To my son, Ken,
a caring pediatrician and exemplary teacher,
with admiration and affection.
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Carol Lyons has given us a book that is both accessible and fascinating. Two topics that are often overlooked or avoided by educators are the neurological basis of learning to read and write and the emotional underlay and overlay of the young child’s learning. In Carol’s wonderful examples we see how children’s neurological impulses work with their strongest feelings to solve the challenges of learning. Her explanations of complex issues are clarified by brilliant accounts of young learners interacting with parents or teachers who seem to understand developing minds. I think readers will not only be challenged to think about brains and emotions but also will never again feel comfortable leaving them out of their thinking.

Important questions are explored in an easy-to-read text that is clear, flows well, and yet explains some tough concepts. How does the brain grow and function? You will remember the account of the button jar! As Patty tries to write her name, as Charles masters a simple set of words, and as Kevin tries valiantly to break “basketball” into three syllables, we begin to understand the developing minds of these students.

What groups of students concern us and how can we create social environments to help them achieve their full potential? In particular, how do developing minds become literate? The book discusses unmotivated students, low-progress students, students classified as learning disabled, students with attention deficit disorder, and language-delayed students.

What do teachers need to understand about these things to create effective practice? How can we make the most of what the neuropsychologists and medical researchers are finding out? And what does it take to change teachers’ minds? Or their practices?

This delightful text should be read from cover to cover. Enjoy the things that are familiar to you and slow down to think about what is not familiar. Does it address some problems you recognize? Where do you agree and disagree? I suspect it would be easy for a reader to attribute the success of many of Carol Lyons’ children to the “normality of the child,” but the credit should go to the inspirational insights of the teachers and parents who are described as they worked with the children.

The author opens up the discussion for classroom teachers, psychologists, educational psychologists, school psychologists, neuroscientists, and brain researchers. Teachers in early intervention and those who work with learning disability and dyslexia will all recognize the relevance of this book for their work. Doctors and social workers should read it and consider recommending it to some of the families they work with.

There will always be some children who cannot make it without supplementary individual instruction. This will be most economically provided in the early stages of learning something. Rather than let them fall behind their peers
we must find ways to accelerate children’s learning, so that they catch up and join in with their successful peers. Better classroom education for the majority will never eliminate the need for individual teaching for some learners to acquire basic reading and writing skills.

Carol Lyons addresses a perpetual problem that will never go away in any education system, anywhere. There is a need to make a continuous supply of catch-up education available as a matter of course wherever children are in schools. We have done this with speech therapy for decades but have only recently begun to do this for literacy learning, and it is working well. Every child must be given the tools they need to succeed in later education, and sometimes that means giving individual instruction. And effective individual instruction of children with diverse needs can never stem from “a set of instructions for everyone to follow.”

How can we best address the literacy learning problems of the lowest-achieving children? In particular, how can we deal with the raw anger, or intense fear, or stubborn resistance of the children who do not want to fail or comply? Teaching manuals do not tell the parent or teacher how to handle these emotions. Carol’s examples are superbly chosen to show persistence and support from teachers who encountered such negative situations. How did Carol deal with the emotions of the thirteen older boys labeled LD and placed in a second-grade transition class, who responded to her opening request as their new teacher to take their seats “. . . soon there were thirteen boys walking in a circle on top of their desks, laughing and singing a rap song?” From that starting point she constructed thirteen favorable outcomes!

From reading this book it is easy to see why first-wave early intervention fits so well as an essential piece for producing two outcomes: (1) removing any literacy problems for most low achievers; and (2) helping identify students with a continuing need for learning that is adjusted to their several handicaps. This must continually be explained to a literate society. When early intervention does its job well, it is not clear to new leaders in education that there is any reason to support the successful endeavor. By its own efficiency it makes the problem invisible. As a result, the problem rapidly slips down on the agenda and risks falling into oblivion. This book will help raise the profile for what it is that we have to provide to get all children off to a good start in education.

Are there dangers in introducing teachers to a readable version of some insights from neurological science? Imagine, for example, the talk behind Reading Recovery’s one-way screen. “Look, she’s making him repeat it to strengthen the myelination of the pathways!” Carol Lyons’ writing should not lead to that. She does a masterly job of introducing teachers to the valid concepts, categories, language, and arguments to do with the brain’s control of what readers do.

The teaching described in the illustrative examples is reader friendly and it all looks easy. Adults may have to understand an elaborate argument, but that understanding could lead parents or teachers to a simple change of direction in practice. The illustrative examples show what changes occur. They are not performances to mimic, they cannot be captured in some PR slogan, and they cannot be listed as ten graded steps to success. Yet the messages in this book will encourage parents and teachers to work effectively alongside learners. I believe that deeply committed and questioning educators will ask, “Why haven’t we discussed these topics before? This is so helpful.”

Marie Clay
began thinking about the ideas presented in this book while I was teaching third- and fourth-grade children from many different cultural backgrounds on an army base during the Vietnam War. These experiences, followed by another two years teaching poor, inner-city students on the East Coast, provided the impetus for writing about how best to teach children who struggle to learn. But it was my doctoral work at Ohio State University in the early 1980s that convinced me that until teachers had a better conceptual understanding of how children think and learn and the neuropsychology of learning, they would not come to fully understand what to do to facilitate learning, why it is so important, and how to develop rationales for their decision making to guide their practice.

I am grateful to two Ohio State University emeritus professors: Marlin Languis, professor of early childhood and science education and director of the Brain Behavior Laboratory; and Philip Clark, professor of psychology, who introduced me to the neuropsychology of learning and supported my research throughout my doctoral program. They helped me learn how to think about the mind and learning and listened, challenged, and encouraged my thinking. They also provided me with opportunities to start pursuing ideas juxtaposing brain mechanisms of learning, the relationship between cognition and emotion, and learning to read and write.

I am also grateful to emeritus professors Charlotte S. Huck, who helped me to understand the importance of emotion in learning and response to literature, and Martha L. King, whose interest and research in language development influenced how I thought about teaching and learning. Special thanks also goes to Marie M. Clay, whose exciting, visionary, groundbreaking research that began in 1960s and continues today has contributed significantly to both the theory and the practice of teaching children to read and write. Her thoughtful and challenging discussion about the ideas presented in this book informed my thinking and research.

I owe a great debt of gratitude to the following Reading Recovery and classroom teachers for sharing their reasoning, experiences, and reflections while working with struggling students: Gail Breslin, Blue Hill Consolidated School, Blue Hill, Maine; Kathy Hardman and Maryann McBride, Prince George’s County Public Schools, Upper Marlboro, Maryland; Karolyn King, Southwestern City Schools, Grove City, Ohio; Cheri Slinger, Upper Arlington City Schools, Upper Arlington, Ohio; Carla Soffos, The University of Arkansas at Little Rock; Rose Mary Estice, Mary Fried, Emily Rodgers, The Ohio State University, Columbus, Ohio; and the late Sue Hundley, Lesley University, Cambridge, Massachusetts. These remarkable teachers offered insights, inspiring models of teaching practices, and suggestions for how to effectively work with the most difficult-to-teach students. I have learned so much from their work.
I would also like to thank the children in the lessons and stories described in this book. They have taught their teachers and me more than they will ever know. The children’s and teachers’ struggles and successes, as revealed through many real-life experiences, speak volumes.

Special thanks goes to Ken Lyons, M.D., for giving me so much enjoyment during the first five years of his life and for agreeing to let me write about it. Ken's careful editing of the neurology sections of this book and Marie Clay's motivating comments while reading early drafts of the manuscript were helpful and encouraging. I am also indebted to Rose Mary Estice, Mary Fried, Susan Fullerton, and Gay Su Pinnell for their comments, perceptive insights, interest, and enthusiastic responses to chapter drafts.

I wish to thank the following RR teacher-leaders for providing the photos for this book: Debra Duncan, Kathy Hardman, Maryann McBride, Beverly Wells, and Debby Wood, Prince George's County Public Schools, Upper Marlboro, Maryland; Betty Tompkins, Charles County Public Schools, LaPlata, Maryland; Paula Conner, Liberty Union-Thurston Schools, Baltimore, Ohio; and Phylis Amicon, Wood County Educational Service Center, Bowling Green, Ohio.

I was fortunate to have the opportunity to work once more with the supportive, skilled, and creative editorial staff at Heinemann. I am grateful to my editor, Lois Bridges, who always provides wise counsel and responds immediately to every concern or question. Production editor Elizabeth Valway's artistic instincts, insights, and attention to detail facilitated the production process and made it an enjoyable experience. Karen Clausen, the editorial assistant, helped immeasurably, making sure that the manuscript was ready for production. Finally, I would like to thank editorial director Leigh Peake for her continued leadership and commitment to excellence.

As always, I want to express love and appreciation to my family and thank them for their continued support, especially Fran and Ken Lyons and my mother, Elizabeth Mueller. I would also like to thank my sisters, Barbara Caverly and Jan Humes; my brother-in-law, Dave Caverly; my niece Tracy Busse and her husband, Aaron; my niece Cori Caverly; and my nephews, Mike Caverly and Matt Humes, and my son Ken, who provided some of the examples and photographs in this book.

In addition to the researchers in neuroscience, learning, reading, writing, learning and reading disability, early childhood, and effective teaching from whom I have learned so much, I have also learned from extensive reading of the literature in teacher education. I would like to thank all of the scholars whose work is referenced here.

A final word of appreciation goes to the thousands of classroom, learning disability, special education, and Title 1 teachers; teacher-leaders; and literacy coordinators throughout the world who continue to work daily with students who struggle to learn to read and write. Your efforts are seldom known, recognized, or appreciated, but the children you reach and teach will be forever thankful, for you have prevented them from experiencing a lifetime of frustration and reading failure. On behalf of all the struggling children you have taught to read and write and their parents and families, thank you for making a difference in their lives.
Most children learn to read and write with relative ease and accomplish this feat by the end of first grade. These children become self-regulated early on and learn from their own attempts to read and write. For other children, however, this is not the case. These children generally fall into two groups.

The first group includes the lowest-achieving 20 percent of children in any first grade in a school. As discussed in Chapter 6, these children have reading difficulties, and they require specialized individual daily instruction by a well-trained teacher to read as well as the average students in the classroom. Patty, Charles, Collin, Kevin, and Alex, described in the last chapter, fell into the lowest 20 percent of first-grade children in their respective schools. What made these children unique is that they were the very lowest achieving of the bottom 20 percent of students in their school and considered by the expert teachers as the hardest to teach. Despite the fact that these five children entered first grade with the lowest literacy knowledge and repertoire of skills, they made accelerated progress and were all reading as well as the average students in their respective classrooms by the end of first grade.

The second group of children who find learning to read and write difficult are classified learning disabled (LD). Some of the LD students may also have an attention deficit disorder (ADD) and/or have this disorder with hyperactivity (AD(H)D). These children may be in first grade until space becomes available for learning disability placement. Three of the first-grade children described in this chapter fell into this group. Bobby was classified LD and AD(H)D, Collin (whom you met in the last chapter) was classified LD and received both LD service and occupational/physical therapy, and Tommy was
considered developmentally handicapped (DH). Two twelve-year-old LD students who were placed in a transitional second-grade classroom are also the focus of this chapter.

Though it was not easy, the expert teachers featured in this book taught the five children how to read and write in less than five months. They had not only developed the knowledge, skills, and tenacity to accomplish this remarkable task, they were able to convince the children, classroom teachers, and parents that five labeled children could learn to read and write as well as their classmates. In this chapter, I (1) provide an overview of the learning disabilities field and attention deficit disorder; (2) discuss the emotional and cognitive behaviors of students labeled LD and AD(H)D; (3) discuss critical teacher and student interactions that help them learn to read and write; and (4) provide recommendations for teaching “labeled” children to read and write.

Learning Disabilities

Three terms are generally used interchangeably to discuss children who have reading difficulty: learning disability (LD), reading disability (RD), and dyslexia. There are as many definitions and interpretations of these terms as the number of people who use them. For example, dyslexia is a label oftentimes used for seriously disabled readers whose disability occurs as the result of a neurological defect that is either genetic or induced by minimal, nonobservable brain trauma (Ellis 1984). But, as Goldberg, Shiffman, and Bender (1983) and Vellutino (1979) point out, many of the same neurological hypotheses used to describe dyslexia have been offered to explain students labeled learning disabled and reading disabled. Some authorities in the learning disability field (Ysseldyke and Algozzine 1983; Clay 1987; Coles 1987, 1998) argue that the term learning disability defies definition. Today there is still no universal agreement among physicians, psychologists, or teachers on how to classify and diagnose the constellation of problems that fall under the umbrella term learning disability.

Since there are no hard and fast rules about how to define learning disability, state department and school district policies for identification and classification vary widely (Lyons 1995b). The terms and definitions have one thing in common, however, and that is the assumption that students have something wrong with them, a deficit that may be organic in nature. The deficit is generally the result of underlying abilities such as perceptual, language, or memory problems (Spear-Swerling and Sternberg 1996).

Learning Disability Assessment

Documentation of a student’s learning disability is crucial to his being entitled to receive specialized services, accommodations, or treatment. Evidence of a learning disability is dependent on what tests are used for diagnosis and how school psychologists interpret the results. Large-scale studies of the underlying abilities tests administered to determine if students are LD revealed that the tests lacked reliability and validity; for example, the text may reveal that a child has an auditory or visual perception problem today and it will not be evident one month later (Coles 1987, 1998; Vellutino 1979). Moreover, a student who is labeled LD in one school district may move to another school district within the state during the same year, receive LD testing, and not qualify for services (Lyons 1994a; Lyons and Beaver 1995).

Batteries of standardized assessments identify various factors that may be contributing to the reading problems. The factors are frequently referred to as correlates of reading disability because the presence of difficulties in any of these areas is correlated with poor reading performance. Generally speaking, psychologists consider four factors when discussing reading and learning disabilities: (1) physical development, (2) cognitive development, (3) language development, and (4) social and emotional development. When one or more of these factors is strongly lacking, the student is considered at risk for school failure (Snow, Burns, and Griffin 1998). However, there is no research that shows that the presence of a high correlation among the factors ensures causality (Coles 1987, 1998). In some cases, difficulties in these areas may account for or contribute to a reading problem, but in other cases they will be ruled out as playing a meaningful role in the reading disability.

Furthermore, while acknowledging the role of social and emotional development in learning to read is commendable, there is little evidence
that classroom and special education teachers are accommodating this need (Allington 2001). But one thing is certain. Once diagnosed learning disabled, most children have the “deficit” for life, and there is little chance that the problem will be corrected permanently. Moreover, the longer students struggle, the more compounded the reading problem, and the further behind their classmates they fall (Johnston and Allington 1991; Snow, Burns, and Griffin 1998).

Learning Disability Services
Most educators believe that the best way to work with children considered reading disabled or learning disabled is to administer a specific battery of standardized tests to pinpoint the reading problem. Once the processing problems are identified (e.g., phonemic awareness, comprehension, word recognition, vocabulary), teachers are required to focus instruction in the target areas. Often times consumable commercial kits designed to remediate targeted deficits are purchased for teachers to use.

Proponents of standardized tests argue that the tests improve teaching and learning. I believe the opposite is true. Standardized tests have a negative impact on students’ learning and do not improve teaching. Since state-mandated standardized tests have been administered to students (including children labeled learning disabled) in elementary and middle schools in Ohio, there have been dramatic changes in teachers’ practice. Classroom teachers have been required to change their instruction in significant ways so that students will score well on state-mandated standardized tests, even if their own goals are undermined. Teaching to the standardized test is the norm. Moreover, teachers and parents report that the increased pressure to score well enough to pass the test and the fear of failure overwhelms some children, especially children considered learning or reading disabled, and leads to anxiety, sleeping problems, depression, and illness. Physicians also report increased symptoms of anxiety as well during “testing months.”

This adverse impact on parents, teachers, and children is not surprising. As reported in Chapter 4, anxiety is a full-body physiological and psychological response to a stressful situation. The higher the stakes, the more anxious the children, parents, and teachers.

Attention Deficit (Hyperactivity) Disorder
Attention deficit disorder (ADD) is a special education category used to classify students with cognitive and emotional problems of distractibility (inattention) and poor impulse control, with or without hyperactivity (AD(H)D), that interfere with learning. The hyperactivity involved in AD(H)D may stem from difficulties in restraining impulses (Mate 1999). It is believed heredity plays a factor in ADD, and may be due to some form of neurological dysfunction related to incomplete development of pathways in the cerebral cortex and between the cortex and lower regions of the brain (Mate 1999). Attention deficit (hyperactivity) disorder also needs to be understood in sociological terms; that is, the student’s difficulty in responding to the expectations and environmental demands of home, school, and community (Weaver 1994).

Unlike a learning disability, which is identified by using standardized tests, physicians, parents, and teachers diagnose AD(H)D through observation in naturalistic settings. The observers document the degree to which the individuals are able to cope with the demands of everyday life that occur within and outside of the classroom (Weaver 1994). Matthew, the unmotivated child discussed in Chapter 5, was diagnosed as having AD(H)D. Today he is a productive, self-employed adult who has a tremendous amount of energy and stamina. He has not outgrown the disorder but has learned to accept and cope with it.

Gabe Mate, a physician and psychotherapist, and his three children have all been diagnosed as having attention deficit disorder. Mate (1999) argues that the first step to helping children with AD(H)D is to discard the medical model and the notion that medication is the answer. He suggests that instead of controlling students’ behavior, which is counterproductive, the focus should be on supporting children’s active involvement in successful learning, which in turn improves their behavior in school. Some of the techniques used by Matthew’s parents and teachers, discussed in Chapter 5, have helped AD(H)D children learn to cope with their condition and alleviate or circumvent learning difficulties.

The sociocultural perspective postulated by Vygotsky (1978) emphasizes the importance of positive teacher and student interactions within
the learning environment. This perspective views the learner in context, taking into account the learner’s strengths, not weaknesses. Teachers who hold a sociocultural perspective support the social, emotional, and cognitive dimensions of learning and provide the kind of experiences children need to construct new understandings and develop the skills necessary to become proficient readers and writers. Effective teachers know how to shape the learning environment to promote students’ strengths, meet their needs, and, by observing their responses, direct their actions and reactions. The expert RR and learning disability teachers featured in this chapter have acquired these abilities.

Stories of Successful Students

The classroom teachers, parents, and even the students thought it couldn’t be done. The idea that three children who were thought to be LD, AD(H)D, and developmentally handicapped (DH) could learn to read as well as the average children in first grade by the end of the year seemed impossible. The RR teachers, on the other hand, believed they could do it, and they did. They had the essential insights and skills to plan and implement an intervention program to support the emotional and learning needs of these AD(H)D, learning disabled, and developmentally handicapped children.

Bobby’s Story

Bobby was diagnosed learning disabled (LD) by a school psychologist and an interdisciplinary team of district-level professionals prior to grade one. Physicians at Children’s Hospital diagnosed him as having an attention deficit disorder (ADD) with hyperactivity (H). At the end of kindergarten Bobby was the lowest performing student in his class. His kindergarten teacher recommended retention so that he would have time to mature, but his parents objected because he was already bigger than the rest of the children in the class.

Bobby hated coming back after the summer vacation to start first grade and he didn’t mind if everyone at home or in school knew it. Scores on the Observation Survey of Literacy Achievement (Clay 1993a), administered during the first two weeks of school, placed Bobby as the lowest achieving of the 110 first-grade students in his school (Figure 7–1).

The second week of school Bobby was waiting in line with his first-grade classmates to go to the restroom when suddenly, without warning, he punched a little girl in the stomach. The little girl fell to the floor crying and Bobby was sent to the principal’s office for the second time that day. It was his fifth trip to the principal’s office since school had started two weeks prior. He was suspended for three days. Last year Bobby was considered the worst-behaved child in kindergarten and it was not likely that his reputation was going to change now that he was in first grade.

Creating a Positive and Emotionally Stable Environment

Bobby started RR the first day back after his suspension. He was angry and did not want to come to the dummy class “down the hall.” The first week they worked together was a struggle for both the RR teacher and Bobby. The teacher selected books she thought he would be interested in but he pushed them off the table. She tried to find out what he liked to do but Bobby did not want to share anything about himself.

He had a very difficult time sitting in his chair and attending to the story the teacher read. He appeared upset that he could not write his name and resisted the teacher helping him. He wanted to write his name “his way,” which were two jerky lines on the paper. Bobby kept talking about what others were doing to him and blamed others for his suspension from school. He did not seem to realize that it was his behavior that caused the problems. He had no friends. The other children feared him. Bobby’s tall, overweight body and out-of-control, explosive behavior intimidated the children in his class.

After one week of failing to build rapport, the teacher knew she needed to change what she was doing or Bobby would become accustomed to being uncooperative. His preoccupation with negative school experiences seemed to be his biggest barrier to learning. She knew she had to redirect his anger by creating experiences in which he felt some control and success. On Monday of the second week they worked together, she asked Bobby, if he could start school all over again, what would he do? Bobby, with support from his teacher, wrote the following story: “I would make friends.
I would learn to read and write” (Figure 7–2). The teacher said she would help him make the story come true and if he was willing, they could start today. Bobby was willing. Writing those two sentences was the first step in changing his attitude and relationship with his teacher.

Once Bobby stopped being defensive, he started to share his feelings and interests. Through shared writing activities and conversations around books they read, the teacher gained a better understanding of what Bobby needed to learn in order to control his anger and manage his behavior. She realized that this unhappy child wanted to feel he belonged.

Bobby knew that he mattered to his RR teacher because she was going to help him reach his goal of learning to read and write. He also gained an understanding that he could make a difference in his learning. Bobby and the teacher were partners . . . members of the same team. He was ready to be a full participant in the thirty minutes they worked together. Bobby regained the will and motivation to learn, which is fundamental to all learning.

### Building a Responsive Learning Environment

Prior to entering school, Bobby had few opportunities to write. He avoided drawing and writing activities in kindergarten. Close observation of writing behaviors revealed that Bobby did not know how to hold a pencil, where to place the paper on the table, or where to begin writing on the page. The classroom teacher commented that even when he had a model to look at, Bobby could not write the letters in his name. Bobby recognized a few letters by name, but he had many confusions. For example, he could not distinguish between B and D, n and r, p and y. Bobby’s strength was that he was willing to learn, so the teacher began teaching through demonstration.

#### Demonstrating the Process

The teacher showed Bobby how to make a B by holding his right hand and guiding his movement in the air while verbally describing the action. For example, to make the B in Bobby, the teacher said: “Down, up, and around to the middle of the line and around again to the end of the line.” This action helped

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<th>Measure</th>
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<tr>
<td><strong>Letter Identification</strong></td>
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<tr>
<td>Children are asked to identify 54 characters, upper- and lowercase.</td>
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<td>54</td>
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<tr>
<td><strong>Ohio Word Test</strong></td>
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<tr>
<td>Children read a list of high-frequency words.</td>
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<td>20</td>
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<tr>
<td><strong>Concepts About Print</strong></td>
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<tr>
<td>Examiner reads a short book and children show what they have learned about the way spoken language is put into print.</td>
<td>0</td>
<td>24</td>
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<tr>
<td><strong>Writing Vocabulary</strong></td>
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<tr>
<td>Children write as many words as they can in 10 minutes.</td>
<td>0</td>
<td>unlimited</td>
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<td><strong>Hearing and Recording Sounds in Words</strong></td>
<td></td>
<td></td>
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<tr>
<td>Examiner reads a short sentence and child writes the words.</td>
<td>0</td>
<td>37</td>
</tr>
<tr>
<td><strong>Text Reading</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children read a series of increasingly more difficult texts they have not seen before. Tester records reading behavior on running records to determine the highest level the child can read with 90% accuracy. Levels range from B (lowest) followed by A, 1, 2, 3, etc.</td>
<td>B</td>
<td>1–24</td>
</tr>
</tbody>
</table>

**Figure 7–1.** Bobby’s Fall Observation Survey of Early Literacy Achievement
him to identify the first letter in his name by movement. When he finished writing the letter, he had to name it, and the name of the letter had to be B not D.

Initially, it was difficult for Bobby to talk and write at the same time. He relied on the oral feedback to guide his movements while making the letter. The teacher provided the oral feedback and description of the sequence of movements for Bobby, and he did the writing. After several days, Bobby tried to make the B by himself. This was not an easy task because of his quick responding and impulsive behavior. His movements were awkward, fast, and jerky. The teacher was attempting to slow him down and guide his movement when Bobby erupted.

**BOBBY:** [pushing the teacher away] Let me do it by myself.

**TEACHER:** OK, what are you going to say while you are making the B?

**BOBBY:** Down, up, around. [making the vertical stick of his name]

**TEACHER:** Were you going around when you said around?

**BOBBY:** No, my words are too fast and this board is too slow. I can’t do it because the blackboard stinks.

**TEACHER:** We can fix that. Try making the letter B on the white board.

**BOBBY:** Down, up, and around. [coordinates the movement with his words and makes a D]

**TEACHER:** Was it easier to make the letter on the white board?

**BOBBY:** Yes, but I forgot to say the right words. I made a D not B. B is down up around and around, two arounds for two bumps.

**TEACHER:** Congratulations, you made a great discovery without my help. You are on your way to becoming a good writer!

Bobby smiled at his teacher and they shook hands. He was pleased with himself. Writing on the white board helped him to understand and feel the sensation of a fluid stroke. And once he became more fluid it became easier to match the words with the movement pattern.

**Facilitating Emotional and Cognitive Development and Growth Through Writing**

Two key components of the learning process were working together to facilitate Bobby’s cognitive development: movement and speech. The movement involved in writing letters was key to keeping Bobby attentive and engaged. Verbal directions guided his processing and helped him to remember how to form a letter and recall the letter name.

Whenever a new letter was introduced, Bobby practiced the verbal description of the movement in the air, in sand, in shaving cream, or on the blackboard with a water pen. As he gained control of a few letters and their names,
Bobby learned how to use what he knew to form other letters. For example, he learned to form a lowercase \( b \) in three days because he already had learned to write the uppercase \( B \). The verbal direction for lowercase \( b \), “down, up half way, around, and down” was similar to that used for the uppercase \( B \). As discussed by Clay (1993b), Bobby was learning to remember how to form the letter in three ways: (1) through movement, (2) through verbal description to control the movement, and (3) through visual form. When he forgot how to write his name, he would begin to say aloud, “down up and around and around,” which triggered his memory, and he could write \( B \).

Clay (1991) reminds us that in the act of writing, the child must attend very closely to the features of letters. As discussed in Chapter 1, writing activates the child’s RAS (Unit I); the occipital lobes (eyes), temporal lobes (ears), and parietal lobes (motor), all housed in Unit II and working simultaneously in an integrated way; and the frontal lobes (Unit III), which organize and direct the working networks of the brain (Luria 1973).

The teacher arranged for over learning and lots of repetition in different mediums, which enabled the assemblies of neurons in the brain to myelinate. Throughout the process, Bobby’s frontal lobes (Unit III) organized and directed his program of action for learning, storing, and recalling letters.

Bobby did not like saying the words to guide his pencil every time he made the \( B \), even though it helped him. The teacher explained that saying the words reminded him how to form the letters and to distinguish one letter from another just like it helped him to notice he made a \( D \) instead of a \( B \). She also let him know that soon he would no longer need to say the words. Bobby agreed to continue using the words “until he was ready to stop.”

This teacher understood the functional development of private speech and its role in developing Bobby’s capacity to become self-regulated. As discussed in Chapter 3, self-control is a developmentally earlier and simpler form of behavioral organization in which the child merely copies and then complies with an adult command in the teacher’s absence (Diaz, Neal, and Amaya-Williams 1990).

The teacher and student interactions around letter formation supports Vygotsky’s (1978) and Luria’s (1976) work suggesting that through speech, children develop the capacity to control their own actions. Initially, the teacher directed Bobby’s actions using consistent language that was specific to the actions required to form and name the letter \( B \). Bobby used private speech to coordinate his hand, eyes, and mouth and to guide, regulate, and control his actions while forming letters without help from the teacher.

The teacher watched Bobby interacting with print to determine if he was becoming impatient or frustrated. If she noticed the slightest bit of frustration, the teacher intervened to prevent his frustration from escalating. When Bobby had difficulty, they talked about how he felt and what he could do about it. He decided the best way for him to “control his madness was the same way he learned to make the letters . . . talk to himself.” The teacher thought this was a great idea and she would help him remember whenever necessary.

The RR teacher found that the most effective way to keep Bobby attentive and on task was to change activities, move to another location, and, if possible, provide opportunities for him to...
manipulate objects. For example, he might move from the table to write on the blackboard with chalk or a water pen and move to the white board to write with a felt-tipped pen. During the same lesson he might stand at the magnetic board and sort letters or construct words using magnet letters and move to the salt tray to write words and letters in salt. When encountering reading or writing difficulty, Bobby found that talking to himself enabled him to find solutions to the problem quicker and regain composure to direct his actions.

Vygotsky (1978) believed that eventually, private speech splits off from teacher-directed, socially communicative speech as a child develops a new cognitive skill and is then transformed into inner speech, which is a tool for individual problem solving, planning, and self-regulation. Inner speech helped Bobby develop the self-regulation and independence he needed to build a self-extending system of behavior, which enabled him to learn more every time he read and wrote.

Reflecting on Bobby’s Emotional and Cognitive Development

The teacher confessed that collaborating with Bobby was not easy. There were many moments when she had to remind herself to remain positive and calm. As she reflected on the four and one-half months they worked together, the teacher discussed emotional and cognitive barriers Bobby and she had to work through in order to maintain and strengthen their partnership.

Gaining Bobby’s trust was the first step in developing a good working relationship. Trust started to build from the moment they wrote the story about starting school all over again. It was difficult for him to put into words how he felt. She believed attaching words to his feelings helped Bobby develop some emotional skills that enabled him to take a different perspective. For example, they were able to write about how the little girl felt when someone bigger pushed her to the floor, which was the incident that got him suspended.

The RR teacher had to continuously work on improving Bobby’s inattentive and impulsive behaviors. The following are inattentive behaviors Bobby showed most often:

- easily distracted . . . noise from the lights humming, playground noise bothered him.
- couldn’t sit still in the chair . . . his feet, arms, head were in constant motion.
- difficulty staying on task . . . He wanted to jump from one thing to another. For example, he would start making the first letter of his name and then wanted to sit down and read a story.
- difficulty completing an activity . . . He wanted to write part of a sentence during writing and finish the next day.
- avoidance . . . Initially Bobby tried to get out of writing. It was too hard to move the pencil.

At the same time Bobby was impulsive. The impulsive behaviors included:

- easily frustrated . . . especially when he couldn’t remember which way to go when he was at the end of a line of text.
- impatient . . . Bobby did not want a book introduction, he wanted to get started reading right away.
- easily overwhelmed . . . The teacher had to make sure the task was doable or he would become irritated and quit.
- needed immediate gratification . . . Bobby would quit after the first attempt if he could not figure something out right away.
- difficulty persevering . . . If the first thing he tried did not work, he did not try anything else. He looked to the teacher for help.

The teacher concluded that when compared to other RR students she had taught, it took Bobby three times as long to develop a program of action to form and recognize letters quickly and learn how to attend and control impulsive actions. Bobby’s story demonstrates that attention—the ability to focus the mind—is critical to learning and a prerequisite to motivation, memory, and self-regulated learning. He was released from RR in February reading as well as the average students in his class. Today Bobby is a sophomore in college.

Collin’s Story

Collin had an extensive vocabulary, much prior knowledge to bring to the reading and writing experiences, and a very good memory for text. He expressed himself well and seemed interested in telling others everything he knew. Although
Collin and Bobby displayed similar behaviors, Collin was more aggressive, demonstrative, angry, and argumentative. He repeatedly argued with the teacher, banged his hand on the table to make a point, threw back his head expressing disgust and exasperation, and thought he was right most of the time. When he became frustrated, Collin would oftentimes quit trying.

**Creating a Positive and Emotionally Stable Environment**

The RR teacher knew that she had to create a positive working environment in which to teach. Furthermore, she had to teach Collin that the disruptive behaviors were interfering with his learning progress. Managing anger constructively is an important developmental task for some children, especially when they have spent several years practicing explosive, uncontrolled anger. Early childhood experts (Katz 1977; Paley 1981) believe that one of the best ways children learn anger management is by observing how adults express, discuss, manage, and control their anger.

The RR teacher did several things to manage her own anger and Collin’s uncontrolled outbursts. First, she did not respond to his frequent disruptions when he made an error. Instead she conveyed that she understood his frustration while reassuring him that she would help him figure out what to do next. This action helped him to channel his actions to resolve problems.

Second, she identified situations that may trigger an angry response and prevented these situations from occurring. In some cases, she stopped taking a running record because Collin’s voice and body language indicated he was becoming frustrated and angry with himself. When he made an error, he had a difficult time composing himself to continue reading even when the reading was easy. As soon as the teacher sensed that Collin was becoming anxious and upset, she intervened. As was discussed in Section 1 of this book, when children are angry or anxious their emotions take over, impeding further learning. Wise teachers prevent the downward spiral from occurring.

According to Katz and Gottman (1991), children who are developing competence in the regulation of emotions are able to: (1) inhibit inappropriate behavior related to strong positive or negative emotion and (2) soothe themselves or calm themselves down when they become highly aroused emotionally. It was very difficult for Collin to develop these two capacities; however, by the end of his RR program the number of angry, impulsive outbursts was reduced. This was probably due to the teacher’s heightened awareness and sensitivity to potentially volatile situations and her resistance to letting him get his own way.

**Building a Responsive Learning Environment**

A critical factor in broadening children’s positive emotional responses to learning is the teacher’s attitude that children are capable of learning how to tackle new and possibly difficult material. The teacher had high expectations for Collin’s ability to learn how to read and write and for her ability to create a learning context that would facilitate his progress. She also understood that she must use Collin’s strengths when introducing new concepts and tasks and work within his zone of proximal development. She also had to teach him, which required a delicate balance between challenging his thinking and helping him manage his behavior. The interaction shown in Figure 7–3 illustrates how she accomplished this task.

Several times in this conversation the RR teacher conveyed confidence in Collin’s ability to problem-solve and at the same time reduced his anxiety and frustration. For example, when Collin hit his hand on the desk and screamed “SWAT, SWAT,” the teacher tried to calm him down by putting her hand on his arm and saying, “OK, you’re working, you’re working.” This action reassured him and at the same time encouraged him to keep trying. He was probably mad at himself for not getting it right the first time, and the teacher conveyed an understanding of his reaction to the predicament.

The teacher also supported his efforts and offered help, “Let’s look at it together.” She helped him understand how to read she’s by covering up the final s and then asked him to add the s at the end of she. When this occurred Collin’s anxiety level was reduced and he easily read she’s, which boosted his confidence. If the teacher had rushed in and told him the word, she may have undermined an opportunity for Collin to regain a positive learning disposition. He did not quit, but continued to read the text.
Facilitating Emotional and Cognitive Development and Growth

Although the concept of scaffolding is most often used in discussion of adults’ roles in supporting children’s cognitive development through interaction and encouragement as they work on emerging skills (Vygotsky 1978; Wertsch 1985), the concept is equally useful in reflecting on young children’s emotional development. The teacher tried to help Collin understand that the phrase “gone to sleep” makes sense in the story by reading the last two pages to him. Even though he resisted her suggestion that the word was gone, not going, she did not let him off the hook by giving in to his reasoning. The teacher’s final statement, “show me gone on this page” made two points: First, it demonstrated to the teacher that Collin knew the word gone and could locate it on the page. Second, Collin learned that “gone to sleep” did make sense and that his teacher was not going...
to give in to his whining, angry demands to be right. The following day, Collin read the last two pages of *Sleeping Out* correctly.

Collin’s opposition to the teacher’s insistence that he read the sentence “gone to sleep” correctly is an example of counterwill. According to Mate (1999) counterwill is an automatic resistance by an individual with an incomplete sense of self that is the reflexive and unthinking opposition to the will of another. Collin showed many signs of counterwill early in his RR program. His resistance to the teacher’s interventions arose from his fear of being controlled. As he became more confident in his ability to read and write, his counterwill dissipated. However, this disposition did not continue in the classroom. When he began to feel threatened or thought that somebody was controlling his actions, Collin’s counterwill emerged again. His opposition to authority figures continued throughout elementary school.

**Reflecting on Collin’s Emotional and Cognitive Development**

Collin was an emotionally responsive, excitable, interesting, intelligent child. When interested in a story or what he was writing, Collin expressed strong positive emotions. Within a one-to-one environment his impulsive behaviors and tendency to act out feelings in the moment were accepted by the teacher and curtailed when they interfered with his learning. Limits were set for him in such a way as to safely contain disruptive behaviors, while at the same time allowing for emotional responses.

Once in a classroom setting, however, Collin had difficulty modifying and controlling his emotions and did not show his classroom teacher how well he could read and write. As shown in Figure 7–4 on page 120, Collin was not too interested in writing in his journal in the classroom. Collin’s classroom journal entry on January 10 does not show much improvement, despite the fact that he was making considerable writing progress in Reading Recovery (see Figure 7–5 on page 121). The RR teacher was surprised to learn that the classroom teacher saw no improvement in Collin’s classroom writing. Then she saw what he wrote on January 10 in the RR lesson (see Figure 7–6 on page 122).

When questioned about the difference between the two writing samples, Collin told his RR teacher, “Gail [the classroom teacher] gives me a break.”

While there may be times when it is appropriate for the teacher to follow the child’s lead, the RR teacher understood that she must retain her role to set limits. She set limits that were firm and neutral but at the same time accepting. She acknowledged Collin’s viewpoint and place in the learning situation. She listened attentively to his expressions of joy, sorrow, hope, and interest in what he was reading and writing. The stories he wrote every day were colorful and interesting. Effective limit setting is done within a supportive, nonthreatening relationship, which Collin and his teacher had established.

Despite his ability to read and write as well as the average students in his class, Collin’s LD classification continued and he received LD and physical occupational therapy and attended speech classes. His interpersonal and social skills, frequent outbursts of anger, and compulsive and inattentive behavior interfered with his learning progress in the classroom. Today, Collin is a third-year student at a private high school.

**Tommy’s Story**

According to most teachers, Tommy was the “biggest behavior problem” in the school. He picked on younger children and bullied older students. He did not relate well to adults. Tommy never looked an adult in the eye. When asked a question he would respond with short answers in a muffled voice. The lack of eye contact built an unseen wall around Tommy that few peers or adults tried to penetrate.

His intense distractibility in the classroom prevented him from maintaining social interactions. Tommy’s inability to initiate and sustain positive social interactions with peers and teachers, coupled with his failure to complete most classroom activities, was strong enough evidence for school authorities to recommend that he be placed in the school for developmentally handicapped (mildly retarded) students at the beginning of first grade, but space was not available.

Tommy entered first grade knowing thirty-three letters by name and hearing two sounds (b and t). He had poor motor skills and could not write his name. Tommy did not recognize any high-frequency words and had the lowest possible
score reading an easy text. Classroom teachers, learning disability teachers, and administrators commented that “if Tommy can learn to read and write, Reading Recovery really works.”

Tommy’s RR teacher decided that if the RR program were going to be adopted by the school district, she had to teach Tommy how to read and write. She believed that “through the right learning experiences, Tommy could learn how to read.” She “just had to find the right way to teach him.”

Tommy believed that he could not learn; her first goal was to change his viewpoint.

Creating a Positive and Emotionally Stable Environment

The RR teacher was well aware of Tommy’s reputation as a troublemaker with few social skills and low literacy knowledge. She knew she had to change the antisocial nature of his behavior with peers and adults. One of his teacher’s major chal-
Challenges was to create a satisfying social relationship for both of them so that they could work in a positive and constructive way together.

The teacher understood that in order for Tommy to learn how to read and write, she needed to set boundaries that he could not establish for himself. She found that the structure of the RR thirty-minute lesson played a major role in helping him to develop the emotional and social stability that he needed.

The consistent daily schedule and routine of the lesson conveyed that someone was in charge.
who would take responsibility for making sure he was in a safe, predictable place where his basic needs to learn to read and write would be met. Knowing that he could rely on certain things each day, such as the same teacher and the repeated occurrence of specific activities (e.g., rereading familiar stories, letter work, writing, and the introduction of a new book) seemed to relax Tommy, and he was able to invest attention and energy into learning. Tommy liked the security of the structured RR lesson. He knew exactly what to do, when activities would change, and what he was expected to do.

He was also easily distracted and upset when the letters and words in text he was reading were different. For example, he could not read a page when \( l \) in the word *little* looked like an \( l \). In order to minimize distraction and disruption of the lesson, the teacher changed the letters in a story before he read the book so that he would not become too distracted to continue reading.

Characters in books who communicate in “speech bubbles” also disturbed him. When he saw dialogue between two characters written in a “speech bubble,” Tommy would become confused and lose track of what he was to be looking at. The RR teacher said he was obsessive about the print layout and form. He would become upset with the authors of the book because “all little books were to have certain things that looked the same and there should be no circles with talk inside.”

As the teacher developed a consistent way of interacting with Tommy, he began to feel comfortable and confident in his environment, which supported more risk taking. The teacher was able to slowly decrease the amount of structure he required. For example, he did not engage in letter work every day. She did not change the print symbols in the books to accommodate his inability to read them nor did she avoid books with speech bubbles. By the middle of his program, Tommy read text with speech bubbles easily without hesitation or comments.

**Building a Responsive Learning Environment**

After working with Tommy for several weeks, the teacher noticed that he did not have a clear understanding or concept of a letter or word. She also observed that he could read a known word, but did not know the corresponding sounds of each letter in the word. For example he could read *to*, but did not know the sound of the \( t \) and \( o \) in the word. The RR teacher took an inventory of the words Tommy could read and asked him the corresponding sound of each letter in the word.

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**Figure 7–6. Collin’s Reading Recovery Writing in January—Lesson 17**
He knew eight sounds. Knowing Tommy’s attention and response level was heightened when the learning context was structured, she developed a routine program of action to help him learn the corresponding sounds to letters in known words.

TEACHER: Come to the board and read this word

TOMMY: [to is written on the board]

TEACHER: Show me the first letter in the word.

TOMMY: [points to t]

TEACHER: What letter is that?

TOMMY: A t.

TEACHER: What sound do you hear in t?

TOMMY: [says the corresponding sound]

TEACHER: What letter makes that sound?

TOMMY: T.

TEACHER: What is that word?

TOMMY: To.

TEACHER: Do you think you can figure out what this word is? [writes took on the board]

TOMMY: Took. Just like book but you make the t sound and get took. That’s easy.

TEACHER: Did you know that word?

TOMMY: No, but I knew how to figure it out.

TEACHER: I am so proud of you, Tommy. You are an excellent problem solver. Reading is problem solving and making sense of what you are read.

TOMMY: I’m going to like reading. I’m good at it.

Tommy and his teacher had developed a collaborative relationship in which both were satisfied and successful. They were also able to experience and express honest genuine emotion in Tommy’s newfound ability to use analogy to solve an unknown word.

Facilitating Emotional and Cognitive Growth Through Language and Structure

As exemplified in her conversation, the teacher used the same language to ask each question in the specified order. This program of action was used until Tommy was able to read the known word, provide a corresponding sound in sequence for each letter he read, and read the word. He had to learn how to work with known words until he was able to understand how individual letters correspond to specific sounds and how to analyze the sounds in a word in a left-to-right sound sequence. The repetition of that routine provided a memory trace of the action sequence and enabled him to call up strategies for analyzing unknown words.

The prefrontal cortex (see Chapter 1) is involved in decision making and in the reflective processing of emotions. The prefrontal cortex monitors private speech, which gives direction to word solving. The program of action designed specifically to help Tommy learn how to use predictable letter-sound sequences to solve unknown words helped him to organize thoughts, decide priorities, and choose strategies for word solving (e.g., using a simple analogy to read took, rather than auditory-to-visual analysis). The prefrontal cortex provided guidance through self-monitoring and determining what is relevant to the task.

Without attending, focusing on relevant information, and self-monitoring, Tommy could not become a reader and writer. Research investigating young children classified as ADD suggests they have a problem of development labeled a “neurodevelopmental lag” rather than one of pathology (Mate 1999). Neuroimaging studies of ADD patients have shown smaller-than-normal structures and lower functioning in the prefrontal cortex of the brain and less production of dopamine, the neurotransmitter that facilitates individuals’ ability to stay focused and that is necessary to develop self-regulatory behaviors. Moreover, the underdeveloped prefrontal cortex is reflected in the social-emotional skills of children diagnosed with ADD (Mate 1999). These findings suggest that if physicians, psychologists, and educators were to think about how to promote individuals’ ability to become self-regulated, then it would be possible to provide the experiences necessary to support and grow neurons in the underdeveloped prefrontal cortex (Mate 1999).

Although Tommy was not diagnosed as having ADD, he had some of the social-emotional behaviors associated with the disorder. For example, he overreacted to emotional situations. In RR, he learned to use reflective, evaluative thought processes. Unfortunately, this behavior did not carry over into the classroom, where he remained quick to respond.

Reflecting on Tommy’s Emotional and Cognitive Development

Tommy finished the RR program in February, reading as well as the average students in his class. By the end of first grade, he was reading at a second-grade level. Tommy never attended the
school for developmentally handicapped children. His success in RR was the reason given for the district implementation of the program. The RR teacher said, “Tommy taught me that any child can learn how to read with the right instruction, and the teacher’s job is to find how to teach him.”

Tommy had few problems academically throughout elementary and middle school. He passed the fourth- and sixth-grade state proficiency tests. He works better in structured classroom settings. Unfortunately, Tommy continues to have problems getting along with peers and teachers. The middle school teachers said he is easily frustrated, lashes out, and bullies other students. He is often seen sitting in detention halls reading a book. Tommy is a freshman in high school.

Teaching in a Primary Learning Disability Classroom

My husband and I moved from Tacoma, Washington, to Connecticut in the middle of September. Since school had already started, I decided to submit applications to various school districts for substitute teaching. I was surprised to be offered a full-time position one week after school had been in session. I was the third teacher hired for the transitional second-grade learning disability position. During the first week of school, two teachers had resigned.

I arrived at Lincoln Elementary School at seven o’clock in the morning to meet the principal and arrange the classroom. The principal told me that the age range of the thirteen boys in the class was ten to twelve years, and several had juvenile records. Twelve of the thirteen boys were enrolled in Lincoln School last year and none had received passing grades. (These are the same boys mentioned in Chapter 5 who successfully walked to the bathroom without supervision.)

I asked the principal what he meant by a “transitional second-grade LD classroom.” He told me that my class was created specifically for these thirteen boys because they were too old to be in second grade and the LD resource room was overcrowded. He also mentioned that the boys’ reading, writing, and mathematics skills were far below other students in the LD classroom. The principal reassured me that the school psychologist and he would do everything possible to help me “get through the year” and if I had any problems he would suspend the students involved. His final comment was that the boys were behavior problems and two were probably going to be moved to a class for emotionally disturbed children, so I would not have them all year.

The room was a mess. The floor was dirty and the tables and desks were pushed to one side of the room. The bulletin boards were empty and books were scattered on the floor. The principal said he would send the janitor immediately. When the janitor arrived, he told me that he had already cleaned up most of the mess. I washed the blackboards and arranged the books on the shelves while the janitor cleaned the floor. He helped me put my desk in the back of the room and arrange thirteen desks in a semicircle. I had ten minutes before school started.

The boys entered the room and did not sit down. They stood together talking loudly in the back of the room and continued talking through the pledge of allegiance to the flag. I knew if I was going to succeed in this classroom, I could not run to the principal’s office for help. I had to deal with the situation. As I watched the boys I tried to figure out the ringleader of the group. I decided it was Willis. He was bigger than the others and my height.

I tapped him on the shoulder and asked him to please take his seat. Instead of sitting, he stood on the top of his desk. As soon as he did that the other boys followed. Soon there were thirteen boys walking in a circle on top of their desks, laughing and singing a rap song. I was horrified.

I went to the front of the room and told them I was the head of Motown Record Company and I was going to select a few of them for an audition. My job was to invite them to “come on down” for the audition. Their job was to stand still on their desks until it was their turn and I would help them down. The student closest to me was Karl. As I took his hand we both fell against the blackboard. He said something obscene and instead of reacting, I asked for his help. He looked surprised and then turned to the group and said, “Me and ‘the teach’ will help you down.” Together Karl and I escorted each boy to a seat. The rest of the day we conducted the audition for Motown Records.

The boys were asked to share something about their school and home life. I heard things I
cannot put in writing that were probably said to upset and shock me. I found out that these boys were street kids who lived by their wits and fists. They expressed little hope for leading a law-abiding life because the “big money” was made in drug dealing.

They had all attended remedial reading classes and had never been out of the low reading group. They were currently reading first-grade basal texts. The boys were self-diagnosed poor readers and writers. Furthermore, they believed school was a waste of time simply because they did not see the relevance of most learning tasks. The long history of remediation and failure to learn how to read and write helped to confirm teachers’, administrators’, and their own self-diagnosis that they were failures.

The boys placed little value in staying in school because they were never going to make it out of the ghetto. The twelve-year-olds in the group said they would drop out when they were sixteen so that they could make “big money.” Eight boys had been retained once, two had too many absences to be credited for attending a school year, and the other three boys started school when they were seven years old. None of the boys had attended kindergarten.

When asked about their prior literacy experiences in school, the boys said they read baby books, did ditto stuff “for babies,” and never wrote. I told them that things were going to change. They were not going to do dittos and they would not read any baby books. They would write books for each other to read and what they wrote would become their textbooks.

The look on their faces showed a lack of enthusiasm. Willis thought it was too much trouble to learn stuff that you are never going to use. The other boys nodded their heads in agreement. Karl spoke up and said, “Wouldn’t you want to know if someone was ripping you off?” The others seemed to agree with him. I learned that day that Karl, not Willis, was the leader of the group.

I knew that if I was ever going to teach them how to read and write, I needed to change their attitudes about learning and convince them that learning to read and write was time well spent because it was their ticket out of the ghetto. I was thankful for the six years of teaching I had prior to taking this position and especially for the last two years that I had taught on a military base in Tacoma, Washington, during the Vietnam War. The year I taught third grade, four students lost their fathers. The U.S. military provided emotional support and advice for teachers during times of crisis. The best advice I received was to read to the children often; select books that dealt with problem solving, coping with fear and anxiety, survival, and self-esteem; and provide many opportunities for children to discuss and write about their feelings. Since I found myself once again teaching in an unstable emotionally charged classroom, I decided to use the same advice I had been given by the psychologists on the military base.

Creating a Positive and Emotionally Stable Environment

The first book I read to the class was *Bridge to Terabithia* by Katherine Paterson. In this story a grief-stricken, lonely, ten-year-old boy copes with the drowning of his best friend, Leslie, by building a bridge to Terabithia, a kingdom where he and his sister are able to have a better life. The boys in my class related to Jess, his sorrow at losing a best friend, and his desire to move forward to improve his life.

A well-written fantasy such as *Bridge to Terabithia* does not deny emotions or show emotional sentimentally. Katherine Paterson’s in-depth description of characters allowed the “worldly, streetwise boys” to experience healthy emotional responses without fear of embarrassment. They loved fantasizing about another place where circumstances would be different. Their ideas and thoughts were similar to the third and fourth graders in Tacoma, Washington. Both groups of students were able to escape through the author’s words and, in the process, develop a stronger sense of self and their role in making life better. Our conversations were about hope, the future, and the power of friendship and teamwork to escape circumstances beyond one’s control.

Discussions about Jess and Leslie’s experiences in *Bridge to Terabithia* helped these thirteen boys dream about what a better place to live might look like. They also began to realize that if they worked together they could create this new and improved place. Our classroom became this new world. The boys called it Marvella, which was short for marvelous. Just as in Terabithia, Marvella had rules we agreed to live by. As the oldest person in Marvella, I was in charge of enforcing these rules.
**Rules of Marvella**

- Respect yourself and others.
- Work cooperatively.
- Don’t quit.
- Be fair and honest.

During the last hour of every day I read the students’ chapters from children’s literature books. We discussed the positive and negative experiences of the characters in the story, issues, feelings, and solutions to problems the characters experienced. The children looked forward to the daily story hour, and it seemed to change their attitude about school. Our ongoing conversations helped to establish a more trusting, supportive, and satisfying climate in which to work, play, and belong. Reading to the boys was the most powerful way I found to gain their confidence and trust in this place we called Marvella.

**Building a Responsive Learning Environment**

My biggest hurdle was to create a learning context that was challenging, encouraged active involvement, and helped them feel successful. The boys had a difficult time articulating and demonstrating what they knew about reading and writing. I had to reveal through clear demonstrations the reading and writing process.

**Demonstrating the Reading Process** Reading aloud *Bridge to Terabithia* not only created a positive, emotionally stable environment in which the boys agreed to work together but also provided opportunities for me to demonstrate the reading and writing process. I would watch the students’ reactions to the story, stop when I saw a questioning or thoughtful look on an individual’s face, and ask him to share his thoughts. I also commented on the dialogue between Jess and Leslie and wondered aloud what they were thinking. I asked myself questions while reading, predicted what would come next, and anticipated the characters’ next moves and the reactions of different characters to the problems that emerged.

By the end of the first week, some of the students started thinking aloud with me. Several boys related Jess’ experiences to something in their personal lives. I explained to them that even though they were listening to me read, they were engaged in the reading process. They were doing what adult readers do, which is trying to understand what the author wrote. I knew they were comprehending the story by the expressions on their faces and by the thinking they were doing to predict and anticipate the characters’ next moves. I explained how they were developing powerful thinking strategies that would help them read and write their own texts. The boys seemed pleased that I thought they were successful learners and offered many comments to prove that they were thinking about the story.

When the book was completed, we discussed the many feelings of joy and sorrow Jess and Leslie experienced in their magical kingdom, Terabithia. One unexpected outcome of these lively conversations was Karl’s idea that we build a bridge to our own magical kingdom, Marvella. The rest of the boys thought that this was a good idea.

Each boy drew a bridge to his ideal kingdom, a place where he could escape his life and that would have everything he ever wanted. Once the bridge and the magical kingdom were built (drawn), pairs of boys interviewed each other. One boy was the investigative reporter, who asked questions and listened to the responses. His partner was the author of the story, who tried to make his ideas clear through speech. The author had to make sure that his story was understood and the listener had to make sure he understood the story. Then their roles were reversed. The interviews stimulated thinking and caused others to react. They were powerful ways to show the boys how they were constructing stories by drawing on their oral language skills as well as their drawings, prior experiences, and knowledge of *Bridge to Terabithia* to make sense. They began to think about the audience and the purpose for writing a story and to see writing as a source of enjoyment for themselves and others. They expressed an interest in writing and were motivated to write their own Bridge to Marvella stories.

**Demonstrating the Writing Process** I asked for a volunteer to demonstrate the writing process. Karl immediately jumped up with his drawing, titled “Karl’s Bridge to Marvella.” I guided his retelling by asking a few questions and writing the answers on an overhead projector for the others to see (Figure 7–7). With the class watching, I transformed our conversation into a story. The story contained a setting, two characters, a problem, several solutions to the problem, and an ending. Although it
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was a simple story, it was a lived experience, something Karl had faced the previous year, with a different ending. His friend Sarah and her family moved and he never heard from her again. Karl wondered where Sarah was living today. His story had a happy ending.

Throughout the next several weeks, I provided a demonstration of the writing process using different students’ tape-recorded Bridge to Marvella stories. Initially I wrote most of the sentences, sharing aloud what I was thinking about when I wrote the words in the text. For example, when I was writing “Marvella,” I said, “What letter does ‘Marvella’ begin with? It starts like my so it begins with an M. Should it be a capital M or a lowercase m? It is the name of a specific place so it should be a capital M.”

As the children became more familiar with thinking about how to write letters, words, sentences, and paragraphs, they were able to coconstruct the text as we discussed the auditory-to-visual processing, format, structure of sentences, and so forth. Gradually some of the

Figure 7–7. Karl’s Oral Retelling of “A Bridge to Marvella”

TEACHER: Where does your story take place, Karl?
KARL: In Harlem.
TEACHER: Where in Harlem? In a house, or store, park?
KARL: In the alley behind the store.
TEACHER: Who are the characters in your story, Karl?
KARL: Michael, he is like Jess, he loses his friend. Sarah is Michael’s girlfriend and she is always getting in trouble.
TEACHER: It sounds like there is a problem? What is the problem?
KARL: Sarah’s Mom has to move again and she doesn’t want to go. So she asks Michael to run away with her. Michael has $15.00 but he says they wouldn’t be able to live very long. Sarah says she is going to run away alone then.
TEACHER: What does Michael do? Does he have any ideas about how to help Sarah?
KARL: Yeah, they could rob a store. Or he could use the money he has to buy a walkie talkie and no matter where Sarah moves they could talk to each other. Or they could each get a job sweeping floors and when they had enough money they could run away. He thought about an old house he had seen in the neighborhood and thought they could see if it would be a good place to live.
TEACHER: Karl, you just said four different solutions to the problem. What did Sarah think about these ideas?
KARL: She was afraid to rob a store. She liked getting the walkie talkies and she wanted to see the old house.
TEACHER: What happened?
KARL: They decided to go to the house but when they got there it was pretty bad, lots of rats and stuff, so they cleaned it up. Some nice man saw the work that they had done and gave them $100 for fixing up the house. They put the money in a pot for when they would run away together.
TEACHER: What happened then? Is that the end of the story?
KARL: They used the money to build a bridge to an island. The island had a beautiful house. They lived off the land and fished in the sea for food. They had lots of kids and no one bothered them forever.
students learned to complete most of the writing and I did very little.

For the first month, I demonstrated the writing process to the entire group of boys. Individual differences in students’ writing ability and skill levels emerged. Seven students did not need as much guidance as the others, so I commissioned them to work together to write books for our library on specific topics of their interest. These boys knew much more about the reading and writing process than they realized. The six remaining students were divided into two groups. These children needed much guided practice. Texts they wrote for our library were within their range of reading abilities and skills.

High standards were set for every book published. The boys began to see how their writing was valued and could influence their classmates. These thirteen boys learned to read through writing and they were motivated to read because they were the writers of the texts. The impact of writing on their reading achievement is described well by Clay (1998).

In short, writing allows a slow analysis of detail in print; both reading and writing draw on the same sources of knowledge about letters, sounds, chunks, clusters, words, syntax (or grammar and sentence construction), the rules of discourse, and narrative structures and genre differences; gains in reading may enrich writing and vice versa; and dipping into a large pool of both reading and writing knowledge will help those with limited knowledge of the language, and may have cognitive advantages. (139)

In my view, the boys in my transitional second-grade LD classroom were excited and motivated to learn to read because their initial attempts to write their stories were accepted, acknowledged, and personally rewarding.

Facilitating the Boys’ Emotional and Cognitive Growth

Although the term AD(H)D was not used to describe any of the thirteen boys in my classroom, I believe some of them, including Willis and Karl, demonstrated many of the classic characteristics of students having ADD and AD(H)D discussed in this chapter and elsewhere (Mate 1999; Weaver 1994). Yet, when compared to other students in the classroom, Karl and Willis showed the most emotional and cognitive growth and development. They also had very different temperaments and learning behaviors.

Karl loved to be the center of attention. He was always ready to help the other boys when they were having difficulty learning. When I had laryngitis and could not speak loudly, Karl devised signals for me to make so that the class could carry on without my voice. He was the one who noticed when Anthony was beginning to have an epileptic seizure. He closed the window when it started to thunder because Ishmal was afraid of storms. Karl was the class clown.

Through writing, children learn how to convey ideas to others and analyze the detail of print.
Children in the school, including his classmates, liked and respected Karl.

During lessons Karl interrupted to share personal anecdotes even when they were not on the topic of discussion. He could express himself orally very well and offered opinions on many topics. Karl became bored easily and would wander around the room aimlessly during work periods. He did not concentrate on tasks for a long period of time and seemed to have several projects going on at the same time. He had a difficult time completing tasks on time.

Karl was put in charge of our weekly symposium, a time when the students displayed their weekly work through writing, drama, art, song, or oral recitation. He was the master of ceremonies and organized the program. Teachers, parents, the principal, and other students in the school were invited to attend. Sometimes nobody came but that did not matter. The boys took great pride and pleasure in entertaining each other and sharing their work with an audience.

Willis was withdrawn, immature, and irresponsible. He was ready to leap into a situation without thinking about the consequences. For example, he would get into a fight even when he did not know what the children were fighting about. When Willis did not know how to read a word in the text, he threw his book on the floor. He lost control easily and became loud and demanding. Willis held a grudge when he did not get his way.

Initially, Willis had a difficult time understanding what to do to complete an assignment. He required very clear oral directions for the assignment; a written, step-by-step reminder; and someone to listen to his explanation of the assignment before he could get started. He needed consistency in directions and exact times when something was to begin and end. Upsetting the routine made him uneasy and angry.

To alleviate his anxiety, Willis became the classroom timekeeper. As the year progressed, he learned how to adjust times for specific activities when more or less time was needed to complete a task. By the end of the year, Willis was better able to manage changes in routine. He also developed confidence in his own ability to remember what to do without asking the teacher or other children for help.

Both boys had years of reading failure, no desire to learn how to read, and little expectation that they could become readers and writers. Their attitudes changed as soon as they learned how to put their thoughts down on paper. Through writing, they become more skilled and successful readers. As discussed previously, the act of writing engages the cognitive operations and skills involved in the arousal, attention, sensory motor, language, and memory processing systems necessary to become a reader.

Karl and Willis wrote more books than anyone else in the class. Karl enjoyed history, so he wrote about historical events and famous people. Willis liked science. His books were about the weather, electricity, magnetic fields, and animal habitats. They enjoyed writing short stories and writing daily in their journals. Through writing they developed momentum and motivation to learn.

Reflecting on the Students’ Emotional and Cognitive Growth

The year I taught the boys from New Britain was my worst and best year of teaching. It took until Christmas to develop a positive, cooperative learning environment. By the end of the first year, most of the boys had improved their reading and writing skills, but they had not made enough progress to be placed in regular education classrooms. So I requested to have the same boys for a second year.

The second year I taught these boys was the most rewarding year in my professional career. They worked collaboratively in Marvella and most made substantial gains in reading and writing. Eight of the thirteen boys were placed in regular education classrooms. Willis and Karl went to fourth grade and six students were placed in third grade. The remaining five boys were assigned to the LD resource room. The transitional second-grade LD classroom was dissolved.

I continued to inquire about these students after we moved to Columbus, Ohio. Two of the thirteen boys died in middle school. One was shot in a gas station robbery and the other boy died of a drug overdose. Willis and Karl attended high school, but I do not know if they graduated. If they are alive today, Willis is thirty-two and Karl is thirty-three years old.

The boys from New Britain made a huge difference in how I think about learning, teaching, and the teaching profession. I realized for the
first time the incredible impact (both positive and negative) teachers have on students’ lives—academically, emotionally, and personally—for a lifetime.

Conclusion

This chapter shows how the learning context significantly impacts the behaviors and cognitive processes of students thought to be LD and AD(H)D. In addition to unwarranted labels, the five boys’ experiences and attitudes were similar in the following ways:

1. Their negative attitudes about school and learning were shaped in the early years of schooling.
2. They were acutely aware of their learning problems and comparisons between themselves and others.
3. As they moved through the primary grades, they began to make judgments about their own abilities to read and write.
4. Feeling inadequate, they gave up and acted out in unacceptable and unpredictable ways.
5. They had difficulty getting along with their classmates.
6. Their social development had a profound effect on their academic progress.

The teachers who successfully taught these students to read and write also shared similar attitudes and expectations. They created a predictable environment that built security by letting the children know how people are likely to behave and events are likely to unfold. This environment provided the emotional stability that the students needed in order to get back on track and believe they could learn to read and write. The context was responsive to individual needs and helped the children feel accepted. This responsive context also helped the students come to understand that there are consequences to their actions and that they can make a difference in their academic and personal life.

Educational Implications for Teaching LD and AD(H)D Students

The term Attention Deficit Disorder (ADD) is used to describe children who are easily distracted and show poor impulse control, with or without hyperactivity (AD(H)D). Children classified as AD(H)D reflect in many different ways a lack of self-regulation.

Individuals are not born self-regulated; rather, they acquire the ability to become self-regulated through experiences in their environment. Instead of looking for a medical answer to explain LD and AD(H)D, why not think about the possibility proposed by Mate (1999) that there is an underdeveloped prefrontal cortex that needs the right kind of experiences and environment to develop? The following recommendations are presented to create this nurturing environment. Although the recommendations are for teachers, they can be adapted for parents and caregivers.

◆ For many children and especially those that may be LD and AD(H)D, classroom activities can become overwhelming both psychologically and cognitively. Teachers should arrange for these children to sit near them or another student who can help when they become confused. If the LD and/or AD(H)D student could help in the selection of this buddy or partner, it is more likely that they will be able to manage the many activities that take place every day in the classroom. Teachers should also establish strong eye contact with the children whenever possible.

◆ Establish everyday routines to help children know what to expect for the day and post them in the room. Some children may need to have the classroom routine written down and in their pockets so that they can refer to it throughout the day. For particularly anxious children, alternative plans should be worked out with the teachers and classmates so that children do not become so upset that they can’t think if plan A does not work out. For example, if for some reason a child becomes ill and the teacher has to take care of him, the remaining members of the class should know exactly what to do (plan B) in case of an emergency. For many children, a variation in the classroom routine is upsetting, but it is doubling upsetting for children who may be LD and/or have AD(H)D.

◆ Limit distractions and avoid disruptions whenever possible. LD and AD(H)D children are easily distracted, which interferes with their ability to attend. When they lose their focus it is very difficult for them to re-
group and get back on track. If teachers can eliminate distractions, they will help children sustain their attention for longer periods of time.

- Develop a cueing system; for example, touching the student’s shoulder, to remind them to attend. This action is not threatening and does not put children on the spot or embarrass them in front of others for not paying attention. It does remind them, however, that it is time to focus. Provide consistency in your responses to children’s behaviors so that they understand what the cueing system means, how it works, and what they are expected to do.

- Structure a warm, calm, supportive, organized classroom and home environment. Without that, students who have attention problems are not likely to attend and sustain their attention for long periods of time. Teachers and parents who can maintain nonthreatening, warm, and stable relationships with the AD(H)D and LD students will find that children are less disruptive and have longer attention spans.

- Praise, encourage, and support students often for genuine accomplishments. This can be done verbally and by establishing private signals such as thumbs up when the student does something positive or well. These actions will establish and sustain teachers’ and parents’ relationship and attachment to children.

- Set time limits and attainable goals. Everyone needs to feel that they are accomplishing their goals. Children thought to be LD and AD(H)D are no exception. But these goals may need to be adjusted from time to time so that children can be successful and do not become discouraged and quit. When children experience failure it may be because the goals set for them by parents and teachers were not attainable at this point in time.

- Teachers and parents working with children who may be AD(H)D and/or LD should make an effort to learn all they can about these two different kinds of learning problems. They should also involve support teachers and parents who are working with these students so that the students are not getting mixed messages.

In my view, the children who are the focus of this chapter were not learning disabled (LD) but instructionally disabled (ID), and the expert teachers proved that point. Collin and Tommy may have been AD(H)D. The expert teachers, however, provided the right conditions and environment to facilitate their neural development, proving that neurological and psychological development is possible under the right conditions and circumstances. Furthermore, as Mate (1999) argues, this development is always possible—even in adulthood.