AN EXPLORATORY STUDY OF THE RELATIONSHIP OF THE REMEDIAL READERS' CONCEPT OF READING TO READING MISCUES, UNAIDED RECALL AND AIDED RECALL

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An exploratory study of the relationship of the remedial readers' concept of reading to reading miscues, unaided recall and aided recall.

By

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ABSTRACT

Little research has been carried out to examine the relationship between a remedial reader's concept of reading and how that reader approaches the act of reading. This study investigated the relationship of remedial readers' concept of reading to reading miscues, unaided recall and aided recall.

Twenty remedial readers were randomly selected from the university clinic files. These readers ranged in age from six to sixteen years. Data were collected for each child on four reading related aspects: interview sheet, miscues, aided and unaided recalls.

The most important finding in this study is that at the independent reading level remedial readers actively engaged in meaning seeking rather than decoding words as was reflected in their interview and as is reported in many studies on good and poor readers.

Most of the remedial readers were word dependent, that is, when asked they indicated that reading is saying all the words correctly. At both the independent and instructional levels of reading, the percentage of acceptable miscues made was similar but the total number of unacceptable miscues made at the instructional level was twice that at the independent level. At the independent level, the percentage of recall was greater than the percentage of recall at the instructional

level. At both levels, the unaided recall was text based, that is, the remedial readers recalled the information almost exactly as it was written in the text without paraphrasing or embellishing the information. At both the independent and instructional levels, the recall increased substantially when questions were asked indicating a dependence on probing to help these remedial readers recall more information than they readily organize and retrieve. The remedial reader's concept of reading seems to vary depending on the level of the reading material being read.

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CHAPTER I

THE PROBLEM

Introduction

Many remediation programs have been put in place in the past twenty years either as a result of ongoing research or untested assumptions, yet children in our schools experience reading difficulties. It is my goal to study remedial readers' concept of reading and how that might be reflected in the kinds of strategies remedial readers use when reading. Such information may allow for further understanding of the reading process particularly in the remediation of reading difficulties.

For the purpose of this study, the remedial reader is one who has not responded to reading programs that are designed to meet the instructional needs and characteristics of the majority of children. Over the years these children who have difficulty learning to read have been the focus of much concern and research. While many have looked for a single cause of reading disabilities, for example, perceptual functioning, (Frostig, 1964; Kephart, 1960; Wepman, 1960) others believed that the causes of reading disabilities are many and varied (Vernon, 1977; Naidoo, 1972; Bond & Tinker, 1984; Howards, 1982).

In the 1960's a group of people under the direction of Kenneth Goodman began listening to children's oral reading

responses as a possible avenue to understand the reading process more clearly. They believed that by studying the deviations in the expected response and the reader's actual response, that is miscues, they could determine the strategies children use to read. These and similar studies (Jensen, 1973; Beebe, 1980; Billard, 1984) have brought to the educator new insights into the reading process. Another means of understanding the reading process more clearly is through the use of protocol analysis. Cognitive psychologists Newell and Simon (1972) laid the foundation for further work by Drum and Lantaff (1977), Stein and Glenn (1979) and Fagan (1985) in which they examine the clausal units in a child's recall to determine the degree to which comprehension has taken place. While studies in miscue analysis and protocol analysis have helped the educator more fully understand what is happening during the reading process, much work is yet to be done.

Background to the Study

In my work as remedial instructor, I see children who have been in classrooms where the necessary reading skills have been taught, but cannot read at an expected level. These children often are in grades three or four and have had at least two years of formal instruction in word recognition (eg. contextual clues, phonic analysis, structural analysis) and instruction in comprehension (eg. finding the main idea,

sequencing, reading for detail).

Several approaches have been used in the classroom by the teachers of these children for the instruction of reading, the phonic approach, the language experience approach, and in many cases a combination of these two have been used, yet these children are referred for remediation because they are having difficulty with the reading process. Many of these children are word by word readers who put more emphasis on saying all the words correctly than on the meaning of the passage consequently they do not comprehend what they are reading. Assuming that these children have been taught word recognition skills and comprehension skills; assuming that the text is well organized and familar to the child; assuming that these children do not have any known emotional, neurological or psychological disorder; where, then are the possible breakdowns in the reading process? Are there other factors which would be worthy of consideration? Historically, researchers have attributed the problems to a multitude of factors.

Early researchers believed the reading problem lay in some physical deficiency. Wepman (1960) stated that children with poor auditory discrimination abilities were more likely to have reading problems than those whose auditory discrimination abilities were adequate. Consequently, remediation programs at that time emphasized auditory discrimination skills. Kephart (1960) attributed deficient motor skills to one's

difficulty with reading and went as far as having remedial readers walk on balance beams to improve their perceptual motor skills which in turn, he believed, would improve their reading skills. Frostig (1964) believed that to remediate a reading problem, one must first correct the deficit perceptual skills that she believed existed in every remedial reader. Such skills as visual tracking and figure-ground activities were emphasized in her perceptual training program. These training programs referred to as "process training" (Kirk, Kliebhan & Lerner, 1978) were often used for remedial readers whether or not they needed them. Although these programs were numerous and much work was done with the children, their effectiveness was questionable as many problems in reading still remained (Hammill & Larsen, 1974). Thus, there was a need to examine the remediation programs more thoroughly.

Researchers (Weiner & Cromer, 1967; Otto, 1978) began asking the question, "What should a child learn in the reading program?" and subsequently examined the numerous skills involved in reading. Their work, however, has never been able to confirm the existence of subskills as separate skills to be learned or that there is a proper sequence to learning the skills. Yet, educators began breaking down the teaching of reading into subskills that had to be mastered. Children were asked to find the main idea in a paragraph or to sequence sometimes insignificant events in a story. They

were taught pronouns, contractions, possessives and how to use verbs. Nevertheless, reading problems persisted.

In the late 1960's, another group of researchers conceptualized reading, not as a series of skills to be learned in isolation but rather as skills to be learned by actually reading a book. There was no prescribed sequence, instead children learned these skills as they read. Emphasis now was placed on getting meaning from the printed word. However, many remediation programs continued to emphasize a skills approach to reading.

To more thoroughly understand why some children had much difficulty with reading, researchers began looking at the reading processes of good and poor readers. In a study carried out by Goodman and Burke (1973), it was found that better readers relied more on syntax and semantics than did the poorer readers. A later study by Canney and Winograd (1979) concurs with the findings of the Goodman and Burke study. In response to the question "What is reading?" posed by Canney and Winograd, poorer readers described reading in decoding terms 79% of the time. In other words, these poorer readers believed reading was "saying all the words", "reading words" or "trying to figure out words." Canney and Winograd (1979) believed that these readers have missed the whole point of reading; they have attended to bits and pieces of language at the expense of getting meaning. Poor readers, then, don't expect to find meaning in what they read. In an

attempt to differentiate strategies involved in the comprehension of good and poor readers, Olshavsky (1976-77) asked good and poor readers to think aloud after reading each clause in a short story. She found that proficient readers used certain strategies more often than the less proficient readers. The strategies were: use of context to define a word, addition of information, synonym substitution, re-reading, hypothesis testing, stated failure to understand a clause and addition of information about the story. Olshavsky concluded "The greater use of strategies by good readers implies that they are more active in their attempt to comprehend" (p. 672). Furthermore, Goodman emphasized throughout his writings that readers must be actively engaged in the reading process; that is, they must always be seeking meaning.

It seems that remedial readers do not look for meaning in what they are reading. Garner (1981) in her studies of grades 6, 7 and 8 students' ability to use rereading to facilitate comprehension found incidentally that poor comprehenders focused on words within a sentence. They did not look at information across sentences or seem to realize when they did not understand. Phillips (1985) identified two important differences between good and poor readers: "monitoring, with good readers making more corrections than do poor readers; and predicting, with a high proportion of miscues made by good readers being meaningful" (p. 114). Good readers seem to know what is expected of them in the

reading process; poor readers do not. Good readers seem to focus on meaning at the outset of their task. They predict words, they confirm their predictions, they monitor what they are reading, and they strive to understand what it is they are reading. Poor readers tend to get bogged down on saying all the words correctly. For them, the task at hand is decoding individual words not comprehension.

One would expect that the information generated from these studies and others (Cooper & Petroskey, 1976; Beebe, 1980) would help in the planning of effective remediation programs in our schools. Even though much is being done about programming for remedial readers, many children in our school system continue to experience reading problems.

It is my conviction that children must know that reading is meaningful if they are to become proficient readers. If they think reading is saying all the words right then these children will set about saying all the words at the expense of seeking meaning. If, on the other hand, they believe that reading is an active process in which one must search for the meaning, then there may not be as many remedial readers in our schools. If a relationship can be found between a remedial reader's concept of reading and comprehension, then it would seem that teachers of remediation programs may have to work on a remedial reader's concept of reading before these programs can be successful.

Most remedial programs are based on an adult's analysis

of what the child does and does not know. They do not consider how the child conceives reading. It is hypothesized that if children think of reading in terms of decoding, then their focus will be on words not on meaning. It is further hypothesized that if that is the case, because children conceive reading to be knowing all the words, then it is likely that they would be poor comprehenders. If such a relationship exists, then as educators we must ensure that remedial readers understand that reading is meaningful. Attempts to improve remediation programs will continue to be insufficient where prior conceptual differences between the teacher and the student remain unchanged.

Purpose of the Study

The purpose of this study is to investigate the relationship of remedial readers' concept of reading to the reading miscues, unaided recall and aided recall. It is my belief that the remedial programs in place in our schools can only be partially effective as long as there are important conceptual differences in what the remedial reader conceives reading to be and what the teacher conceives reading to be. If a strong relationship can be found between how remedial readers conceive reading and the strategies they use to read, then it would seem that the first task is to teach remedial readers that reading is meaningful.

Very few studies to date have examined the remedial

reader's concept of reading, although several researchers have made some very interesting incidental observations concerning both the good and poor readers' concept of reading. They have noted that poor readers tended to focus on words, observing bits of information rather than understanding the story as a whole. Good readers, on the other hand, attended to larger more meaningful pieces of information and generally seemed to understand more of what they had read (Garner, 1981; Canney & Winograd, 1979). While neither study determined that there was a relationship between the reader's concept of reading and comprehension, in both cases, the readers who focused on words at the expense of meaning were poor comprehenders. Conversely, the readers who did not focus on words but who were more concerned with getting meaning from the text were the good comprehenders. It is the goal of this investigation to study if a relationship exists between children's concept of reading and how these children perform in reading.

For the purpose of this investigation the following questions will be examined:

1. What is the remedial reader's concept of reading?
2. What is the nature of the miscues made by the remedial reader?
3. What is the nature of the remedial reader's unaided recall?
4. What is the nature of the remedial reader's aided recall?

5. Is there a relationship between the remedial reader's concept of reading and the nature of the miscues made at the independent and instructional reading levels?

6. Is there a relationship between the remedial reader's concept of reading and the nature of the unaided recall at the independent and instructional reading levels?

7. Is there a relationship between the remedial reader's concept of reading and the nature of the aided recall at the independent and instructional reading levels?

8. Is there a relationship between the remedial reader's concept of reading and the way the reader approaches the task of reading as defined by questions five, six, and seven?

Need for the Study

The review of literature has not identified research that examines the relationship between a remedial reader's concept of reading and how a remedial reader performs in reading comprehension. Goodman has stated throughout his writings that the child who focuses on words loses the meaning of what is being read. Undoubtedly, he observed this phenomenon in his research; he has not, however, set about to study the possible relationship between the remedial reader's concept of reading and the possible relationship it might have on comprehension. Garner, Canney and Winograd made interesting incidental observations while carrying out their research in the area of comprehension. As in the case of Goodman's work, it is implicitly stated that if children

think of reading as 'saying all the words right' then these children will attend to each word on the page while ignoring the intended meaning of the text. It is also implied in these studies that children who think reading is understanding what is being read generally attend to the meaning of the text rather than individual words. It is important, therefore, to examine directly the relationship between the remedial reader's concept of reading and how the remedial reader performs. If the child thinks of reading as decoding words does that mean the child attends to the words at the expense of the meaning?

Looking at the child's concept of reading may be a beginning point to put a remediation program in place. Until the child's concept of reading is considered, it would seem that any remediation program that is being used can only be partially effective. If, for example, the remedial teacher assumes that the students in class read for meaning when in actual fact they may be concentrating on word recognition, then the teacher and the students may be at dissonance and the program inappropriate until the teacher knows each child's concept of reading.

Ira Aaron, who served as president of the International Reading Association for the period 1983-84 was quoted recently as saying, "We seem to be helping children learn to decode better than we help them learn to comprehend" (The Evening Telegram, August 22, 1985). Aaron supports my view that

children who focus on words are not getting the meaning. In fact, teaching may be reducing the effectiveness of the current philosophy of reading if it is insisted that children be good decoders of words. How can children become good comprehenders if their concentration in reading is primarily on the analysis of words?

It is essential that we know whether or not the child's concept of reading affects comprehension. What do remedial readers believe reading to be? Do they believe that the function of reading is to say all the words correctly? Or, do they believe that the most important function of reading is understanding what one has read? The answers become the starting point for an effective remediation program. Only when we know more about how the remedial reader conceives reading can we effectively plan for that reader. Otherwise, the teacher and the child may be at cross purposes; the remedial reader attending to each word on the page, trying to say each one correctly and the teacher attending to the meaning of the story as a whole. A more effective program may be put in place if the teacher knows the child's concept of reading at the outset of the remedial sessions and uses that knowledge as the starting point for the remediation. If it can be determined that there is a relationship between the child's concept of reading and performance on the reading tasks, then it may be necessary to take this into account to plan remediation programs that are better suited to each

child's needs. Remediation programs now in place presuppose understanding on the part of the child in places where important conceptual differences lie more or less unaddressed. Continued improvement in research and teaching must speak to these differences. It is the purpose of this study to identify remedial readers' concept of reading and how that conception is reflected in miscues, unaided recall and aided recall.

Definition of Terms

The definitions considered pertinent to the study are given below:

Reading - a sampling, predicting, confirming and integrating process. The reader simultaneously makes use of three types of information or cue systems during the reading process, namely, graphophonic, syntactic and semantic.

Remedial reader - a reader who has not responded as expected to developmental reading programs that are designed to meet the instructional needs and characteristics of the majority of children.

Miscue - an oral reading response that differs from the expected response to the written text. The underlined words in Bob's response are examples of acceptable miscues because the substituted words are semantically and syntactically acceptable. John's response contains examples of unacceptable

miscues.

Text: The boys ran through the dark forest.

Bob: The boys went through the dark woods.

John: The boys ran though the dark frest.

Unaided recall - information the reader recalls from what has been read without the aid of questions or probing

Aided recall - information the reader recalls from what has been read with the help of questions or probing. It is usually preceded by unaided recall.

Strategy - a systematic plan for achieving a specific goal. The procedures that a reader uses to get from print to meaning are called strategies.

Limitations of the Study

The following are recognized as possible limitations of this study:

1. Each assessment was carried out by a different graduate student. Since different approaches may have been used in the collection of data, a difference in data may exist. I limited myself to the data most consistent in all twenty files.

2. The study was limited to the information found in the files of the students. In any diagnostic situation it is always best that the clinician work

with the child, since this was not possible, I depended on the reports of other graduate students.

CHAPTER II

REVIEW OF THE RELATED LITERATURE

Introduction

For years research has been ongoing to determine the causes of reading disabilities. There are some who believe that perceptual deficits are the root of the difficulty (Frostig, 1964; Kephart, 1960) while others blamed poor neurological functioning (Orton, 1937; Delacato, 1963; Levinson, 1980). However, most authors (Howards, 1982; Satz, 1977; Hartman & Hartman, 1973) as well as the Disabled Reading Committee of the International Reading Association support the view that the causes of reading failure are many and varied. "The causes are so interwoven and overlapped it becomes speculative to say why the diagnosed problem does exist and exactly how it is affecting the learning" (Howards, 1982, p. 152). What one person refers to as a cause of a reading problem, another sees as a symptom. We may be looking at a number of causes that manifest themselves in various ways.

What determines why some children have more difficulty learning to read than others may be answered in part by investigating single factor theories and multiple causation theories. Under these two broad headings I will present most of the reported reasons for reading disabilities.

Single Factor Theories of Reading Disabilities

It has been a concern for years whether or not perceptual deficits cause reading problems. Perceptual processes refer to brain operations which involve interpreting and organizing the physical elements of sensory input (Lee & Berger, 1978). Those who believed that reading failures were caused by perceptual deficits generally agreed that all processes were equally important in interpreting and organizing information. Fernald (1943) recommended supplementing the visual and auditory stimuli with a kinesthetic stimulus. She believed in preventative measures, that is, if the child's visual, auditory and kinesthetic senses were used, then that child would not have any problems with reading.

While many theorists blamed general perceptual deficits as the cause of reading disabilities, others were more specific. Frostig (1964) emphasized the significance of visual perceptual skills in the reading process. She believed that to correct a reading problem, one first had to correct the visual perceptual problem. Formal training of visual perception skills using Marianne Frostig's program was very much in vogue in the 1960's. Today it is recognized that while teaching visual perceptual skills improves a child's visual perception, it does not necessarily improve reading.

Kephart (1960) went as far as having children walk on balance beams to improve their visual-motor perception which

in turn was to improve their reading ability. He believed that many children were coming to school lacking in the basic perceptual motor skills because they were being restricted in their experimentation. Children could not explore their world adequately because of dangers or fear of breaking a valuable item in their home. As a result of these deficient motor skills he said "children were less able to participate in formal educational activities, were less likely to learn from these activities and were more likely to become slow learners" (Kephart, p. 16). Children who are restricted in their ability to explore and manipulate very often develop more slowly than those who are not restricted. This slow development is general and not specific to reading. Some children who experienced reading problems, however, were not restricted in their home environment and were allowed to explore at will. Factors other than those addressed by Kephart must account for at least some of the reading problems that children experienced.

The most widely discussed hypothesis has been that of Orton (1937). While he was aware of the many factors which could influence reading problems, he was concerned with what he believed to be the cause of reading disabilities. He thought that sensory impulses were received simultaneously in both cerebral hemispheres. If one hemisphere was dominant, clear perception would result. However, if cerebral dominance was incomplete, the result would be shifting and inconsistent

perceptions. A child who confuses "b" for "d" and reads "was" for "saw" would be an example of one who has inconsistent perceptions (Myers & Hammill, 1976). These very same errors can occur when children are beginning to read because of their insufficient experiences with letters, words and with print in general. This does not mean that the child has a reading problem unless the confusion persists beyond about grade two.

In 1963 Delacato stated that the problems children experience in reading could have been prevented if parents had been aware of significant developmental factors which so greatly influence subsequent neurological organization. He believed that children must go through the stages of creeping, crawling, climbing and balancing before the brain can become fully organized and ready for learning. The findings of a study by Robbins (1966) did not support Delacato's postulated relationship between neurological organization and reading achievement. This theory called patterning has been recently denounced by a committee of the Israeli Ministry of Health (Zigler & Weintraub, 1980). In the spring of 1968 many American and Canadian groups including the American Academy for Cerebral Palsy, the American Academy of Physical Medicine and Rehabilitation, the Canadian Association for Children with Learning Disabilities, and the Canadian Association for Retarded Children also made statements condemning this theory. Many cerebral palsied children never go through the

stages that Delacato stated as necessary before learning can take place yet they learn to read beautifully. An immediate case that comes to mind is the son of a friend, who has never been able to creep, crawl, climb or balance has done as well as other children in his class throughout school, not only in learning to read but in reading to learn.

Wepman (1960) emphasized the importance of auditory perception in the reading process. His research is cited by many who insist that there is a close relationship between reading and auditory discrimination skills. He found in his study of first and second grade classes that children with poor auditory discrimination ability were more likely to be poorer readers. Thompson (1963) found that out of the best 24 second grade readers tested on an auditory discrimination task given at the beginning of first grade, 16 could perform adequately. By contrast, out of the poorest readers, only 1 demonstrated adequate skill. He concluded that weakness in auditory discrimination has continued to emerge as a major correlate of reading disability. Groff (1975) believed as well that "a constant relationship between auditory discrimination and reading achievement is still alive and thriving" (p. 57). Wepman's, Thompson's and Groff's theories would be valid if the teacher taught reading using an approach that required only fine auditory discrimination. Most reading programs however do not depend solely on one's ability to hear the likenesses and differences of phonemes

and words. If the program did depend solely on fine auditory discrimination ability and the child did not have adequate auditory perception, then reading difficulties would result. On the other hand, a teacher who uses a whole language approach to teach reading knows that the child with auditory perceptual difficulties can learn to read using this method. The teacher allows the children to use their own language in learning to read and shows them how to understand what they are reading.

Over the years others have attributed reading disabilities to a single cause. Bender (1957) credited reading disabilities to a maturational lag. He believed that specific brain centers involving reading developed slowly while the rest of the brain developed normally. He has now refuted this idea in favor of a multiple cause theory of reading disabilities which will be discussed later.

Heredity has also been cited as the primary cause of reading disabilities. Naidoo (1972) studied the relationships of familial history to other features of reading disabilities to determine if different types of reading disorders existed. These studies showed a high incidence of reading problems in families of children who experienced difficulties in reading. This might logically be expected since these children may have experienced reading difficulties because their parents were not readers and, therefore, not good models of reading. The child's home environment then would probably be lacking

magazines, books and newspapers. The child may not have been read to early in life if the parents had difficulties with reading or perceived reading as not important. Harding (1983) found that parents of average readers read more often than those of poor readers. Thus, an environment in which parents are seen reading must be influential for the child.

In order to read, Athey (1983) believed that children must have the language facility to express an idea and ask questions related to their experiences. She contended that middle class children start school with an enormous advantage for learning to read. This advantage has been brought about by the parents' willingness to clarify and expand ideas with the child.

Ekwall (1976) in citing various ways teachers might not provide help to specific individuals, expressed the viewpoint that more than 90% of our reading failures could or should be blamed on poor teaching. Evidence of this claim was shown in a study by Durkin (1981) who, after carrying out a survey of 39 classrooms from grades three to six, reported, "The teaching of comprehension was almost nonexistent" (p. 453). Since it is the viewpoint of Ekwall that only 2 percent of our students experience learning disabilities so severe as to require the services of a specialist, then 98 percent of any heterogeneous group should be able to read without difficulty. Even if one were more liberal and said that 10 percent of our students need special help in our schools, then the

other 90 percent should be able to read adequately. This is not the case. Many children in the regular classroom setting are experiencing severe reading difficulties. Using the results of Canadian Tests of Basic Skills, the percentile score for averages showed the Newfoundland Grade 6 children in 1984 to be below the 50th percentile in word recognition and comprehension (Department of Education, Annual Report, 1984). Teachers become frustrated when they have students who don't learn to read as well as other students their age. These teachers, instead of determining the child's strengths and weaknesses in the reading process, give the student more of the same kind of teaching, when in fact, a different approach may be all that is needed. One student that I worked with was socially mature, her verbal abilities were beyond her age, her reading was good, yet she was failing miserably in her Grade 7 courses. It was found that when films, slides, maps, diagrams and other visual aids were used in class, her retention of the subject was nearly perfect. This was a child who was restricted in her ability to process information unless she had the help of visual aids. More lectures, notes and extra studying would not be the most effective form of help. She needed the visual cues that were not being provided by her teachers. Alm (1981) included teaching methods as one of the eight topics listed as educational factors that are the major cause of the reading difficulties students have today.

Another inhibitor to learning is a high degree of stress (Monteith, 1981). He estimated that 45% of all children born in the United States today will spend at least a year living with only one parent. Almost all of these children undergo stress from external conditions and internal feelings. This stress prevents children from learning, learning to read if the child is young, or learning general information if the child is older.

It would seem then that the topic of reading disabilities is complex and that multiple factors must be considered.

Multiple Causation Theories of Reading Disabilities

In recent years the single factor theories of reading disabilities have been questioned by many who do not believe that all reading problems arise from a single inherent deficiency in all readers. Reading is a complex process and not effectively learned as a unitary skill, so it would be expected that there are various points of breakdown in different readers. Reading necessitates the acquisition of several different skills which are fully integrated. These skills depend on normal functioning of a number of psychological processes: visual and auditory perception, memory, linguistic ability, and reasoning (Vernon, 1977).

Along with adequate functioning and integration of psychological skills, other factors to consider when we look at the disabled reader are the environmental and social

implications as well as the educational causes of reading problems. Howards (1982) has gone as far as to say that one does not need to be unduly concerned with which causes may be responsible for the reading failure. Instead, what the teacher needs to know is how the students deal with language, learning, the reading process, and how they deal generally with the world. By virtue of the fact that hundreds of researchers have found what they claim to be the cause of a reading disability, one has to look more closely at the possibility of varying combinations of causes when children cannot read as well as is expected.

In the past when a child had a reading problem, the child's eyes were immediately considered as the possible cause of the difficulty. Because some optometrists believed that visual training improved one's ability to read, the child was placed on a program for that purpose. While correction of the visual problem, for example, the ability to follow print smoothly and accurately with both eyes, might increase the speed of reading, it will not improve one's ability to read. Rayner (1985) in reviewing the characteristics of eye movements during reading found that eye movement characteristics reflect the difficulty or ease with which readers are able to process textual material but emphasized that eye movements are not the cause of reading problems. He found that one could train a poor reader to make more efficient eye movements, but overall reading efficiency did

not improve. Bender (1957), Frostig (1972), and Goldberg et al. (1983) found that visual perception correlated highly with reading ability and all agreed that if the perceptual deficit was not corrected before the age of 6, perceptual training after that age would probably not develop the skill that is lacking. Do we then assume that the child who is lacking in some aspect of perceptual skills can not learn to read? Of course not. In fact, if the child were diagnosed earlier than the age of 6 and visual problems corrected the child might still have a reading disability. A child who has a visual perceptual problem may have trouble keeping in place in reading, as evidenced by the omission or confusion of words which might lead to an eventual avoidance of reading but these difficulties are not the causes of reading problems.

Frostig (1964), Wepman (1960), Kephart (1960) and others strongly believed that once perceptual skills were improved, reading would automatically improve as well. However, the literature is replete with studies by those whose findings do not substantiate this claim. Frostig (1972) explains seven years after her program had first been initiated that while perceptual training may need to be the focus of some remedial programs, it can not be divorced from training in language or higher thought processes.

Cohn (1966) found that perceptual skills improved in first grade readers as a result of perceptual training with the Frostig program but reading did not improve. Sullivan

(1972) used the Kephart approach with educable retarded children and reported no improvement in reading. Children with average to bright intelligence received perceptual-motor training in a six week summer program, and again, no improvement in reading ability was evident. Robinson (1971) reviewed the research on perceptual training and concluded "this training results in improvement on tests of visual perception but seldom is the resultant reading improvement substantial" (p. 5). A child who is trained in visual tracking, that is, for example, choosing "A" from a line of letters, will learn to select the appropriate letter quickly, but will not necessarily read any better because of this new skill. Neither will teaching a child to find numerals hidden among objects (figure-ground training) facilitate the reading process.

Groff (1975) and Larsen (1976) have both questioned Wepman's research in auditory discrimination. They each have found in their studies that the correlation between reading and auditory discrimination is low. Groff also states that there is a lack of agreement among the available experimental data regarding the relationship of auditory discrimination and reading.

I have worked with a large number of children who scored within the average range on tests of auditory discrimination yet experience difficulty in learning to read. On the other hand, some children who scored poorly on these same tests

give no evidence of difficulty with the reading process. Obviously the time devoted to auditory training should be evaluated if the purpose of such training is to improve reading proficiency.

In a longitudinal study carried out by Naidoo (1972), he found that one large group of disabled readers could be characterized by linguistic deficits. All other groups showed a multiplicity of problems so that it was impossible to find another group with common difficulties. Seventy percent of those patients, who were reading disabled, seen by Denckla (1972) did not fit into any clear-cut group. The other 30% fell into three groups -- a language deficit group, a group with visual-spatial difficulties, and a group he characterized as "sweet, silly and sloppy" (p. 403). As in other studies, no one factor was common to all reading disabled children.

Howards (1980) did not focus his study on one cause of reading disabilities but rather he investigated the many causal factors under the headings: Educational, Physical and Psychological Problems. In Dyslexia: An Annotated Bibliography (1982), there are 28 causes of reading disabilities listed and 1221 references that one may read to find out more about the multiplicity of the factors attributed to reading problems. The truth is that despite the numerous studies that have been carried out on the correlates of reading there is no conclusive evidence that reading difficulties are caused

more by one factor than another. The relationship of auditory and visual discrimination, visual and auditory memory, intelligence and attention with reading achievement show positive correlations that are generally low. There is some evidence that the ability to process and organize linguistic information may be strongly related to the difficulties experienced by poor readers (Gillespie-Silver, 1979; Goodman, 1969, Goodman & Burke, 1973; Smith, 1971; Liberman & Shankweiler, 1985). There is also some evidence in Durkin's (1981) study to support the claim that "most reading disabilities are created and not inherent" (Bond & Tinker, 1984, p. 10). She claimed that in her observations of 39 classes of grades three to six, "mentioning" not "teaching" was evident. Only 45 minutes out of a total of 11,587 minutes of reading periods were actually spent instructing the children in comprehension.

It is my opinion that although we as reading educators may not have created the reading disabilities we have perpetuated the problems by not consulting with the persons experiencing the difficulties. It is time to ask these children what they perceive the reading problem to be. If, for example, a person becomes ill, the family practioner immediately discusses the illness with the person involved, yet we as reading educators often neglect to discuss with our students the problems they are experiencing thereby possibly failing to identify the fundamental source of the problem, that is what the

child perceives reading to be.

Becoming A Proficient Reader

The focus in this section will shift from the difficulties that some children encounter in learning to read to how natural it is for most children to begin reading.

Most children are born with an innate desire to communicate with their family and with others in their world. Because of that desire almost all children develop language without having to be taught. They learn, not by imitation but by testing the rules of language. When a young child says "I bringed the book home," the child is overgeneralizing the rules learned. The child soon learns to be understood and to understand and to produce sentences not heard before. Halliday (1975) believed that "function precedes form in language development." This ability to create language makes it possible for children to use original sentences and to "try out" their sentences. It is this need to communicate that encourages language development.

Children growing up in a literate society begin to encounter written language as well as oral language early in life. Most of them become aware of and are able to read written language to some extent before they go to school. According to Smith (1976) the roots of reading are discernible whenever children strive to make sense of print before they are actually able to recognize any of the words. They

become aware of books, signs, captions, logos and certainly the names of their favorite cereals. They recognize their own names and begin scribbling. When children point to a sign or a caption under a picture and ask, "What's that say?" they are becoming aware of the printed message. If children get no response to their question then a necessary part of learning to read has been passed up. Children as young as 4 years were reported by DeFord (1980) to have distinguished between their scribbles and the writings of others even though they were not actually able to read. In a project that I carried out two years ago, one two year old child drew a helicopter, wrote the word "helicopter" and his name. The drawing of the helicopter was barely distinguishable from the words yet he clearly indicated which was the drawing and which was the printed message.

The Goodmans (1979) differentiate the view that learning to read is natural from the view that the development of literacy is innate. When children are raised in an environment that is rich in print, they become aware of what is happening around them. They see their parents reading a paper, or a letter from a relative; they observe also their mother and father following a recipe to make a dessert, or following instructions to assemble a new toy. To hope that because children are immersed in this print they will learn to read is leaving too much to chance. Parents have to facilitate the process. Since understanding that print is meaningful

is fundamental to reading, it is imperative that parents make their children aware of this.

Very early in life children are brought to a department store or a supermarket where they observe signs such as "Toy Department" or "Fresh Fruit." The children may predict that the words say "Toys" or "Apples" because they are trying to get meaning from the printed word. Not only must the parents confirm that these predictions are partially correct but also offer the correct response to the signs.

As Smith (1976) pointed out, children probably begin to read from the moment they become aware of print in any meaningful way. The word "meaningful" is important here. Children can become aware of the print but they must be "active participants in communication with unseen writers" (Goodman, 1977, p. 254). The children themselves must feel the need to communicate with the writer to get the message or carry out the wishes the writer wants to convey. For example, young children who love to help around the house would read simple instructions if they were made aware that there was meaning associated with the printed words on the list of instructions. The young child is already aware of many of the printed messages in the environment: "McDonalds", "Stop", "Fruit Loops". We, as teachers, have to make children more aware.

Young children expect that written language will make sense. Children sitting in McDonalds restaurant would not

read "Strawberry Milkshakes" as "Hats for Sale". They probably would say "Hamburgers" or "French Fries" because they expect the signs to have meaning and to relate to the context in which it is written. When these same children go to school for the first time, it is important that the teacher recognize the knowledge they already have about reading. The teacher has to "respond to what the child is trying to do" (Smith, 1973, p. 95). Children have to be made aware that they have been meaningfully engaged in the task of reading long before coming to school. The teacher must build on what the children already know: their vocabulary, their concepts and their ablity to handle print.

I agree with Halliday (1975) when he said "There is no doubt that many of our problems in literacy education are of our own making" (p. viii). We have been trying to make learning to read hard by "solemnly teaching letters, phonemes, words and word attacks, hoping to make children aware of linguistic abstractions, while failing to take seriously their constantly demonstrative competence in using and learning functional language" (Goodman, 1977, p. 140). In other words, we have been making children good decoders and neglecting what they already know about the language.

How Proficient Readers Differ From Remedial Readers

When Goodman began his research in the 1960's, the predominant view up to that time was that reading was simply

a process of identifying each word. In 1965 he demonstrated that children were able to recognize words that were embedded in the context of a story that had gone unrecognized in isolation thereby challenging the view that children must recognize each word before they can read with understanding. Indeed, if children take time to look at each word, the meaning of the text is lost. From their research on the reading process in readers with widely different levels of proficiency, Goodman and Burke, (1973) reached these conclusions:

1. There is only one reading process. Readers may differ in the control of this process but not in the process they use.

2. Non-proficient readers show problems in getting it all together. They tend to get bogged down in preoccupation with letters and words and lose meaning.

3. The major difference in readers of varying proficiency is their ability to comprehend what they read.

4. Older non-proficient readers...don't get much sense from what they read and seem not to expect sense. (p. 262)

Not only do non-proficient readers get bogged down in their preoccupation with letters and words, but I have watched parents who, when reading with their children make them focus on letters and words. "Break the word apart," "Sound it out," or "Spell the word" are familiar demands of the parents. The children are not permitted to continue reading until the unknown word is said, by then, often the meaning is lost. Never in my experience of working with

parents and their children have I heard a mother or father tell the child to "Read on until you know the word," or ask the child "What do you think the word could be?" Parents are somewhat surprised to realize that I don't want the child to figure out the unknown word before continuing on with the story. I have to teach these parents to use not only the graphophonic skills but also syntactic and semantic cues when they are helping their children with reading.

Consider, for example, the sentence, "Susan jumped on her horse and rode away." A child reading this sentence might confuse the word "horse" with "house". To figure out the word "horse" phonetically the child has to look at the beginning "h", the "or" and then the sound of the "s", and be aware of the silent "e". If the child were taught to use syntax then the word "house" would be syntactically correct. However, since the ultimate aim of reading is to get meaning, teaching the child to use semantics is most useful. In this case the child would realize that one could not jump on a "house" and ride away. Most children would have no difficulty coming up with the word "horse" if they were reading for meaning.

Cooper and Petrosky (1976), in reviewing the work of psycholinguists, Kenneth Goodman, Yetta Goodman, Frank Smith, Carolyn Burke and linguist, Noam Chomsky, derived reading strategies that are found in fluent readers but not in poor readers. Gillespie-Silver (1979) not only concurs with these findings but bases her guide for reading assessment and

programming upon these characteristics of fluent readers:

1. The reader discovers the distinctive features in letters, words, and meaning.
2. The reader takes chances - risks errors in order to learn about printed text and to predict meaning.
3. The reader reads to identify meaning rather than to identify letters or words.
4. The reader guesses from context at unfamiliar words, or else just skips them.
5. The reader takes an active role, bringing to bear his or her knowledge of the world and of the particular topic in the text.
6. The reader reads as though he or she expects the text to make sense.
7. The reader fills short term memory with the largest possible units -- meaning of phrases or sentences rather than words or letters.
8. The reader shifts approaches depending on the purpose. (pp. 191-195)

The remedial readers that I see are so unlike these fluent readers; they display very few, if any, of the above characteristics. These children usually read word by word, without much thought for the meaning. They are often afraid of being wrong so they will not guess at unfamiliar words. In a story describing the adventure of a young boy, one student with whom I work, read, "He swirled down the river" as "He swallowed down the river." He was satisfied that he had read the sentence correctly and continued on. Obviously, the child was not thinking about what he was reading or he would have questioned why someone would "swallow a river."

What he had done was looked at the phoneme "sw" and possibly the end of the word "ed". He did not consider the meaning. Most of the children with whom I work are passive readers, merely reading word by word to get to the end of the text. Even those children with rich experiences do not bring meaning to the print when they are laboriously reading the words.

For too long remedial readers have been passive participants in the reading process. No one has thought to ask these children what they understand reading to be. Perhaps for too long the reading teacher has put too much emphasis upon saying all the words correctly. After all, the children who perceive reading as getting all the words right had to acquire that understanding from others. A brief overview of the characteristics of good and poor readers is shown in Table 1. It provides information concerning the word recognition skills and comprehension strategies used by good and poor readers.

Table 1 Classification of Good and Poor Readers

Good Readers	Poor Readers
Word Identification and Comprehension	
Active comprehenders (Bristow, 1983; Johnson & Winograd, 1983; Ryan, 1981)	Largely passive (Bristow, 1985)
Actively monitor ongoing comprehension (Brown & Palincsar, 1982)	Do not monitor their comprehension (Garner & Hare, 1984)
When comprehension fails they adjust reading rate, adjust reading style and look back to previously read text (Garner & Reis, 1981; Ryan, 1981)	Make fewer spontaneous corrections (D'Angelo, 1982) Use context clues less often (Ryan, 1981)
Use comprehension fostering activities which include: - setting a purpose for reading - focusing attention on main ideas - evaluating text material in light of background knowledge - self-questioning to ensure that comprehension is occuring - making predictions, inferences - drawing conclusions (Brown & Palincsar, 1983)	Do not use active strategies and need explicit instruction in comprehension enhancing strategies (Bristow, 1985; Anderson et al., 1983)
View reading as a search for meaning (Anderson et al., 1983)	Regard meaning as a decoding process (Smith, 1978; Anderson et al., 1983)
Make more corrections (Phillips, 1985)	

Error Pattern Analysis

The ever increasing number of children who couldn't read caused much concern in the 1960's. Although numerous studies were ongoing and large sums of money were being spent on remedial programs, results of these programs were minimal. In 1965, the National Council of Teachers of English (United States) appointed a Task Force on Education. Their mandate was to "gather information about the hundreds of independent and uncoordinated programs in language and reading that had sprung up in every part of the country" (Allen, 1976, p. 4). It became apparent as they travelled throughout the nation that education had begun to look at other disciplines for help with their problems. One of these disciplines was linguistics.

Just prior to the establishment of the task force, linguists were becoming concerned about the possibility that dialect difference might affect instruction in reading. At a conference held in Indiana, not only was dialect difference discussed, but also the nature of English grammar. At that time the schools were using a prescriptive approach to the teaching of grammar but Paul Roberts' text Patterns of English, based on descriptive grammar brought about change in the thinking of many people. Noam Chomsky challenged the descriptive linguists in his book Syntactic Structure which introduced a new theory of grammar that came to be known as "transformational grammar." These developments in grammar influenced the way

educators viewed language and how it should be taught. Cognitive psychologists, as well, had become interested in this debate on grammar, adding their expertise to the growing area of interest, psycholinguistics.

Important advances were also made in the study of language development of pre-school children (Durkin, 1966) and school age children (Loban, 1963; Ruddell, 1965). Their research forced educators to take another look at the texts they were using in their schools with a view to developing new materials. Advances were also made in studying the process of oral reading (Weber, 1968). It was awareness of this research that brought together scholars of diverse interests at conferences at Cornell, New York in the late 1960's. The research on error pattern analysis at Wayne State University under the direction of Kenneth Goodman grew out of the discussions at these conferences. Researchers hoped that by looking at the miscues children made while reading orally new insights might be gained into the problems that many children were having with reading.

Since academic achievement is based on reading, learning to read is obviously necessary for the academic survival of the child, yet in our schools many children experience extreme difficulty with reading. Researchers, for years, have tried to find the cause of reading problems children experience. Perhaps they have gone around in circles because until recently the same suspected causes were being examined

again and again. While the quantity of mistakes a child makes in reading had caught the attention of researchers, no one had looked at the quality of the oral miscues. It was the quality of these miscues that the researchers at Wayne State University studied. The process of examining these miscues is called error pattern analysis. They used as their perspective the psycholinguistic nature of the reading process.

In looking at the way children learn to read, Kenneth Goodman (1969) established certain basic premises as guidelines for his further research into the reading process. They are:

(1) Reading is language. Reading and listening are the receptive processes in language. Speaking and writing are the generative language processes.

(2) Readers are users of language. While children are learning to read, they already know a great deal about their language. They have used language to communicate and make sense out of the world. Reading, then, must be treated as a natural extension of the child's language. Only then will the printed word have meaning for the reader.

(3) Language is the means by which communication among people is brought about. It cannot be divorced from meaning. If reading is language then neither can reading be divorced from meaning. Children expect to comprehend each other through oral language (p. 46).

What is Miscue Analysis?

Reading is a sampling, predicting, confirming and integrating process during which the reader makes use of three types of information or cue systems simultaneously. These three cue systems are graphophonic, semantic and syntactic. The graphophonic cue system refers to the relationships between the graphic representation, that is letters, and the sounds of these letters alone or in combination. The reader should not be taught to look at every letter or even every word in a sentence because to do so would necessarily be an extremely slow process. Since reading is not an exact process, it would be wasting the reader's time to insist that attention be given to each word. Instead this cue system must be used in conjunction with the other two systems to get meaning from the text.

Unless the child can focus on meaning, that is, use the semantic cue system during the process of reading, the ability to use graphophonic and syntactic cues are of minimal value. To be able to get meaning from the printed word, the material must be meaningful to the reader. In his book, Understanding Reading, Smith (1971) talks about surface structure and deep structure. To get from the words on the printed page to the meaning of these words, the reader must be able to use knowledge of syntax or the structure of language. Research indicates that by the time children come to school they have already mastered the grammatical system

and rules of their community language (Goodman, 1969; Chomsky, 1957). When observing children reading, it will be noticed that they rarely make a grammatical mistake; more often the mistake is in semantics or in graphophonic relationships. Consider the following,

Expected Response: They were all waiting for the big ride.
Oral Response: They were all watching the big rider.

In the previous example, although the reader has changed the meaning of the sentence, the grammatical structure has remained intact. An example of a child who is using graphophonic and syntactic cues but who is ignoring the meaning of the sentence is:

Expected Response: He made a statement to the police.
Oral Response: He made a studment to the play.

In the following example the child did not recognize the word "passes" but is trying to make sense of the sentence:

Exected Response: When the train passes the whistle blows.
Oral Response: When the train goes it blows the whistle.

Most children, when reading orally make miscues; that is, they deviate from the text. Many teachers ask these children to stop and re-read to correct their mistakes. These teachers think reading is an exact process and expect children to read precisely what is on the page. They do not

concern themselves with the kind of miscue the child makes, but rather with the fact that a miscue has been made and must be corrected. Reading is not an exact process; most readers deviate from the text in their encounter with the written material.

Analyzing the miscues the children make gives a teacher the opportunity to examine the interaction between the child's language and the author's language. It can also show the teacher the manner in which the child is processing information. For example, is the child attending too much to words and not enough to meaning? Miscue analysis allows the teacher to see how the reader's experiences can help make the printed page more meaningful. We are looking at the thought processes and the language processes of the child when we examine the miscues. It is my belief that miscue analysis is one way to identify the strategies children use in comprehending the author's meaning.

What Is Protocol Analysis?

Another method of examining the strategies children use when reading is protocol analysis. Protocol analysis, as used in cognitive psychology to study problem solving behavior, requires the subjects to think aloud as they solve a problem (Newell and Simon, 1972). The data of each subject's exposed thought processes (the protocol) which pertain to each clause of the text is then analyzed for evidence of strategies.

The ultimate goal of protocol analysis is to determine

the degree to which comprehension has taken place. As a product, comprehension occurs each step along the way in conjunction with the processes which contribute to it. Thus Fagan (1985) believed that readers may be interrupted during their reading to ascertain either the processes themselves or the resultant comprehension of the author's meaning at that point in time. Fagan, however, preferred to use the free recall of his subjects for analysis. Free recall is the information the reader can recall from what has been read. Drum and Lantaff (1977) also favored free recall and used this protocol, once it had been divided into propositional units for their analysis. A reader's recall as interpreted by a researcher or an educator is usually assessed in terms of the degree to which it corresponds to the author's meaning as expressed in a text. Stein and Glenn (1979) in parsing children's recall examined the causal links that occured within each category and between episodes of a story. They established as their categories; major setting, initiating event, internal response, direct consequence and reaction. They stated that children expect certain patterns of information when listening or reading a story and encode information to already existing psychological structures or patterns of information.

Drum and Lantaff (1977) indicated five different kinds of text information children remembered in their in-depth analysis of the protocol of a boy and a girl: retention of

the given information, inference bounded by text information which may also indicate prior knowledge, inference not bounded by the text which may or may not be accurate representations of the general content, general responses that are so vague that the subject's ability to read the text or to understand the content are probably lacking, and parenthetical remarks and repetitions that appear to be characteristic of relating or writing information from memory without a chance to edit or revise.

A protocol may be divided into different units for analysis: proposition (Drum & Lantaff, 1977), clause (Hunt, 1965), syntactic proposition (Fagan, 1985). Drum and Lantaff preferred to divide their protocol into what they describe as workable units: clausal propositions, attribute propositions or rhetorical propositions. Each proposition unit was then scored into one of the following categories: Text Specific, Text Entailed, Text Elicited, Text Evoked, Text External. Under these five broad categories Drum and Lantaff further subdivided the categories into several more specifically defined categories. Fagan (1985), whose research is based on the work of Drum and Lantaff, suggested that a T-unit (main clause and any subordinate clause) be used for analysis. An assumption made when choosing a unit is that it represents a meaningful division of information and that the reader may perceive this unit when comprehending or recalling information. Fagan suggested the T-unit represents a meaningful division

of information "about which a judgement can be made as to whether or not a summary has taken place" (p. 4). It is more difficult, he believed, to determine if there has been a summary of information within the brevity of a proposition. Fagan next assigned the T-unit to one of five categories. The five categories used to analyze the T-units of recall information and to assess comprehension are defined as follows:

A. Text Exact

This category includes information from the text in its exact form with minimal variations. It is assumed that this information was stored in rote fashion and is reproduced in a similar state.

B. Text Specific

In this category is placed information recalled that has specific references in the text. The reader may have transformed some of this information by reordering or substituting lexical terms. For example:

Text: People were very kind to the stranger.

Protocol: They were very kind to the stranger.

C. Text Entailed

In this category is placed information that is a paraphrase of or synonymous with the information input, but the unit of recall includes information from more than one unit of input. For example:

Text: She jumped into the icy water. She was trying to save

save the swimmer who was in trouble.

Protocol: She jumped into the icy water to save a swimmer in trouble.

D. Text Experiential

This information is added by the reader to fill in gaps in the text data. The reader is reconstructing information based on prior knowledge. For example:

Text: The captain climbed the mast of the distressed ship and signalled for help.

Protocol: The captain climbed the mast of the distressed ship and signalled for help with his flag.

E. Text Erroneous

These errors constitute memory errors or are due to lack of attention to the text. For example:

Text: The lobster's claws.

Protocol: The lobster claws.

Text: While visiting her Aunt Lizzie at the farm last week, Teri helped harvest some carrots, peas, zucchini and tomatoes.

Protocol: Last weekend Teri helped her Aunt harvest some fruit.

Analyzing the data, whether it be the miscues that children make when they are reading orally or the recall of children's stories can offer valuable insights into the ways children process text, thereby enabling the educator to

understand the reading process more fully. It is only when we understand the reading process more fully that we can effectively help those children who have difficulty learning to read.

CHAPTER III

METHODOLOGY

This chapter will include a description of the sample, materials, data collection procedures and data analysis.

Sample

The twenty children selected randomly for this study had been previously assessed in a one to one situation at the Reading Clinic at Memorial University. The children who range in age from six to sixteen were referred to the clinic by their parents or teachers because of reading difficulties. Generally, they live in St. John's or the surrounding area. Each child was given a battery of tests in reading achievement and process as well as the correlates of reading. The assessment was carried out in one session in approximately three to four hours by a graduate student in reading to meet the requirements for the course, Practicum in Remedial Reading. For the purposes of this study the following information was abstracted for each child from the clinic files: a client interview sheet, a record of the miscues the child made while reading orally from a passage and from an isolated word list, as well as the written account of the child's unaided and aided recalls.

Materials

The results from the following materials were used by the examiner:

1. McCracken Standard Reading Inventory (McCracken, 1966)

Each child was administered the Standard Reading Inventory, Form A or Form B. Each of the forms has eleven stories for oral reading, eight stories for silent reading as well as eleven graded word lists for measuring word recognition ability in isolation. This is an individually administered reading test for measuring reading achievement at pre-primer through seventh grade levels. It measures a child's independent reading level, the instructional level and the frustration level in reading. The independent reading level is the highest passage level that the child can read independently, that is, with 99% word recognition accuracy and 90% comprehension. The instructional reading level is the level at which the child finds the material challenging and requires instruction. Standards used in judging this level are 95% word recognition accuracy and 70% comprehension. The frustration reading level is the level at which the material is too difficult for the child. Less than 90% word recognition accuracy and less than 50% comprehension are the most widely used standards for determining this level.

Each child is asked to read from the word list at a level which causes no difficulty, that is, can correctly respond to 23 of the 25 words. If the child is in Grade 4, for example, the examiner will begin at about a Grade 2 level. When less than 50% of the words on a single list are pronounced correctly, the child is asked to stop. The

highest level at which the child is able to pronounce 23 of the 25 words correctly determines the beginning level on the oral reading passages. If the highest level at which the child was able to read 23 of the 25 words correctly was beginning Grade 2, then the initial story would be at the next lowest level, that is ending Grade 1. Each child is asked to read passages increasing in difficulty, some orally and some silently until frustration level has been reached. After each passage has been read the child is asked to tell as much of the story as can be remembered. Questions are subsequently asked to aid further recall of information that may have been omitted in the unaided recall.

The pertinent information necessary for this study was tabulated as follows:

A. Miscues in Oral Reading

As the child reads orally often deviations from the text are made. These miscues (deviations) are recorded by the examiner for subsequent analysis. The miscues from one oral reading passage at each child's independent level and one oral reading passage at each child's instructional level was used for the purpose of this study. The independent level was selected in order to have an accurate representation of how a remedial reader is reading when the material is within the capability of the child. The instructional level was selected to have a representation of how a remedial reader reads when the material is beyond the independent capability

of the child. The frustration level was not used because the intention of this writer was to determine how a remedial reader reads when he or she can cope with the material presented. At the frustration level, reading becomes a word identification process and all readers would have the same concept of reading thereby defeating the goal of this study.

B. Unaided Recall

When a beginning level on the oral passages has been determined, the child is told the title of the story, after which a short discussion may follow which sometimes stimulates the child's prior knowledge about the subject. After the story has been read, the child is asked to tell as much as can be remembered about the story. The examiner uses a number of questions which accompany each passage as a guide to determine what information should be recalled and the order in which it should occur. Total comprehension is equivalent to one hundred percent.

C. Aided Recall

The questions that are not answered during the unaided recall are asked to obtain the information that may have been omitted during the retelling of the passage. Total recall is considered to be equivalent to one hundred percent.

2. Client Interview Sheet (Phillips-Riggs, 1981)

The client interview sheet, a self-report measure of a child's concept of reading, is intended to help the examiner

develop rapport with the child while attempting to gain a better insight into what the child perceives reading to be. A better insight is acquired through an examination of the reading strategies the child thinks are used while reading and the reading strategies the child thinks should be used when difficulties are experienced. Also, how the child thinks reading may be improved after ten remediation sessions is revealed.

There are a total of eleven questions on the client interview sheet (see Appendix A). Eight will be abstracted; the remaining three are of a more general nature that do not have significance for this study. The eight questions to be used are:

1. What is reading?
2. How did you learn to read?
3. Who is the best reader you know? Why?
4. What do you think he/she does when he/she comes to a word he/she doesn't know?
5. How do you rate yourself as a reader -- good, average, fair, poor? Why?
6. What would you like to improve about the way you read?
7. When you are reading and you come to a word you don't know, what do you do?
8. What would you do to help someone who was having trouble reading?

3. Informal Observations of the Child's Concept of Reading

Very often informal observations are more valuable than a standardized measure. Children's body movements, their motivation, their stamina and the comments they make about themselves and their work tell us a great deal about the students with whom we are working. An astute examiner makes note of any comments, reactions or interactions of the child and utilizes them in conjunction with standardized measures to more thoroughly determine how the child is approaching the reading process.

Data Collection Procedure

From the files of twenty students the following data were collected:

1. Miscues

Miscues made by each child during the oral reading of one passage at the instructional level and one passage at the independent level was examined. For each miscue the following questions, based on the work of Goodman and Burke (1972), were asked:

1. Is the miscue semantically acceptable?
2. Is the miscue syntactically acceptable?
3. Is the miscue visually similar to the expected response?
4. Is the miscue auditorially similar to the expected response?
5. Was the miscue corrected?

For questions 1, 2 and 5 a percentage of acceptable miscues at both the independent and instructional levels in relationship to the total miscues made was calculated for the purpose of a quantitative analysis. The remaining two questions were used to further support the discussion concerning the strategies children use when they approach the reading task.

2. Unaided Recall

To assess the degree of comprehension as indicated by a child's recall, Fagan (1985) suggests that the recall first be divided into T-units. He defines a T-unit as "a single independent prediction (main clause together with any subordinate clauses that may be grammatically related to it). It may be a single or a complex sentence but not a compound sentence." (p. 4). Once the T-units have been determined, each one can be assigned to a category. Under the five broad categories of Text Exact, Text Specific, Text Entailed, Text Experiential and Text Erroneous, Fagan identified sub-categories. For the purpose of this study the T-units were assigned to only the broad categories. Fagen's smaller, more specific headings served only to give the examiner examples of the kinds of information to include in the broad categories. Clauses were the information unit examined in this study to identify how the child was interacting with the print.

Each child's unaided recall was analyzed to establish what percentage of information was recalled at both the independent and instructional reading levels. The unaided

recall was then divided into T-units. Each T-unit was analyzed using Fagan's recall categories to identify the source of information recalled. The data was collapsed into two categories: percentage of T-units that were text based and percentage of T-units that were extra-text based. When T-units came from the original text, that is, category Text Exact, Text Specific, or Text Entailed then they were considered Text-Based. When the T-units were beyond the original text expressed in the child's own words, that is, category Text Experiential or Text Erroneous then they were considered Extra-Text Based.

3. Aided Recall

When a child finishes telling a story, questions are asked to aid recall of any information that may have been omitted during the retelling. Each child's protocol was analyzed to consider whether the structure of questions aided the child's recall at the independent and instructional reading level. If so, what percentage of the information was recalled with questioning? For the purpose of a qualitative discussion the following questions were asked: Was any part of the story omitted during the retelling? Information omission detracted from the total comprehension score. Recall was based on the child's stated information.

4. Child's Concept of Reading

Diagnosis of concept, like many types of evaluation,

offers some difficulties. Concept is a construct not a behavior. It produces a great number of behaviors but generally no pattern of behaviors has been found that is consistent across all individuals. The child's concept of reading can be examined using the following two measures:

A. Self-report measure of concept

Children were asked to determine or evaluate their own perception of reading in response to the questions asked in the client interview. Using a dischotomous scale the responses were categorized as either decoding terms or meaning terms. If a child, for example, answered the question "What is reading?" with responses such as "saying words" or "reading words out loud" the responses were placed in the decoding terms category because the child's focus was on reading words. If the child responded to the same question with responses like "understanding", "thinking about what the words say" or "fun, when I know what it means", these responses were labelled meaning terms because the child was focusing on getting meaning. The proportionate number of responses in each category was then calculated.

B. Informal Observations of the Child's Concept of Reading

During the assessment process, the examiner recorded comments the children made pertaining to themselves or their work. Note was also made of any behavior that might help the examiner determine more fully how the child approaches the

reading task. Informal observations were classified under the following three headings: comments, reactions and interactions. Comments included the comments children made about themselves or their reading. Reactions included facial expressions, body movements, motivation and stamina. Interactions included any interaction between the clinician and the child which indicated a child's confidence or lack of confidence.

The client interview sheet used as a main measure in this study has not been formally validated. To compensate for that, all comments, reactions and interaction exchanges on the part of each child were noted. Such information served to lend support to the interview sheet as a way of providing a validation check for the study.

Inter-rater Reliability. Contact was maintained with my thesis Supervisor as each step of the coding unfolded. A minimum of one third of all protocols were analyzed by her on every aspect of the study to ensure the reliability of the coding. The minimum percentage of inter-rater reliability was 91.4 and a maximum percentage of 98.8.

Data Analysis

The data that were analyzed were of two types, qualitative and quantitative. The first four questions lent themselves more to qualitative description than to statistical analysis. The first four questions are:

1. What is the remedial reader's concept of reading?

2. What is the nature of the miscues made by the remedial reader?

3. What is the nature of the remedial reader's unaided recall?

4. What is the nature of the remedial reader's aided recall?

A quantitative analysis of the second group of questions using multiple correlations allowed an examination of the linear relationships between each of the variables.

The second group of questions is:

5. Is there a relationship between the remedial reader's concept of reading and the nature of the miscues made at the independent and instructional reading levels?

6. Is there a relationship between the remedial reader's concept of reading and the nature of the unaided recall at the independent and instructional reading levels?

7. Is there a relationship between the remedial reader's concept of reading and the nature of the aided recall at the independent and instructional reading levels?

8. Is there a relationship between the remedial reader's concept of reading and the way the reader approaches the task of reading as defined by questions five, six and seven?

The preceding questions were examined to test the hypotheses that if children think of reading in terms of decoding then their focus will be on words, not on meaning, and if that is the case, since children conceive reading to be knowing all the words, then it is likely that they would be poor comprehenders.

CHAPTER IV

FINDINGS OF THE STUDY

The purpose of this chapter is to present the findings of this study as they relate to the eight questions posed by this writer and to discuss the results in terms of these questions. One main statistical procedure, correlation analysis, was employed to analyze the data. A computer program SPSS was used to complete the results.

The writer examined the files of twenty children who had been previously assessed at the Reading Clinic during the period from July, 1982 to July, 1985. In attempting to determine each child's concept of reading, the writer scrutinized the client interview sheet, and the records of discussions with and observations of each child made by the examiner. The miscues of each child in a passage read at the independent and instructional level were listed by the writer and analyzed in the following manner, based on the work of Goodman and Burke (1972): Is the miscue semantically and syntactically acceptable? Is the miscue visually and auditorially similar to the expected response? Was the miscue corrected?

The unaided recall of each child was divided into T-units as defined by Fagan (1985). Modification of Fagan's work, as mentioned earlier was used here. Instead of assigning each T-unit to a small, very specific heading, each was assigned to one of five categories: Text Exact, Text Specific, Text Entailed, Text Experiential, and Text Erroneous. The

percentage of information added after probing questions were asked (aided recall) was also tabulated by the writer.

The variables examined and referred to in the subsequent tables are as follows:

Concept of Reading - what the child conceives reading to be.

Miscue - an oral reading response that differs from the expected response to the written text.

Unaided Recall - information the reader can recall from what has been read without the aid of questions or probing.

Aided Recall - information the reader can recall from what has been read with the help of questions or probing. It is usually preceded by unaided recall.

Independent Reading Level - It is the highest passage level that a child can read independently, that is, with 99% word recognition accuracy and 90% comprehension

Instructional Reading Level - It is the level at which the child finds the material challenging and requires instruction, that is, 95% word recognition accuracy and 70% comprehension.

Analysis of the Data

The first four questions were analyzed using descriptive statistics and the writer's informal observations.

Question 1 What is the remedial reader's concept of reading?

Table 2 presents the total percentage of responses to the questions in the client interview sheet that were either word dependent or meaning dependent.

Table 2 Frequency, Percent and Cumulative Percent for the Study Sample (N=20)

Value	Frequency	Percent	Cumulative Percent
word dependent	17	85	85
meaning dependent	3	15	100
	20	100	

The findings indicated that seventeen of the twenty children responded with an answer that revealed that they think of reading in terms of knowing all the words. Only 15% of the children indicated that the purpose of reading is to understand what one has read.

Table 3 presents the number of boys and the number of girls who were meaning dependent and the number who were word dependent.

Table 3 Number of Children, by Sex, Who Were Either Word Dependent or Meaning Dependent

Sex	Meaning Dependent	Word Dependent	Total
Male	2	7	9
Female	1	10	11

The findings show that 9% of the girls and 22% of the boys indicated that they were meaning dependent, as determined

by the client interview sheet. The remaining 91% of the girls and 78% of the boys expressed that they were word dependent. In other words, a very low percentage of these remedial readers expressed that they read for meaning. In distinguishing between good and poor readers, many researchers (Gillespie-Silver, 1979; Goodman, 1982; Bristow, 1985; Phillips, 1985) have reported that it is good readers who read for meaning, poor readers focus upon words within a sentence.

Informal observations suggested that these remedial readers rely heavily upon individual words when they are reading. The following comments illustrate the children's preoccupation on the words in reading: "I'd like to be able to spell all the words; that would improve my reading;" "A good reader reads fast and knows all the words;" "Reading is fun when you know all the words;" and "We learned all the words by heart, then we'd get books and practise." The word dependent readers demonstrated their concern for words as they were reading the passages. They were not always able to synthesize the parts after they had analyzed the words, yet they were satisfied with what they had accomplished. In other words, although they were unable to use phonics effectively, they continued to employ that strategy in many cases as a sole means of reading the sentences. Correctly identifying the words seemed to be an end in itself. Informal observations supported Goodman's theory that children who

attend to words lose meaning. The remedial readers in this study did not try to gain meaning when they encountered difficulty with the pronunciation of words.

In summary, the findings indicated that 85% of these 20 children who had been referred to the Reading Clinic think of reading as knowing all the words. Fifteen percent of the children perceived reading as understanding what one has read.

Question 2 What is the nature of the miscues made by the remedial reader?

Table 4 presents the percentage, the mean and the standard deviation of the miscues acceptable at the independent level.

Table 4 Acceptable Miscues at the Independent Level

Percent of Acceptable Miscues	Number of Children with Acceptable Miscues	Percent of Children with Acceptable Miscues	Cumulative Percent
0	1	5	5
33	2	10	15
50	1	5	20
60	1	5	25
66	2	10	35
67	1	5	40
75	1	5	45
83	2	10	55
99	9	45	100

Mean 75.35% Standard Deviation 28.598

The mean percentage of acceptable miscues at the independent level for all students was 75.4. This indicates that at the independent level most students corrected their miscues when what they read was not semantically and syntactically acceptable. In fact, this evidence suggests that at this level the remedial readers were very similar to good readers. They were not focusing on words, instead they were monitoring their oral reading, they were making predictions about the words and then re-reading to confirm whether or not the word made sense within the sentence. They seemed to expect that the passage would have meaning.

At the instructional level, the data indicated that the children made slightly more miscues that were not acceptable, that is, they did not correct their miscues as often, nor did they monitor as carefully what they were reading. The acceptable miscues at the instructional level are presented in Table 5.

Table 5 Acceptable Miscues at the Instructional Level

Percent of Acceptable Miscues	Number of Children with Acceptable Miscues	Percent of Children with Acceptable Miscues	Cumulative Percent
17	1	5	5
40	1	5	10
41	1	5	15
50	1	5	20
56	1	5	25
60	1	5	30
67	1	5	35
71	1	5	40
75	1	5	45
80	3	15	60
89	2	10	70
91	1	5	75
92	1	5	80
99	4	20	100
Total	20	100	

Mean 73.7% Standard Deviation 23.304

It is important to note that at the instructional level the total number of miscues made was twice that at the independent level. Beebe (1980) found in her study of 46 Grade four boys that the total number of miscues was negatively related to retelling and comprehension scores. However, when she looked beyond the total number of miscues and examined the miscues in light of their type, she found that different types of miscues had different predictive values. It will be shown later in the results of this study that although the total number of miscues made by the remedial readers negatively affected the retelling scores (unaided

recall), it was the total number of unacceptable miscues that accounted for the considerable decrease in the retelling scores from 74% at the independent level to 46.5% at the instructional level. The miscues at the instructional level also indicated that these remedial readers corrected more miscues that distorted syntax than they corrected miscues that changed the meaning of the text. A total of 221 miscues were made by the 20 children. Of these, 98 or 44.3% were not semantically acceptable while 57 or 25.8% were not syntactically acceptable. These remedial readers attended to the syntactic structure more often than they focused on the semantic structure of the sentence. This finding lends support for the view that remedial readers at the instructional level seem to pay attention to words more frequently than they do to the meaning of the text (see Table 3).

Upon examination of the graphophonic similarity between the miscues and the actual words, it was observed that these remedial readers depend heavily upon graphic input while reading at the instructional level. When they were unsure of a word, they tended to say a visually similar word rather than one that made sense within the sentence. In a few instances, the need for graphic similarity was so great that nonsense words were substituted for the real word "treatly" for "treaty"; "expenation" for "expedition"; "exciapped" for "escaped"; and "immagetly" for "immediately".

The findings indicated that at the independent level most of the remedial readers in this study appeared to get meaning when they read orally. However, at the instructional level, they made twice as many miscues and more unacceptable miscues than they did at the independent level. Also, they seemed to focus more on individual words and lose the meaning of what they were reading at the instructional level.

Question 3 What is the nature of the child's unaided recall?

At the independent level, the data indicated that approximately half of the children recalled less than 75% of the information without the aid of questions. Table 6 presents the percentage of unaided recall at the independent level.

Table 6 Unaided Recall at the Independent Level

Percent of Information Recalled	Frequency	Percent of Children	Cumulative Percent
30	2	10	10
40	1	5	15
60	4	20	35
70	2	10	45
80	3	15	60
90	3	15	75
95	1	5	80
99	4	20	100
Total	20	100	

Mean 74.05% Standard Deviation 22.549

The unaided recall at the independent level was further examined to determine whether the T-units recalled were text-based (Text Specific, Text Exact or Text Entailed) or extra-text based (Text Experiential or Text Erroneous). The data showed that all 20 remedial readers were text based at the independent level, that is, their recall was similar to the text; they did not try to enrich or extend it with their background knowledge. The writer wanted to determine whether or not remedial readers reading at the independent level paraphrased what they had read. To that end, Text Entailed T-units were subsequently categorized separately. It was found that a mean of 19% of the information recalled was Text Entailed. In other words, the miscues they made while they were reading orally at the independent level seemed to indicate that they were reading for meaning. However, these remedial readers may have been reiterating what they had read since they gave very little evidence that they had synthesized the information. The stories themselves may have led to reiteration of the facts since they were short, had very little detail and, for the most part, were not representative of the narrative text the children read in school beyond the Grade 1 level.

At the instructional level, the data indicated that the mean percentage of unaided recall was 46.5, whereas at the independent level the mean percentage was 74.05. This decrease in the amount of information recalled unaided is

substantial. The percentage of unaided recall at the instructional level is presented in Table 7.

Table 7 Unaided Recall at the Instructional Level

Percent of Information Recalled	Number of Children Recalling Information	Percent of Children Recalling Information	Cumulative Percent
20	2	10	10
30	7	35	45
40	1	5	50
45	2	10	60
50	2	10	70
70	4	20	90
80	1	5	95
90	1	5	100
Total	20	100	

Mean 46.5% Standard Deviation 21.28

These word dependent children whose total percentage of acceptable miscues at both the independent and instructional levels were similar, now are showing a wide discrepancy in their unaided recall scores. There are at least two possible reasons for this discrepancy. The first reason is that when the children were reading orally at the independent level, they were less word dependent and better able to attend to the material to be recalled. Secondly, as the number of miscues increased so did the number of unacceptable miscues increase. At first glance, it would appear that the total number of miscues caused the unaided recall scores at the instructional level to decrease. However, upon closer

examination, it could be seen that the total number of unacceptable miscues accounted for the wide discrepancy in the unaided recall scores. Consider, for example, Child A who made a total of 17 miscues, and Child B who made a total of 22 miscues. At the independent level Child A made five acceptable miscues, one unacceptable miscue and had an unaided recall score of 80%. At this same level, Child B made three acceptable miscues, two unacceptable miscues and had an unaided recall score of 80%. At the instructional level, Child A made ten acceptable miscues, one unacceptable miscue and had an unaided recall score of 70%. Child B, however, had seven acceptable miscues, ten unacceptable miscues and an unaided recall score of only 30%. Clearly, it would seem to be the number of unacceptable miscues that was causing Child B to have problems with comprehension.

The unaided recall at the instructional level was also examined to determine whether the T-units recalled were text based or extra-text based. The data indicated that at the instructional level 85% of the children's recall was text based. Again, the writer examined the Text Entailed category separately to determine whether or not the children were trying to paraphrase the text they had read. It was found that a mean of 23% of the recalled information was Text Entailed. While the percentage is slightly higher than the 19% found at the independent level, these remedial readers generally try to recall text exactly as it is written without

paraphrasing or adding experiential information. This may be the result of dependence on word recognition and literal comprehension, or it may be as Wagoner (1983) stated, that poor readers appear willing to accept passively whatever the author presents.

To summarize, the nature of remedial readers' unaided recall was similar at both the independent and instructional levels in the quality of information they recalled. At both levels their recall resembled that of the text with very little added from their own experiences. Recall at the instructional level was significantly lower than recall at the independent level resulting possibly from the increase in the number of unacceptable miscues at the instructional level.

Question 4 What is the nature of the remedial reader's aided recall?

At the independent level one half of the remedial readers had an aided recall score greater than 90%. The other half of the children scored between 60% and 90%. Table 9 shows the percentage of aided recall at the independent level.

Table 8 Aided Recall at the Independent Level

Percent of Information Recalled	Frequency	Percent of Children	Cumulative Percent
60	1	5	5
70	1	5	10
80	3	15	25
85	1	5	30
90	4	20	50
95	1	5	55
99	9	45	100
Total	20	100	

Mean 90.05% Standard Deviation 11.19

It is interesting to note that with the help of questions the mean score at the independent level increased from 74% to 90%. It appears, then, that these remedial readers need the structure of questions to activate or retrieve information that they are unable to organize themselves.

The mean percentage of aided recall at the instructional level was 74.4, whereas the mean score without the aid of questions was 46.5. The 27.9% increase is substantial and indicates the need for questions to aid recall. Table 10 presents the data for aided recall at the instructional level.

Table 9 Aided Recall at the Instructional Level

Percent of Information Recalled	Frequency	Percent of Children	Cumulative Percent
30	1	5	5
50	1	5	10
60	4	20	30
70	3	15	45
75	1	5	50
80	4	20	70
85	1	5	75
90	2	10	85
99	3	15	100.
Total	20	100	

Mean 74.350% Standard Deviation 17.762

Even though the questions increased the amount of recall, it may be that these remedial readers have become too dependent on questions in school and have not been taught to comprehend what they are reading. Durkin (1986) reported that children are not learning how to comprehend simply because they have not been taught how to go about getting meaning from text. She believes that teachers ask questions for the purpose of teaching comprehension when in fact they are assessing what has been comprehended. Perhaps instead of allowing children to become dependent on questions to help them recall more information than they can organize themselves, teachers should be giving explicit instructions in the process of comprehending.

In summary, findings from the analysis of remedial

readers' aided recall indicated that the mean recall at the instructional level was considerably lower than the mean recall at the independent level. The questions asked in the aided recall at both the independent and instructional levels improved the amount of recall by at least 16%.

Questions 5, 6 and 7

The next three questions were analyzed using a Pearson-product moment correlation coefficient. This provides a correlation coefficient which indicates the degree to which variations in one variable is related to variations in another. The statistics were used to examine the relationship between concept, acceptable miscues, unaided recall, and aided recall. Due to the amount of coding and the time constraints on the present study, the case base was minimized to twenty and the level of significance adopted was at the .10 level. Also, since this was an exploratory study on the multifaceted nature of reading, it was felt that the level of significance could be more lenient to help detect differences and suggest trends. Three correlations were significant at the .10 level: aided recall and acceptable miscues, unaided recall and acceptable miscues, unaided recall (independent level) and unaided recall (instructional level). Table 10 provides a matrix of these correlations and their levels of significance.

Table 10 Correlations Between the Variables

	CONCEPT	ACCMIS	ACMSIL	UNRECIL	UNRECIN	ADRECIL	ADRECIN	UNRECS	UNRECSIN
CONCEPT	1.000 P=.	-.0957 P=.344	.0610 P=.399	-.0137 P=.477	.2059 P=.192	.1650 P=.243	.1694 P-.237		.1765 P=.228
ACCMIS		1.0000 P=.	.0891 P=.354	.0513 P=.415	.2469 P=.147	.1567 P=.255	.4473 P=.024*		3564 =.061*
ACMSIL			1.0000 P=.	-.2362 P=.158	.2519 P=.142	-.2367 P=.157	.1647 P=.244		.1178 P=.310
UNRECIL				1.0000 P=.	.0185 P=.469	.8166 P=.000	.0739 P=.378		-.2985 P=.100*
UNRECIN					1.0000 P=.	.0947 P=.346	.6822 P=.000		.0641 P=.394
ADRECIL						1.0000 P=.	.1633 P=.246		-.1136 P=.317
ADRECIN							1.0000 P=.		-.2180 P=.178
UNRECS									
UNRECSIN									1.0000 P=.

The key to the pneumonics is as follows ACCMIS = Acceptable miscues at the independent level; ADMSIL = Acceptable miscues at the instructional level; UNRECIL = Unaided recall at the independent level; UNRECIN = Unaided recall at the instructional level; ADRECIL = Aided recall at the independent level; ADRECIN = Aided recall at the instructional level; UNRECS = Unaided recall that is text bound at the independent level; UNRECSIN = Unaided recall that is text bound at the instructional level.

Question 5 Is there a relationship between the remedial reader's concept of reading and the nature of the miscues made at the independent and instructional levels?

Findings

The correlation between measures of concept and acceptable miscues at the independent level was - .10. The correlation between measures of concept and acceptable miscues at the instructional level was .06. Neither of these correlations was significant at the .10 level.

Question 6 Is there a relationship between the remedial reader's concept of reading and the nature of the unaided recall at the independent and instructional levels?

Findings

The correlation between measures The correlation between measures of concept and unaided recall at the instructional level was .21. Neither of these correlations was significant.

Question 7 Is there a relationship between the remedial reader's concept of reading and the nature of the aided recall at the independent and instructional levels?

Findings

The correlation between measures of concept and aided recall at the independent level and at the instructional level were both .17. Neither of these correlations was significant.

Discussions of Questions 5, 6 and 7

Although the client interview sheet and informal observations indicated that the remedial readers in this study thought of reading in terms of saying all the words correctly, the miscues at the independent and instructional levels showed that these children were trying to get meaning from the text as they were reading orally. The unaided recalls at the independent level again seemed to denote that these remedial readers who indicated that they were word dependent, were reading for understanding as the mean recall was 74%. However, upon closer examination of the recalls, it was seen that these remedial readers may have been reiterating what they had read since they had not given any evidence that they had synthesized the information. At the instructional level, although the number of acceptable miscues seemed to indicate that they were reading for meaning, the mean percentage of unaided recall was only 46.5. On the surface it appeared that the total number of miscues was causing the children to lose meaning of the passages, but in looking beyond the total number of miscues at the type of miscues the remedial readers made, it was seen that the number of unacceptable miscues detracted from the comprehension of the passages, causing the unaided recall score to decrease substantially.

When questions were asked to stimulate further recall these remedial readers were able to remember more of the information than they were able to retrieve independently.

Question 8 Is there a relationship between the remedial reader's concept of reading and the way the reader approaches the task of reading as defined in questions 5, 6 and 7.

Discussion

The remedial readers in this study were, for the most part, word dependent, that is, they believed that being able to say all the words correctly is very important in the reading process. Since these children were word dependent, then they approached the task of reading with the idea that they must get all the words correct. If their focus was on words then possibly they did not engage in comprehension seeking behaviors because their goal was directed towards saying the words and not towards reading for meaning. Certainly, comprehension of the passages was much lower at the instructional level as was indicated by the children's recalls. It may be that at this level they got bogged down with the quantity of unacceptable miscues they made. Had their concept of reading been meaning dependent, these remedial readers might have continued their search for meaning, rather than permitting themselves to focus on the individual words at the expense of meaning.

Summary

Most of the remedial readers in this study were word dependent. Generally they approached the task of reading with a view to getting all the words correct, rather than comprehending what they were reading.

CHAPTER V

SUMMARY, IMPLICATIONS AND RECOMMENDATIONS FOR FURTHER RESEARCH

The purpose of this chapter is to 1) present a summary of the major findings, 2) to draw conclusions regarding the implications of the study, and 3) to make recommendations for further research.

Summary

The major findings of this study may be divided into two categories: Formal Findings as measured by statistical procedures defined earlier in this study and Informal Observations of the strategies the children used to read. They are summarized as follows:

Formal Findings

1) Eighty-five percent of the remedial readers indicated that they were more word dependent than meaning dependent in their reading.

2) Twenty-two percent of the boys and 9% of the girls indicated that they were more meaning dependent than word dependent. The other 78% of the boys and 91% of the girls indicated that they were more word dependent.

3) At the independent level, most of the remedial readers made acceptable miscues.

4) At the independent level, most of the remedial readers in this study remembered what they had read (mean recall was 74.05%).

5) At the instructional level, the remedial readers made more unacceptable miscues than they did at the independent level.

6) At the instructional level, the remedial readers made more semantic miscues than syntactic miscues (44.3% of the miscues were not semantically acceptable and 25.8% were not syntactically acceptable).

7) At the instructional level, the total number of miscues made was twice that made at the independent level.

8) At the instructional level, the remedial readers remembered less than half of what they had read without the aid of questions (mean recall was 46.5%).

9) Recall of the passages read at both levels was increased by questions asked.

10) At both the independent and instructional levels, the remedial readers tried to recall exactly what they had read without paraphrasing or without adding experiential information.

11) There was a significant relationship between acceptable miscues and aided recall at the independent level.

Informal Observations

1) These remedial readers seemed to focus upon individual words when they were reading more often than they searched for meaning of the text.

2) At the instructional level, phonics was often used for figuring out unknown words even though the strategy was not always effective.

3) At the instructional level, nonsense words were often substituted for real words.

4) At the instructional level, the children had more difficulty with pronunciation of words causing them to turn their focus from meaning to word calling.

Conclusions and Implications

The major purpose of this study was to examine the nature of remedial readers' concept of reading, the miscues, the unaided and aided recalls and to investigate the relationship between these variables. The review of the Literature

revealed that very little research has been carried out to investigate the possible relationship between remedial readers' concept of reading and the way in which they approach the task of reading. The remedial readers in this study appear to use different approaches to the task of reading than do good readers. In reporting on the approaches good and poor readers use, Bristow (1985) stated "There is a possibility that poor readers view reading differently than good readers, focusing on word calling rather than comprehension" (p. 324). Many other researchers have made interesting observations concerning poor readers: "They focus on words within a sentence and do not look at information across sentences" (Garner, 1981, p. 378); "They comprehend in a piecemeal fashion" (Canney and Winograd, 1979, p. 162); "Poor readers read as if they do not expect what they read to make sense, as if getting every individual word right were the key" (Smith, 1978, p. 34). The remedial readers in this study focused on words more than they did on gaining meaning from the text. It was determined by means of a dichotomous scale that these remedial readers viewed reading as saying all the words correctly, rather than as a search for meaning. An overview of the classification of good and poor readers was presented in Table 3 in the previous Chapter.

Other findings in this study indicated that there were significant positive relationships between aided recall (instructional level) and acceptable miscues (independent

level); unaided recall (instructional level) that was text based and acceptable miscues (independent level); unaided recall (independent level) and unaided recall (instructional level). All other correlations were not significant. It is possible that more significant correlations may have been found had the writer merged the two levels of reading to examine the proportion of acceptable and unacceptable miscues in relation to the individual's total number of miscues. A greater variance of the scores would allow for higher correlations, but combining the two levels of reading would not have given this writer insights into how the remedial readers in this study performed at each level.

The findings indicated that these remedial readers appeared to be word dependent, judging from the responses they had given in the client interview, yet the percentage of acceptable miscues made at both levels seemed to indicate that they were reading for meaning. However, upon examination of the unaided recalls at both the independent level and the instructional level, it was determined that these children were very dependent upon the text. Very little of their recalls fell into the text entailed category, instead the children reiterated, in many cases, specifically the words they had read. Beebe et al. (1984) found the amount of text entailed information in a child's recall to be a powerful predictor of reading comprehension scores on a standardized test. They reported that text specific information influences

comprehension because this is what is abstracted from a passage, integrated into the reader's cognitive structure and as such becomes part of what is reconstructed and retold as text entailed information. It seems, then, that the remedial readers in this study were abstracting the information from the text but were not always integrating it into their existing knowledge. The short passages that the children were expected to read may have lent themselves to reiteration of the facts. It may be, however, that the children have been accustomed to being specific in their recall and generally not expected to do otherwise in their classrooms.

At the instructional level, these remedial readers had more difficulty recalling the information in the stories than they did at the independent level. This can possibly be attributed to the quantity of unacceptable miscues made at the instructional level. Although the percentage of acceptable and unacceptable miscues made at both levels was approximately the same, the quantity of unacceptable miscues at the instructional level was greater than the quantity of unacceptable miscues at the independent level. Beebe (1980) found in her study of 46 Grade four boys, that those who made unacceptable miscues had low retelling scores.

It may be that when we place children in materials that are too difficult for them, "they make so many errors that they abandon attempts at sense making and focus on word level decoding" (Bristow, 1985, p, 320). In fact, when good

readers are placed in difficult material they act very much like poor readers (Leslie and Osol, 1978). When the remedial readers in this study were asked to read a passage that they found difficult, they were unable to maintain comprehension and seemed to focus more on individual words. It is important that children be placed in materials that are not too difficult for them since, as Hoffman et al. (1984) found, difficult material clearly precludes the use of active, comprehension seeking behaviors.

At both the independent and instructional levels, comprehension of the passages read was facilitated by questions asked for the remedial readers in this study. It appeared that these remedial readers needed the structure of questions to help them abstract more information from the passages. Beebe (1984) and Fagan (1985) both found in their research that questions stimulated further recall and interpretation after a child had retold as much of the story as could be remembered.

Some remedial readers need more than help abstracting the information from the text; they need to be taught to integrate the information into their existing knowledge. Good readers facilitate this process by such activities as setting a purpose for reading, activating background knowledge, self-questioning to ensure that comprehension is occuring, making predictions and inferences, and drawing conclusions (Palincsar and Brown, 1983). Poor readers, on the other

hand, do not use active strategies and must have explicit instruction in comprehension enhancing strategies (Bastow, 1985). Durkin (1986) believes that teachers are not instructing children in comprehension; they are merely assessing comprehension. In this study, questions asked in the unaided recall did not only assess what the child already knew but helped stimulate further recall. Perhaps, questioning at the end of the text, interspersed in text or self-questioning, is one strategy to teach poor readers, but these children who have difficulty with reading need to be taught many other strategies to help them comprehend.

In our search for the cause of reading disabilities, it is important that we, as educators, examine closely the strategies good readers use when they read. It is equally important for us to know where the processes are breaking down in poor readers. These poor readers must be taught to actively engage in seeking meaning from the text, in other words, they must realize that the ultimate goal of reading is to understand what one has read. They must facilitate comprehension by using strategies good readers employ. As well, it is our responsibility to see that children are placed in reading materials that are not too difficult for them, otherwise, they could become bogged down with words and not able to attend to meaning. It is of ultimate importance that children read meaningful material and spend more time engaged in meaning related, rather than decoding activities.

It is the responsibility of teachers of reading to teach remedial readers to be good readers.

Recommendations for Further Research

The following recommendations for further research grow out of what was learned in this study and are offered to improve similar studies in the future.

The statistical results of this study revealed low intercorrelations among the various measures used. This finding supports the multifaceted concept of reading and suggests that reading concept, as a single measure, appears to be too broad, as it was measured in this study. This finding and others beg the question "Is concept of reading a unitary concept?" . Further philosophical and empirical research is necessary on this particular question.

In light of the finding that the remedial readers in this study performed as did good readers in other studies at the independent reading level, then caution is recommended in any overall classification of readers. It is recommended that all readers, regardless of their so-called level of proficiency, be studied at all three levels of reading proficiency before general classificatory and sweeping statements are made.

Many of the remedial readers' behaviours and responses may be an artifact of instruction from which reflect possibly many of the problems. The question must be asked "How can we begin to improve research and instructional materials?" In

dealing with such questions, in the case of remedial readers, it is recommended that the philosophical assumptions be studied to ensure a firm starting point.

The remaining recommendations pertain to modifications based on this study. The first is related to the data gathering procedures, namely that the study dealt with the files of the remedial readers rather than the children themselves. Gathering data by working with each child individually may allow the investigator to collect more thorough data than abstracting the data from files as was the case in this study. In addition, an analysis of student recalls on silent reading passages would provide another dimension to a study of remedial reading.

As well as using an interview sheet to determine whether the child is word dependent or meaning dependent, an additional criterion might be established. For instance, listening to the child read orally at the independent, instructional and frustration level is probably the best indicator of whether that child is word dependent or meaning dependent. Guidelines could be established to determine, while listening to the child read orally, whether he or she is dependent on individual words or reading to gain meaning. This additional criterion would probably provide valuable information, since in this study the children who indicated on the client interview sheet that they were meaning dependent, did not always read for meaning, and the children who indicated

that they were word dependent read for meaning at the independent level. Perhaps, because these remedial readers experience frustration most of the time at school, they are confused about their true perception of reading.

The final recommendation is that longer passages with a better storyline would be more consistent with Children's Literature and with the narrative texts read in school. In this study, informal inventory passages were used but perhaps the longer stories would allow more room for embellishment of information and interpretation of ideas presented in the text.

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APPENDIX A

Client Interview

Name:

Age:

1. What is reading?

2. How did you learn to read?

3. Who is the best reader you know? Why?

4. What do you think s/he does when s/he comes to a word s/he doesn't know?

5. How would you rate yourself as a reader -- good, average, fair, poor? Why?

6. What would you like to improve about the way you read?

7. When you are reading and you come to a word you don't know, what do you do?

8. What would you do to help someone who was having trouble reading?

9. What do you hope to be better at after our ten sessions

here?

School Work [name subject(s)] _____

Passing a Test (which?) _____

Reading Faster _____

Understanding what I read better _____

Learning how to study _____

Writing Reports (which?) _____

Other _____

10. Which type of books interests you most?

Adventure Stories	[ ]
Science Fiction	[ ]
Pirates	[ ]
Humorous Stories	[ ]
Mysteries	[ ]
Sports	[ ]
Other	[ ]

11. What do you do in your spare time?