

Summer 1995

## **A Case Study: Effects of Tutoring on the Sight Word Vocabulary of a Nonreader**

Paul L. Coppin

Follow this and additional works at: [https://digitalcommons.cwu.edu/graduate\\_projects](https://digitalcommons.cwu.edu/graduate_projects)



Part of the [Educational Assessment, Evaluation, and Research Commons](#), [Educational Methods Commons](#), [Elementary Education Commons](#), and the [Language and Literacy Education Commons](#)

---

A CASE STUDY: EFFECTS OF TUTORING ON  
THE SIGHT WORD VOCABULARY  
OF A NONREADER

A Case Study  
Presented to  
The Graduate Faculty  
Central Washington University

In Partial Fulfillment  
of the Requirements for the Degree  
Master of Education

by  
Paul L. Coppin  
August, 1995

CASE STUDY: EFFECTS OF TUTORING ON THE  
SIGHT WORD VOCABULARY OF A NONREADER

by

Paul L. Coppin

August, 1994

The purpose of this study was to provide remedial instruction in reading to a ten year old nonreading student enrolled in the Ellensburg School District and to develop a case study that outlined the diagnostic and remedial procedures used with the subject. The case study approach was chosen as a way to document the progress of a single student whose initial diagnosis was as a nonreader. Because the initial diagnosis indicated a need to establish a sight word vocabulary, early instructional methods focused on this area.

## TABLE OF CONTENTS

	Page
CHAPTER	
1. Background of the Study . . . . .	1
Purpose of this Study . . . . .	1
Significance of this Study . . . . .	2
Limitations of the Study . . . . .	3
Definition of Terms . . . . .	4
Review of Selected Literature . . . . .	5
2. Case Study . . . . .	12
Methods of Data Collection and Reporting . . . . .	12
Student's History of Reading Difficulties . . . . .	13
Introduction to the Case Study . . . . .	22
Continuation of the Case Study . . . . .	28
Review of the Remediation . . . . .	34
3. Summary, Conclusions, and Recommendations . . . . .	36
Summary . . . . .	36
Conclusions . . . . .	37
Recommendations . . . . .	38
REFERENCES . . . . .	40
APPENDIXES	
A. Parental Permission . . . . .	42



## CHAPTER ONE

### BACKGROUND OF THE STUDY

The nonreader is a specific subgroup of the reading-disabled population whose problems present unique instructional difficulties to classroom teachers and remedial reading specialists. By definition, nonreaders are unresponsive to a variety of remedial techniques. Without intervention with a successful and effective teaching methodology, their attainment of reading literacy is doubtful (Rutter & Yule, 1975).

Nonreaders represent a very small percentage of the reading disabled population. McCormick (1994) stated that the nonreader subgroup make up 1% or less of disabled readers. A classroom or remedial reading teacher may have little experience in developing or implementing successful instructional strategies for nonreaders. Remedial instruction techniques commonly used with poor readers have not been shown to be as successful with nonreaders (Harris, 1981). Much of the research on nonreaders has concentrated on the cause of the reading difficulties (McCormick, 1994). While causation is important in the overall study of the nonreader subgroup, intervention techniques which can help the individual nonreader are needed by reading instructors.

#### Purpose of this Study

The purpose of this study was to provide remedial instruction in reading to a ten year old nonreading student enrolled in the Ellensburg School District and to develop a case study that outlined the diagnostic and remedial procedures used with the

subject. The case study approach was chosen as a way to document the progress of a single student whose initial diagnosis was as a nonreader. Because the initial diagnosis indicated a need to establish a sight word vocabulary, early instructional methods focused on this area.

### Significance of this Study

The results of a single case study can not be generalized to a larger population (Gay, 1987). However, this case study does have significance to the subject of the study, the subject's future instructors, and other teachers who may encounter nonreaders in their teaching experience.

Based on the initial diagnosis, the subject of this study was significantly reading impaired. Despite four years in the Ellensburg School District, extra reading help in the resource room for all four years, and special tutoring help, the subject had a sight word vocabulary of less than 20 words at the outset of this study. At this point he did almost no independent reading and expressed an extreme dislike towards reading and school in general. This study offered an opportunity for individualized one-on-one instruction utilizing methodologies and materials previously untried with the subject.

The significance of this case study was in the chronology it provided concerning efforts to teach a nonreading student to read. And, while this case study could not be generalized to larger populations, it could provide important insights into methods, strategies, and techniques effective with certain types of reading disabilities. These methodologies proved significant to the subject's reading improvement.

### Limitations of the Study

Gay (1987) wrote that the two biggest limitations to a case study were observer bias and lack of generalizability. Because this study was begun for the purpose of helping a severely disabled reader, and the observer hoped the subject's reading skills would improve, his observations were possibly biased, and he only saw what he wanted to see.

This was a single-subject case study and the results could not be generalized to a larger population, the study was limited by low external validity (Gay, 1987).

However, Gay also wrote:

For single-subject designs, the key to generalizability is replication. If a researcher applies the same treatment using the same single-subject design to a number of subjects, and gets essentially the same results in every case (or even in most cases), our confidence in the findings is increased; there is evidence for the generalizability of the results for other subjects. (p. 335)

External validity was also limited by the multiple-treatment interference that occurred because of instruction taking place within the school setting. For the purpose of this study the subject was tutored using the Multiple Exposure/Multiple Context (ME/MC) method of instruction for two 1 hour periods per week over a 9 month period, outside his normal school environment. During the same period of time the subject received regular classroom instruction and additional reading instruction in the school's resource room. The effects that the instruction and interaction outside the parameters of the study had upon the subject's improved reading skills and attitudes about reading could not be measured.

Maturation, as a limitation to internal validity, refers to physical or mental

changes that may occur within a subject over a period of time (Gay, 1987). The subject had a history of displaying boredom and distracting behaviors with both the instructional methods and instructors used in the past. Although the frequency of distractive behaviors and unwillingness to participate diminished as the case study progressed, the subject's motivation was a primary concern in all tutoring sessions.

### Definition of Terms

For the purpose of this case study, relevant terms are defined as follows:

#### Nonreader

Because this study is a replication of many of the instructional methods developed by McCormick (1994), it was necessary to use the same definition of a nonreader. A nonreader is not an individual who can not read at all. A nonreader is an individual who has normal or above average intelligence, has no gross neurological or sensory defects, has received adequate instruction, and yet has minimal reading abilities (McCormick, 1994). According to McCormick (1987), minimal reading abilities fall in the range of a sight word vocabulary of between 2-50 words.

#### Sight Word Vocabulary

Words that are instantly recognized and read by an individual without context and in isolation are considered part of that individual's sight word vocabulary (Ekwall & Shanker, 1988).

#### Multiple Exposure/Multiple Context Strategy

The ME/MC method of reading instruction was developed by McCormick (1994). The purpose of the Multiple Exposure/Multiple Context method of instruction was to

assist a student with word identification and to increase the student's sight word vocabulary. The ME/MC strategy relied on internal and external stimuli to promote learning word identifications, transference to other reading situations, and generalization to reading in different contexts. The ME/MC instruction had five steps: (a) choosing appropriate material, (b) beginning tutoring, (c) practice with unknown words, (d) rereading small blocks of practiced words in different contexts, and (d) continual review . The ME/MC strategy was explained in more detail in the case study section of this report.

### Review of Selected Literature

This section of the report summarized the review of literature on the nonreader and literacy acquisition as they related to the subject of this case study. Nonreaders were first identified as a subgroup of reading disabled students by Morgan in 1896 (McCormick, 1994). Morgan's report created interest in the nonreader in the early twentieth century, but the interest was short lived. Most research concerned with the nonreader since that time focused on the causes of the disabilities that have affected the nonreader and not on effective methods of remediation (McCormick, 1994).

Little research was located concerning effective teaching strategies for the nonreader. The Fernald technique (Fernald & Keller, 1921) had been frequently used as a method of remedial instruction for the nonreader (McCormick, 1994).

According to Norton (1980) the Fernald technique was a multisensory approach to reading instruction the involved several specific steps. The first step of Fernald instruction had the instructor write the focused word in large letters on a card. Next, the instructor named the word as the word was shown to the student. The instructor

then asked the student to look at the word carefully and say it with the instructor. The instructor then traced the word with two fingers while the student repeated the word. Next, the student traced the word with two fingers while pronouncing each syllable. The student was not to spell the word. The student kept tracing and repeating the word until he felt he was able to write the word without copying it. Then the student wrote the word without looking at the card. If the student wrote the word correctly, he continued the writing and verification process three more times. If the student did not write the word correctly, he would repeat the pronunciation and tracing process until he was able to write the word correctly. Words learned were retested in following sessions.

Forster (1941) found that the Fernald technique was not necessarily an effective method of instruction. In the study Forster found no significant statistical difference between the visual-auditory-kinesthetic learning style in the Fernald method and a visual-auditory style it was compared with. The tracing portion of the Fernald method was eliminated in the visual-auditory instruction group and a statistically similar amount of word learning took place as did in the group with the tracing. Forster theorized that the kinesthetic "tracing" of the Fernald method might have served as a "motivating power" to a deeply discouraged student. Forster also speculated that the tracing was merely a method of assuring that a severely disabled reader was "attending to" the task at hand.

The Fernald technique was used as a method of instruction with the subject of this case study in the past. In a report Lyso (1994) indicated the technique had not been effective increasing the sight word vocabulary of the subject. Lyso recommended one-on-one tutoring be continued and that different methods of instruction be explored.

In addition to the majority of research which has focused on causation, remedial instruction for the nonreader has primarily centered upon the deficits of the nonreader (McCormick, 1994). McCormick proposed that instruction of the nonreader should follow the interactive theory of reading ability and disability presented by Lipson & Wixson (1986). The theory stated that external factors needed to be incorporated with consideration for a subject's internal factors when remediation instruction was designed for a nonreader. If both factors were considered, Lipson & Wixson theorized that the instruction would impact reading attainment for a student whose learning growth in reading had slowed or stopped.

In a recent case study McCormick (1994) described the testing and remediation of a nonreader. The study spanned a period of 3 1/2 years. The subject was an 8.5 year old male who was about to enter the third grade when the study began. The subject had been held back for one year in school. He had an above average IQ, but he knew only four sight words (*i, a, and, but*) on an informal reading inventory. In the study McCormick described the development of the ME/MC strategy and its initial success attaining entry into the reading process for the subject. McCormick related how the ME/MC strategy relied upon internal and external factors. One of McCormick's conclusions was that the case study was one confirmation of the Lipson & Wixson (1986) interactive theory.

Motivation was an internal factor in the acquisition of reading skills. Severely disabled readers often suffered from a lack of motivation to acquire reading skills. Weiner (1979) believed that the motivation to achieve was a result of the expected success or expected failure of the learner. Weiner also believed that past failures can make nonreaders assume that literacy achievement is not possible for them. Instruction that focused upon the inabilities of the reader and excluded external factors

pointed to the reader as the cause of failure. The preoccupation with the internal deficits of the reader and the failure to acquire reading skills has led to nonreaders expecting failure in reading instruction (Weiner, 1979).

Motivation to achieve was important in the learning process for all students. It was especially important to students with learning difficulties. A history of poor performance and expected failure has led to a lack of motivation to achieve literacy. Without the motivation to achieve success, literacy acquisition was not likely (Ryan, Short, & Weed, 1986).

A particular trait of nonreaders was the assumption that they were unable to learn how to read (McCormick, 1994). According to McCormick, after two to four years of experiencing nothing but failure in the process of learning how to read, nonreaders believed that they could not be taught how to read. They believed that the reason they could not learn to read was because there was something wrong with them. Such nonreaders also exhibited many behaviors that enabled them to avoid tasks that they believed they could not succeed at in order to remove themselves from this failure.

Motivation was an important consideration in the remedial instruction of nonreaders. McCormick (1994) believed it was very important, especially in the early stages of instruction. After years of reading failure, engagement in any reading instruction was very difficult. Since it was important for nonreaders to be motivated early and often in the remedial process, low motivation levels of the nonreader should have been taken into account in the techniques of instruction. If motivation was considered in the instructional intervention of the nonreader, then chances of success should have increased.

The cognitive process involved in word learning was also an internal factor. A



characteristic of nonreaders was a minimal knowledge or ability to use phonics. They have not been successful in learning letter/sound correspondence or how to use them. An inability to have acquired literacy through these conventional methods is another characteristic of the nonreader subgroup (Fernald & Keller, 1921).

McCormick (1994), Seidenberg (1985), and Stanovich (1991), recognized five characteristics relating to word recognition. The first was that visual and phonetic elements of a word were processed simultaneously and interactively. Secondly, when the amount of visual information was enough to allow identification of a word without the use of the phonological process, immediate word recognition occurred. Next, it was beneficial to the reader to be able to identify words without using context clues. Also, multiple exposures to a word brought about immediate recognition that used less cognitive capacity and eventually was helpful in identifying irregular words not contained in the reader's sight word vocabulary. Finally, visual clues of individual letters within a word were important to word identification.

The five characteristics of word recognition were also incorporated into the developmental stages of word recognition suggested by Ehri (1991). The first stage was called the orthographic stage. In this stage the reader randomly attended to very few features of the word. If clues of letter shape and size were used, it was a random selection of the letters. Visual letter cues were seldom recalled from one word to the next. The order of the letters was not taken into account. If a reader was taking a visual cue from the letter "T", the reader may have begun any word with a "T" sound whether that letter was at the beginning, middle, or end of the word. In this first stage the reader was not able to read very many words without context clues. Short-term exposure to words resulted in little learning or maintenance of the word. This stage

was also characterized by difficulty in learning sets of words with more than just a few words.

The second stage of word learning is the rudimentary alphabetic stage (Ehri, 1991). In this stage the reader could identify several words without context clues. The reader also learned and maintained a few words after a short-term exposure. More attention was paid to letter cues. The reader sometimes used beginning and ending sounds. Some of the same letter cues were used consistently from word to word. Words were still identified primarily by sight, but with better accuracy because of the ability to consistently use correct letter cues. The orthographic and rudimentary alphabetic stage were the primary focus of this study.

According to Lipson & Wixson (1986), reading success for disabled readers depended upon external factors as well as internal factors. Lipson & Wixson included methods of instruction, a variety of opportunities for response, and the structure of the tasks as external factors that should have been considered in an interactive reading instruction model.

Method of instruction was considered for this study. The method of instruction most often used in the formal reading instruction has been group classroom instruction (Bloom, 1984). Bloom also found that one-on-one instruction with a disabled reader was shown to be more effective than group instruction.

Offering a variety of opportunities to respond were also considered. McCormick (1994) demonstrated success with nonreaders in developing word recognition by providing more and varied opportunities for reading responses. McCormick cited examples such as using sight words in games, providing different methods and materials to write sight words, and using sight words in student generated text as ways to vary response required from a student. Using pictures whenever possible

was also found to be effective increasing the rate of learning sight word vocabulary (Arlin, Scott, & Webster, 1978-1979).

The structure of tasks is another external factor that was considered for this study. The tasks presented to a disabled reader during remediation were found to have an important influence on the outcome (Jorgenson, 1977). Jorgenson found that it was necessary to use activities and materials that were appropriate to the abilities of the learner.

The major use of case studies was for individual counseling and not the solution of research problems (Gay, 1987). Gay also wrote that the case study approach was a valid form of observational research when an in-depth study of an individual is conducted.

Summarized in this chapter has been information relating to the use of case studies as well as a review of literature pertaining to the nonreader subgroup of the reading disabled population. This section also presented literature concerning word identification and acquisition of sight word vocabulary as it relates to this case study.

## CHAPTER TWO

### CASE STUDY

The purpose of this study was to provide remedial instruction in reading to a 10 year old nonreading student enrolled in the Ellensburg School District and to develop a case study that outlined the diagnostic and remedial procedures used with the subject. The case study approach was chosen as a way to document the progress of a single student whose initial diagnosis was as a nonreader. Because the initial diagnosis indicated a need to establish a sight word vocabulary, early instructional methods focused on this area.

#### Methods of Data Collection and Reporting

The subject of this case study was referred by a graduate student, who had worked with the subject in the spring of 1994, to a remedial reading program at Central Washington University in the summer of 1994. As a result of that referral and the request of the subject's parents, the subject was enrolled in the reading program. He was given a thorough assessment of reading abilities and tutored for 1 hour a day, 4 days a week, for 5 weeks. At the end of the 5 week tutoring session, the subject's tutor decided to continue working with the subject for the remainder of the school year in an attempt to remediate to his severe problems and to record the chronology of remedial instruction and the results of that instruction through the use of a case study.

Background information and data collection for the diagnosis were derived from a number of sources and were included in the case study. Interviews with parents,

teachers, and the subject provided needed perceptions from outside sources concerning the duration of the problem, behaviors at home and school, the subject's language development, and instructional strategies used in the past. School records provided past evaluations, observations by instructors, testing results, and recommended instructional procedures. Information was also provided by informal observations and tutoring session reports. Informal observations provided ongoing data concerning the subject's attitudes about reading and the remediation that was being conducted. The observations also substantiated subject behaviors noted in evaluations contained in the school reports. Tutoring session reports provided a record of subject behaviors and responses. Assessment of the subject's sight word vocabulary during the diagnosis was obtained through informal reading inventories. Assessment of the subject's attitudes about reading and the remediation procedures was obtained with the use of a questionnaire. This chapter presented the information obtained through these data collection methods.

### Student's History of Reading Difficulties

The subject for this case study was a 10 year old fourth grade student enrolled in the Ellensburg School District. Background information from parent interviews and school records was presented below.

Born on July 15, 1984, the subject lived at home with his father, mother, one older brother, and one older sister. The mother indicated that the older siblings were above average readers and had no difficulty with academics. She also noted that the subject's brother and sister were very good about reading to Fred and did not tease him about his reading difficulties.

The subject's mother indicated that she knew he would be "different" when he was about three or four years old. She was very concerned that he was going to enter the fourth grade and could not read. The subject's mother believed his severe reading difficulties were probably caused by an attitude that had built up within him over the last four years. She believed that his early lack of success in reading had helped to build a wall of negative feelings towards the reading process. The subject's mother also blamed the public school system for not having provided sufficient help for him, a lack of encouragement from his father, teasing from other students, and a general feeling of failure in school.

The subject's father did not attend two scheduled interviews. In the course of the study the father expressed support of remediation efforts, but he left most decisions about the subject's education to the mother.

Initial interviews with the subject proved to be very difficult. He did not want to attend extra tutoring sessions. He said that he could not read because nobody had taught him the right way. He responded to almost all inquiries with, "I don't know!" or "Why are you asking me these questions?" The tone the subject used was hostile and his movements and expressions indicated that he was very uncomfortable when he talked about school and about reading in particular. In the second and third sessions the subject was more responsive to questions about reading. He said that he knew he needed to learn how to read and that he wanted someone to show him the "right way." He also said that other students in school had made fun of him on many occasions because he could not read. The subject said that this teasing had led to several fights and other disciplinary problems at school. He also indicated that he did not like school because he couldn't do most of the things students were asked to do in the classroom. The subject said that his teachers hadn't taught him correctly and that he didn't like to

go to the resource room all the time. Later he indicated more interest in reading than he had originally disclosed. He revealed that he loved to listen to a good story being read to him. He liked to listen and think about the story "in my mind." The subject commented that he did not like to draw pictures while someone was reading to him because it got in the way of listening. He also said that he liked to look at books about pirates, cowboys, knives, and things that interested him. After the third session the subject said that he would be willing to participate in extra tutoring if it helped him to read better, if they weren't too hard, and if it wouldn't be in the presence of other students.

The subject was first referred to the Ellensburg School District for testing at the age of 4 years 6 months in January of 1989. His mother was concerned about his speech and language development. She also expressed concern about the subject's aggressive behaviors he displayed when he interacted with his brother, sister, and other children when he played.

The preschool special education assessment team from the Ellensburg School District did an evaluation. The following is from that report:

[The subject] is a four year old child who was referred for an evaluation by his mother. She was concerned about his speech which seemed to interfere with his social skill development. Current test results indicated average range pre-academic skill development. Gross motor and adaptive skills were also within the normal limits. Deficits were noted in fine motor skills, articulation, and social interaction. His self-concept seemed affected by his poor speech and impaired ability to communicate. He was very pleasant during testing and seemed to enjoy individual attention. During those times he took risks and expressed himself freely. [The subject] needs a program that addresses his speech

problems and fine motor delays. He also needs to acquire some strategies that help him become more comfortable communicating with other children despite his speech problems.

The subject qualified for special services under the category of developmentally handicapped—developmentally delayed children because he scored two standard deviations below the mean for his age in fine motor skills and articulation skills. It was recommended that he attend developmental preschool 3 days a week for 2 hours each day. It was also recommended that he receive 40 minutes a week of speech therapy for his articulation problems and 30 minutes a week of occupational therapy to focus on developing his fine motor skills.

Records showed that the subject attended the developmental preschool for the rest of the 1988-1989 academic school year. His reentry into the developmental preschool was denied by his mother in September of 1989. She told the school district that she had decided to keep him at home for the year. He did not attend Kindergarten the next year and was enrolled as a first grader in the Daman School District in the Fall of 1990. In September of 1990 the subject was referred to the Ellensburg School District for assessment. The staff at Daman School was concerned about his speech/language development, disruptive behavior, and difficulty with peer relations. During this assessment period the subject was transferred by his parents into the Ellensburg School District.

Overall, the subject scored in the average range of intelligence. An occupational therapy evaluation showed that his gross motor skills were normal, but that he suffered significant delays in fine motor skills. The occupational therapist and school psychologist attributed this to his lack of educational opportunity.

In the area of academic achievement there were major concerns. The following



evaluation was from the 1990 assessment:

The results of a current assessment of educational achievement, using the Woodcock–Johnson, placed [the subject] at the bottom of the entering 1st grade distribution in the areas of reading, math, and written language. The resource teacher reported that [his] skills measure at a level consistent with most Kindergarten age groups at this time. These grade equivalent scores were converted to age–based standard scores, and, using appropriate tables (WAC 392-171-412) , demonstrated a severe ability/achievement discrepancy in virtually all areas of educational achievement evaluated.

Although the subject appeared to have met the eligibility criteria of learning disabled, it was determined that he was not eligible under the Specific Learning Disability (WAC 392-171-406; 411; 413) classification because of the exclusionary criteria of not having received a Kindergarten program and because social and environmental factors such as lack of educational emphasis and experience in the home were contributing factors toward his learning difficulties. He qualified under the Communication Disorders (WAC 392-171-391) classification for speech therapy. An Individual Education Plan (IEP) was written for [him] that included 30 minutes of speech therapy a week. The Multi Disciplinary Team (MDT) making the assessment attributed the ability/achievement discrepancy to environmental factors and a lack of educational opportunity. The subject was assigned to a 1/2 day Kindergarten and 1/2 day first grade program. It was also recommended that he repeat an all day first grade program the following year if his progress in the combined K–1 program left him unprepared for entry into the second grade.

The subject was enrolled in an all day first grade program in September of 1991. At the beginning of the school year he continued receiving speech therapy and some

resource room support. He was referred for special education assessment by his classroom teacher two months into the school year. In the referral the teacher reported that the subject's academic growth had fallen short of even the most minimal expectations. Despite one-on-one assistance, daily Chapter 1 support, and peer tutoring, his teacher reported that the subject consistently recognized only four sight words ( *a, red, i, look* ), demonstrated low self-esteem, and assumed that he could not perform academic tasks before he would even attempt them.

Qualitative observations made during the evaluation described the subject as immature and lacking ability to form interpersonal relationships with others. He described his family as being seen by others as different and unusual. This seemed to cause him much embarrassment. The Ellensburg School District special education evaluators also noted the subject's desire for interpersonal closeness and help with his reading difficulties. In the evaluation it was suggested that the help come in the form of a positive male role model for him.

Testing at that time was consistent with results from previous tests. The subject scored in the normal range of intelligence and showed a significant delay in developing fine motor skills. The report stated that this delay was of such magnitude that it significantly impacted his ability to develop written language skills. The subject also showed significant impairment in visual-motor integration. Errors in his visual-motor integration included misdirections, reversals, and errors of motor planning. It was suggested in the report that these errors would make seat work, desk-to-blackboard activities, and classroom written activities very difficult for him. The report also stated that these difficulties had contributed to the subject's confusion, frustration, sense of being overwhelmed, and his assumption of his own inability to accomplish tasks in the classroom.

Further testing at this time showed that the subject was at a beginning Kindergarten level in basic reading skills. He was only able to identify one word (*to*) on a sight word vocabulary list. He demonstrated severe ability/achievement discrepancies in all academic areas except applied math. It was determined that he qualified for special education under the category "Specific Learning Disability" (WAC 392-171-406; 411; 413). The subject was put on a program of special education instruction in the areas of reading, math, and written language for 2 hours a day, 5 days a week. He also continued to receive speech therapy for 30 minutes per week.

A special education assessment analysis was not done for the subject during his second grade year. The resource room teacher reported in an end of the year evaluation that the subject had made some progress learning sight words in the context of short sentences and phrases. The resource room teacher also reported the subject had read a passage aloud at the primer level with an accuracy of 90 percent. The teacher also noted that the subject had great difficulty remembering sight words from one day to the next. His classroom teacher reported that the subject often refused to try and needed a lot of encouragement. The subject was not able to read passages for testing reading comprehension but did answer questions orally and was a good listener.

As a third grader the subject was again given a special education assessment. In a summary of the results it said that the subject was very unhappy about being tested and refused to cooperate at first. He did cooperate when he was offered ice cream, but he made it clear that the ice cream was the only reason he cooperated. The summary also stated:

[The subject] was a 9-3 year old third grader who was reassessed early due to staff's concern about his lack of progress in reading. [He] still needs to be

considered a nonreader despite two years of individualized instruction. He has not responded to the sight word approach or phonics approach to reading. Consequently he also has no writing skills. His strengths were his auditory processing skills for directions, gross motor skills, verbal problem solving skills, and determining cause and effect relationships. [He] has very specific visual perceptual deficits that affect his visual sequential memory, and his ability to distinguish reversed letters from those oriented correctly. [The subject's] inability to read affects many areas of his school life including his social and emotional well-being.

The subject was qualified for special education. He was placed in a program that gave him 10 hours of special education instruction per week and 30 minutes per week of speech therapy.

During the spring quarter of 1994 a Central Washington University graduate student worked with the subject to improve his reading skills. The sessions took place at the school where the subject attended regular and special education classes. There were four sessions per week and each lasted 1/2 hour. The sessions were scheduled during the 2 hours each day that he was pulled from the regular classroom for special education support. Rehearsal Reading and the Fernald technique were the methods of instruction used for these tutoring sessions. The Fernald technique was employed during the first 20 minutes of each session and Rehearsal Reading was used for the last 10 minutes of each session.

Using the Fernald technique, the tutor required the subject to dictate a short story or several unrelated sentences. The tutor would record what the subject had dictated. The subject would then trace the words as he read them. He often needed prompting from the tutor to identify the words. The subject then copied the sentences below the

originals as he read the sentences aloud. In the last step of the Fernald technique the subject was required to write the sentence independently from memory.

The Rehearsal Reading technique required the tutor and the subject to read a selected text simultaneously. The tutor and the subject would sit so that they both could view the text. The tutor would read aloud and the subject would read at the same time or immediately echo what the tutor had read. After five minutes of this type of reading the tutor would choose three or four sentences from what they had just read. The subject would then read the chosen sentences over and over until he read them perfectly. The last step of rehearsal reading required the subject to read those three or four sentences silently to himself.

The graduate student who tutored the subject during this time reported mixed results. Both of the reading techniques used required high levels of attention and participation from the subject. The following was from her report on the subject's progress in June of 1994:

If [the subject] came to class excited and with a positive attitude, his attention to the reading requirements was admirable and his accomplishments were very evident. However, if [he] started the session with an "I can't read this" frame of mind, or "I don't want to do this today" attitude, then the majority of the time was spent in trying to focus his attention to the lesson and little was accomplished. Throughout the process, as many basic sight vocabulary words were incorporated into his stories as possible. Kucera and Francis's list of 80 most frequently occurring words in written text was used as a check list. During the second week of class, [he] identified 25 of the 80 basic sight word vocabulary words on the list. After oral review and writing practice using most of these words over the past few weeks, on June 1 (1994), [he] was able to identify 22 words

from the same list. This points to the fact that [he] does have memory retention problems. Despite the numerous ways these words were used and practiced, [he] had made little progress in the mastery of these basic sight vocabulary words.

In her final report the graduate student who had tutored the subject recommended to the subject's parents that the subject participate in a summer reading program at Central Washington University. The subject's parents agreed and enrolled him in the program in June of 1994.

### Introduction to the Case Study

Remediation began in the summer of 1994. The subject had just completed the third grade and was enrolled in a summer reading program at Central Washington University. He was assigned to a remedial reading class. Before the subject was introduced to his tutor, the tutor was told by the reading specialist from the school the subject attended, that the subject had experienced very little success in reading and that he was not happy about attending the summer session.

The first assignment in the remedial reading class was to test the subject to determine his reading ability. The subject was unhappy about being in the class. He refused to answer many of the questions asked and said that he thought "this whole thing is stupid." He also said that he never read unless someone made him do it. When he was asked to read from an IRI sight word list, he absolutely refused. The subject said that one of the reasons he did not like reading was because he had to take tests all the time. The tests were put away and he was asked if he would like to have a story read to him. The subject responded that he would if he didn't have to

answer any questions about the story. The subject chose a story about foxes and listened attentively. He enjoyed the story and was very pleased when he was assured that he did not have to answer any questions about the story. He was told that each session would begin with a story or part of a story read aloud to him and that he would not have to answer any questions about what was read unless he wanted to. This seemed to put the subject more at ease. A discussion about camping, turtles, pirates, and other things that interested him took up the rest of the 1 hour session. When the subject was told that it was time to go he asked, "Already?"

During the first week, the daily 1 hour sessions became more and more comfortable. The subject was anxious to get started each day and was much more cooperative. Each session began with 20 minutes of oral reading by the instructor. The novel *Hatchet* (Paulsen, 1988) was the first book read with the subject during these sessions. The book was an adventure story about a young boy who was stranded in the Canadian wilderness and had to overcome his own fears and a multitude of obstacles to survive. After the oral reading, the subject was asked to make a statement about something he remembered from what was read. This did not appear to threaten him as much as asking questions did. The instructor then wrote the statement and read it back to him. The subject would read the sentence with help until he could read the sentence himself. One statement was added each day after the oral reading. The subject was asked to read and practice the sentences from previous sessions along with the dictated sentence of that day. The four statements the subject dictated during the first week were:

1. If I was in the plane I would land it in the water.
2. Brian got a Hatchet from his mom.

3. The pilot had a heart attack.
4. Brian doesn't know how to fly a plane that good.

When asked to orally review sentences from previous days, at first he repeated the main idea of one of the sentences from memory and guessed at the sentence which contained the idea. For example he would say, "I'd land the plane in the water if it was me." His statement contained the correct meaning of the sentence, but it was not derived from the words written on the paper. When he was asked which sentence he was reading, he would point to the first sentence, which was correct. When the sentences were mixed up without the subject's knowledge, he always picked the first sentence to coincide with the statement about landing the plane in the water. When he was told that it was the wrong sentence he became upset and said that he couldn't read and didn't want to participate any more. He also said that he wasn't really reading and that he was just memorizing. The subject was told that memorizing was good. All readers have used memorization and that it was part of learning how to read. He seemed reassured by this and continued with the exercise.

After this initial guessing, the subject was encouraged to look at each sentence and point out words that he knew. This gave him clues as to which of his statements about the story he was looking at. He still paraphrased the general meaning of the sentence when he was sure which sentence he was trying to read. For example, the subject already had the word *mom* in his sight word vocabulary and was able to identify it quickly. He also learned the word *hatchet* in the first few sessions. This was probably because it was the title of the book and because the subject quickly identified with the protagonist and the use of the hatchet in the story. The hatchet was also a very important element of the the protagonists survival. When the subject was shown sentence number two from above (*Brian got a hatchet from his mom.*), he quickly



identified the words *mom* and *hatchet*. He read the sentence as, "His mom gave him a hatchet." Again, the subject understood the main idea, but did not read the words. After he was praised for getting the main idea, he was asked to read each word in the sentence. This wasn't an easy task for the subject. He was inclined to guess whenever he thought he remembered the sentence and quickly become frustrated if he was having trouble identifying words. If pressed to continue when frustrated, he would respond with, "I don't know" or "I don't want to."

By the fourth and fifth sessions the subject became much more comfortable with the reading practice. He enjoyed the story *Hatchet* very much and liked to talk about it at length. The subject was very perceptive about implications of the protagonist's actions and often made correct predictions about possible problems the character in the story would have to face. He was very good at looking at the sentences he had dictated and relating the correct meaning of each sentence. He continued to have difficulty reading the sentences word for word. The subject was praised and encouraged for his successes, and was often reminded that meaning was a very important part of the reading process. He no longer became visibly upset when he could not identify words. He was encouraged to make his best guess or state that he didn't know, skip the word, and try to figure out the rest of the sentence. This did not appear to be as threatening to the subject, and he no longer became angry or refused to participate. He would guess if he thought he had a good idea or state that he didn't know and move on.

As the subject became more comfortable with the routine, he was asked to write some of the sentences after he read them. He found writing exercises to be the most difficult. He was obviously not happy about being asked to do the writing. He was not unpleasant, but he did use distracting behaviors to avoid the task. The instructor and

the subject agreed that he would only write one sentence each lesson. When the subject knew exactly what to expect, it made the task easier for him. He was unable to write the sentences from memory and had to have a copy close at hand to refer to. He would struggle and take his time. However, if he was given plenty of time and not put under pressure, he wrote legibly and copied correctly.

At the end of the five week summer session, the subject had dictated fifteen sentences about *Hatchet* and six other sentences about general activities that had happened during the tutoring sessions. The subject was able to identify the correct main idea in 21 of the 25 sentences. Of the 142 words used to make up the sentences, he was able to correctly read 103 of the words when he read them in the context of the dictated sentences from previous lessons. Many words were used in more than one sentence. The protagonist's name (*Brian*) was used in nine different sentences. Consequently, *Brian* made up nine of the 142 words. The subject identified the name *Brian* six out of the nine times in context. The 142 words were put on individual cards and shown to the subject in isolation, he correctly identified 76 words. Some repetitive words were identified correctly every time (*a, the, got, is*). Other repetitive words correctly identified periodically were *Brian* and *had*.

The second week of tutoring sessions found the subject less threatened by the instruction and more comfortable with the instructor, he was now willing to take part in an informal reading inventory. The Burns and Roe I.R.I. (1985) was administered to assess sight word vocabulary and both oral and silent language development.

The first section was a graded word list. Each graded list contained 20 words. A score of 18-20 words pronounced correctly placed a reader at the independent reading level. A score of 16-17 words pronounced correctly placed a reader at the instructional level. A score of 0-15 words pronounced correctly placed a reader at the

frustration level.

The subject began with the lowest level (pre-primer) list. Of the 20 words at the pre-primer level he correctly pronounced 10 words (*a, at, big, can, do, for, I, in, one, see* ). He either did not attempt or said, "I don't know" for seven of the words (*back, go, jump, of, play, said, that* ). He substituted *her* for the word *she* and made up nonsense words with a beginning "h" sound for the words *have* and *help*. His score of 10 correctly pronounced words indicated a frustration level of reading at the pre-primer level. The subject wanted to try the next 20 word list which was the Primer level list. He could not identify the first five words on the list and quit. He acted embarrassed and repeatedly made statements about not being very good, not being able to read, and that he hated tests. He was continually reassured that he had done fine and that the test showed that he could read some words and that he could learn more.

Graded passages were read orally by the instructor. The subject was asked comprehension questions about each passage. He scored 100% answering the comprehension questions at the pre-primer level, primer level, and level 1. He scored a 75% on oral comprehension at level 3 and 60% at level 4. The subject was not willing to try the silent reading comprehension section of the IRI.

In the last two weeks of the summer session, 5-10 minutes of each session were spent talking with the subject about the reading process and about how he approached and dealt with reading at home and at school. He revealed that he wanted to learn how to read and that he knew that learning to read was important.

The tutoring sessions were scheduled to end in the first week of August of 1994. The subject had presented the instructor with a difficult task and challenge. The subject had begun to believe he could learn to read. A positive relationship had

developed between the tutor and the subject. After a discussion with the reading program director and the instructor's faculty advisor, permission was given to continue the tutoring sessions. It was decided by the instructor, subject, and the subject's parents to continue the tutoring sessions in order to provide the subject with more one-on-one help and to develop this case study.

### Continuation of the Case Study

It was decided to continue working with the subject for the next school year to try to improve his reading and chronicle the progress through a case study. To accomplish this the subject met with the tutor two evenings per week from 4:00 pm to 5:00 pm. Days of the week varied according to the tutor's class schedule, the subject's family events, sickness, and holidays. The usual days were Tuesday and Thursday if nothing interfered with those days. Tutoring sessions were held at the Central Washington University library, the Ellensburg city library, or at the tutor's home. Fred attended a total of 30 tutoring sessions. Regular sessions ended in March of 1995.

At the first continued session in October of 1994, the subject was again given the Burns and Roe Informal Reading Inventory (1985) pre-primer sight word list to identify. He had pronounced a total of 10 correct words out of the 20 words on the pre-primer list in July of 1994. In October he pronounced nine words correctly. He scored lower on the second test, but he approached the test in a different manner. In the October testing he attempted most of the words, or simply said, "I don't know" and went to the next word. He did not show anger or frustration as he did in the previous testing session. A summary of the results are shown below.

Words Identified Correctly on Both July and October Testing

*a, at, for, I, in, one, see*

Words Identified Incorrectly on Both July and October Testing

*back, go, have, help, play, said, she, that*

Words Identified Correctly on July Test Only

*big, can, do*

Words Identified Correctly on October Test Only

*jump, of*

The first tutoring sessions focused primarily on the words that were missed on both tests. Secondary focus was put on the words that were missed on only one of the tests. The 20 words on the pre-primer list were routinely reviewed in isolation and in some form of context at least once a week.

The 20 words were written individually on two different 3x5 note cards. At the beginning of the second tutoring session in October of 1994, the subject was asked to identify the words that he missed on both previous tests. The tutor showed each card to him and gave him 30 seconds to respond. If the subject responded correctly he was praised and asked to go on to the next word. If he answered incorrectly the tutor responded according to the type of miscue he had made. When he substituted a word with the same beginning sound the tutor responded with encouragement and told him that he identified the correct beginning sound and he was encouraged to try again. If the subject was still unable to identify the word correctly then the tutor read the word. When the subject substituted with a word having similar phonetic or graphic characteristics he was praised for trying and the similarities were shown to him and the word was identified correctly by the tutor. If the subject substituted with a word that had

similar meaning he was told that the word meant the same and to try again. When the subject answered that he did not know, the tutor read the word correctly and told him that it was all right because the subject was given the opportunity to practice the words later in the lesson.

After the words were practiced in isolation they were presented in context. A short sentence was presented for each word. Words that were already in the subject's sight word vocabulary were also used in those sentences. Words that were not from the high frequency vocabulary list and were used in the context sentences were always identified for him if he asked. Each sentence was read simultaneously by the tutor and by the subject. The targeted vocabulary word in each sentence was underlined. For example the sentence "*I can see that dog*" was used to practice the word *that* in context. Each sentence was practiced until the subject read the sentence correctly on his own. After all eight words were practiced in context sentences, the sentences were randomly mixed and he tried to read them by himself. At this point he became frustrated. He had problems reading the first sentence and said that he couldn't do it. The subject asked if he had to do all of the eight sentences. The 1 hour session ended and the subject commented that it was just like school. Because of this reaction by the subject and the fact that the lesson was not completed by the end of the hour, future lessons targeted three or four words.

The next two sessions followed the same format except that four words were targeted in each session. At the end of the next session the subject correctly read the four targeted words (*she, that, have, go*) in isolation and in the context sentences. In the following session the other four words (*back, help, play, said*) the subject had missed on both I.R.I. tests were targeted. At the end of the session he correctly read all four words in isolation and in context. He also showed signs of restlessness and

boredom. He commented twice that he was bored and on three occasions the subject was asked to sit still and give his full attention.

At the beginning of the next tutoring session on November 8, 1994, the subject tried to read the eight targeted words from the previous two sessions. In isolation and in context he identified one word correctly (*she*). He also attempted to read all 20 words in isolation from the pre-primer IRI list on the individual note cards. He read ten of the words correctly. He was frustrated because he realized that he had done better in past testing. The subject said that the lessons are not doing any good and that he wasn't a good reader. He was told that it was not his fault and that the lessons themselves were probably to blame. For the rest of the lesson picture books were read to the subject. He was more relaxed and enjoyed the reading part of the session.

The subject had lost interest and the tutoring sessions had not gone well. It was decided that the study had lost focus on two critical areas, motivation and the subject's attitude towards reading based on his self-concept as a reader. In his first four years of school the subject had experienced very little success in reading or school in general. Drill and practice in the classroom and one-on-one remedial instruction had not significantly improved his reading. He viewed himself as a total nonreader.

Success in the summer tutoring sessions had come partially because of a more relaxed atmosphere. Stories were read and discussed. The reading process had been talked about. The subject was not threatened with possible failure. All of his past records and experience indicated that he shut down and refused to participate in activities that presented a possibility of failure.

The subject's motivation and attitude towards reading were given top priority in lessons developed after the November 8, 1994 session. Lessons were based on the ME/MC instruction strategy. The ME/MC method consisted of five steps in the process



of attaining sight vocabulary words.

The first step was to choose context material that was of high interest to the subject. This motivated him to read the material. Sentences and passages from the book *Hatchet* (Paulsen, 1988) that contained the targeted words were used. He was given the opportunity to illustrate the action that was depicted in the sentence. The pictures provided him with a good cue for remembering the main idea of each sentence.

The second step was reading the material with the subject in a non-threatening manner. The subject would read along if he wished. Targeted words were pointed out to him.

The subject was provided regular opportunities to practice the targeted words in step three. Only three words were targeted for each lesson. Many times the same three words were targeted for both lessons of the same week. The words were used in card games, matching games of concentration, matching games on a computer, tic-tac-toe, letter matching, beginning sound matching, and student generated games. The subject was also encouraged to write the words in isolation and in sentences. He balked at writing exercises. He did become more interested in writing when he wrote the words on a computer. Writing on the computer became one of the subject's favorite activities. The games and writing activities alleviated boredom and they provided the multiple exposures and context forms that were essential to the ME/MC methodology.

Step four consisted of rereading the sentences and words after practice. Praise was constantly given for success. If the subject was not able to read a targeted word he was encouraged to keep trying. He was often reminded that he was doing better. He kept a list of words he had learned on computer disk. It demonstrated to him the



progress he had made.

In step five sentences and words were constantly reviewed. The subject was allowed to pick a word and a sentence to review and a word and sentence were picked for him to review. He did not always pick the easiest sentences or words. He varied what he chose. He took it as a challenge and showed he was able to read some of the sentences that had earlier given him the most trouble. Targeted words that were identified correctly in past lessons but missed in reviews were kept on a list and were targeted again.

The subject had difficulty remembering words from the beginning of a lesson until the end of a lesson. If an activity or distraction took him away from attending to the targeted words he would often forget the word. It was important to keep his interest high throughout the lesson. He also had difficulty remembering words from one lesson to the next. This was especially true if a schedule change created a gap of more than three or four days between lessons. The subject became discouraged from time to time because he knew that he had been able to identify some of the words in past lessons. However, he appeared interested in the lessons and seemed to like coming to the tutoring sessions. He was always pleased when he entered a learned word into the computer.

Under the ME/MC format the tutoring sessions went much better. Progress in accumulating words into the subject's sight word vocabulary was slow. Other incentives such as computer chess, card games, craft projects, and having stories read were added as rewards for staying focused on lessons and achievements. Sometimes a session consisted of just playing chess, reading stories, and talking about school, reading, and anything else that was on the subject's mind.

The study ended on the third week of March, 1995. Some follow up testing was

done in June of 1995. The subject continued to meet with the tutor in the summer of 1995 on an informal basis to read and discuss stories. The next section of the case study will review remediation results.

### Review of the Remediation

Throughout the nine months of work with the subject, many insights were gained into his strengths, weaknesses, fears, likes, and dislikes about reading and school. Up until the 1994-1995 school year, he had experienced little success, was considered a discipline problem, and did not like school. He was a nonreader who did not participate in most school activities. He was afraid of taking chances because he assumed that he would fail if he did.

Because of the non threatening opportunities for success that were made available to him during this study, he willingly participated in the remedial activities. The subject gained insight into the reading process and saw himself as someone who could and would learn how to read.

On informal reading inventories given in January of 1995 and March of 1995, the subject correctly identified 15 out of 20 and 17 out of 20 words respectively. In a follow-up inventory given in June of 1995, the subject identified 18 out of the 20 targeted words correctly. He was very proud and stated that he knew it was the best he had done.

While the gain in the number of words to his sight word vocabulary seemed small, it was a big accomplishment for the subject. He also made important gains in other areas as well.

At an Individual Education Plan meeting in November of 1994, attended by the

subject's mother, teacher, speech therapist, resource room teacher, and school psychologist, it was agreed by all present that they had "seen a drastic change in [his] behavior this year." It was reported that his behavior problems had decreased and that he was more engaged in his academics. It was also stated that his attitude toward reading and being a reader had improved. The report attributed the improvement to the subject's extra tutoring sessions and a positive relationship he had with his classroom teacher. The subject functioned at higher levels in reading than he had in the past but would still be considered delayed by two to three years.

The subject's fourth grade classroom teacher reported on his progress throughout the year. The following was from the report of June 1995:

[The subject] was among the shooting stars this year! He has made tremendous progress. It is a joy to witness such growth. As usual, [he] makes meaningful contributions to class discussions. Often in these discussions he showed and understanding beyond his years. I am looking forward to working with [him] next year!

The subject also indicated an awareness of changes within himself. In a June of 1995 interview he said that he now liked school. He also said that reading was "O.K." He revealed that he thought he could read better and looked forward to being an even better reader. He said that school was better because he liked his teacher, it was not as boring, and because he tried harder.

The subject's school had an awards assembly at the end of the 1994-1995 school year. At the awards ceremonies he was given a special award as the Most Improved Student.

## CHAPTER THREE

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### Summary

The purpose of this study was to provide remedial instruction in reading to a 10 year old nonreading student enrolled in the Ellensburg School District and to develop a case study that outlined the diagnostic and remedial procedures used with the subject. The case study approach was chosen as a way to document the progress of a single student whose initial diagnosis was as a nonreader. Because the initial diagnosis indicated a need to establish a sight word vocabulary, early instructional methods focused on this area.

The significance of this study was in the chronology it provided concerning efforts to teach a non reading student to read. The study provided important insights into methods, strategies, and techniques effective with this nonreader.

Review of the literature revealed that research concerning the nonreader had focused on the internal deficits of the nonreader and not on external factors such as the remediation methods used with the reading disabled. If external factors were considered along with internal factors, when planning remedial techniques, there has been success in the remediation of nonreaders. Some of the reading characteristics displayed by the subject of this study, were consistent with natural stages in word learning development.

The study was conducted over a period of nine months from July 1994 to March 1995. The subject was tutored two evenings a week for one hour each session.

Exceptions were made for sickness, family activities, holidays, and special occasions.

Previous diagnoses by Special Education Assessment teams from the Ellensburg School District indicated that the subject had an ability/achievement discrepancy at the age of four. Testing over the next five years showed the discrepancy growing larger as he progressed through school. By the time he had finished third grade he scored in the Kindergarten range of reading ability, had a poor self-concept of himself as a reader, did not think he would be able to learn how to read, and did not like school.

Because this was a single subject case study, no comparisons to a larger population were made with pre or post testing. Burns and Roe (1985) informal reading inventory was used in the pre and post testing. Testing indicated a one level growth from pre-primer to primer during the course of the study. Pre and post study interviews with teachers, parents, and the subject showed a positive change in his self-concept, attitude toward reading, participation in school activities, and feelings about school.

### Conclusions

It can be concluded that the subject made positive gains in his sight word vocabulary based on the informal reading inventories. Based on school reports and interviews it can be concluded that he made positive gains in his self-concept and attitudes about reading and school. The ME/MC method of instruction proved to be effective with the subject. It provided him with the motivation and varied opportunities necessary to keep his interest high and attitude toward reading positive. He is still three years behind in independent reading abilities.

The value of the study is apparent in the positive gains the subject made in both academic and affective areas. He will need intensive one-on-one remediation if he is going to become an independent reader. He will enter middle school soon. He can learn to read but progress will be extremely slow. His positive attitude and willingness to try should be capitalized upon now.

The subject's strengths are his listening abilities, reasoning skills, prediction skills, growing self awareness, positive attitude, mechanical abilities, and willingness to try. His growth in the last year is a result of those strengths. However, growth is slow and hard-fought for him. Positive reinforcement, acceptance, and encouragement must be used in order for him to avoid feeling like a failure.

### Recommendations

The subject has made considerable progress in achievement and attitude. Taking that progress and the insights the instructor has gained in having worked with the subject, the following recommendations were made:

1. An intensive one-on-one remedial program continue for the subject. He must be given opportunities to experience success. He is not an independent reader. Alternative opportunities for expression and completion of assigned tasks must be given to him.
2. Accomplishments must be praised and encouragement must be given to him to overcome setbacks. Attitude is the key for the subject. If he lacks the motivation, inspiration, praise, and encouragement that he desperately needs for success, it will be extremely difficult for him to become an independent reader.
3. The subject be given a complete psychological and neurological evaluation.

This can be done through the University of Washington. More information can be obtained through the Central Washington University Education Department.

4. Any Individual Education Plans developed for the subject should be based on the results of the psychological and neurological evaluations.

5. Further research be conducted to determine alternative methods of instruction that would be successful for the nonreader.

The subject of this study has just begun to enter the world of literacy. It will be a long and difficult course for him with the proper help. It could be impossible without it.

## References

- Arlin, M., Scott, M., & Webster, J. (1978-1979). The effect of pictures on learning rates of sight words. Reading Research Quarterly, 14, 645-660.
- Bloom, B. (1984). The 2 sigma problem: The search for methods of group instruction as effective as one-to-one tutoring. Educational Researcher, 13(6), 4-17.
- Burns, P., & Roe, B. (1985). Informal reading inventory. Boston: Houghton Mifflin
- Ehri, L.C. (1991). Development of the ability to read words. Handbook of Reading Research, 2, 383-417.
- Ekwall, E. E., & Shanker, J. L. (1988). Diagnosis and remediation of the disabled reader. Boston: Allyn and Bacon.
- Fernald, G.M., & Keller, H. (1921). The effects of kinaesthetic factors in the development of word recognition in the case of nonreaders. Journal of Educational Research, 4, 355-377.
- Forster, M. (1941). Visual and visual-kinaesthetic learning in reading nonsense syllables. Journal of Educational Psychology, 32, 453-458.
- Gay, L.R. (1987). Educational research: competencies for analysis and application. New York: Macmillan
- Harris, A.J. (1981). What is new in remedial reading. The Reading Teacher, 34, 405-410.
- Jorgenson, G.W. (1977). Relationship of classroom behavior to the accuracy of the match between material difficulty and student ability. Journal of Educational Psychology, 69, 24-32.
- Lipson, M.Y., & Wixson, K.K. (1986). Reading disability research: An interactionist perspective. Review of Educational Research, 56, 111-136.



Lyso, M. (1994). [Remedial reading program for (subject)]. Unpublished raw data.

McCormick, S. (1994). A nonreader becomes a reader: A case study of literacy acquisition by a severely disabled reader. Reading Research Quarterly, 29/2, 157-175.

Norton, D. E. (1980). The effective teaching of language arts. Columbus: Charles E. Merrill.

Paulsen, G. (1988). Hatchet. New York: Viking Penguin Inc.

Rutter, M., & Yule, W. (1975). The concept of specific retardation. Journal of Child Psychology and Psychiatry, 16, 181-197.

Ryan, E.B., Short, E.J., & Weed, K.A. (1986). The role of cognitive strategy training in improving academic performance of learning disabled children. Journal of Learning Disabilities, 19, 521-529.

Seidenberg, M.S. (1985). Constraining models of word recognition. Cognition, 20, 169-190.

Stanovich, K.E. (1991). Word recognition: Changing perspectives. Handbook of Reading Research, 2, 418-452.

Weiner, B. (1979). A theory of motivation for some classroom experiences. Journal of Educational Psychology, 71, 3-25.

Woodcock, R. (1987). Woodcock Reading Mastery Tests-Revised. American Guidance Service

APPENDIX A  
PARENTAL PERMISSION FORM

To Whom it May Concern,

I give my permission for Paul Coppin to work with [subject] on his reading and to use information from interviews, tests, and school records in a case study project for Central Washington University.

The following may also be used for the case study: test results contained in school records; teacher observations; and informal observations that were recorded during tutoring sessions.

It is also my understanding that no names or specific addresses will be used in the case study.

---

Parent Signature

---

Date