability to internalize its structure. They flow from class to class following directions as appropriate without any apparent difficulty. Given a set amount of structured time, such as a “homework period” or study hall, they are able to develop a personal “plan of action.” However, students who exhibit attention deficit tendencies may have difficulty planning. They may face a 40-minute study hall with no idea of how to spend the time. Given 15 minutes for silent reading, they may read two or three pages and spend the other time on any number of distractions or wasted attempts at staying on task.

3. Selectivity. A child’s school day is full of messages — from teachers and other adults, from classmates, and from the environment. In order to learn effectively, students must be able to select appropriate messages. When teachers are teaching, they typically become the important focus for students in the room. When classmates read aloud, the rest of the class is generally expected to be a willing audience. However, during reading class, as during the entire day, there always will be distracting stimuli for the attention deficit student — from other teachers teaching nearby to noisy radiators or other students discussing or reading in another part of the classroom. Children with attention deficits frequently lose reading instruction because they lack the ability to select the appropriate focus from all available stimuli.

4. Tempo Control. When children come to school, they are exposed to and must learn various appropriate classroom behaviors. Many of these behaviors are tempo-related. Examples of physical, tempo-related behavior include waiting in lines, sitting still in desks, moving around classrooms, and changing classroom locations (especially in upper
grades). There also are intellectual tempo-control demands placed on students. For example, students are required to complete set amounts of work within a prescribed time. When students lack tempo control, they may fidget in their seats, twist their hair, or generally be "on the move."

5. Self-monitoring. Many educators believe that learning cannot take place unless a learner is able to self-monitor. As children read directions on worksheets or engage in silent reading, they must develop appropriate self-checking or metacognitive behavioral strategies. This requires the ability to focus on one's own reading in order to know when comprehension is breaking down. A child who does not effectively self-monitor may read poorly in oral reading, have difficulty following written directions, or otherwise make careless errors. In classrooms where revision is a critical aspect of the writing process, these students may have difficulty finding and correcting even obvious errors.
Attention Deficits and Models of Reading

In their text, *Assessment and Instruction of Reading Disability*, Marjorie Lipson and Karin Wixson (1991) describe current models of the reading process. In describing the way in which reading processes work, reading professionals have used the terms bottom-up, top-down, and interactive to describe a reader’s orientation to text.

In a bottom-up orientation, the emphasis of the reader’s cognitive processing is on the text. According to this view, in order to fully comprehend, the reader processes text in a hierarchical order as follows: First, words are physically seen or perceived by the reader (perceptual analysis). Then vocabulary is recognized by the reader (lexical analysis). Next, the reader considers the word order as it relates to vocabulary meaning (syntactic analysis); and finally the meaning is constructed by the reader (semantic analysis).

In contrast, in a top-down orientation, the cognitive emphasis begins with one’s personal meaning structure or schema. First, the reader’s experiences are tapped in preparation for reading. Next, as the reader processes print, the impact of word order (syntax) on the construction of meaning is considered. Finally, if the reader perceives a need to focus on individual words, lexical and perceptual analyses take place and individual words are isolated as required.

According to Lipson and Wixson (1991), each of these models is consistent with particular instructional approaches most often seen in elementary grade classrooms. Bottom-up instruction is typical in a
skills-based curriculum, whereas top-down models are more consistent with whole language approaches. However, most reading professionals agree that the reading process is neither exclusively top-down nor bottom-up, but is an interactive process. That is, top-down and bottom-up processing occur simultaneously. This interaction has been described by Frank Smith (1988), who says that reading always involves a combination of visual and nonvisual information. It is an interaction between reader and text. According to Smith, a reader uses personal knowledge (non-visual information) in the construction of meaning derived from print, figures, and illustrations (visual information). He argues that reading cannot take place without this interaction.

This interactive view makes the assessment of a child with attention deficits difficult. When reading breaks down in classrooms, teachers must discern whether it is the fault of perception (bottom-up orientation) or because of a lack of prior world knowledge (top-down orientation). From the bottom-up view, the reader with attention deficits may misattend to the salient features of words. Letters may be reversed or inverted, thus interfering with decoding automaticity. In reading words, the child may reverse the letter order or make impulsive guesses based on the first few initial letters. This behavior may be especially detrimental in taking standardized tests where multiple answers are written to purposely elicit such errors.

According to Levine (1987):

Students with attention deficits may have significant difficulties understanding textual materials. Their reading may be highly superficial, impulsive, and generally unfocused. They may read an entire chapter while thinking about two or three other matters and have no idea of what they have just read. Another difficulty is that careful reading may be replaced by over reliance on probability or context. Students may do too much skimming and not enough careful perusal of the subject matter. Often students with attention deficits have a tendency to impose their own ideas on the detail in the text. While this kind of dialogue can be useful and even admirable, over indulgence in the practice distorts mean-
ing. Students with attention deficits may not realize how superficial their reading is. They may equate reading a chapter with finishing it. (p. 293)

A child's reading also may be deficient because of a lack of appropriate top-down processing. Top-down processing relies on a child's personal awareness and control of his or her experiential knowledge. Many attention deficit children process world knowledge more selectively and personally than other children might. In addition, children with attention deficits usually have an overabundance of verbal information on specific topics. So when the teacher asks the student about these topics, the student actually might know too much to focus on the intended meaning of the passage. In situations such as this, specific pre-reading questions may be more beneficial than more divergent questions. Further, when teachers note specific problems in passage reading, providing during-reading, line-by-line checks may be useful.
ADD Characteristics in the Reading Classroom

This section will review how attention deficits might affect a child’s learning in the elementary classroom. Both conventional and whole language classrooms will be described.

*Conventional Classrooms.* In many elementary classrooms, the focus of the reading curriculum is a basal reading series. In these classrooms, teachers often use ability groups. Students in conventional classrooms frequently spend time doing seatwork, completing exercises from workbooks or skill packets. Although the students participate in groups, there may be little collaboration. Evaluations in reading are based on the completion and correctness of the written assignments. Tests that accompany the basal series also are used for evaluation.

For a child with attention deficits, this type of learning environment might be beneficial or detrimental, depending on the individual. Some ADD students benefit from:

- Consistent materials — the same workbook and text all the time.
- Structured daily schedule — students struggling to stay organized benefit from a predictable schedule.
- Consistent instructional methods — students can focus more readily on content.

However, a conventional classroom also might present special challenges to a student with attentional difficulties because of:
• little possibility for matching materials to an individual's interest,
• fewer opportunities for one-on-one interaction,
• little opportunity for experimentation with new or alternative learning methods.

Whole Language Classrooms. In a whole language classroom, the reading curriculum is partially focused on the interests of the students and on real-life concerns, events, and needs for reading and writing. Emphasis on finding meaningful ways to use language translates into a student-centered workshop environment in which students are encouraged to explore language individually, in small groups, and as a class. Collaboration is encouraged. Students regularly confer with their teacher to get individual assistance, set personal goals, and evaluate progress. Evaluation is facilitated by the compilation of various types of portfolios or collections of student work.

As in the conventional classroom environment, the ADD student may find either benefits or detriments, depending on the individual's attention deficits. Some students benefit because:

• Student interest shapes the curriculum.
• The workshop format allows for very regular one-on-one time between student and teacher.
• The whole language classroom emphasizes student interest and expertise, and so students have more opportunity to discover and focus on strengths.

Negative components of the whole language classroom for a student with attention deficits may include:

• A greater need for self-monitoring.
• Variations in the classroom may impede the ability to focus on content.
• A constantly changing list of “required” materials for class work and homework may present an organizational challenge to the ADD student who is striving to increase planfulness.
In each type of classroom, one more conventional and one more holistic, a child with attention deficits might find both successes and challenges. Because each child and each classroom is unique, there will be no definitive answer to modifying instruction for children with attention deficits. Every class has particular components that have the potential to trigger attentional breakdowns.

Consider the following scenarios in which students and teachers interact in common classroom situations:

Scenario 1. Robin is a child in Mr. Smith’s second-grade classroom who is receiving low grades in reading. She has difficulty staying focused on instruction during reading and frequently is reminded not to talk to her neighbors during seatwork. Seatwork usually entails the skill papers from the series workbook, a free-writing assignment, or other homework (which can be completed in school). Robin often fails to complete her seatwork assignments on time and turns in work with many careless errors. At home, Robin likes to read to her stuffed animals from her collection of Box Car Children books.

Mr. Smith is a teacher with six years of experience, is well organized, and sets limits for behavior. He teaches reading using a recently published basal series. He has three reading groups and provides individual instruction as needed for some children. He gives students the opportunity to move to reading or listening centers when their seatwork is completed. Mr. Smith reads to his students every day after lunch and provides time during the week for creative writing. He has tried cooperative learning but finds it difficult because, as he states, “second grade is too young for that.”

Robin is receiving low grades in reading in part because of her performance on seatwork assignments. Therefore, one goal should be to improve her seatwork. Since Robin’s excessive talking and lack of focus during seatwork seem to be a problem, several possible ways to help her maintain attention should be considered. Mr. Smith might discuss with her privately that when she talks to friends during seatwork, she
may not finish her work or may hand in hurried assignments that contain the careless errors. He might help Robin to understand that maintaining a personal focus in seatwork is one critical personal goal.

Some teachers might be tempted to move Robin away from her classmates, perhaps to the side of the teacher’s desk or even to the hall. But these steps may not be effective in this case. Instead, because Mr. Smith has listening centers in his classroom, he might also create seatwork centers using three-walled study carrels where students can go when they feel a need to concentrate better. In Robin’s case, she might receive positive reinforcement for using a carrel during seatwork, thus maintaining self-control during this instructional time.

Mr. Smith also might help Robin by providing pre-established signals to help Robin monitor her off-task behavior. For example, if she is talking during work time, he might quietly ask Robin, “What time is it?” He could further reinforce appropriate behavior during seatwork by walking around the classroom between reading groups to monitor his students’ work and so intercept problems.

In evaluating Robin, Mr. Smith might place an emphasis on correctness rather than completeness. One system that many teachers use is a split grading system in which one grade is given for correct items and a second grade is given for completing the work. Robin also might be encouraged to self-monitor her behavior.

**Scenario 2.** Tom is a fifth-grader in Ms. Lopet’s class who is receiving low grades because of missed assignments. Tom appears to be very disorganized. He shifts from one uncompleted task to another. He often loses materials needed for school, such as pens, notebooks, and journals. Tom seems to lack a personal system for schoolwork, though he says he likes being in Ms. Lopet’s class and especially likes learning about animals in science.

Ms. Lopet is an experienced fifth-grade teacher. She teaches reading using literature that is incorporated into thematic units. Her classroom is divided into four discussion circles. These “groups” provide struc-
ture for writing and reading workshops, editing and discussion groups, and other team projects. Children have time during the day to explore various centers and to “work ahead” on home practice materials. Ms. Lopet reads to her children at least once a day and maintains a dialogue journal with her class. A class meeting is held weekly to discuss classroom matters, including the weekly schedule.

In order to succeed in Ms. Lopet’s class, Tom will need to be more organized because his disorganization interferes with his success. Losing assignments is only one symptom of a larger problem. The goal here is to provide Tom with a system for organizing his materials and assignments. In the short term, it may be necessary for Ms. Lopet to provide or impose such a system for Tom. Ms. Lopet may need to be a short-term “auxiliary organizer” for Tom, as suggested by Gordon (1991, p. 124). In this role, she would make sure his papers and materials are on hand. However, her goal should be to help Tom to become self-motivated so that he can independently maintain the organization that is required to be successful. In Tom’s case, part of his evaluation may need to be “grades” for being organized and having the materials he needs.

Since Ms. Lopet has weekly class meetings, she might use this time to promote awareness of these problems to the entire class without identifying Tom or other children who share his needs. On the other hand, Ms. Lopet also might consider the extent to which varying her instructional schedule may be affecting Tom’s ability to get organized. Although a flexible, class-negotiated schedule may benefit some students, it may be a detriment to Tom.
How the Reading Specialist Can Support Instruction

Children with attention deficits often require assistance in reading in addition to that provided by the classroom teacher. Levine (1992) suggests that schools give children with attention deficits opportunities for one-on-one instruction in reading. This form of instruction can be implemented in several ways.

For example, if they qualify, children with attention deficits can receive services from special educators in resource rooms for learning disabled students. They also might be seen by remedial reading teachers through Chapter 1 or other programs. Or, as is happening in many districts, children with attention deficits might be assisted by a reading specialist who works with the regular classroom teacher as a co-teacher.

According to Friend (1993), co-teaching refers to an instructional situation in which two (or more) educators contract to share instructional responsibilities for specific content (or objective) with mutual ownership, pooled resources, and joint accountability, although each individual’s level of participation may vary.

The use of two or more educators is especially helpful in the reading curriculum because students can receive individualized instruction within the regular classroom. In sharing instructional responsibilities, the reading specialist and teacher can better provide for comprehensive instruction and fair evaluation.

Several instructional models are helpful:
• The classroom teacher teaches the whole class while the reading specialist helps selected students. This model is helpful for note-taking and other tasks that require accuracy.
• The classroom teacher leads discussion while the reading specialist writes on the board. This model is effective for semantic mapping or other activities that require use of visuals.
• The classroom teacher presents the lesson while the reading specialist listens and helps ADD students stay on task. Then each teacher facilitates a small-group discussion. Finally, the reading specialist leads discussion while the classroom teacher provides support. This model is effective for directed reading-thinking activities and other traditional reading strategies.
• The classroom teacher presents a lesson while the reading specialist observes ADD students. This model is useful for evaluation of ADD students.
• Both teachers confer with selected students while most students work on assigned tasks. This model is effective for reading and writing workshops.

The reading specialist can be a major advocate and supporter for ADD children. Reading specialists can provide careful one-on-one monitoring on a consistent schedule. They can provide support and reinforcement to the regular teacher and also be a liaison between the school and other agencies.
Assessment of the Child with Attention Deficits

Children with attention deficits usually do not perform well on standardized, timed tests. Various reasons for poor performance include: time constraints, the need to maintain consistent focus for the duration of the entire test, the requirement of careful recording of answers, and lack of teacher-student interaction during the assessment.

Fortunately, in recent years the emphasis in reading assessment has shifted from formal, timed tests to more authentic measures. This shift has affected all children but truly benefits children with attention deficits. Samples of authentic methods include audio recordings of student oral reading, written responses to silent reading, and the use of running records or miscue analysis samples.

In *Strategies for the Assessment of Reading and Writing*, co-published by the International Reading Association and National Council of Teachers of English (1994), specific standards have been proposed for assessment of reading and writing. One standard says that the interests of the students are paramount in assessment. Another standard is that assessment must lead to the improvement of teaching and learning; for the most part, formal tests have little impact on instruction. A third standard deals with the fairness of assessment. For those with attention deficits, fairness implies that the testing must afford an opportunity for the best possible performance. For this reason, such authentic measures as miscue analysis are more useful than abstract "scores."
In summary, reading assessment of a child with attention deficits should be based on four guidelines:

1. Assessment should be *fair*. According to Gordon (1991, p.125) fairness is not defined by all students getting the same, but by each student getting what he or she needs.

2. Assessment should be *authentic*. Evaluation based on children's own work samples provides the opportunity for positive reinforcement.

3. Assessment should include *self-evaluation*. Children with attention deficits often lack the ability to self-monitor. With explicit practice in self-evaluation, they can be helped to make the most of this assessment practice.

4. Assessment should be *collaborative*. Students should be involved in their literacy assessment. In teacher-directed evaluation schemes, tests and grades are "done to" students. Students come to feel like victims. When teachers and students work collaboratively, this feeling can be changed.
Guidelines for Instruction

Regardless of the environment in which the student learns, there are teaching and management strategies that are helpful particularly when working with ADD students. The following suggestions for general classroom modifications are compiled from our own experience and from Busch (1993), Gordon (1991), Ingersoll (1988), and Levine (1987, 1992).

General Modifications

1. In order to avoid public humiliation, the teacher should develop a means to support the child through personal and private reinforcements. A system of unobtrusive, pre-established signals, such as a hand on the shoulder during reading instruction, can serve to help the student change behavior when self-monitoring breaks down.

2. During whole-class instruction, the teacher should remain in close proximity to the students with attention deficits. When possible, this should be done without removing the student from his or her classmates. This does not necessarily imply placing the ADD student’s desk next to the teacher’s desk.

3. When seatwork or other independent assignments are given, the teacher should divide the work into manageable amounts. For example, asking students to complete three or four small assignments (one or two pages) during the day is preferable to giving a whole packet to complete in 40 minutes. During seatwork, teachers should allow op-
opportunities to move around the classroom between activities that require intense concentration.

4. In evaluating children with attention deficits, emphasis should be placed on work samples rather than on standardized tests. The use of miscue analysis on oral reading samples is an excellent tool for ongoing evaluation. In addition, teachers should be open to other alternative assessments, such as permitting students to complete a modified test or an alternative project if the test does not seem to "fit" the student's ability to demonstrate his or her knowledge.

5. Teachers should allow students to investigate topics of interest in reading in order to develop their academic skills and capitalize on successes.

6. Teachers should keep careful anecdotal records in order to identify the best times for reading instruction. Especially with younger children, teachers should strive to provide instruction when the child is most alert and focused.

7. Through careful observation, teachers should be aware of unintentional triggers or events that seem to precipitate attentional breakdowns for a student with attention deficits. For example, calling out to the class during seatwork or silent reading may be a mild interruption to some students; but for a child with attention deficits, it may cause complete disruption and inability to resume work.

8. Another unintentional trigger may be the practice of withholding privileges, such as recess, unless work is completed. The unintended result may be to reinforce the attention deficit child's impulsive behavior or lack of close self-monitoring.

9. Teachers should provide feedback in positive terms:

   • If a number score is given, emphasis should be placed on the number correct rather than the number incorrect. For example, on a 20-item vocabulary test, "+15" or "15/20" is preferable to "-5."
   • If a letter grade is given, a short phrase of encouragement also should be provided. For example, an A might be accompanied by
“Excellent job.” Next to a grade of D, a teacher might write, “Not the best day — tomorrow will be better.”

10. For many teachers, reading aloud to the class is a daily activity. If an ADD child finds it difficult to listen, several types of accommodations can be used:

- For the child who fidgets in his or her desk, a teacher might allow children to sit on the floor on carpet squares or on an area rug.
- For the child who needs to occupy his or her hands, the teacher might allow the student to draw while listening to the story. (This might even enhance the child’s ability to visualize.)
- Older students might be encouraged to jot down notes or key words for use in later discussions or assignments.

11. In silent reading, teachers should model the use of underlining or highlighting. If necessary, ADD children should be allowed to write in their books — to take notes, to highlight, or otherwise to key into details.

12. When considering homework for an attention deficit student, collaborate with parents to set a specific amount of time for homework each night. For example, in elementary grades, 30 minutes to an hour may be appropriate. In high school, up to two hours can be expected. Once the set time for homework time is over, the student should stop — even if the homework is not finished. This may require modification of evaluation (for example, evaluating for correctness rather than completeness).

13. Students should be allowed to dictate or type longer written compositions so that they can think without being distracted by the physical task or writing. For younger children especially, the use of dictated text also can promote attention to letter/sound relationships.

14. In preparing a lesson, teachers should consider presenting material in small “chunks.” Give older students lecture outlines to enable them to listen closely instead of using all of their energy for taking notes.
15. To assist students with self-monitoring and organization, teachers should teach organizational and study skills. If possible, teachers should send a second set of textbooks to be kept at home for homework. Students with poor self-monitoring skills often find themselves ready to sit down to a homework assignment only to discover that they did not bring the proper materials home.

16. To assist with organization, teachers should provide students (and parents) with weekly or monthly calendars that contain all assignments for that period of time.

**Oral Reading and Fluency**

1. Teachers should expose ADD children to oral reading situations that require attention to accuracy and expression. For example, students might read aloud into a tape recorder, put on an aural play, use expressive characterization, or read class or school announcements. Frequent audio-recording of students reading can help them hear deviations from text. They should listen especially for substitutions, insertions, omissions, and other miscues.

2. Students should be allowed to preview or silently rehearse material for oral reading.

3. Repeated oral reading should be used to help students develop accuracy. If students have difficulty reading whole pages of text, they should be encouraged to repeat sentences or paragraphs as appropriate. As a modification of oral reading, teachers can use alternative progressions — for example, read page 1, teach page 2. Or read pages 1 and 2, teach page 3. And so on.

4. Children should be assisted in remaining on task by intermixing whole-group choral reading with individual “reading solos.”

5. During oral reading practice, the goal must be to maintain the child’s focus on reading automatically. Therefore, if a student blocks on a word, the teacher should simply pronounce the word for the student so that oral reading can continue. Specific vocabulary word-attack reteaching should take place at a later time.
6. Miscue analysis should be the primary method used to evaluate a child's oral reading.

**Vocabulary Development**

1. Given the verbal ability of many children with attention deficits, teachers can use a language experience approach to develop voiceprint matches to vocabulary items.

2. Teachers should use such visual methods as semantic mapping, semantic feature analysis, or venn diagrams to develop relationships between words.

3. Fill-in-the blank, multiple-choice, and matching exercises should be avoided when teaching for vocabulary development, as they often encourage impulsive guessing in order to complete the exercises.

4. In order to make vocabulary exercises meaningful, teachers should use vocabulary exercises that include sentence writing or completion.

5. Teachers should give specific attention to vocabulary used in directions and model the vocabulary using guided practice.

6. Students should be encouraged to collect special words in word banks (card decks) or personal journals.

7. Teachers who use word searches should prepare them with words written left-to-right or top-down. Diagonal words and backwards words should be avoided because they may impair the focus of the word and indirectly reinforce reversals and inversions.

8. If scrabble games are used, teachers should emphasize word choices rather than points. In using such games, teachers should stress collaboration to avoid frustrating individual students.

9. In order to provide for transitions to content area subjects, teachers should preteach vocabulary that specifically deals with content processes, especially mathematics.

10. In assisting students with phonics instruction, teachers should use word families to teach letter-sound relationships. For example, the
_at family contains *cat, chat, bat*, and so on. Also, teachers should emphasize meaningful activities, especially in conjunction with student writing or language experience dictation.

11. If computers are used, teachers should select software that focuses on the substance of vocabulary development rather than video reinforcement.

**Comprehension**

1. Students should be taught how to apply self-monitoring metacognitive strategies. For example, teachers could help students choose the most appropriate sentence:

   a. Christmas trees are green.
   b. Christmas trees are giant.
   Why is one more appropriate than the other?

2. Teachers should prepare paragraphs that contain one or two nonsense words. Students then are asked to provide logical choices to replace the nonsense words.

3. In reading extended texts, teachers should use prereading focus devices, such as graphic organizers or K-W-L charts.

4. If questions are to be answered after reading, then teachers should teach students to read the questions before reading the text.

5. In providing questions after reading, teachers should avoid multiple-choice, fill-in, or matching. Rather, they should provide questions that require complete and expressive answers.

6. If partner reading is used, teachers should encourage students to quiz each other by taking turns asking and answering questions.

7. Questions during reading should emphasize prediction so that the focus for reading is maintained.

8. As an alternative to postreading questioning or stories, students can be given the opportunity to illustrate or sketch scenes from the story. Or students can retell or act out story parts using creative drama or puppets.
9. Teachers can use writing activities in lieu of questions. Sample activities might be letters in the voice of a character, different endings for the story, or poetry in response to reading.

10. If written tests are used to evaluate reading, teachers should allow students to write the questions to be included on the test.

**Attitude and Motivation**

1. Teachers should allow students to select their own reading materials whenever possible.

2. Opportunities should be provided for students to develop expertise through personal research.

3. Students should be allowed to create bulletin boards for classrooms, libraries, and halls.

4. Teachers should read to students every day and from various genres.

5. Students should be allowed to read for specific periods in order to get certain privileges, such as a special clothes day (jeans day), homework free pass, television viewing at lunch, computer time, and so on.

6. Students should be allowed to read to special people in school, such as the principal, secretaries, and others.

7. If reading incentives are used, teachers should emphasize minutes of reading rather than completion of books. Book-buddy programs could be set up in which older and younger students take turns reading to each other.

8. Computer software, especially CD-ROM applications, can promote extensive research and reading.

9. Teachers should not take away recess privileges as a consequence for failure to do class work. And they should avoid any public humiliation with regard to reading.
Whatever Happened to Johnny?

With appropriate instruction and management, children who exhibit attention deficits can learn in regular classrooms. This is underscored most appropriately by Busch (1993), who writes:

The basic assumption that needs to be made when designing adaptive techniques is that we can accommodate the child's difficulties with short attention span and impulsivity, and teach to the child's strengths and abilities. (p 17)

This fastback began with the story of Johnny, the ADD youngster who was referred to the Reading Center. As we wrote this manuscript, it had been more than a year since we last saw Johnny in the Reading Center. He now has finished grade four. He recently visited us and went to lunch with the clinicians who worked with him. Before he left, he gave us a copy of his latest report card and proudly pointed to the B he received in reading. His father said that he still takes a small amount of Ritalin, but his joy in learning is what sustains him the most.

Students with attention deficits can succeed if teachers understand how to help them deal positively with those problems and overcome their limitations.
Resources

Resources for Educators


Resources for Parents


## Resources for Children


## Parent Support Groups and Organizations

ADDA Support Group Hotline
1-800-487-2282

ADDA Warehouse
300 N.W. 70th Avenue, Suite 102
Plantation, FL 33317
1-800-233-9273
Attention Deficit Disorders Association (ADDA)
8091 S. Ireland Way
Aurora, CO 80016
(303) 690-0694

C.H.A.D.D. Children with Attention Deficit Disorders
499 N.W. 70th Avenue, Suite 308
Plantation, FL 33317
(305) 587-3700

Challenge: A Newsletter of the Attention Deficit Disorder Association
P.O. Box 2001
West Newbury, MA 01985
(508) 462-0495

Hawthorne Educational Services, Inc.
800 Gray Oak Drive
Columbia, MO 65201
(314) 874-1710

Learning Disabilities Association of America
4156 Library Rd.
Pittsburgh, PA 15234
(412) 345-1515

International Reading Association
800 Barksdale Road, P.O. Box 8139
Newark, DE 19714-8139

National Council of Teachers of English
1111 West Kenyon Road
Urbana, IL 61801-1096.
References


Phi Delta Kappa Fastbacks

Two annual series, published each spring and fall, offer fastbacks on a wide range of educational topics. Each fastback is intended to be a focused, authoritative treatment of a topic of current interest to educators and other readers. Several hundred fastbacks have been published since the program began in 1972, many of which are still in print. Among the topics are:

- Administration
- Adult Education
- The Arts
- At-Risk Students
- Careers
- Censorship
- Community Involvement
- Computers
- Curriculum
- Decision Making
- Dropout Prevention
- Foreign Study
- Gifted and Talented
- Legal Issues
- Mainstreaming
- Multiculturalism
- Nutrition
- Parent Involvement
- School Choice
- School Safety
- Special Education
- Staff Development
- Teacher Training
- Teaching Methods
- Urban Education
- Values
- Vocational Education
- Writing

For a current listing of available fastbacks and other publications of the Educational Foundation, please contact Phi Delta Kappa, 408 N. Union, P.O. Box 789, Bloomington, IN 47402-0789, or (812) 339-1156.
Phi Delta Kappa Educational Foundation

The Phi Delta Kappa Educational Foundation was established on 13 October 1966 with the signing, by Dr. George H. Reavis, of the irrevocable trust agreement creating the Phi Delta Kappa Educational Foundation Trust.

George H. Reavis (1883-1970) entered the education profession after graduating from Warrensburg Missouri State Teachers College in 1906 and the University of Missouri in 1911. He went on to earn an M.A. and a Ph.D. at Columbia University. Dr. Reavis served as assistant superintendent of schools in Maryland and dean of the College of Arts and Sciences and the School of Education at the University of Pittsburgh. In 1929 he was appointed director of instruction for the Ohio State Department of Education. But it was as assistant superintendent for curriculum and instruction in the Cincinnati public schools (1939-48) that he rose to national prominence.

Dr. Reavis' dream for the Educational Foundation was to make it possible for seasoned educators to write and publish the wisdom they had acquired over a lifetime of professional activity. He wanted educators and the general public to "better understand (1) the nature of the educative process and (2) the relation of education to human welfare."

The Phi Delta Kappa fastbacks were begun in 1972. These publications, along with monographs and books on a wide range of topics related to education, are the realization of that dream.