

THE SYSTEMATIC INSTRUCTION OF STUDENTS WITH SEVERE  
READING DISABILITIES: TWO CASE STUDIES

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A Thesis

by

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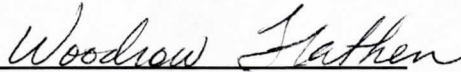
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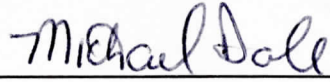
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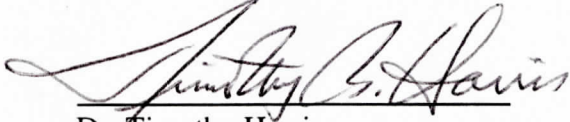
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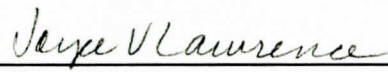
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## ABSTRACT

### THE SYSTEMATIC INSTRUCTION OF STUDENTS WITH SEVERE READING DISABILITIES: TWO CASE STUDIES. (DECEMBER 1996)

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The way in which students with severe reading disabilities are instructed in a public school system was investigated. Interviews regarding the perceptions and beliefs which guide the instruction of severely disabled readers were conducted with educators in a western North Carolina county. The results of these interviews indicated that educators were employing ineffective methods to educate severely disabled readers. Two case studies were then presented in which severely disabled readers were instructed using a systematic alphabetic-code based approach. These severely disabled readers made significant progress in response to this systematic instruction. Implications for the instruction of severely disabled readers in the public school setting were drawn from both the interviews and the two case studies. Both the interviews conducted with educators and the two case studies conclusively indicated that in order to effectively instruct severely disabled readers in the public school system, the system must provide the proper methods, conditions, and teachers.

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## Chapter 1

### Introduction

John usually arrives a little after 7:30 AM. Together we drop off his coat, sign up for his lunch, and walk to the empty speech/language pathologist's office to begin our work. For 60 minutes, John and I read books written on the early-first-grade level. We practice letter sounds, rhyme short vowel words, and write stories with invented spellings. This is perhaps the most difficult literacy work that John engages in all day. The remainder of academic work that John is assigned throughout the day is far beyond his instructional level. The work is too impossible to provide challenge. John is a third grader who reads on the early-first-grade level. For two years, John has watched his peers become fluent in what to him is a foreign tongue--written English. However, in spite of his repeated failure in the area of reading, John takes on the work we do, the work of learning to read, with more determination and seriousness than I thought possible of a nine-year-old boy.

For the past year, I have had the opportunity to work with yet another individual whose perseverance continues to amaze me. David is 40 years old. He is the owner of a contracting company that did over one million dollars worth of business last year. He is also a man who reads on the early-third-level. When David and I first began working together his reading was comprised of sight word recall and context based guessing. At times he was surprisingly accurate, almost deceptively so. David had scant knowledge of letter sound relationships, and he could not decode unknown words. Over the last year, David has worked to master the letters and the sounds they represent. He has gone all the way back to the beginning and is in fact "re-learning" how to read. The prospect of taking



an adult who seemed to be reading at the third-grade level all the way back to ground zero was indeed daunting. The confidence and seriousness that David brought to this task was in fact what carried us through such unfamiliar and frightening terrain. David can now decode virtually all words at the third-grade level. His reading has become more fluent than I ever could have anticipated, and he is ready for a new challenge.

John and David continually struggle to master a written language that has regularly defeated them. They are individuals of courage and persistence, and each has demonstrated a difficulty with written language, has experienced failure in reading, has encountered educators who give up and has been labeled dyslexic.

### What is Dyslexia?

No reading teacher can escape this question. It comes at him [sic] at parties and in the grocery store, at school and at play, and even in the home after the Thanksgiving feast. Unfortunately, so many answers have been given to the question . . . that any answer is bound to conflict with what has been said before. It is a bit like interpreting scripture. (Henderson, 1981, p. 125)

Like the interpretation of scripture, the definition of dyslexia seems to depend more on personal pragmatics than exegetical intention. However, as most theologians would maintain, a common interpretation of scripture is the foundation upon which productive discourse is built. So too, it is a collective definition of dyslexia that will bring about and sustain meaningful discussion.

The term dyslexia seems to have increased in popularity. It is no longer a term used only in reading clinics. It is instead used unreservedly on television sit-coms and soap

operas. Stanovich (1991) described a typical "media dyslexic" as that very bright child who is full of potential yet unable to read due to some cognitive "glitch". In fact, it seems to have become almost fashionable to say "I have dyslexia"(Perfetti, 1985). The actual meaning of "dyslexia" has been diluted to such a degree that it no longer possesses any real distinction.

The word is commonly used, even in educational circles, to describe a student who has difficulty reading. Most recently, the term has taken on the connotation of a disease. A reader seemingly "catches" dyslexia, and is left unable to read. In his book On Being L.D. [Learning disabled]: Perspectives and strategies of young adults., Murphy (1992) has collected and transcribed a variety of interviews with young adults who have learning disabilities. One adult, in describing his reading disability, explained:

Here I am; I have dyslexia, but I don't know that much about it. They told me I had it and I didn't know what it was. And she was telling me there are different symptoms, but they just said you have it. But I figured I'm going to have this thing for my whole life, why get upset about it. (p. 41)

The young adult's words conjure up images of a doctor's office where a patient is conferring with his doctor. The patient's symptoms are reviewed (e.g., the reversal of letters). The diagnosis is made: the patient has dyslexia.

Thus, dyslexia is often viewed as a fatal disease with a hopeless prognosis (Rayner & Pollatsek, 1989). Another young adult in Murphy's work (1992), conveyed this sense of hopelessness when she described why she preferred the term "learning disabled" to dyslexia.

I use the term learning disabilities. I think there's more to it . . . I just like the term better. Dyslexia is like a dead end, that's it, no hope. [emphasis added] It will never change, and you will never change. I don't know, it [learning disabled] just sounds better. (p. 34)

Dyslexia can become that "dead end" around which no one ventures to travel. Students who are labeled dyslexic are often excused from academic tasks. These students receive a blanket excuse for academic endeavors, similar to the doctor's excuse that students present when they must avoid physical education for a week. Dyslexia, when viewed as a disease, has come to provide an excuse, and indeed a rationale, for those children who are not doing as well in school as they should.

In a more clinical sense, dyslexia is a word which describes a condition, not a disease. It is more likened to poor eye sight, or low blood sugar, than to measles or whooping cough. Literally, dyslexia means faulty words, from the Latin prefix "dys" and the Greek root "lexis". The World Federation of Neurology characterized dyslexia as: "A disorder manifested by difficulty in learning to read despite conventional instruction, adequate intelligence, and socio-cultural opportunity. It is dependent upon fundamental cognitive disabilities which are frequently of constitutional origin" (Critchley, 1970, p. 11).

Researchers define dyslexia as a specific reading disability in which individuals are reading two or more years below their expected reading level as determined by mental age (Just & Carpenter, 1987; Perfetti, 1985; Rayner & Pollatsek, 1989). However, this definition must be qualified. Not all individuals reading two or more years below their expected reading levels are dyslexic. Dyslexic individuals have an average or above

average intelligence, commonly measured by IQ tests. The low reading level of dyslexic individuals also may not be attributed to social or environmental factors. That is to say, dyslexia is not a result of poverty, poor teaching, or lack of exposure to books.

Dyslexia is frequently understood in terms of two subcategories: developmental dyslexia and acquired dyslexia (also referred to as alexia). Developmental dyslexia is a condition that has not been caused by any traceable brain damage; thus, neurological insult has been eliminated as a cause. Acquired dyslexia is a condition that results from some evidenced damage; for example a stroke. For the purposes of this discussion, the term dyslexia will refer specifically to developmental dyslexia.

When new clients (usually children) arrive at the college reading clinic where I work, two things occur. First, a parent interview is conducted where the child's medical, familial, and educational history is reviewed. Second, the child is given an informal reading inventory which assesses word recognition, reading accuracy, reading rate, oral and silent reading comprehension, and spelling. It would seem that in having all of this information, the diagnosticians at the clinic would be fairly accurate in determining which clients were dyslexic. However, this is not the case. Even when diagnosticians are privy to the history of a client, it is difficult, if not impossible to determine the nature of a reading disability from a set of assessment scores. These preliminary interviews and assessments are merely screenings. True diagnosis of reading ability and disability comes, over time, through close observation of the child attempting to read.

Dyslexia is not defined, nor identified most accurately by a set of diagnostic criteria. It is, instead, a condition that appears to the trained eye after a great familiarity

with a particular client, as well a great familiarity with the reading process and the nature of reading disabilities. The observations that skilled diagnosticians make are informed by a deep and reflective understanding of the reading process. Dyslexia is not an aberration recognized for its deviant nature. Rather, it is more accurately understood in terms of the way in which this condition is both similar to and different from other reading abilities.

Perfetti (1985) realized the necessity of conceptualizing dyslexia in relation to other reading abilities and described dyslexia in terms of a continuum of reading ability, locating dyslexia at one end of that continuum (see Figure 1). In this scheme dyslexia is a distinct reading disability, yet it is only understood in the context of other reading abilities. Thus dyslexia is one shade in a spectrum of reading abilities, a shade that is distinct from the others, yet similar.

A continuum that locates dyslexia at one end also gives place to a range of other reading abilities. For the sake of orientation, such a continuum would begin with “dyslexic readers” and move left to right. Close to dyslexic readers on a continuum of this nature, would be a group of disabled readers categorized as “poor readers”. Poor readers are individuals of average or above average intelligence who are between one and two years behind in reading level (Perfetti, 1985). These are readers who, for reasons not obvious, are not making the expected progress in reading, yet to the best of our knowledge do not appear to be dyslexic. Moving further along the continuum would be another group of readers experiencing difficulty in the task of reading. These readers, referred to as “less skilled readers”, are individuals who fall below grade level in reading due to what is

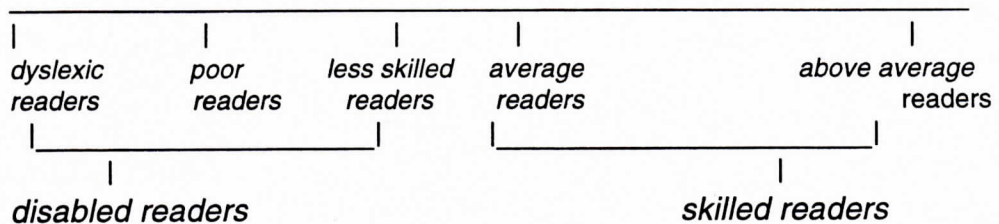


Figure 1: A conceptualization of a reading continuum based upon Perfetti's (1985) work.

most often described as a limited or lower academic aptitude. This group is located closer to the center of the continuum than the dyslexic readers. These readers experience less difficulty in learning to read than do dyslexic readers; thus, their disability is judged less severe. In the center of the continuum is the group labeled "average readers". These individuals read at grade level, and they seem to make the expected progress in reading at the expected time. This is also the group to which all other readers are compared. Further to the right on the continuum are "above average readers", all the individuals that read with better than average ability. For a plethora of reasons, these individuals make great progress in learning to read. They may have high academic aptitudes or a special talent for processing written language. Whatever the reason, they experience no difficulty in the area of reading.

In laying out a continuum of this nature, I have purposefully neglected to situate a particular group of readers. These are the readers whose lives offer other explanations for reading failure. For example, they may come from situations of poverty where they have had little exposure to written language. These individuals may experience emotional difficulties which impede their ability to concentrate, or they may simply be cognitively immature--unready for the reading instruction that is offered. The possibilities are varied.

For no one reason, these students do not make the expected progress in reading. These readers, considered as a group, do not occupy one specific location on the continuum but are instead spread throughout. When a student has difficulty learning to read because of other external emotional demands--for example the divorce of parents--the child may for a time resemble a "poor reader". With time and assistance that same child may be able to focus his attention and move into the group of average readers or even above average readers. There are many external factors which influence a student's ability to read. The effects of these factors are difficult to perceive; thus, the diagnosis of reading disability must be done with full knowledge of the reading continuum as well as a regard for those demands upon the individual that may initially be unknown to the diagnostician. Unfortunately, diagnosis does not always occur in this manner, and quite often students--dyslexic readers, poor readers, and readers with extenuating circumstances--are given the single label of learning disabled.

### What is a Learning Disability?

It is hard to understand how a professional could successfully identify, diagnose, prescribe treatment for, teach or remediate, motivate, or generally improve the life of a person who has a learning disability without first having a clear and accurate idea of the nature of a learning disability. (Hammill, 1990, p. 74)

Determining the nature of a learning disability is a formidable task; defining the term "learning disability" an even more difficult assignment. Unlike dyslexia, a learning disability is not a specific condition with predictable manifestations. In the same way that a person might be identified as "legally blind", a person may be identified as dyslexic.

However, the term "learning disability" does not give name to a particular disorder.

As a term "learning disability" was first coined by Kirk in the 1962 edition of his textbook, Educating Exceptional Children (as reported in Hammill, 1990). The term was later used in a speech at the 1963 organizational meeting of the Association for Children with Learning Disabilities (Chalfant, 1990). Kirk opted to use a new term, one less severe than the then prevailing "minimal brain damaged". At the time that Kirk made this speech, support at the grass roots level was being rallied for the rights of handicapped individuals. This new term, "learning disabled", won enormous support with those people demanding more rights for individuals ignored by the federal government. In this one speech Kirk replaced a term that had a more literal meaning, "minimal brain damaged", with an ambiguous, figurative turn of phrase. A great deal of support from parents and educators gathered around the new terminology. As support grew, a demand increased for the federal legislation securing the rights of those who were learning disabled.

In 1974 President Gerald Ford signed Public Law 94-142. This law, the Education for all Handicapped Children Act, mandated that all handicapped children be served through public education. There were six basic principles that the law articulated: (a) the right of access to public education programs, (b) the individualization of services, (c) the principle of "least restrictive environment", (d) the scope of broadened services to be provided by the schools and a set of procedures for determining them, (e) the general guidelines for identification of disability, and (f) the principles of primary state and local responsibilities (Gartner and Lipsky, 1987, p. 369). This law introduced and mandated services for students labeled learning disabled in the public school system. Through the



fifth principle articulated in this law, the federal government identified eleven different classifications of handicapping conditions, including learning disabled, which were to be served in the public school. It was because of this law that states became responsible for defining the term "learning disability", identifying students with learning disabilities, and providing services and funds for all qualifying students.

As states began to create their own definitions of the term "learning disability", the field of special education worked to put forth their own definition. In 1977 the National Joint Committee on Learning Disabilities (NJCLD) published a definition which has become the basis for all other definitions. This definition was revised in 1988 by a committee including representatives from: the American Speech-Language-Hearing Association, the Council for Learning Disabilities, the International Reading Association, the National Association of School Psychologists, and the Orton Dyslexia Society. When the revision process had come to an end, all of the participants had not reached consensus. There were some individuals who would not adopt the new definition and preferred to continue to use the original 1977 definition. The differences between these two definitions are very subtle, and the 1988 NJCLD definition does contain what seem to be the most basic components of the term. The definition read:

Learning disabilities is a general term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities. These disorders are intrinsic to the individual, presumed to be due to central nervous system dysfunction, and may occur across the life span. Problems in self-regulatory

behaviors, social perception, and social interaction may exist with learning disabilities but do not by themselves constitute a learning disability. Although learning disabilities may occur concomitantly with other handicapping conditions . . . or with extrinsic influences . . . they are not the result of those conditions or influences. (NJCLD, 1988, p.1)

In this definition the five basic components of the term "learning disability" are articulated: (a) a task failure component, (b) an exclusion factor component, (c) an etiological component, (d) a discrepancy component, and (e) a psychological process component (Chalfant, 1989) . These five basic components can also be found, at least partially, in the definitions of "learning disability" used by each of the 50 states. The number of students classified as learning disabled has increased dramatically since the law's inception. Between 1977 and 1985 the number of students labeled learning disabled increased 119 percent while the total number of students served under special education increased only 16 percent (Gartner and Lipsky, 1987). Nationally, more than 40 percent of all special education students are classified as learning disabled. On a state level the prevalence of learning disabled students within the special education population ranges from 26 to 64 percent (Chalfant, 1989). The statistics are surprising; such dramatic increases have prompted many to question the criteria used for determining identification and eligibility of students with learning disabilities.

In the North Carolina Public School System, students come to be labeled as "learning disabled" due to a 15 point discrepancy between the standard scores on an aptitude (IQ) test and an achievement test. These are most frequently based upon the

student's scores on the Wechsler Intelligence Test for Children - R and the Woodcock-Johnson Psycho-Educational Battery-Revised. While other screening procedures occur before the actual testing of the student, the 15 point discrepancy on the norm-referenced tests is the legal bottom line. Thus, in North Carolina (as well as many other states), it is the discrepancy component of the learning disability definition that serves as an operational definition.

### Instruction for the Dyslexic Reader

It is logical to assume that students with dyslexia would eventually find themselves labeled "learning disabled" in the public school system. This label "learning disabled" is not in and of itself problematic. It is in fact desirable that dyslexic readers be identified and appropriately instructed within their local school system.

Research has clearly indicated that phonological awareness (the ability to hear and identify the component sounds of words) and word retrieval facility (the ability to quickly map sounds to symbols and symbols to sounds) are the two most important factors in predicting reading success (Felton, 1993). Indeed the student who has specific language-related reading disability, dyslexia, will have deficits in the area of phonological awareness or in the area of word retrieval. Often noticeable deficits exist in both of these areas (Stanovich, 1980). These deficits manifest themselves most clearly in the area of word recognition. Disabled readers are unlikely or even unable to complete internal analyses of words. Segmentation of words often becomes an impossible task (Stanovich, 1994). In an empirical study in which third and fifth grade disabled readers were compared to skilled first-grade readers, the disabled readers proved significantly more impaired in their ability

to decode nonsense words (Felton, 1993). Dyslexic readers are measurably disabled in their ability to “sound out”, to decode phonetically regular words. This inability to decipher the alphabetic code, then manifests itself in reading fluency problems as well as reading comprehension problems.

The implications for the instruction of dyslexic readers evolve from what is known about the deficiencies of dyslexic readers. If these students are to learn to read, they must strengthen and develop their phonological awareness as well as their word retrieval ability. Thus, instruction should focus upon developing a consciousness of the sounds which comprise words (Felton, 1993). This instruction should also include explicit instruction in letter sound relationships (Perfetti, 1986) and the alphabetic system (Calfée, 1982). This instruction, if it is to be effective for the dyslexic reader, must be intensive and explicit (Pressley, 1994).

In another empirical study (Felton, 1993), two groups of “at risk” first graders were given differing methods of instruction. To one was given “context” based instruction, where word context was used to foster word recognition skills. The other group was given “code” based instruction, where decoding was emphasized as a means to develop word recognition. At the ends of first and second grade the two groups were assessed in reading ability. The “code” group was found to be significantly more accurate in word recognition. Thus, decoding ability, and hence phonological awareness and word naming facility, can be developed and enhanced with an effective method of instruction.

Research has provided an ample base which educators can use to guide and inform their instruction of dyslexic students. While this research is not a recipe for success, it is a

principled foundation upon which we can devise effective instructional routines. The instruction of the dyslexic student, if it is to be effective, should contain explicit and repeated instruction in the alphabetic code. This instruction should also be bracketed by the timeless truths that determine good reading instruction: students must be instructed at their instructional level and they must spend time reading.

The instruction of disabled readers (dyslexic and poor readers) is an area around which research has been ample. The research has clearly indicated that the disabled reader is in need of analytic and explicit instruction in spelling-sound correspondences (Calfee, 1982; Perfetti, 1986; Pressley & Rankin, 1994; Slavin, 1994). There are many ways to phrase this conclusion; however, the instructional implication remains the same. Quite succinctly, dyslexic and poor readers must be taught how to decipher spelling-sound correspondences.

Although not all students identified for special education services in reading are dyslexic, and although dyslexic readers and poor readers alike seem to receive the same instruction, there remains a great potential for the effective instruction of the dyslexic reader in special education because both poor readers and dyslexics can benefit from the same instructional practices. The problem occurs when ineffective instruction is provided through special educational services. When educators choose not to implement proven effective instructional practices, the results are the same as those that come about when dyslexia is viewed as that fatal disease with a hopeless prognosis. The dyslexic reader does not learn to read.

John is considered a dyslexic reader. While he is in the third grade, his instructional

reading level (the level at which he is most able to learn and progress) is mid-first-grade. When evaluated for special education services, John showed a 27 point discrepancy between aptitude and achievement. However, more significantly, John demonstrates a profound difficulty with language. His word recognition ability is poor and his phonological awareness is under-developed. While the progress that John is making in this area is slow, he is making progress. With appropriate, effective instruction John will continue to progress.

David would also be considered a dyslexic reader. His reading is well below any expected level. Like John, David's word recognition ability is weak. David also has great difficulty employing letter-sound relationships. After one year of explicit code-emphasis instruction, David is making steady progress and he frequently comments that he can feel himself improving. David is an intriguing individual. He has lived for over 30 years knowing that he could not read; yet, he never gave up. It seems that he always knew that he could learn to read. For David, dyslexia was never a fatal disease, but a condition requiring appropriate, effective instruction--instruction he failed to receive in public schools.

In this thesis I will investigate the experience of the dyslexic reader in the public school to determine how it is that students like David and John are not learning to read. I will present interviews with teachers and administrators which reveal the perceptions and policies which guide the education of the dyslexic student. I will then present the two case studies of John and David. These case studies will describe the instructional practices used with these two dyslexic readers and the relative effectiveness of the practices. Finally, I

will consider the way in which instructional practices and policies can affect the educational experiences of dyslexic readers.

## Chapter 2

### The Dyslexic Student in School

Growing up on a farm was a lot of hard work . . . . We were very poor as far as money was concerned, but we had enough to eat . . . .When I needed help doing homework, or help with reading, Mom and Dad couldn't help very much; they couldn't read very well either. This made it very difficult to make good grades in school. I had trouble reading all through the sixth, seventh, and eighth grades.

Reading came very hard for me. The boys in my classes picked on me, and called me names. This added more pressure to school and to school work.

David is the author of this piece. This particular passage is taken from the beginning of an autobiography that David is in the process of writing. He begins this life story with a description of the difficulty that reading has caused him, specifically in school. As David reveals more and more of his story, it becomes evident that the inability to read has been the singularly most important factor in David's life. David has a severe reading disability. This disability has become the axis around which he interprets all other events in his life. It is the lens through which he views everything.

Quite remarkably, David's story goes on to reveal that he graduated from high school with honors. He then attended a prestigious state university for a year. It seems incongruous that an individual whose life has been so profoundly affected by an inability to read, could reach this level of academic accomplishment. In educational circles, a student like David, someone smart enough to graduate from high school yet remain unable to read, is explained through the term "learning disabled. This term "learning disabled" has



taken on the meaning that Stanovich (1991) ascribed to dyslexia--the idea of a cognitive glitch that prohibits an intelligent individual from achieving his or her full potential. While there is no empirical evidence to explain this learning disability phenomenon, the term has great societal support, and the support seems to be growing.

By the beginning of this decade the number of school-aged children in the United States who had been identified as "learning disabled" and served through public special education services had risen to 1.75 million (Murphy, 1992). The majority of these students were disabled in the area of reading (Frost and Emery, 1996). Of these students, some could make progress and eventually no longer qualify for special education services. There are other students, however, who would not make noticeable progress. These students, in spite of the special services they received, would continue to fall further and further behind, and the discrepancy between aptitude and reading achievement, initially responsible for their placement in special education, could become larger and larger. Such has been the experience of John.

John was referred to the reading clinic at Appalachian State University at the end of his first-grade year. At the time of referral, John had been identified by his school as learning disabled in reading based upon a discrepancy between his IQ (WISC-R) and his reading achievement (Woodcock-Johnson Psycho-Educational Battery-Revised). Initial testing at the reading clinic showed that John had an instructional reading level at the early-first-grade level (Pre-primer 3). One and a half years later, during which time he was instructed by a classroom teacher and a special education resource teacher, John's instructional reading level remained Pre-primer 3.

It would be easy at this point to cast the blame for John's lack of progress upon his teachers. These educators, according to this argument, must not be attempting to meet John's needs. Their instruction is most likely rote and inflexible; instruction that could in no way respond to John's needs. John's teachers are likely unaware of the central importance of reading and thus perceive it as just one more component of the standard course of study. John is probably one of those students who is allowed to remain on the fringe of every activity. His progress, or lack thereof, is most likely ignored. Assumptions of this nature cast educators as uninformed and uncaring. These assumptions wrongly label teachers as the sole educational scapegoats. In reality, these assumptions in no way describe the educators with whom John has had the good fortune of working.

John's third-grade classroom is not a place where students fill in the blanks on endless reams of Xeroxed worksheets; it is instead a community of readers pursuing all the subtleties of the written word. The children in John's class read almost incessantly. Each day begins with a language arts block that is 90 minutes long. During this block of time the students read and discuss titles such as Stone Fox and Charlotte's Web. When the children cannot read the books, the books are read to the children--no member of this class is denied the opportunity to participate in the discussion of literature. The themes and ideas that new novels introduce are reinforced as the children take field trips, stage re-enactments, and write and produce plays. The passage of time in this classroom is not marked by season, by midterms or even by report cards. The passage of time in this classroom is marked by the encounters that the students have with novels and the authors who wrote them.

John is an integral member of this class; his teacher is continually creating settings in which John is both able and invited to participate. The spelling lists that John receives each week contain words expressly chosen for John. When the other children get 20 words, John gets 12. This teacher also modifies other assignments to accommodate John's instructional level. Some assignments are even read aloud to him. John's third-grade teacher, through the help of an assistant and a student teacher, makes certain that John gets one-to-one attention. When testing takes place, more accommodations are made. John's tests are read aloud to him, and quite often he even dictates his response to a scribe. This third-grade teacher has great compassion for John and his struggle with reading. This teacher wants John to learn, and she holds herself accountable for the progress that he makes.

John also works with a special educator who is deeply concerned with and invested in the progress that John makes. She sees John along with four other boys in a resource room setting for 45 minutes each day . During these 45 minutes, the resource teacher exposes John to the richest language experiences that she knows how to provide. With this teacher, John listens to chapter books and even “partner reads” some of the more instructionally appropriate stories. The students in this class write almost daily. Students read their pieces to each other and work cooperatively to edit and revise their works-in-progress. To assist in this writing process, each student develops a word bank to which he or she refers daily. Written words paper the walls. On one side of the resource classroom stands a “word wall”, on another hangs examples of students’ published writing. In this resource classroom each child is encouraged and supported in finding his

or her own voice. For 45 minutes each day John is steeped in the richest of language experiences. John's educators implement practices advocated by some of the most recent literature in the field of reading.

It is not immediately clear why John is not learning to read. This student has been accurately identified as being in need of special attention. He has also been given specific instruction in his area of disability. In fact, he has received special reading instruction in both the regular classroom and the special education resource room. For all intents and purposes the educational system seems to be working well, but . . . John is not learning to read.

Unfortunately, John is not the only student with a specific reading disability who is not learning to read. Currently, lawsuits are being brought against school systems in the state of North Carolina by parents whose "learning disabled" children are not learning to read (R. Felton, personal communication, July 13, 1996). While the parents involved in these lawsuits would simply have the schools teach their children to read, the solution to this problem is not that clear cut. The reason that John has not learned to read cannot be attributed to one single person, not John, not John's teacher, not John's parents. Nor can this problem be solved by just one person. The education of any student in the public school system is not the responsibility of just one individual, just one teacher. The education of the student, even the severely reading disabled student, is the responsibility of the entire educational system.

### The Interviews

In order to begin to understand the mis-education (Dewey, 1938) of the dyslexic

student in the public school, this researcher thought it important to understand the beliefs and systemic policies that influence the education of the dyslexic student. To address this aim, interviews were conducted with educators who would seemingly have the greatest effect upon the reading instruction of students with reading disabilities. These educators were deemed to be: school principals; regular education teachers (preferably third-grade teachers as John was currently in third grade); Title I reading teachers who serve children considered to be at high risk for reading failure; and special education instructors serving children labeled as learning disabled.

So that these interviews might better represent the experience of the dyslexic student in a school system, as opposed to a particular school, interviews were conducted in each of the eight elementary schools in a rural county school system in western North Carolina. The county has a population of 36,952 with 21.5 percent falling below the federal poverty level. Seventy-two percent of the population have completed high school and 27.4 percent have completed college. This county's elementary schools range in size from 210 students to 880 students. The average elementary school population is 429 students.

Individual interviews were conducted with 27 school teachers and administrators. Four teachers were unavailable for interview and one teacher refused to be interviewed. Of the teachers and administrators interviewed, 14 had obtained master's degrees, 4 had completed the course work required for the degree of educational specialist, and 1 was a candidate for a doctoral program in education. The average level of experience was 17 years with a range from 1 to 34 years. The teachers and administrators had been presented

with copies of the interview questions prior to the interview. All interviews were tape recorded, with the exception of one at the request of the interviewee. Each teacher and administrator was asked to respond to the following questions:

1. How would you define the term “dyslexia”?
2. In your opinion, what makes a dyslexic reader different from other below average readers?
3. In your school, how is the dyslexic student identified?
4. How would you define the term “learning disability”?
5. In your opinion, what are the instructional needs of the dyslexic reader?
6. What do you believe to be the role of special education in relation to the dyslexic reader?

How would you define the term “dyslexia”?

At the outset of every interview, the responding teacher or administrator prefaced all remarks by stating that the school did not use the term “dyslexia”. One Title I teacher remarked, “I don’t know that it’s been proven that such a thing exists” (see Table 1). Another Title I teacher explained, “We stay away from that term, we don’t label people here”. One special education teacher even referred to the term “dyslexia” as a “bad word”. The one teacher who refused to be interviewed was in fact a Title I teacher with certification in the area of reading. She stated, “I don’t know anything about dyslexia and don’t know why you want to talk to me!” Thus, it should be noted that there seemed to be an apprehension surrounding the discussion of dyslexia, as well as, in some cases, a very noticeable agitation.

	How would you define the term "dyslexia"?	What makes a dyslexic reader different from other below average readers?	In your school, how is the dyslexic student identified?
School 1-Admin.	reversals, an inability to read	*	evaluated at the end of <u>First Steps</u> , referred to School Wide Assistance Team (SWAT)
School 2-Admin.	a range of inabilities	dyslexic reader has a discrepancy	through SWAT- - and labeled LD
School 3-Admin.	reversals in reading- - it could also be colors	for the dyslexic the problem is not comprehension	LD- SWAT after referral through classroom teacher
School 4-Admin.	most research with no results- - reversals	dyslexia doesn't show up until fourth or fifth grade	classroom teacher- to SWAT- LD
School 5-Admin.	yet to see it well defined	*	we do not identify dyslexia as a disability- - identify LD
School 6-Admin.	jumbling of information	*	classroom teacher will identify and refer to SWAT but not until student is writing
School 7-Admin.	synonymous with learning disability- not a term used by the state department	more unevenness in learning	identified as LD through SWAT
School 8-Admin.	term is confusing- - may be a learning disability	once exposed to print, student is still struggling	Title I or classroom teacher refers- - gets served in <u>First Steps</u> - then served in resource room.

\*-indicates no response

Table 1: Responses of educators to interview questions 1-3.

	<b>How would you define the term "dyslexia"?</b>	<b>What makes a dyslexic reader different from other below average readers?</b>	<b>In your school, how is the dyslexic student identified?</b>
<b>School 1-Reg. Ed.</b>	*	*	*
<b>School 2-Reg. Ed.</b>	reversals in reading and writing	the problem is not comprehension	SWAT- identified as LD
<b>School 3-Reg. Ed.</b>	reversals- - something about the brain	special techniques needed- - not regular phonics or whole word	SWAT- after referred by classroom teacher
<b>School 4-Reg. Ed.</b>	letters reversed	inconsistent progress	referred to SWAT by 3rd grade classroom teacher
<b>School 5-Reg. Ed.</b>	reversals	dyslexic has problem with what they are seeing	SWAT- referred by classroom teacher
<b>School 6-Reg. Ed.</b>	scrambling and reversals of letters of numbers	dyslexic is very deliberate, works very slowly, really struggles	classroom teacher refers to SWAT
<b>School 7-Reg. Ed.</b>	learning disabled because they see things reversed	dyslexic has good comprehension skills	classroom teacher to SWAT to special education
<b>School 8-Reg. Ed.</b>	*	*	*

\*-indicates no response

Table 1: Responses of educators to interview questions 1-3 (cont.).



	How would you define the term "dyslexia"?	What makes a dyslexic reader different from other below average readers?	In your school, how is the dyslexic student identified?
<b>School 1- Spec. Ed.</b>	reversals in letters	*	will be identified as learning disabled (ld)
<b>School 2- Spec. Ed.</b>	*	*	*
<b>School 3- Spec.Ed.</b>	reversals- we don't use that word- - it's a "bad word"	severe disability- slow progress- erratic learning	evaluated at end of <u>First Steps</u> - goes to SWAT and identified LD
<b>School 4- Spec. Ed.</b>	processing difficulty in reading- - reversals	problem is not comprehension- below avg. and dyslexic look alike on standardized test	SWAT and labeled LD
<b>School 5- Spec. Ed.</b>	not reversals	number of exposures needed to learn words	SWAT - - identified as LD
<b>School 6- Spec. Ed.</b>	reversals- visual processing or expressive problem	skill deficiency in all aspects of reading	most identified LD, referred by classroom teacher
<b>School 7- Spec. Ed.</b>	don't use that word a lot; any difficulty reading	I'm not trained in dyslexia	probably identified as LD in reading- - not identified as dyslexic
<b>School 8- Spec. Ed.</b>	inability to learn to read- - we don't come up with that label	dyslexic has a processing difference	classroom teacher to SWAT then LD

\* indicates no response

Table 1: Responses of educators to interview questions 1-3 (cont.).

	How would you define the term "dyslexia"?	What makes a dyslexic reader different from other below average readers?	In your school, how is the dyslexic student identified?
School 1- Title I	*	*	*
School 2- Title I	*	*	*
School 3- Title I	reversals- - we stay away from labels	reversals- - - dyslexic student can't do word families	labeled LD- goes through SWAT
School 4- Title I	reversals	*	*- had not yet seen process
School 5- Title I	see words different from other people	they end up in special education	SWAT
School 6- Title I	I don't know that it has been proven that it exists- a learning disability	dyslexic has to learn to cope with problem	SWAT- referred by classroom teacher
School 7- Title I	severe reading disability is a better term	*	identified as LD, not dyslexic- - referred if not "getting it" in <u>First Steps</u>
School 8- Title I	very few true dyslexics	*	end up in special education

\*-indicates no response

Table 1: Responses of educators to interview questions 1-3 (cont.).

In defining the term “dyslexia”, every administrator and teacher spoke of it in relation to a difficulty that some students experience in the area of reading; one regular educator broadened this perception to include other difficulties with numbers, and one administrator talked about difficulty with colors. Fifteen of the 27 people interviewed used the word “reversal” when explaining their understanding of this reading disability; of these 15 responses 3 came from administrators, 6 from regular education teachers, 4 from special educators, and 2 from Title I reading teachers. One special educator differed in this opinion and stated, “I do not believe that they [dyslexics] see them [letters] reversed.” She continued, “dyslexia can be used interchangeably with having a learning disability, whether [the disability is] symbol to sound or sound to word. There is also auditory dyslexia and graphic dyslexia.” Three different individuals--two of whom were principals and the other a third-grade teacher--used the term “learning disability” to explain dyslexia. One of these administrators even went so far as to say that the term “dyslexia” was “synonymous with learning disability”.

Among the individuals interviewed, no clear definition of the term dyslexia was given. The greatest commonalities among the interviews was the vagueness with which dyslexia was defined and the very real hesitancy to even discuss this term. With one exception, this hesitancy did not seem to suggest skepticism in the existence of such a condition. Instead, the trepidation was connected to a sense of intentional caution concerning the way in which this term was used. While none of the teachers who were interviewed offered what could be considered a “textbook” definition of “dyslexia”, the use of the terms, “reversals” and “learning disability” conveyed some familiarity, albeit

distant familiarity, with the condition dyslexia.

In your opinion, what makes dyslexic readers different from other below average readers?

In attempting to discover what teachers and administrators found to be unique about dyslexia, the question was posed: “What makes a dyslexic reader different from other below average readers?” The responses to this question were even more varied than the responses to the previous query. To this question, three principals, three Title I teachers, and one special educator offered no reply. Another special education teacher explained that she was not trained in dyslexia. Of the individuals who did respond, three educators--a principal, a third-grade teacher and a special educator--suggested that dyslexic students show more “erratic learning”. One principal, two third-grade teachers, and one special educator explained that for dyslexic readers the problem is not comprehension. Other teachers offered very specific insights about dyslexic readers, suggesting a personal knowledge of these severely disabled students. One Title I teacher explained that dyslexic students “can’t learn to read from word families”. This teacher used word families to expose students to new sight words as well as to help students develop a knowledge of letter-sound relationships. In her experience, dyslexic students did not learn to read in this manner. One special educator noted, “Below average readers and dyslexic readers look alike on standardized tests.” Another special educator explained that the difference between below average readers and dyslexic readers lay in the number of exposures needed to learn words. In her experience dyslexic readers needed more exposures to learn words than did other readers.

The responses given to this question suggest that special educators, more than any

other group, have given some thought to what makes dyslexic readers unique. While two of the seven special educators interviewed offered no answer, the five that did respond provided answers that specifically dealt with the specific difficulty these students have in learning to read. In contrast, the Title I teachers who were interviewed gave the most vague responses to this question. In two of the four responses offered, the responses had no direct relevance to the act of reading. Taken as whole, the responses given by the interviewed educators, reveal a vague, and at times confused, understanding of the specific reading disability that is commonly referred to as dyslexia. One regular education teacher responded by saying, "They [dyslexic students] have a problem with what they are seeing." This statement is false; dyslexia is not a disability connected to one's vision.

When these responses are viewed individually, it becomes clear that these teachers and administrators have little formal knowledge about dyslexia. The responses that were offered seemed to come from personal knowledge of students these teachers assumed to be dyslexic readers. Several educators also offered what seemed to be insights into the way dyslexic readers learn. These insights were not specific to the nature or to the manifestations of dyslexia, but instead took the form of working hypotheses which served primarily to inform practice. While the teachers and administrators in this county have evidently not been provided with any uniform way to speak or think about dyslexia, occasionally they did offer insights about the disability. These insights appear to be knowledge that thoughtful teachers have developed after interactions with and reflections about specific students.

In your school how is the dyslexic student identified?

In explaining how the dyslexic student is identified in their schools, the educators had great uniformity of answer. While the phrasing differed, each teacher and administrator offered essentially the same response. It was first noted that though very low readers are not labeled “dyslexic” in the school system, these students do quickly come to the attention of teachers. While these students seem to readily attract teachers’ attention, no explanation was given as to what type of identifying characteristics “dyslexic” students demonstrate. Most often the classroom teacher would first notice the dyslexic student; however, occasionally the Title I reading teacher makes the identification. In each of the eight elementary schools, a first-grade reading intervention program (First Steps) is in place. This intervention program gives one-to-one tutorial assistance to first graders who are at risk for reading failure. The program is carried out primarily through the services provided by the Title I teacher. If at the end of the yearly intervention, the student still is not “getting it”, the Title I teacher brings this student to the attention of other teachers.

If the dyslexic student is not identified through First Steps, the classroom teacher will likely notice the difficulty the dyslexic student is having in the regular classroom. The classroom teacher will then consult with a “buddy” teacher and brainstorm as to some modifications that may help this student in the regular classroom. In the opinion of the educators interviewed, these brain-stormed modifications will likely not work, and thus the student then will be referred to the *School Wide Assistance Team*. This team, composed of a special educator, an administrator, a school counselor, a school psychologist and other representative teachers then in all likelihood will recommend that the testing required for placement in special education be carried out. At this point the student most likely would be administered the Weschler Intelligence Scale for Children-

Revised and the Woodcock-Johnson Psycho-Educational Battery Revised. If a 15 point discrepancy is found between aptitude and achievement, the student would be identified as “learning disabled” and by law would receive services from the special educator. The educators were in complete consensus that a student who is dyslexic (possessing a severe reading problem) most likely will be identified as learning disabled and thus served through special education.

An intriguing aspect of the responses to this question is the uniformity of answers. Each teacher and administrator told the same story, from the initial recognition of the student by the classroom teacher to the final placement of the student in the care of special education. The educators in this county have been instructed well in the systematic policy of the school. These educators also place great faith in the ability of this policy to mandate special assistance for dyslexic students.

In hoping to find out more about the involvement of special education in the education of the dyslexic student, the second half of the interview brought in the term “learning disability” (see Table 2).

How would you define the term “learning disability?”

When asked to define the term “learning disability”, 10 out of the 27 interviewed educators used the word “discrepancy”--the 15 point discrepancy that the State Department of Public Instruction suggests as a guideline for the placement of students in special education. Of these ten responses, five came from special educators; in fact the only other response that the special educators offered to this question was “a difficulty in processing”. As a group special educators offered a somewhat uniform response. Six other respondents, third-grade and Title I teachers, explained “learning disability” in terms of a

	How would you define the term "learning disabled"?	What are the instructional needs of the dyslexic reader?	What is the role of special education in relation to the dyslexic reader?
<b>School 1-Admin.</b>	discrepancy	*	one on one intervention
<b>School 2-Admin.</b>	incapability	concrete repetition	support classroom teacher
<b>School 3-Admin.</b>	anything that keeps a student from learning in a normal way	*	primary servers- - not sure that special educators are trained for the exotic.
<b>School 4-Admin.</b>	anything that inhibits student from meeting potential	window box, taped books	one on one instruction
<b>School 5-Admin.</b>	barrier from making progress	tap into favored modality	one on one, advocate, specialized approach
<b>School 6-Admin.</b>	problem with information procession	training in exceptionalities	assess needs, case manager
<b>School 7-Admin.</b>	discrepancy	look at individual needs	enhance child but give equal opportunity
<b>School 8-Admin.</b>	don't understand all the terms- problem with brain- may be developmental delays	caring and patient personnel	I do not like pull out program and labeling of kids

\*-indicates no response

Table 2: Responses of educators to interview questions 4-6.



	How would you define the term "learning disabled"?	What are the instructional needs of the dyslexic reader?	What is the role of special education in relation to the dyslexic reader?
School 1-Reg. Ed.	*	*	*
School 2-Reg. Ed.	discrepancy	individualized instruction	remediation
School 3-Reg. Ed.	difference in learning- not IQ	special techniques- one on one	one on one
School 4-Reg. Ed.	problem in the processing on information from page to brain	modifications, one on one, teach letters and vowel patterns	specialized training and individualized instruction
School 5-Reg. Ed.	certain area student is having difficulty learning	individualized instruction	part of team
School 6-Reg. Ed.	learn in a different not conventional way	modified assignments, preferential seating	specialized training- total dose of reading
School 7-Reg. Ed.	discrepancy	compensations, make allowance for reversals	inclusion, someone at student's side
School 8-Reg. Ed.	*	*	*

\* -indicates no response

Table 2: Responses of educators to interview questions 4-6 (cont.).

	<b>How would you define the term "learning disabled"?</b>	<b>What are the instructional needs of the dyslexic reader?</b>	<b>What is the role of special education in relation to the dyslexic reader?</b>
<b>School 1- Spec. Ed.</b>	discrepancy	teachers need training	one on one assistance
<b>School 2- Spec. Ed.</b>	*	*	*
<b>School 4- Spec. Ed.</b>	process related disability- difficulty with retrieval and encoding of information	develop strategies to retrieve and recognize words	assess all needs and deliver services
<b>School 5- Spec. Ed.</b>	discrepancy	one on one, not whole language, need phonics	teach differently
<b>School 6- Spec. Ed.</b>	significant difficulty in either processing, receiving, or expressing information	identify mode of learning- meet individual needs	support, advocate
<b>School 7- Spec. Ed.</b>	discrepancy	teachers need to be trained appropriately	supports- people who can help
<b>School 8- Spec. Ed.</b>	discrepancy	modifications and accommodations	remediate - - inclusion doesn't work when kids are 3- 4 years behind
<b>School 3- Spec.Ed.</b>	discrepancy	survival reading	advocates

\* -indicates no response

Table 2: Responses of educators to interview questions 4-6 (cont.).

	How would you define the term "learning disabled"?	What are the instructional needs of the dyslexic reader?	What is the role of special education in relation to the dyslexic reader?
<b>School 1- Title I</b>	*	*	*
<b>School 2- Title I</b>	*	*	*
<b>School 3- Title I</b>	difference in learning-inconsistent	repetition	primary service provider
<b>School 4- Title I</b>	physiological problem	structured explicit instruction	one on one
<b>School 5- Title I</b>	trouble processing information	different approach, repetition, one on one	special help
<b>School 6- Title I</b>	ability to learn but something interfering with it	students must recognize that they learn differently	give strategies and skills to cope
<b>School 7- Title I</b>	discrepancy	one on one	served in LD program
<b>School 8- Title I</b>	learning as we expect to occur doesn't happen	domain of special education	who the dyslexics work with

\* -indicates no response

Table 2: Responses of educators to interview questions 4-6(cont.).

“difference in learning”. Of the educators interviewed, the administrators seemed as a group to have the least specific responses to this question. One administrator explained a learning disability in terms of an “incapability”, while another used the words “anything that keeps a student from learning in a normal way.” Another administrator made a similar response: “A learning disability is anything that inhibits a student from meeting his potential.” The words “problems with processing information” were used by administrators to describe the term “learning disability”, as were “barriers from making progress”. One administrator simply acknowledged, “I don’t understand all the terms.” The two other administrators who were interviewed both used the word “discrepancy” to define the term “learning disability”. Interestingly, both of these administrators had previously worked as special educators.

The definitions of the term “learning disability” put forth by the teachers as a group and administrators as a group are qualitatively different. It seems that practitioners who have the most day-to-day contact with students that are labeled learning disabled, understand the term “learning disabled” primarily in terms of a discrepancy between aptitude and achievement. Interestingly, these definitions seem to be informed primarily by the procedural policy used to place students in special education. When explaining how the dyslexic student is identified, every educator referred to a 15 point discrepancy between aptitude and achievement as measured by standardized tests. In defining the term “learning disability”, over one third of the respondents made reference to this very discrepancy. While most educators were able to provide a definition for the term “learning disability”, this definition did not seem to come from any specialized training, but was

instead informed almost entirely by school policy.

In your opinion what are the instructional needs of the dyslexic students?

In attempting to specify the instructional needs of dyslexic readers the teachers and administrators who were interviewed gave a great variety of responses. The most frequent response occurred only five times. Two third-grade teachers, two Title I reading teachers, and one special educator responded that dyslexic readers were in need of “one-to-one attention”. Four educators--one principal, two third-grade teachers, and one Title I teacher--believed that instructionally, dyslexic students required “modifications and accommodations”. These modifications and accommodations included: “modified assignments”, “preferential seating”, “the use of reading window boxes” (i.e. cards with a small rectangle cut out, used to aid in tracking print), and “allowances made for letter reversals”. Two Title I teachers mentioned the need for repetition in the instruction of the dyslexic student, as did one principal. One special educator was noticeably specific in her response. She said, “They [dyslexic readers] need phonics instruction. Pegasus (Santa, 1995)--the literature based reading curriculum used at her school--does not teach these kids [dyslexic students] to read.” The most intriguing response to this question regarding the specific instructional needs of dyslexic students came from four of the educators interviewed, two of whom were special educators. These individuals believed that dyslexic students were in need of teachers with specialized training. This response is quite revealing. First, the educators were implying that dyslexic students are best taught by those individuals with specific training. The idea is that not just anyone can help these students. Secondly, these educators, two of whom were special educators, seemed to be

admitting that they did not possess this training.

Each administrator and teacher who was interviewed believed that dyslexic students had some specific instructional needs. The instructional needs that were articulated did not necessarily seem vague or randomly chosen; however these responses did lack cohesion. While these educators seemed to have thought, at least on some level, about the instruction of dyslexic students, it is clear that dyslexic students in this public school system are not receiving a uniform approach. The educators in this system seem to be offering a hodge-podge of instructional approaches hoping that something will hit its mark.

What do you believe to be the role of special education in relation to the dyslexic reader?

Concerning the role of special education in relation to the dyslexic reader, the educators who were interviewed expressed opinions very similar to responses given regarding the instructional needs of the dyslexic students. Once again these responses were varied, but “providing one-to-one instruction” was the most frequently cited response. Three Title I reading teachers and one special educator believed that the role of special educators was to serve as the primary service providers for dyslexic students. Three teachers, none of whom were special educators, suggested that teachers in special education offered specialized training to the dyslexic student. Of the seven special educators interviewed, the most common descriptions of their roles were “providing support” and “acting as advocates”. These educators described themselves as buffers between the dyslexic student and the public school system. They are the teachers who protect the rights of the dyslexic student. Interestingly, these special educators did not

describe their roles in terms of the instruction they provide.

While the questions “What are the instructional needs of the dyslexic reader?” and “What is the role of special education in relation to the dyslexic reader?” may have in some ways overlapped, these two questions did reveal an interesting paradox. In response to the question regarding the instructional needs of dyslexic students, special educators listed such things as: teacher training, one-to-one instruction, student strategies, and instructional modifications and accommodations. When asked the question regarding the role of special education, special educators described: assessment of student needs, different teaching, advocacy and support, and remediation. It seems logical to assume there would be some agreement between the way in which teachers perceived the dyslexic student’s instructional needs and the way in which those same teachers described the role of special education; however, there was no such agreement. Not one teacher described the role of special education in such a way that it matched the instructional needs of the dyslexic student.

While these interviews represent only the perceptions of a sample of educators in one North Carolina school system, some preliminary conclusions can be drawn. It is clear that a “channel” exists, and this is the channel that most dyslexic students follow through public education. Students with severe reading disability come to the notice of their classroom teachers. These teachers then refer dyslexic students to school wide assistance teams, who then recommend the students for testing. In all likelihood, dyslexic students will demonstrate a 15 point or greater discrepancy between aptitude and achievement, and will therefore be labeled learning disabled. These students will then receive instructional assistance from a special educator.

It also becomes evident through these interviews that although educators are reticent to use the term dyslexia, they do believe that such students exist. It even seems from the specificity of many of the responses, that teachers, especially special educators, have personal knowledge of students with severe reading disabilities. From the nature of the responses that were given, it is apparent that these students are of genuine concern to their teachers. While educators may not always be able to explicate educationally sound responses to the instructional needs of dyslexic students, these teachers and administrators have given some thought as to what would benefit dyslexic students. The teachers and administrators of this county have each seemed to develop their own ways to attempt to respond to dyslexic students. These are people who are well aware of the educational system's real bottom line. They know that in practice it takes at least a 15 point discrepancy to get dyslexic students special assistance. They know that in order to receive special assistance, dyslexic students must be labeled learning disabled. These educators also know that dyslexic students must have something beyond the regular classroom experience.

Finally from these interviews it is evident that teachers and administrators do not feel comfortable using the term "dyslexia". While not all educators need expertise in the area of dyslexia, special educators would certainly seem to need this knowledge. However, these special educators have received no formal explanation as to the nature of dyslexia, nor have they been trained to instruct dyslexic students. Whereas these special educators may have 20 years experience teaching, while they may implement the most current of reading practices, and while they may make all the modifications and accommodations the curriculum allows, they do not possess a formalized knowledge of



the instructional practices that most would benefit dyslexic students.

Finally, the responses to the interview questions seem to reveal something deeper. That is, John's mis-educative experience (Dewey, 1938) is not attributable to one teacher, to one administrator, nor to one dyslexic student. The mis-education of John seems to be a consequence of the way in which the educational system operates. While it would be easy and perhaps more immediately satisfying to place the blame on a particular teacher or school, it is the educational system, the system that sets policies, procedures, and expectations, that is truly to blame.

Kauffman (1994), a noted researcher in the area of special education, published an editorial article in The Journal of Learning Disabilities in which he outlined criticisms, both justified and unjustified, that have been advanced against the field of special education. While Kauffman directed his concerns and opinions specifically to the field of special education, the issues that he raised can be used to understand the way in which the greater field of education responds to students with special needs.

Kauffman enumerated those factors which have served to prohibit the effective education of students with special needs: teachers lacking the necessary training, teachers working in isolation, and teachers being denied necessary teaching conditions. The educators I interviewed did not require Kauffman to identify these issues for them. These issues were raised repeatedly as teachers, especially special educators, described their attempts to educate disabled students. On more than one occasion these educators asserted that they needed more training, specifically in the area of dyslexia.

Throughout the interviews, the teachers and administrators demonstrated what

seemed to be genuine concern for their students. Yet like the educators to whom Kauffman refers, they have worked without an informed understanding of dyslexia. They do not possess a common understanding of reading disability, or a common language in which to talk about this condition. Instead these teachers have been working from individual glimpses of a much larger picture. Their perceptions and understandings of reading disability have been developed in isolation from one another. They are like the blindfolded men who attempt to identify an elephant: Each works in isolation, each perceives a different part, and thus no one can ever fully see the animal in front of them.

The interviewed teachers admitted that they are not trained to instruct every different type of student that they encounter; they are, however, held accountable for the progress that every student makes. Kaufman argued that in training teachers to meet every possible situation, the field produces teachers who are expert in nothing. These teachers are then, in effect, thrown into situations where the only recourse possible is offering Band-Aids for gaping wounds. In these primitive situations the teacher hands out window box cards, preferential seating, and allowances for letter reversals. Accommodations and modifications are the only Band-aids available. In situations of this nature, there is nothing else to offer.

Although Kaufman's criticisms were directed specifically at the field of special education, those same criticisms seem to apply to the entire field that attempts to educate the student with special needs. Having identified the problems inherent in the educational system, Kauffman proposed essential reform:

If we allow special education teachers to use methods of questionable virtue or to

implement them carelessly or sporadically, then we have no right to expect that special education will work, by any reasonable criterion. Special education succeeds or fails not so much by its structure as by its instructional effectiveness. Special educators are so called because they are to offer instruction that is particularly intensive and effective, if not special along other dimensions. (P.616)

The reform is rather basic. The field of education must make use of effective instructional practices, practices not of “questionable virtue”, but practices which have proven sound. Thus, if John is to learn to read, a change must occur in his school. His teachers must be provided expertise in proven effective instructional practices. If teachers are to be held accountable for the progress of their students, and if schools are to claim that they provide education for all children, then educators must be given the training to accomplish these aims. Fortunately, there is no need to reinvent the wheel. As noted in Chapter 1 research has already indicated those instructional practices which have proven to be effective in teaching the dyslexic student how to read.

## Chapter 3

In Chapters 1 and 2, the following argument took shape. Students with severe disabilities in reading are regularly identified as having a disability. By law, these students are then provided with specialized services. Ideally these students would receive the best, most appropriate instruction available. What is considered the best most appropriate instruction, however, becomes an issue. Quite often the ‘best’ practices in education seem to be informed by the most recent of pedagogical trends.

Reading education is known for its dramatic pendulum swings. Presently a debate continues between proponents of whole language instruction and advocates of a phonics-based approach. Often the focus of this debate does not truly seem to be upon the student who is learning to read, but instead upon the rhetoric, the drama, and the political agenda of the debate. In 1938 Dewey addressed these pendulum swings in Experience and Education. He wrote:

There is always the danger in a new movement that in rejecting the aims and methods of that which it would supplant, it may develop its principles negatively rather than positively and constructively. Then it takes its cue in practice from that which is rejected instead of from the constructive development of its own philosophy. (p. 20)

The danger to which Dewey refers is real. All too often educational debates become reactive, as opposed to proactive, in character. The shapers of the debate lose sight of purpose; practitioners are left with practices which often seem to lack a coherent

theoretical base. While the educator may be offered the most innovative and current instructional practices, these practices may not carry with them a sound understanding of how students learn. The educational debate, while seemingly determining the ideal in educational methods, does not transfer easily into a practice that readily matches the needs of real students.

John, and arguably many others in his situation, do not benefit from rhetorical debates over “which is the best reading method”. In considering the specific needs of severely disabled readers such as John, research has supported and continues to support direct instruction with a focus upon the development of letter sound knowledge. This instruction, supported with appropriate in-text reading, is to be systematic and appropriately paced (Morris, 1992; Slavin, Madden, Karweit, Dolan, & Wasik, 1991). In the following case studies, the effectiveness of this direct, code emphasis instruction is examined. This examination is two fold in nature. First, the case studies document the severely disabled reader’s need for very specific and systematic instruction. Second, the case studies provide concrete examples of how code-emphasis instruction can be used with severely disabled readers.

## Method

### Subjects

The subjects in this study were two males, here called David and John, aged 42 and 9 respectively. According to an assessment comprised of a word recognition inventory, a passage reading inventory (Woods & Moe, 1981) and a graded spelling inventory (Schlagal, as reported in Templeton & Baer, 1992) the reading levels at the

beginning of intervention were late-first-grade (David) and early-first-grade (John).

Although no formal intelligence test has been administered to David, the occupational level to which he has risen evidences his functioning to be within the normal range of intelligence. John was given the Weschler Intelligence Scale for Children-Revised and attained a full scale score of 108.

### Procedure

Each subject received one-to-one reading instruction that lasted one hour each session. The duration of this intervention varied according to subject. David and I have met two times per week for 13 months for an approximate total of 110 hours of reading intervention. John and I have met 3 times per week for nine months for an approximate total of 105 hours of reading intervention.

The tutorial sessions were documented in three different forms. First, each tutorial session was based upon a lesson plan. The lesson plans and pertinent notes regarding the student's response to the lesson were written in a journal and kept in a portfolio. Second, weekly skills checks were used as a means of informal assessment. These informal assessments also became part of each student's portfolio. Third, each student relayed anecdotes regarding his struggle and progress with the reading process. As these stories were typically impromptu, they were not caught on audio or video tape but were written down in narrative form by the tutor and added to each student's portfolio.

### Case Study 1: David

David first came to the Appalachian State University reading clinic in January of 1992. At that time he was given a test battery which assessed word recognition (flashed

and untimed) oral reading accuracy, reading comprehension and reading rate, as well as spelling level. Assuming the instructional level to be the highest level at which David scored no less than 60% in flash word recognition and no less than 90% in oral reading accuracy, David was instructional at the late-first-grade level (see Table 3). He was frustrated at the second-grade level, showing low flash word recognition (45%) and very low oral reading accuracy (78%).

David had no difficulty comprehending the easy first- and second-grade passages and his reading rate (60 wpm) approximated that of a first grader. The examiner noted that David was clearly anxious about this assessment. David explained that it was the hardest thing he ever had to do. He said that he had sweat dripping down his face because he was so nervous. Taking David's anxiety into account, and considering his word recognition scores in isolation, we can surmise that the level at which David was instructional in oral reading was first grade.

Through the Appalachian State University Reading Clinic, David received supervised tutorial instruction in reading. The tutorial instruction followed the standard format used at this clinic: guided reading at the client's instructional level (15-20 minutes), word study activities (10 minutes), easy reading at the client's independent level to develop fluency (15 minutes), and writing (15 minutes). Using this pattern of activities, tutors worked with David two times per week for two years. Through word study activities, in which words are presented and studied by pattern, David was systematically exposed to all of the short-vowel high frequency words (CVC) as well as the long-vowel pattern high frequency words (CVCe). He worked on each pattern until demonstrating

	Flash Word Recognition	Untimed Word Recognition	Oral Reading Accuracy	Oral Reading Rate	Instructional Spelling Level
Preprimer	90	100			
Primer	75	90	68	72 wds/min	
1st	65	95	90	60 wds/min	60%
2nd	45	80	78	52 wds/min	44%
3rd	15	55			

Table 3: David's reading level before intervention as measured by an informal reading inventory.

mastery in sorting words according to pattern, as well as proficiency in spelling the words. After working in the clinic for two years, David had seemingly mastered the most common long vowel patterns and was therefore working through a third-grade spelling book, Houghton Mifflin Spelling (Henderson, Coulter, Templeton & Thomas, 1985). He had also begun to read books written at the early-third-grade level. No formal reading assessments were taken during this period due to the distress that testing caused David, but informal assessments were regularly taken. For example, clinicians would monitor a hundred word passage from the leveled text that David was reading during the guided reading portion of the lesson. At the late-second and early-third-grade level, David was scoring between 90 and 95 percent in oral reading accuracy on these passages, an indication of instructional level. When David took weekly pre-tests in spelling, he scored approximately 50% in accuracy. Then on the weekly posttest he scored in the 85 to 100% range, suggesting a degree of mastery. On spelling review tests administered every six weeks, David again scored in the 80 to 100% range, confirming a degree of mastery of the



studied spelling patterns.

In January of 1995, approximately 2 years after he had begun work at the clinic, I began tutoring David. At that time David was mid-way through a third-grade spelling book and so we began at the point where he had stopped. David continued to score around 50 percent on the pretest and then 90 to 100% the posttest. While David's reading was slow and disfluent at the third-grade level, he did possess a large sight vocabulary and he was attending to punctuation as he read. His reading was even beginning to develop a cadence and inflection that skilled readers use. It seemed as if I had David working in reading and spelling where he would be able to make the most progress. But David was not making progress.

As I became more familiar with David's reading, several patterns began to emerge. David consistently had problems recognizing small sight words such as a, the, an, that, this, when. When he missed one of these words and I drew his attention to the word, he would guess at the word until he got it correct. David also showed difficulty in reading unknown proper names. Even when the names were phonetically regular, David showed great frustration in dealing with these. When I told him the unknown word, he could not read it on the second and third exposure. It was as if David had no way to remember the individual letter-sounds that comprised the name. Frequently, David would make substitutions in the text that were contextually appropriate, even to the point of being synonymous with the misread word. David would read "dinner" for supper and "fall" for autumn. Substitutions of this nature occurred frequently, enough to cause the suspicion that David was not entirely attending to the letters in the words. I believed that he saw the

letters, but that he did not process the letter-sound relationships in that word.

My suspicion that David was not using the letters to sound out words was compounded to some degree when I noticed that David was making substitutions in which both words, the printed word and the substitution, shared similar physical characteristics. David would read “position” for positive, “blame” for balm, and even “saw” for was. Intrigued by this phenomenon, I asked how he knew the word “blame” was blame. David explained that he saw the b, l, and m, and knew those letters were in blame when in actuality the word was “balm”. David was attending to specific letters in words, but not the way in which the letters fit together or the sounds that the letters represented. I began to realize that David’s third-grade reading ability was built entirely around his excellent memory. He was memorizing entire words, and when that was not possible, he memorized strategic parts of words.

David’s inability to use letter-sound relationships and his dependence on memory was echoed in his spelling. David would frequently misspell a word using another whole word. He would spell CHAP for “chip”, MINT for “might”, and SCROLL for “straw”. Another pattern that appeared through David’s misspellings was what could be referred to as “noise”. When David attempted to spell unknown words he would often use letters that had little phonetic relation to the word he was spelling. He wrote SCHES for the word chase and SCTERAR for the word center. The sequence of letters used to represent these words has little relation to the sounds in the words, and hence it seemed that David could not isolate and identify the sounds heard in these words.

To check to my suspicion that David was not identifying and applying knowledge

of letter-sound relationships, I gave David a spelling test comprised of ten phonetically regular nonsense words (see Table 4) . The purpose of this task was to assess what David could do phonetically, when he could not use his memory to recall memorized words. From this assessment, it was evident that David could and did attend to initial consonants as well as initial blends, and appeared to control ending consonants. However, he inaccurately represented the short vowel sounds. Out of ten attempts, this third-grade reader represented short vowel sounds correctly only two times. It became increasingly evident that I was not effectively responding to the instructional needs that David was clearly demonstrating.

### The Lesson

Guided Reading. In order to better meet David's instructional needs, the format and content of our 60 minute lesson was altered. The lesson began as it had with 20 to 25 minutes of guided reading at the early-third grade level. I chose to keep David at this level because of the high interest materials that were available to us. David and I would "partner read" the text, alternating turns approximately every 150 words. When David read, my goal was to slow his reading to the point where he could begin to attend to the letters in each word. When he missed a word, I would not orally correct him, but instead point to the missed word and encourage him to use the initial sound and any other available sounds, as well as the context to decipher that word. When letter-sounds were unknown to him, as many were, I would provide that sound as a means of support, yet allow him to construct the word in its entirety. While the actual time reading with David was of great

<b>Word Given</b>	<b>David's Response</b>
1. gad	1. <i>gad</i>
2. fob	2. <i>foub</i>
3. mot	3. <i>mit</i>
4. pef	4. <i>piaf</i>
5. nud	5. <i>nuad</i>
6. bip	6. <i>bide</i>
7. stod	7. <i>stad</i>
8. clim	8. <i>clum</i>
9. frap	9. <i>frad</i>
10. dimp	10. <i>dumt</i>

Table 4: An informal assessment of David's spelling knowledge.

import, there was an additional instructional focus in this reading. The focus was first upon conveying the concept that words are decodable, and second upon providing a supportive environment for practicing letter sound knowledge. In addition, this guided reading of high interest materials provided needed purpose to the lesson, that is, the learning of new information through reading.

After the guided reading portion of the lesson, David and I would then spend approximately 20 to 25 minutes on word study activities. These word study activities became the portion of the lesson where direct instruction in letter-sound relationships was provided. This was the part of the lesson where David gained and practiced the skills he

needed to make progress in contextual reading. The actual word study was comprised of five different components: the alphabet sound flash, the reading of words, the making of words, the spelling of words, and the word flash.

These activities are not independent of each other but are designed to reinforce and build upon each preceding activity. In using these five activities together, the instructor is able to provide the student with direct instruction in letter-sound relationships through a variety of learning experiences.

I used high and low frequency words as well as non-words as the words to study. The use of non-words in this instruction could be validly challenged; however, my decision to use non-words in David's instruction was made with great care. David came to the task of reading with a vast sight vocabulary. If given the choice, David prefers to identify words by memory rather than by attending to the letter-sounds of the word. In order to force David to focus upon these letter-sounds, low frequency words and non-words had to be used. The use of non-words in this instruction was a defensible means for providing the best and most direct instruction in the alphabetic code.

The Alphabet Sound Flash. In this activity I flashed individual lower-case letter cards to David asking him to produce the sound that each letter represented. David correctly identified 12 sounds: /a/, /o/, /c/, /t/, /b/, /s/, /r/, /h/, /l/, /j/, /m/, /d/. Using these letter sounds as a knowledge base, I began to flash these letters to David asking him to respond with the correct sound. Once he was comfortable with the task I began to add new consonant letters, one or two at a time. New letters were only introduced after David demonstrated mastery of the letter-sounds on which he was currently concentrating.

Vowels were introduced in a slower fashion; David required more time to master the vowel sounds. After David demonstrated repeated control over /ă/ and /ō/, /ī/ was introduced. Following the introduction and repeated demonstration of mastery of /ī/, /ū/ was introduced, and then finally /ē/. David repeated this alphabet sound flash for three months (25 sessions) before /ē/ was introduced. Interestingly, even when this student demonstrated a solid mastery over particular vowel sounds, the introduction of a new sound seemed to confuse the once mastered sounds. For example when /ē/ was introduced, David began having difficulty with the previously mastered /ă/ and /ī/.

The Reading of Words. After the alphabet sound flash, David and I moved to an activity referred to as the “reading of words”. This activity reinforced and elaborated upon the alphabet sound flash. Using between five and seven of the consonant cards used in the flash and two or three of the vowel cards from the flash, the cards were laid upon the table in front of the student. With this limited universe of sorts, I made three-letter, CVC words or nonwords (see Figure 2). After I constructed a word by moving the letters around, David read the word. I then replaced one of the letters with another from the table, maintaining the consonant-vowel-consonant order, and again the student read. When the David misread a word, I assisted him by pointing to each letter and prompting him to make each isolated sound. David was then encouraged to blend the sounds together and arrive at the correct pronunciation. This sequence was repeated at a rapid pace for about 20 repetitions. The activity was most often focused in such a way as to work on either initial consonant sounds, final consonant sounds or medial vowels. This focus was determined by which part of the word I chose to manipulate. Instructionally, this activity

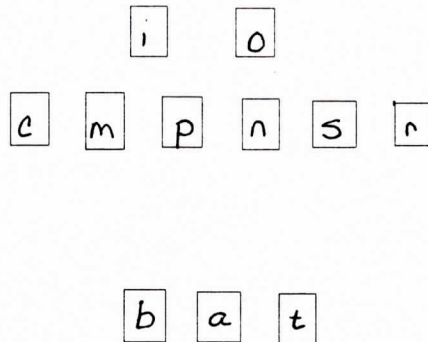


Figure 2: Letter card position used in the “reading of words”.

encouraged phonological awareness as well as letter sound automaticity.

The Making of Words. Directly following the reading of words the I modified the activity and began “the making of words”. Using the same alphabet letters on the table, I pronounced a consonant-vowel-consonant word or non-word, and the student used the letters on the table to “make” that word. Again the focus of the lesson was determined by the sounds that I chose to manipulate. When the student misrepresented a word, he was stopped and asked to read the word or non-word that was created. I then repeated the word that was initially given and the student corrected the mistake. This activity proceeded at a rapid pace for approximately 20 repetitions. While this activity may seem simplistic in nature, it can prove very complex for the student who has not yet mastered letter-sound relationships. When David first started participating in the “making of words” I simplified the activity by asking him to spell words and non-words made of only two letters. When asked to spell the non-word /op/, David assembled the letters “pa”. After stopping and reading what he had formed, and listening as I repeated /op/, David

produced “po”. Again he stopped and sounded out this combination. After I repeated /op/ the third time, David finally arrived at “op”. This combination seemed like something of a breakthrough for him. He said, “Now I can hear it.” This activity, as well as the reading of words, strengthens the student’s phonological awareness, while at the same time emphasizes the code-like nature of our alphabetic system. Through this activity David has learned to make letter-sound connections that had previously eluded him.

The Spelling of Words. Following “the making of words”, the word study progressed into the spelling of words. In this activity I called out six words, one at a time, that were used in the previous activities (e.g., fan, bam, fin, fib, sob, cod). After each word was called out, the student wrote the word or non-word on paper using the steps comprising the strategy of simultaneous oral spelling (Gillingham & Stillman, 1960). In simultaneous oral spelling David began by repeating the word to be spelled. He then spelled the word aloud. He then wrote the word, naming each letter as he formed it. Finally David read aloud the word that he had written. This process was repeated for each of the six spelling words that the instructor chose. After all six words were written, David then went through the list and read the words he had written. As the instructor, I ensured that he read exactly what he had written. When a mistake was made, David would read the word as it was, and I would then repeat the original spelling word. David would then make the necessary corrections while I gave as much support as was needed.

Word Flash. The final component of the word study was a word flash. In this activity a collection of short vowel, CVC words were presented in a flash format to David. Initially, we began with only those words containing the vowels /a/ and /o/. David would



try to read correctly as many words as he could in a minute's time. The number of words read correctly were then graphed so that improvement could be measured. In this activity I chose to use the words that Gillingham and Stillman list in their manual, titled Remedial Training for Children with Specific Disability in Reading, Spelling, and Penmanship (1960). As David gained proficiency in this activity, more vowel patterns were added to the flash. They were added in the order that they were introduced through the alphabet sound flash. This activity was used to develop the speed and accuracy in which David applied letter-sound knowledge in decoding words.

Easy Reading. The final component of David's reading lesson was time devoted to improving David's ability to apply his knowledge of letter-sound relationships. For approximately 10 minutes each lesson, David read texts comprised of phonetically controlled vocabulary. The vocabulary was controlled to such a degree that only those spelling patterns which David had been taught appeared in the text. There are a variety of criticisms that could be made against the use of such material: the sentences are awkward, the language flow is choppy, the text has no real meaning. All of these criticisms are valid; however, the use of this controlled text had great purpose in David's instruction. In reading this type of text, David was able to practice the skills that he was developing in the word study portion of our lesson. Because relying on context to identify a word was no longer an option, David was able to focus solely upon applying his knowledge of the alphabetic code. For over 30 years David's reading has been based upon his visual memory and context based guessing; this "reading" approach is no longer something he can consciously control. In order to give David the in-text word attack practice that he

needed, David needed to read text where he had no other recourse than to attend to letter-sound relationships. Interestingly, the reading of this text seemed to hold meaning for David. David viewed this activity as a “strengthening exercise”--essential practice that was gradually bringing him closer to his ultimate goal of becoming a skilled reader.

### Evidence of Progress

Over the past year, David’s reading has improved in two different yet related ways. First, David now considers himself a reader. Where once he relied upon his employees to do his reading for him, he now budgets the time and makes himself do his own reading. This past Christmas, David said that he read all the Christmas cards that were sent to him. It was the first time he had ever been able to do this. In referring to all the time that he has spent working on mastering letter-sound relationships, David explains that he feels like he has one large piece of the puzzle. While it was frustrating at first, he sees himself improving in ways he did not expect. Not too long ago, David did something that surprised even himself. During church, he was asked to stand in front of the congregation and read the scripture lesson for the day. David has as one of his greatest fears, public reading, but he went ahead and read the scripture in spite of this fear. He told me that he read it well. David now sees himself as a member of the community of readers.

David’s reading has improved in a second more measurable way (see Table 5). Using the same informal reading inventory initially used to measure David’s reading level, David’s instructional reading level was measured after one year of specific code emphasis instruction. With regard to word recognition, David is now clearly instructional at the third-grade level, this being the highest level at which he attained 60% on the flash

measure. It is also significant that David can now decode 80 percent of the words at the fourth grade level as indicated by his fourth-grade untimed score. At the third-grade level, David also demonstrates an instructional level, reading accuracy score of 94%. While the reading accuracy score of 90% at the fourth-grade level is borderline frustrational, the score of 90 does suggest that David is improving in his reading ability, and is in sight of some additional progress. At the third-grade level the expected reading rate ranges from 80 to 110 words per minute (Carver, 1990 ). David's score of 38 words per minute is clearly below that range. However, David is a severely disabled reader and his rate will most likely always be slower than that which is expected for average readers. This low rate does not negate David's progress; David is learning to read, albeit slowly.

	Flash Word Recognition	Untimed Word Recognition	Oral Reading Accuracy	Oral Reading Rate	Instructional Spelling Level
Preprimer	90	100			
Primer	75	90			
1st	65	95	90	60 wds/min	60%
2nd	45	80	78	52 wds/min	40%
3rd	15	55			

**Informal Reading Inventory Given Before Intervention**

	Flash Word Recognition	Untimed Word Recognition	Oral Reading Accuracy	Oral Reading Rate	Instructional Spelling Level
Preprimer	85	100			
Primer	90	100			
1st	85	100			90%
2nd	75	100	97	52 wds/min	72%
3rd	65	85	94	38 wds/min	
4th	20	80	90	32 wds/min	

**Informal Reading Inventory Given After Intervention**

Table 5: The effects of one year of tutoring as measured by an informal reading inventory.

### Case Study 2: John

John was brought to the reading clinic at Appalachian State University by his mother who works as a high school special education teacher. At the time of referral, John had just completed the second-grade, and his teachers had told John's parents that he was reading on an early-second-grade level. John's mother, who was quite aware of her son's struggle with reading, was confused by this information and asked for an evaluation at the university reading clinic. From this evaluation it was clear that John was not reading on the second-grade-level; he was reading on the early-first-grade level (see Table 6). While his oral reading accuracy at the Primer level was adequate, he had little sight word recognition (25%) at this mid-first-grade level and his reading rate was very low. John was a struggling early-first-grade reader.

John and I began working together at the start of his third-grade year. When presented with a flash of lower case alphabet letters and asked to make the sound that each letter represented, John correctly produced only 16 of the 26 sounds, all of which were consonants. John could not identify the sounds that any of the vowels represented. His oral reading was slow and relatively inaccurate. Interestingly his limited word reading accuracy was enhanced by his use of context. When reading predictable trade books that contained repetitive, natural language flow as well as supportive illustrations, John was able to rely on contextual clues, and thereby efficiently "guess" at unknown words. It quickly became apparent that John was not decoding print.

	Flash Word Recognition	Untimed Word Recognition	Oral Reading Accuracy	Oral Reading Comp.	Oral Reading Rate	Spelling
Preprimer	70	90				
Primer	25	65	92	100	39 wds/min	
1st			73	60	29 wds/min	
2nd						
3rd						

Table 6: John's reading level before intervention as measured by an informal reading inventory.

### The Lesson

Guided Reading. John and I met three times a week, for an hour each session. The lesson plan that we followed was very much like the lesson plan used with David. The lesson began with 20 to 25 minutes of guided reading. At first, I chose to use the Pre-primer 3 book, Ferocious Fish, from the Laidlaw Brothers Basal Series (1976). This basal series, particularly at the lower levels, is exemplary in its use of controlled vocabulary and text length. The level of difficulty with which the stories progress seems adequately paced for low beginning readers. In addition to its carefully controlled vocabulary, the Laidlaw Brothers series contains, for the most part, engaging illustrated stories that are fun to read. For all of these reasons I chose to begin reading Ferocious Fish with John. We began each story by echo reading the first few pages and then progressed to partner reading or alternating pages. As John read the sequential basal stories, his skill and confidence advanced and we were eventually able to partner read stories from beginning to end.

As John progressed through Ferocious Fish he developed enough reading skill so

that upon completing the Pre-primer 3 he was able to move into the Primer, Blue Tailed Horse (1976). John's progress in Blue Tailed Horse was steady, yet upon completion of this Primer-level basal he was not yet ready to move into a more difficult 1-2 text. In using the reading of 100 word passages from Blue Tailed Horse as informal assessments of oral reading accuracy, I found that John was still reading with 95 percent accuracy at the Primer level; he was therefore still instructional at that level. To supplement John's reading at this level, I selected stories from two other Primers, Parades (Houghton Mifflin, 1976), and A Place for Me (Holt, Rinehart, and Winston, 1973). I purposefully kept John reading in basal texts with controlled vocabulary for two reasons. First, I wanted John to have the best in-text repeated exposure to sight vocabulary that I could provide. Second, I wanted John to be reading in controlled vocabulary so that he could attempt to use the decoding skills that he was learning through word study.

By the end of January, mid-way through the school year, John was regularly reading Primer passages with 98 percent accuracy. He was ready for more difficult reading. Once again we returned to the Laidlaw Brothers series (1976), and John read the 1-2 or late-first-grade reader in that series, Toothless Dragon. By the middle of March, John had completed that reader yet he was not ready for more difficult material; his oral reading accuracy was approximately 92 percent at the late-first-grade level. John had by this time developed word attack skills that allowed him to decode almost all phonetically regular, short-vowel words. He was also developing a sight vocabulary appropriate for his late-first-grade reading level. Noticing these strengths, I thought that he might be ready to read some trade books written on the late-first-grade level. I had hoped that these "real"

books would be interesting to John as well as a means to build his confidence and exposure as a reader. John read titles such as: My Puppy is Born (Cole, 1973), Morris has a Cold (Wiseman, 1978), Morris Goes to School (Wiseman, 1978), In a Dark, Dark, Room (Schwartz, 1984), and The Life Cycle of the Wolf (Hogan, 1979). John's reading ability continued to improve. Allowing him to stay at the level at which he was instructional, enabled John to consolidate his skills and strategies and build a solid foundation for the next more difficult level.

Word Study. After the guided reading portion on John's lesson plan, he spent 15 to 20 minutes upon a word study sequence very similar to that of David. We began with the alphabet sound flash. I flashed to John lower-case letters written on individual cards. He responded with the most common sound the letter represented. We began with the 16 consonant letters that John already knew, as well as the vowels "a" and "i". Consonants were added one or two at a time after the current consonants in the flash were mastered. After John demonstrated mastery of the short vowel sounds that "a" and "i" represented, not only in the flash but throughout the entire word study sequence, o was introduced to the flash. The short "o" sound then became the focus of the other word study activities. This new sound was not taught in isolation, but in comparison to /a/ and /i/. Once mastery of o was demonstrated, u was introduced, and then eventually, e. As was the case for David, so it was for John. The introduction of new vowel sounds tended to confuse the once mastered vowel sounds. It seemed important to teach John not only the isolated short vowel sounds, but these vowel sounds in comparison to each other. The alphabet sound flash, was the means through which new sounds were introduced and continually



reinforced.

The Reading and Making of Words. The word study sequence then moved directly from the alphabet sound flash to the reading of words and then to the making of words, the same activities used with David. Like David, John used these activities to gain phonological awareness as well as a real proficiency in manipulating beginning, middle, and ending sounds. These activities proved extremely effective as John struggled to gain control in both identifying and contrasting the different vowel sounds. John is now at the level where he needs work in discriminating between /a/, /e/, and /i/. These are then the vowels we use when reading and making words. The sounds that “a”, “e”, and “i” produce are different, but only subtly. By constantly changing the middle letter in the consonant vowel consonant combinations, John gets a multitude of opportunities to practice the vowels in comparison to each other.

Spelling. Following the reading and making of words, John moves on to the spelling component of his word study program. John’s regular classroom teacher has asked that I produce grades for the work that John does in spelling. John therefore takes weekly pretests and posttests on spelling lists that I construct. John and I meet three times a week. The first day John takes a pretest on the new spelling words for that week. He spells the words using the same simultaneous oral spelling (see p. 54) technique that David uses (Gillingham & Stillman, 1960). He also corrects his spelling by reading the words that he has spelled back to me. As I do with David, when John misspells a word, he reads it as it is spelled. I then repeat the actual word and he makes the necessary corrections. On the second day, John reviews his spelling words by sorting the words, now written on

individual cards, into groups according to medial vowel. (For a more detailed explanation of the word sort procedure, see Morris, 1992.) On the third day, John takes a spelling posttest using the aforementioned simultaneous oral spelling technique as well as the same self correction technique used with the pretest.

The spelling lists that I give to John are developed around the vowel sounds upon which John is currently working. The spelling lists reinforce all other components of the word study sequence. Interestingly, mastery is indicated when John accurately represents the sounds in each word on the weekly pretest. When this occurs, John is applying the knowledge that he has about letter-sound relationships to new and often unknown words. The weekly posttest on the other hand, does not indicate mastery, but shows only what John can do with 10-12 words that he has studied intensively.

Word Flash. The word study sequence concludes with the same one minute word flash process that David uses; the only difference is in the word patterns that are flashed (see Figure 3). The words in this flash are the short-vowel, CVC words listed in Gillingham and Stillman (1960). The flash activity pushes John to become more automatic in applying his knowledge of letter-sound relationships. Ideally he is beginning to internalize or “chunk” the CVC pattern instead of sounding through each letter-sound. John does this flash procedure three times, for one minute each. The best score, the score with the most words read, is then graphed to show John’s progress.

Easy Reading. John’s lesson concludes with 10 to 15 minutes of easy reading. During this portion of the lesson John reads trade books written on the early-first-grade level. Many of these books are predictable with repetitive text. John reads these books

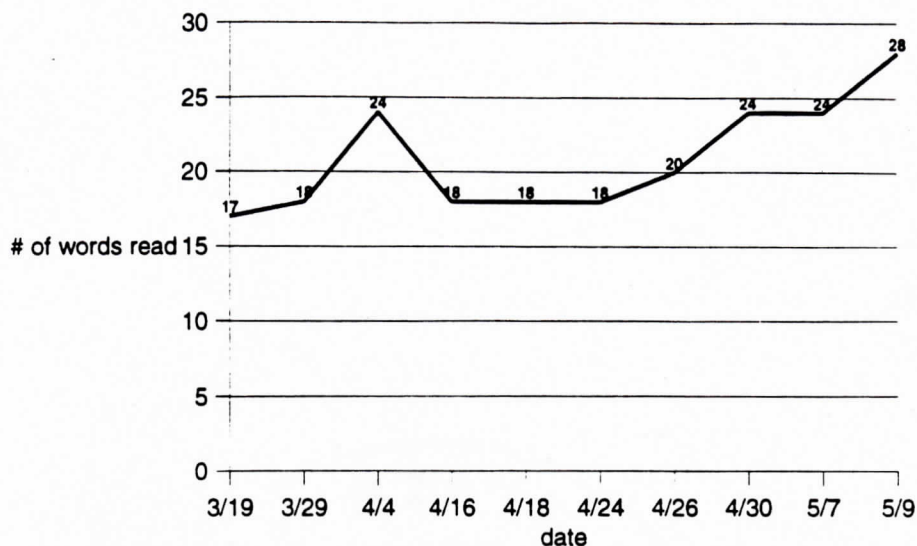


Figure 3: A graph of John's daily flash word recognition scores.

to develop a sense of phrasing and inflection. He works to develop his reading fluency.

### Evidence of Progress

John is making progress in reading. He now knows the sounds that the letters represent. He can decode most phonetically regular one-syllable words and he is beginning to segment multi-syllable words. His sight vocabulary is developing well. It is improvement that both he and I can see. A few weeks ago John was talking with his mother. He was commenting on how well he feels that he is doing in spelling this year and that he had never done this well before. His mother agreed and commented on how well he is doing also in reading. John responded, "You know mom, they 're kind of related. When you spell you have to listen to the word and hear the letters, and when you read you look at the letters and figure out the word." John seems to have uncovered the secret to reading.

The progress that John senses he has made is reflected in the informal reading

inventory that was administered at the end of his third-grade year (see Table 8). At the onset of the intervention, John had an instructional reading level at the early-to-mid-first-grade level. At this level he read with 92% accuracy and at 39 words per minute. At the end of his third-grade year, John's instructional reading was on the late-first-grade-level. His word recognition, on both the flash and untimed measure, has moved significantly. Furthermore, he can read late first-grade text with 90% accuracy.

### Conclusions

David and John are individuals who have a severe disability in reading, dyslexia. However, they are also individuals who are learning to read. After more than 100 hours of one-to-one tutorial instruction, David's instructional reading level moved from the first-grade level to the third-grade level, and John's instructional reading level grew from what is considered an emergent reading level to a solid first-grade level. While the progress that these two individuals made may seem relatively slow, it is foundational progress nonetheless.

The progress David and John have made is qualitatively different from the progress that other more skilled readers make in learning to read. While both readers, the skilled and the disabled, journey to the same destination, the manner of travel is quite different. Both readers must climb a mountain of sorts. The skilled reader travels by road. He or she can walk relatively flat paths or sprint up steep inclines. This reader can rest, or even circle back when necessary. Eventually, the skilled reader makes great climbs in altitude, but always at a comfortable pace. The disabled reader has the same mountain to conquer;

	Flash Word Recognition	Untimed Word Recognition	Oral Reading Accuracy	Oral Reading Comp.	Oral Reading Rate	Spelling
Pre-primer	70	90				
Primer	25	65	92	100	39 wds/min	
1st			73	60	29 wds/min	
2nd						
3rd						

### Informal Reading Inventory before Intervention

	Flash Word Recognition	Untimed Word Recognition	Oral Reading Accuracy	Oral Reading Comp.	Oral Reading Rate	Spelling
Pre-primer	90	100				
Primer	70	90	96	100	48 wds/min	
1st	45	80	90	100	34 wds/min	65
2nd	25	90				28
3rd						

### Informal Reading Inventory after Intervention

Table 8: The effects of nine months of tutoring as measured by an informal reading inventory.

however, he or she must climb straight up the mountain's face. At the start there is little to hold on to, and nowhere to get one's footing. During this climb, there is little space or time for rest. Every move forward is a conscious decision. This travel is slower and much more precarious because every step forward requires determination, grueling work, and deliberate advances. Nothing can be left to chance.

As David and John worked at reading, they provided all the determination and

perseverance that was needed; however, that alone was not enough. Individuals with severe reading disabilities require reading instruction that is planned with systematic steps forward. These steps must include explicit instruction in the alphabetic code. David and John attempted to read using every other strategy conceivable rather than learning letter-sound relationships. This was not a conscious choice, it was choice not in their control. David and John experience great difficulty in making symbol to sound connections. If this information is not taught to them explicitly, and exercised systematically, David and John and others like them will not develop this knowledge. Therefore, they must learn the alphabetic code used in reading.

Whereas explicit instruction in reading skills is essential for the severely disabled reader, it is not enough. David and John required opportunities to practice newly learned skills in the context of reading. While the skill instruction served to develop their precision and accuracy, the time spent reading in a supported context allowed these individuals to develop strength and endurance.

The instruction that was used in teaching David and John is not revolutionary, nor would it be considered “cutting-edge”. The reading instruction used in this intervention is based upon sound reading theory and common sense. This intervention was informed by research that underscores the importance of explicit code instruction for the severely disabled reader. It also was informed by the common sense notion that a student must practice reading at his or her instructional level, a level that is challenging but not overwhelming.

## Chapter 4

Now it is time to bring my report to a close. I will do so by declaring some general conclusions that I have reached about the teaching of reading and writing in our world today . . . .Reading failure and illiteracy stem in largest part from cultural causes. All conditions that reduce the value of written language for individuals will tend to make its mastery unlikely, regardless of our educational efforts. How we cope with a problem of this dimension, I do not really know, but I believe that in some measure it must stem from a new regard for human difference and worth and the value of the written word. (Henderson, p. 155)

This passage is excerpted from the conclusion of Edmund Henderson's book, Learning to Read and Spell (1981). His assertion is bold. Did he really believe that the dyslexic or learning disabled student's failure in reading was attributable to cultural causes? The very labels "dyslexic" and "learning disabled" suggest that the problem lies within the individual; thus it would seem, dyslexic students, as well as learning disabled students, fail at reading because of some sort of internal processing disorder. However, on reading further in Henderson's conclusion, it becomes clear that Henderson did attribute the reading failure of dyslexic students and learning disabled students to largely cultural causes. The case studies of David and John clearly demonstrate that the severely disabled reader can learn to read. The reading failure that these individuals have experienced was not caused solely by some internal "cognitive glitch" (Stanovich, 1991), but by ineffective, inappropriate, instruction. When John and David were provided the direct code based

instruction that research supports, they began making progress in reading. The problem was never that these two individuals were incapable of learning to read; the problem was, and still is for many other individuals, that they were not provided appropriate reading instruction.

Surprisingly, in all the reading failure that he experienced, David never lost sight of the value of written language. The ability to converse in written language was, in David's opinion, something that would make his life more whole. He repeatedly described his life in terms of a circle. Because he could not read, one piece of that circle was missing, and he believed, and still believes, that learning to read would make him whole. David is a remarkable man; however, most individuals do not possess, nor should they be expected to possess, the conviction and the endurance that have driven David.

In our society individuals who "pull themselves up by their boot straps", the ones who persevere and triumph in the face of repeated adversity, are glorified and held up as examples for us all. However, these examples quite often become an expectation that regardless of whatever unjust and inhuman conditions, individuals, if they but wanted to, could succeed. Thus the argument is commonly made "if that student really wanted to, really concentrated, really tried, he or she could learn to read." Failure because of adversity, because of cultural conditions, because of ineffective instruction, then becomes the fault of the individual who gave up, and the members of society who contribute to and cause this adversity are then free from all blame.

John did not have the perseverance or vision that David had. After four long years of school and four long years of failure, John was ready to give up. He lived in wait for the



weekend. In order to survive the school day, John was developing a keen interest in art, and spent most free time in school doodling. Quite interestingly, the once shy and cooperative John was becoming disruptive and argumentative--what educators commonly call a behavior problem. John was giving up on learning to read because the written word had no value for him. It was as if he had been told so many times that he could not learn to read that he was finally believing it himself. Fortunately for John, he had two parents who continually held up and maintained the value of written language. These parents, while frustrated with John's education and concerned about placing so much value onto something John had been shown he could not do, never ceased in reminding John how important reading was in all of their lives. John was very fortunate. The conviction and perseverance of his parents carried John to a level where he could not have traveled alone. Learning to read has not lessened John's love of art, nor has it cured John's behavior problems. His favorite class remains art and he is now learning to play the electric guitar. His parents are also frequently contacted regarding John's inappropriate behavior. However, John is now beginning to develop his own value of reading and he takes pride in reading or writing assignments where he does well. John has been fortunate, but there are many students who are not as fortunate as he.

The cases of John and David provide proof that individuals with severe reading disabilities can make progress in learning to read when appropriate instruction is provided. The cases of John and David are also stories of individuals who didn't give up, individuals who triumphed in the face of adversity. These two people could be held up as examples, examples of personal drive and of parental support; however, the cases of David and John

should not be used to set expectations for all people who have reading disabilities. It should not be expected that individuals endure repeated years of failure in learning to read before they are taught to read. It should not be expected that individuals continue to place value upon that which they repeatedly fail. The cases of David and John should, however, be used to set one very clear expectation: Individuals with severe reading disabilities should be provided with appropriate instruction. They should be taught to read.

### Teaching the Dyslexic Student to Read

In the article “Places of change: Special education’s power and identity in an era of educational reform”, Kauffman (1994) took issue with the field of special education for attempting to meet the needs of students without the necessary ingredients. He argued that in order for special education to live up to its name, thus to be both special and education, the field must have in place the proper methods, conditions, and teachers. The cases of John and David demonstrate that students with severe disabilities in reading, students known as dyslexic or learning disabled, can make progress in learning to read when provided with appropriate instruction. These studies offer very clear implications for the instruction of the reading disabled student in the public school setting. These implications can be organized according to the three issues that Kauffman spoke to: methods, conditions, and teachers.

### The Proper Methods

By February of 1996, John and I had been working together for over five months. One morning while visiting his school, I found myself walking down the hall with John’s principal. I took this opportunity to share my enthusiasm and describe the progress that I

saw John making. John's principal listened and agreed that this was indeed very good news. He then remarked quite casually, "I guess we never really know what will work." That casual turn of phrase reveals what is a very real contributor to the miseducation of the dyslexic student, that being the misperception that the field of education possesses no understanding of how to teach the dyslexic student.

The instruction of the student who is severely disabled in reading is best accomplished through direct instruction in the alphabetic code and the spelling patterns of written language. This direct instruction in letter-sound relationships should be supported by textual reading at the student's instructional level. During this reading, the dyslexic student is given opportunities to practice and develop his knowledge of the alphabetic code, the printed word, and the written language. These assertions have been supported by a broad base of research and confirmed by the case studies of David and John. It is important to note at this point, that neither research studies, nor the case studies of John and David have indicated any one particular reading program that is the most effective in teaching the reading disabled student. There is no evidence that the code based instruction of the Wilson Reading System is more or less effective than the code based instruction of SRA Corrective Reading or the Orton Gillingham Language Therapy. There is also no evidence that any of these code-emphasis programs alone can effectively respond to the needs of the severely disabled reader. The dyslexic reader is in need of instruction which contains direct instruction in the alphabetic code as well as instructionally appropriate in-text reading. In fact, some scholars have concluded that a reading program lacking direct systematic instruction in the alphabetic code or instructionally appropriate textual reading

will be ineffective, perhaps even damaging, in instructing the disabled reader (R. Felton, personal communication, July 13, 1996).

It is also important to consider the pace at which the the severely disabled reader is instructed. David and John both received over 100 hours of one-to-one reading instruction. After these 100 hours, John could accurately produce and represent all five of the short vowel patterns. David, however, was still not consistently correct in producing or representing two of the five short vowels. The pacing of these tutorial lessons was not set by a predetermined time line, but instead by the student's demonstrated mastery of each new concept presented. David and John were also paced very carefully through graded reading material. In the more than 100 hours that David and I worked together, he read over five books--Nobel Prize Winners (Billings & Billings, 1993); Congressional Medal of Honor Winners (Billings & Billings, 1993); Great Rescues (Billings & Billings, 1990); Great Escapes (Billings & Billings, 1990); Great Challenges (Billings & Billings, 1991)--written on the third-grade level. Completing one third-grade text did not mean that David was immediately ready for a fourth-grade text. Because David's instructional reading level remained at the third-grade level, he continued to need reading practice at the third-grade level. When John and I began working together, he was reading on the early-first-grade level. Before John moved into late-first-grade material, he read and often re-read stories from three basal textbooks (Holt, Rinehart, and Winston, 1973; Houghton Mifflin, 1976; Laidlaw Brothers, 1976) written on the Primer or mid-first level. Again the pacing used in selecting the difficulty of reading was not determined by the completion of a basal textbook, but instead by mastery--that is, the reading accuracy and fluency

demonstrated by the student at each level. When instructing the dyslexic student, and arguably any student, the pacing of instruction must reflect the instructional reading level, demonstrated by the student.

### The Proper Conditions

In tutoring David and John, most of my thought was given to choosing and implementing the proper teaching methods that would produce the greatest learning. Because I was working independently of the public school, I did not have to devote time to securing the appropriate instructional conditions. I simply set up the necessary conditions for learning and proceeded. For teachers and administrators operating in the public school domain, the securing of the necessary instructional conditions is a vital when working with dyslexic students. If teachers and administrators are to truly educate and serve the dyslexic student, conscious, grounded, decisions must be made concerning how instruction is best implemented. These decisions should not be made with the belief that if progress is not shown, something new will be tried. Decisions regarding appropriate instructional conditions should be made for the long term, should be established at a system wide level, and should be monitored very closely. The case studies of David and John point to two instructional conditions which seem necessary when working with a severely disabled reader: one-to-one reading instruction and purposeful curricular decisions.

In interviewing teachers and administrators, two questions were asked concerning the instructional response to the student with a severe reading disability: "What are the instructional needs of the dyslexic student?" and "What is the role of special education in relation to the dyslexic student?" In response to these questions, 11 of the 27 respondents

described one-to-one instruction as an appropriate instructional response to students with severe reading disabilities. One-to-one instruction is not a new concept. In her book Individualizing Your Reading Program: Self-selection in action, Veatch (1959) proposed organizing classroom reading instruction such that each member of the class received one-to-one instruction in reading. While what Veatch suggested was viewed by some as extreme if not unmanageable, she did assert pedagogically sound ideas. Currently, the trend in classroom reading instruction seems to be whole group instruction, in which all members of the class are engaged at the same level at the same time. The most common alternative to this brand of reading instruction is intra-class grouping, where one class is divided into separate homogeneous groups according to instructional reading level. Each group is then instructed at a different level. Interestingly, the choice between Veatch's individualized instruction, whole group instruction, or leveled group instruction, often boils down to a matter of classroom management. While management is an issue, it would seem that the instructional effectiveness is the greater issue.

When considering the instruction of the severely disabled reader, the efficacy of reading instruction must remain the primary issue. The most effective instruction for the dyslexic reader is one-to-one instruction. This one-to-one instruction allows the teacher to respond directly and efficiently to the student's instructional needs. In a group setting, students' instructional needs may still be met; however, the needs will be met in a less direct way due to the number of needs to which the teacher must respond. There will be many factors which vie to become part of debate concerning the most effective way of instructing the dyslexic student. Some may insist that schools cannot afford teachers to

work with one student at a time. Others will argue that the special education teacher's case load is much too large for one-to-one instruction. While these objections are valid, the fact remains that in order for severely disabled readers to make progress in learning to read they require one-to-one instruction. Thus, if educators and administrators are to truly serve the dyslexic student, they must fully commit to providing one-to-one instruction. This commitment will require dedication of purpose and of resources.

In addition to providing one-to-one instruction, schools and school systems must commit to purposeful curricular decisions. There are times in the lives of public schools when curricular decisions seem to be reactive, made on the whim of a principal or superintendent in response to a new educational trend. Education is known for its dramatic pendulum swings, and schools frequently reflect those swings. However, if schools are to commit to instructing the severely disabled reader, they must begin to resist the temptation to follow each new pendulum swing. Schools, and the people who care about them, must begin to make purposeful decisions concerning methods of instruction which are educationally sound.

When provided with very consistent code-emphasis instruction, David and John made progress. However, the results were not immediate. If their instruction had been altered midway through the year, or even at the end of the first year, their reading progress would have been less evident and their confusion more obvious. Similarly, had the supervisor of my clinic requested for no pedagogically sound reason that I implement a dramatically different type of instruction, for example, one focusing upon rich literature with no attention to the alphabetic code, the consequences would have been severe. First,

I would be forced to offer instruction that was proven to be ineffective with dyslexic students. Second, I would be providing instruction that was inconsistent and in response my students would be confused about what it was they were to learn. Finally, I would have been confused about how to teach in this new way, and I would have needed time to become proficient at teaching in this new manner. I would have also lost sense of where my students were in relation to what I was teaching. Unfortunately, instructional changes of this nature occur frequently in public schools, and consequently students are denied the opportunity to learn and teachers the opportunity to teach.

When working with David and John there seemed to be three levels of awareness through which I moved as a teacher. My first level of awareness, was an awareness of the teaching method. I was continually concentrating on what I was doing, how I was doing it, and what would come next in the sequence of instruction. At a second level of awareness, I began to actually observe how David and John performed. I was developing an awareness of how these students were reacting to my instruction. Finally, after a great deal of time, I began to understand the responses of David and John in terms of the instruction that I was offering. It was at this third level that I had a sense of where these students were, where they had to go, and how I should move them there. I finally felt that I understood the curriculum and the students well enough to begin to see where these students were in the space of the instruction offered. If I had been required to change in midstream the type of instruction that I offered, I would probably never have been able to assimilate and understand what I was teaching and what they were learning. The instruction of the dyslexic student requires a commitment of time and continuity, not just a



commitment of hours for instruction, but a commitment that schools will make sound instructional decisions and then hold to those decisions without interruption. Schools must provide time for students to learn, and time for teachers to learn to teach.

### The Proper Teachers

The third and equally necessary condition for successfully instructing severely disabled readers is employing the proper teachers. In his criticisms against the field of special education Kauffman (1994) wrote, "Special education cannot be truly effective with run-of-the-mill teachers." The teachers who will be successful with severely disabled readers will be teachers who have been carefully trained and supervised to work with these students.

In order to avoid producing "run-of-the-mill" teachers, teacher training must become something other than run-of-the-mill. Currently, in the state of North Carolina, individuals seeking undergraduate level certification in special education are required to take nine credit hours in "reading methods". In these nine hours the preservice special education teacher is exposed to topics such as: beginning reading instruction, beginning spelling instruction, beginning writing instruction, comprehension instruction, instructional reading strategies, reading instruction in the middle grades, reading instruction in the high school, reading diagnosis, and remedial reading instruction. In these nine hours the special educator is exposed to--in the best circumstances--a rich introduction to reading education; however, an introductory understanding of reading education is not sufficient preparation to instruct students like David and John.

If a special educator begins his or her teaching career and sees a need for

additional training, the educator could pursue a master's degree in special education with a concentration in learning disabilities. It would seem that in this course of study teachers would receive the training they need to instruct students who are learning disabled in reading--students like David and John. However, the state of North Carolina requires only three credit hours of instruction in reading (Reading in the Content Areas) for master's level certification in reading. Thus special educators leave a Masters program with essentially no more knowledge about reading than they had when they entered the program. With regard to teaching reading, institutions of higher learning in this state are not preparing special educators to be anything more than run-of-the-mill.

If special educators are to be truly effective, they must be trained to instruct and remediate the severely disabled students with whom they work. In order to accomplish this aim reforms in teacher training must be made. These are not reforms that will simply add three credit hours to the state certification requirement. These reforms must be dramatic; they must require that administrators, policy makers, and academicians get serious about what they are preparing special educators to accomplish.

In studying for a Master's degree in reading education, I took courses in the beginning reading and writing, reading assessment and correction, and even a seminar with a focus on reading disability. However, the course that had the greatest influence on my understanding of the reading process and indeed the course which prompted me to write this thesis was a practicum in the clinical teaching of reading. In this semester long practicum, I worked with two different clients, meeting with each of them twice a week. My clinic supervisor monitored my lesson plans, observed tutoring sessions, and discussed

with me what he saw happening in each lesson. Before I began this practicum I felt that I had a sound understanding of the reading process; however, when I was engaged in this practicum the reading process took on a whole new shape. Reading instruction was no longer an abstract sequence of skills, but now a very real conversation. Through these tutoring sessions, I learned how it is that people learn to read. Through discussions with my clinic supervisor, I was given the language to understand and to think about how this process was occurring.

While intuition is an invaluable asset to any teacher, it alone is not enough. Those who would be teachers of severely disabled readers must come to the task of teaching with a sound and full knowledge of how children learn to read. These teachers must also be able to think about and understand what is happening as children are learning to read. This knowledge and experience must be part of the teacher's training.

When I began working with John, I had completed a supervised reading practicum as well as three additional months of independent reading tutoring with four different clients. At the outset of John's intervention, the professor who had been my clinic supervisor met with me to discuss John's case history as well as his current instructional reading level. This professor then suggested some directions that I might take in working with John. As I continued working with John, I would return to the university to talk about what was happening with John. While sometimes I just wanted to share my enthusiasm, more often I needed help understanding what was happening as John was working at reading. Reading disability can be both baffling and incredibly intriguing. Working with John was like unraveling a mystery of sorts, and I often needed help sorting

through all of the clues. Periodically, my former supervisor would come to the school where I worked with John and observe a lesson. He would then provide feedback on my instructional technique, discuss the progress he had seen, and then encourage me to defend the instructional choices I had made.

This professor, my former supervisor, served as mentor for me as I attempted to apply what I had learned in my training. Although I had completed my university course work, I continued to need someone who could support and direct me as I attempted to apply what I had learned. I continued to need assistance in finding the language to understand all that was taking place as I taught John to read. In the book, Rousing minds to life, Tharp and Gallimore (1988) discuss Vygotsky's theory in relation to the education of both students and teachers. In passing through different stages in the zone of proximal development, the learner moves from assisted performance to independent performance. As I learned to teach reading to students with severe reading disabilities, I moved from the assisted performance I found in the university practicum to the independent performance of tutoring John. However, as Tharp and Gallimore made clear, movement through the zone of proximal development is not necessarily a linear trip, but more often a recursive journey. When the learner (me in this case) faces a new experience, he or she can move back into a stage where assisted performance is necessary. It is for this reason that the role of mentor is so crucial.

As teachers work to apply all that they know about teaching disabled readers, they will undoubtedly face unfamiliar terrain. They will be asked to teach in new settings and to work with children whose disabilities they do not quite understand. If these teachers are

expected to be successful, they must be provided with the support they require. This support is most effectively offered through the role of a mentor. A mentor is not a teacher who has simply taught for a number of years. A mentor is an individual who has real expertise. For the special educator the mentor must have expertise in the instruction of severely disabled readers. If schools are to provide education for severely disabled readers, special educators must be given the preparation that they need, and then supported as they attempt to instruct these very challenging students.

### Conclusion

John and I no longer walk to an empty speech language pathologist's office to take on the task of reading; instead, we work in an observation room at the university reading clinic. We meet for two hours each week, and continue to wade through written language. While John demonstrates a solid understanding of short vowel sounds, he has yet to develop a real familiarity with long vowel patterns. While John now reads on the second-grade-level, his reading level still remains two years behind his fourth grade placement. John has made progress, yet he has far to go.

In spite of all the other commotion that disrupts David's life, David continues to work on his reading. While he has mastered the sounds that short "a", "o", and "u" represent, he is still confused by short "e" and "i". Although David now clearly recognizes that words can be broken down into their component sounds, he still demonstrates some difficulty in the area of phonological awareness. Last week, in attempting to spell "spilt", David wrote "split", but then caught his mistake. David has also made tremendous progress, yet he too has far to go.

The case studies of David and John do not provide educators with any quick fixes. While David and John did make measurable progress in learning to read, their struggles are not over. Reading for them will always require conscious hard work. The good news is that David and John now see reading to be a skill within their grasp. The written word has a place in each of their lives. David and John consider themselves readers, and indeed they are. The instruction of the dyslexic student is possible; severely disabled students can learn to read. They need only be taught.

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