THE USE OF A WHOLE LANGUAGE APPROACH TO DEVELOP SIGHT VOCABULARY IN HIGH RISK PRIMARY CHILDREN

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BY

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ABSTRACT

The purpose of this study was to discover whether a basal reader-phonics approach or a whole language approach would produce larger sight vocabularies in high risk children who had experienced difficulties with their kindergarten program. The whole language approach has a theoretical foundation in the psycholinguistic theory of reading and encourages the use of children's strengths in language--their syntactic and semantic knowledge--as a basis for developing reading. Children instructed in a whole language environment are introduced to print in meaningful situations through language experience, predictable books, repetitive poetry and personal writing using invented spelling.

The sample in this study was composed of eleven children from two grade one classes in two different years. Group one, consisting of five children who were in grade one during 1979-80, was taught through a basal reader-phonics approach. Group two, composed of six children who attended grade one in 1982-83, was taught through a whole language approach. The Slosson Oral Reading Test (SORT) was administered to both groups in May of their grade one and grade two years. The WISC-R intelligence test was administered early in their grade one year to obtain verbal and performance ability scores.

Pearson product moment correlations revealed a high correlation between the whole language treatment and

achievement at the end of grade two but not at the end of grade one. One-way analyses of variance indicated that the effects of treatment on Achievement were not significant at the end of grade one but were significant at the .001 level at the end of grade two. It was concluded that the whole language approach enabled children to acquire a larger sight vocabulary than did the basal reader-phonics approach.

Four case studies were included to illustrate other positive aspects of the treatment. There was evidence that children who were introduced to reading through whole language were more interested in books and reading, were exposed to more situations which encouraged the development of background knowledge, and were aware early in their instructional program that print was meaningful.

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CHAPTER I

THE STUDY

Introduction

In current psycholinguistic theories of the reading process, reading is generally considered a constructive language process in which a reader's most important asset is his knowledge of language. K. Goodman (1968) emphasizes this point when he describes skilled reading as a psycholinguistic guessing game which involves an interaction between thought and language. Fluent reading is an active process in which the reader reconstructs a message which has been visually encoded by the author. In his efforts to construct meaning, the reader simultaneously utilizes minimal cues from three systems--graphophonic, syntactic and semantic. All meaningful text includes these three systems. The graphophonic system refers to the relationship between the sounds of the language and its written form. The syntactic system refers to the grammatical relationships and functions of various sentence components. The semantic system includes the underlying meaning or meanings that the words in the text evoke in the reader.

The reader must continually predict meaning on the basis of what he already knows--his nonvisual information (Smith, 1971)--and then sample the text, selecting the fewest possible cues, to confirm or reject his predictions.

He continually tests his choices against his developing meaning. When the text does not confirm his guesses, he must gather additional information either by skimming ahead or by rereading previous paragraphs or sentences. As a result, original predictions often need to be altered.

Smith (1971) defines the fluent reader as "one who makes maximum use of redundancy" (p. 9) to get meaning from print. Redundancy exists whenever information is available from more than one source. In point, there are at least four sources of redundancy: visual, orthographic, semantic and syntactic information. Fluent reading can only result from the utilization of this redundancy. The more redundancy there is in print, the less visual information the reader uses to sample the text.

Although K. Goodman has written at length on the topic of the fluent reader and how the reader handles the text, he has only proposed a simplified model of early reading. The ability to sample text, which characterizes fluent reading, is more difficult for the young reader. The child is confronted with a graphic input which he recodes by changing the letter patterns into sounds. This speech is then used as aural input and decoded in a manner similar to the decoding of oral input in listening. Goodman uses the term decode to mean gaining meaning rather than translating printed symbols into sounds. Only when the deep structure of the message of the author is understood has decoding occurred. Goodman believes that some decoding can occur

without the intervening recoding step even in the beginning stages of reading. He does not elaborate this model nor does he explain how to assist the young child in learning how to recode or decode.

Smith (1971, 1978a, 1978b) also focuses his attention on the early stages of reading. Rather than attempting to develop a model of early reading, he defines reading in terms of what a child needs to know--"the fundamental insights" (Smith, 1978b, p. 129). These include being able to distinguish words, and to understand that print is meaningful and that printed words are language that needs to be interpreted. Children learn these things by reading --by making sense of written language. A child's first contact with reading occurs in the environment. By the time a child comes to school he has already begun to understand what reading is about. It is then the job of the school to build upon the information already acquired. In order to do this Smith advocates learning to read by reading. If the child does not know how to read, the reading must be done for him until he has developed personal competence. Smith (1978a) assures teachers that there "should be no cause for dismay that we cannot say with exactitude what a child has to learn in order to read" (p. 180).

Neither Smith nor K. Goodman has addressed in any depth this important question of <u>how</u> a child learns to read, but both have written at length on the topic of suitable conditions under which a child is likely to read. These conditions

provide the only guide available for the educator interested in teaching reading within a psycholinguistic framework.

A review of literature that focuses on the teaching implications of Goodman's model of skilled reading, yields the following principles of instruction:

1. Reading is a search for meaning and all activities should be organized around a search for meaning.

2. Language, because of the highly interdependent nature of its elements, should not be fractioned into small units for the purpose of instruction. When it is, its redundancy and cohesiveness are destroyed.

3. Instruction should make use of the strengths of the learner, especially his language knowledge, because this is a primary resource for learning that reading is constructing meaning from print.

4. Meaningful materials written in natural language will enable the child to utilize his language sense. The content of the materials used must be within the experiences of the reader.

5. The child must learn to predict, to organize his ideas and to reflect upon them as he reads. Background knowledge and knowledge of language will aid in the development of these strategies.

A more recent publication by K. Goodman and Y. Goodman (1979) describes in somewhat more specific terms the in-school activities that should be included in an initial reading

program. Even these are too broad to be practical since they do not address the question of exactly how the child is to acquire a sight vocabulary which will then allow him to become an independent reader. This task is clearly left to the teacher with these words, "In all that we have said we see the teacher as making the crucial difference in whether some or all children will learn to read" (p. 152).

Few teachers would argue that the main purpose of teaching children to read is that they may obtain meaning from print. Another undeniable fact is that the ability to recognize words is one of the most important abilities in the acquisition of literacy. Ehri (1978) stresses the importance of word recognition and indicates how this skill might develop in beginning readers. She perceives automatic word recognition as a probable consequence of the individual's having seen the word in context many times and thus building up a complete linguistic identity around it. By repeatedly seeing the same words and correctly guessing their identities, it is possible for the beginning reader to expand his repertoire of sight words.

Studies have indicated that words are recognized quickly in an appropriate sematic context (Schvaneveldt, Ackerman, & Semlear, 1977) and that the linguistic context of a word can be used to identify the word (Smith, 1971). Samuels (1976) agrees that context does provide important cues that will enable the reader to recognize a word, but he warns that it is important to determine if the reader can also

recognize the word in isolation. Ehri (1978) suggests various activities developed by Chomsky that will enable the reader to focus on the words in isolation within a context. One of these methods is to place a frame around individual words in print, have the word identified in isolation and then use the context for verification. Another method involves tape recording a passage and then having the student alternate listening and reading himself until he is fluent. Only then does he move on to a new passage. This method provides the appropriate phonological identities for new words and at the same time maintains syntactic and semantic patterns.

Statement of the Problem

The theoretical arguments concerning the utilization of the cueing systems have been developed with the average reader in mind. Exactly how these ideas apply to a retarded or high risk child has not been clearly addressed in the literature. It would appear that these children, more than any others, should be encouraged to make use of every possible aid in learning to read. Thus children's knowledge of language and how it works and their past experiences must be utilized when designing a suitable approach for them. Another requisite of meaningful reading that must be considered is the ability to identify words, since an individual must be able to identify some of the words before he can

utilize the cueing systems.

This study is concerned with the most meaningful method of developing word identification facility in beginning readers who have made a slow start in kindergarten. Since little information of a practical nature can be found in literature dealing with psycholinguistics and the acquisition of reading ability, it is necessary to consider the skilled reader and the conditions under which reading can be acquired.

This study attempts to answer the following questions which grew out of the above considerations:

Will a whole language approach, designed to take into account the principles of instruction advocated by K. Goodman and Smith, enable grade one children to acquire a sight vocabulary?

Will these children score higher on a standardized sight word test than will children taught using a basal reader-phonics approach?

Will children who have been exposed to the whole language approach make greater progress by the end of grade two?

Need for the Study

Carroll and Walton (1979) indicate that approximately 15% of the children in U.S. schools at any particular time will have difficulty learning to read beyond a primary level. Many attempts have been made over the years to discover why

this is so and to determine what can be done to reduce the numbers. As early as 1961 Conant organized a conference to resolve the controversy over phonics and the look-say method instigated by Flesch's Why Johnny Can't Read (1955). Throughout 1968, many meetings focused on dyslexia and related reading disorders. Other attempts to solve the reading problems were reported by Kavanagh and Mattingly (1972), Carroll and Chall (1975) and Reber and Scarborough (1977). Unfortunately, the reading problem has remained unsolved and was considered by Carroll in 1979 to be even greater because of the general awareness of the educational difficulties of minority groups and the media awareness of adult literacy.

Over the years some changes have been made. There is now a large body of research to support the linguistic and psycholinguistic considerations that underlie literacy, and more is known about the perception of words and comprehension. In spite of these advances, educators and researchers are still searching for, but have not found, the elusive answer to the question of how to deal with the problem reader. The individual teacher is left to design appropriate approaches for these children without proof that any one approach is best.

A teacher's decision to use a specific approach brings with it many responsibilities, the greatest of which is a knowledge of the theory in which that approach is rooted. Added responsibility is incurred when this theory must be translated into daily practice while only general implications

rather than specific activities are available in the literature. Such is the case with the psycholinguistic approach to reading. Appropriate methodology to encourage the development of the skills that are evident in the fluent reader must be designed.

The teacher needs to be aware of the conditions under which these skills are likely to develop and must learn to survey old methods and materials in a new light. Exactly how to do this cannot be found in the literature. Studies that assess the use of various approaches suitable for beginning readers are numerous, but few of them focus on an approach that is in keeping with the learning conditions psycholinguists advocate. The closest approach reviewed in the literature is the language experience approach.

When the lack of specific methodology is combined with a scanty research base, the need for further study is indicated. The difficulties are compounded when a teacher is responsible for developing suitable materials and techniques to use with high risk children.

This study is concerned with such children who entered grade one with many academic problems. It was the responsibility of the teacher to design a language arts program which would give them the best possible introduction to reading and writing.

Definitions of Terms

Key terms that have been used throughout this study are defined below.

Phonics Approach. The phonics approach to the teaching of reading focused on sound-symbol relationships to identify words.

Structured Language Experience. Structured language experience is an approach to teaching beginning reading in which the child's responses are recorded and used as text. This approach is generally used with children who have minimum levels of language and who need to develop concepts and background knowledge. Structures such as supplying sentence beginnings and repetition of words are used to encourage student responses.

Whole Language Approach. The whole language approach is an approach to the teaching of reading which focuses on the use of children's knowledge of language and the world around them as the basis for learning to read. This approach uses materials dictated by the pupils and commercially produced predictable books. Speaking, listening, reading and writing are equally important and receive attention daily.

High Risk Child. The high risk child is a child who enters kindergarten at a disadvantage as a result of lack of stimulation in the home, hearing or sight impairment,

brain damage or low intelligence, or a combination of two or more of these. Such a child's difficulties are indicated by his inability to master the basic concepts taught in kindergarten.

CHAPTER II

REVIEW OF THE LITERATURE

In the last twenty years, the results of separate pieces of research carried out in a variety of fields including sociology, linguistics and psychology have slowly come together like pieces of an intricate puzzle. The results of these combinations of ideas have enabled educators to become more aware of the complex nature of becoming an efficient language user. Many teachers have begun to question some of their beliefs about the acquisition, development and use of language, reading and writing by children. They are seeking better ways of relating current theory and practice. In an effort to build a sound theoretical foundation, it is important first to examine research in different areas.

This chapter reviews studies dealing with young children and their literacy knowledge before school entry, and their knowledge of the reading process once formal instruction has begun. The work of researchers who have studied young readers' use of the cueing systems is considered. In keeping with the belief that readers are best able to utilize their knowledge of language when print is meaningful, vocabulary studies that deal with the acquisition of sight vocabulary in context are examined. The problem reader and the types of children who are usually

identified by this term are discussed. The remainder of the chapter presents an overview of effective whole language environments.

Young Children's Knowledge of Print

One of the central issues in the study of the acquisition of literacy is the relationship between reading and writing. For many years the general sequence for acquiring the four language processes was considered to be listening, speaking, reading and writing. In recent literature there has been controversy concerning the correct sequencing of reading and writing for the purposes of instruction. The common assumption that writing follows reading is questioned by Chomsky (1971), who argues that children are developmentally ready to write before they read and that their introduction to print should be through writing. This point is also discussed in the works of Durkin (1966) and Read (1971), who report the advent of writing behaviour in three and a half and four year olds before reading interest had begun.

A moving force in the study of the written language of young children was Clay's (1975) work with preschoolers in New Zealand. She demonstrates that children's understanding and use of written language begins long before any formal instruction is given. Clay proposes that children develop writing behaviour by learning several different

writing principles as they interact with print. They become aware that many patterns recur in different words and that position, form and order are responsible for creating a variety of words in our language. An awareness of directionality is evident in a child's attempts to place words in lines from left to right. After much experimenting with print children come to realize that they can generate a variety of different messages by rearranging letters and words. While experimenting with letters and words they become aware of the contrastive differences between similar words. It is also apparent that young children unconsciously do inventories of what they already know about writing by making lists of known letters or words. Knowledge of these principles is intuitive in nature and is evident in the written samples of young children, especially in those of kindergarten children.

Wiseman and Watson (1980) discovered a wide range of ability in the writing of four- and five-year-olds, who had no formal instruction. There were 17 subjects in their study and all had learned that letters have to do with writing and that writing is characterized by a certain form (letters arranged in lines from left to right). Of the total number of subjects in the study, 15 realized that writing was both purposeful and functional. Harste, Burke and Woodward (1979), too, have documented the preschooler's expectations concerning the function and form of print. When subjects in their study were asked to write letters,

names or stories, they were able to make representations of their ideas on paper and then read their work, thus indicating their control of the function of language. In another study, Harste and Carey (1979) collected writing samples from three four-year-olds with different language backgrounds (United States, Saudi Arabia, Egypt) and compared them. These samples illustrated that the children, even though they had been exposed to different types of print in their environments, all showed an awareness of function and form. Their writing was arranged in lines with mock writing similar to the standard used in their country. It would appear that the child's awareness of function and form is developed long before his ability to correctly represent his messages graphically. De Ford (1980) and King (1980) suggest that there is a sequence to the development of writing which begins with scribbling. This progression continues through letter-like shapes, to symbols/signs which relate messages and then to words using invented spellings.

Read (1971, 1975) illustrates young children's ability to use invented spelling to represent their ideas graphically. Children are able to analyze their speech sounds and then use this knowledge to invent individualized spellings. These spellings differ from standard English spellings but patterns such as the following are evident: (1) The use of single letters to represent more complex sounds (e.g. /sh/ /ch/ might be represented by h) (2) The omission of nasal sounds (e.g. sing→seg, finger→fegr)) (3) The use of one letter

to represent a syllable (e.g. table→tabl) (4) The use of phonetic relationships between vowel sounds (e.g. /ey/ /e/ /ae/ represented by a since they are all made in the same position in the mouth).

Beers and Henderson (1977) have proposed four spelling stages through which all school age children (K-2) progress. These stages include: (1) pre-phonetic stage in which some of the sound features are not represented, especially vowels (mtc), (2) phonetic stage in which all sound elements are represented (e.g. eighty→ate), (3) transitional stage in which the child becomes aware of some of the conventions of English orthography (e.g. vowel markers, vowels in every syllable), and (4) correct forms. This research illustrates that children's knowledge of grapheme-phoneme relationships has begun to develop by approximately age 5 and from this point onward children should be encouraged to express their ideas in writing.

Hall, Moretz and Statom (1976) have looked at another important facet of early writing ability, home environment. What types of home environment produce early writers? The subjects in this study included 18 three-, four- and five-year olds from four nursery-kindergarten classes. The factors which were common to the majority of subjects included: (1) frequent observation of adults or older siblings involved in purposeful reading, (2) easy availability of writing materials that could be used without parental consent, and (3) a high frequency of story reading by parents and the

viewing of adults reading for pleasure. Three other patterns also emerged but did not occur as consistently in all subjects. (1) There was a desire to communicate with others (e.g. letters, notes). (2) The children knew the names of the letters and how to make them because of parent or child initiated teaching. (3) Sesame Street was seen by parents as an important factor in the child's ability to recognize letters.

Educators are becoming more aware of the knowledge that their students bring to school, and efforts are being made to recreate this type of positive home environment in the school setting. Children are being encouraged to involve themselves with writing even at the kindergarten level. Long before an active interest was taken in early writing, Durkin (1966) had begun her famous correlational studies of the environmental factors which encourage early reading ability. Her studies revealed that early readers had personal and environmental characteristics in common.

A survey of studies in early reading by various researchers including Clarke (1976), Durkin (1966, 1970) and Torrey (1969) was conducted by Teale (1978). Teale discovered that it was possible to sort the various results of the studies and identify four factors which related to the home environments of early readers. First, a variety of printed materials was readily available. This availability allowed the child to be in constant contact with print. Durkin (1966) lists a variety of materials her

subjects were exposed to, among which were story books, comics, encyclopedias and magazines. Clarke (1967), Gardner (1970) and Torrey (1969) all point out the importance of everyday print--things such as menus, captions on T.V., supermarket products, cookbooks, newspapers and maps. The availability of printed material alone, however, is not enough to produce early readers. The second factor which stood out was the modelling of meaningful reading behaviour by parents or older siblings. All the potential sources of reading in the environment remain unrealized unless children learn the function of print. They must learn that print is meaningful. This message is received each time they see an adult or sibling interacting with print in a meaningful way, for example, reading signs, reading instructions for games, and reading notes. Smith (1977) implies that reading or responding to environmental print is the basic way that children come to realize the function of written language. Reading stories aloud also has an important function over and above acquainting children with the function of print; it sensitizes them to the structure and vocabulary of written language. From listening to a variety of stories children begin to develop a story grammar which helps them to comprehend stories when they begin to read (Mandler & Johnston, 1977; Thorndike, 1977). Of all the factors identified by Teale (1978) after his survey of early reading studies, reading to the child was the most frequently cited. A majority of the parents of the subjects were also readers

themselves and read for enjoyment. This portrayed reading as a unique, pleasurable, communicative experience. The third factor cited in Teale's survey reveals another aspect of the communicative character of written language. In the homes of all the subjects, writing materials were readily available. Durkin (1966) characterized the children in her study as 'pencil and paper' kids and noted that the starting point of interest in literacy began with scribbling and drawing. Torrey (1969) states that her early readers "enjoyed writing and spent much time printing words and numbers" (p. 551). Plessas and Oakes (1964) report similar findings. A fourth environmental factor was the availability of a person to respond to what the child was trying to do. Smith (1973) comments on the quality of this interaction by specifying that the respondent should be willing to help the child in his efforts to deal with language. The amount and type of help should ideally be determined by the child.

Characteristics of the reader are equally as important as the home environment of the child. Torrey (1969) indicates that the siblings of early readers often did not learn to read before they began school. Not every early reader had the advantages of a home environment similar to that described in Durkin's study. This was the case with the subject of Torrey's (1969) case study. This young boy was not read to at home nor did he have parents who were readers. Torrey concluded that the key to learning to read is to have the child ask the right questions. Durkin (1961)

reports on the personal characteristics of a total of 49 students drawn from 5103 first graders. This group shared a number of personality and behaviour patterns which included curiosity, conscientiousness, persistence and self-reliance. They were serious minded, had extremely good manners and were able to concentrate well. K. Goodman (1977) discusses the resources needed by the young child in more general terms. He maintains that the two most important resources the child brings to the act of reading and writing are his oral language development and his ability to use language as it is needed for new functions.

A number of researchers--Clay (1975), Doake (1979), Y. Goodman (1983), Harste, Burke and Woodward (1982), and Holdaway (1979, 1984)--have posed questions about young children and their attempts to deal with print. In an effort to answer these questions researchers have begun to observe three-, four-, five- and six-year-olds interacting with print. Reflecting on the works of other writers and on personal research with young children dealing with environmental print, Yetta Goodman (1983) has reached tentative conclusions about developing literacy. She believes that many young children come to school reading, but this only occurs in literate societies where children are bombarded with print. From the earliest age they know that print communicates meaning. Young children realize that print does the telling, but they consider the print only as symbols of meaning (CREST would be toothpaste). At this point many

children know the letters of the alphabet but have not connected this knowledge with reading. Their first awareness of print is at the meaning level and it is at this level that they make intuitive decisions about how written language works. They use their knowledge of the world just as proficient readers do. They also use pictorial cues, including colour and situational context. When print is given to children out of its situational context they no longer treat it as meaningful language. Y. Goodman (1983) presented the word IVORY to children in its appropriate blue colour and wavy design. Most children in the study could recognize it, but when it was written in manuscript on plain paper none of the subjects could identify the word.

Young children make use of all the reading strategies described in the K. Goodman (1976) model of reading. Y. Goodman (1983) reports that they view and select meaningful elements as they become accustomed to seeing print in a variety of situations, and they also use confirmation strategies. They guess, using a minimum of cues, and often disconfirm their initial guesses and make new ones. By age 5, children have begun to relate sounds to letters and to realize that names should be specific (Rice Krispies) rather than generic (cereal). Because of this growing knowledge, they are often less adventurous risk takers and appear to know less than younger children. These behaviours are present in all children but they develop at different rates. Some are apparent at the same time while others are evident

in isolation. At times children may only apply their intuitive knowledge to writing or reading rather than seeing a connection between the two.

The work of Harste, Burke and Woodward (1982) complements that of Y. Goodman and presents further evidence that young children expect written language to make sense--to have a predictable structure. Harste, Burke and Woodward also investigated the literacy knowledge of three-, four-, five- and six-year-olds. They were attempting to discover specific language strategies or characteristics of young children. When these subjects were confronted with books or environmental print they responded in ways that were meaningful. One language strategy, text intent, was displayed when the subjects were able to recreate verbally a message they had represented graphically. Children also showed evidence of utilizing this strategy in many environmental situations in which they attempted to interpret the meaning of signs or messages. Their "reading" of the print is always in some way connected to the situation.

Harste, Burke and Woodward also noticed a second language strategy, negotiability, which the children used when they utilized what they had previously learned about language to help them with new print encounters. This knowledge is self-initiated and children will only select information they consider relevant to the situation and ignore the rest, often changing the communication intent to one that makes sense to them. A third language strategy

is risk taking which is characterized by experimenting with how language works. Children who are familiar with a story because they have been read to many times will often attempt to "read" the books privately, even though they are not sure of the words. Rather than playing it safe, children will go on their own. The use of invented spelling is another example of the risk taking practised by young children in their efforts to control a language situation. A final strategy described by Harste, Burke and Woodward has been termed fine tuning language with language. This infers that what is learned in one language situation becomes a resource for subsequent language situations. Oral language can become a resource for written language and vice versa. Children who have been frequently read to will be able to use the language of books and story structures in their efforts to write their own stories. These four strategies are not used separately, but rather they occur concurrently when a child attempts to interpret print.

In a paper presented at the IRA Annual Convention in 1979 Doake comments that educators need to change their views concerning pre-schoolers and reading. In the past this period has been considered a pre-literacy or pre-reading stage. Even the reading readiness program that a majority of children are exposed to in kindergarten implies that reading is made up of a discrete set of skills that must all be mastered before the child is considered ready to read. Unfortunately these tasks bear little relationship

to reading and they may even distort the child's view of what reading is. Doake contends that there is no such thing as readiness for reading, since children begin to learn to read from the first time they hear language, especially the language of literature. If children are immersed in written language in meaningful ways, reading behaviours will emerge early. Doake suggests that the young child in school should be allowed to experiment with whole language in its written form just as many children experience it at home.

Doaké's (1979) work with young preschoolers in the area of reading, using the shared book approach, has provided teachers with insights into reading development. A number of principles are evident from his work.

1) Given the right environment children will learn to read and write in much the same way as they learn to speak and listen.

2) Young children are able to direct, regulate and monitor their own learning if they are given the opportunity to operate with large, meaningful chunks of information.

3) If teachers accept the fact that children learn to read very early in their lives, present views of readiness are untenable.

4) If learning to read can and should be a natural happening that the child directs, educators must stop attempting to control the child's learning and place more emphasis on allowing the child to self-direct and self-correct his own learning.

It appears that the child who comes to kindergarten for the first time brings with him a number of strengths in the areas of print consciousness and language knowledge. These strengths need to be taken into consideration when reading programs are being designed for the primary child.

The Cueing Systems and Sight Vocabulary

It is apparent that the beginning reader finds the reading process more difficult than does the proficient reader. This is because the beginner is still not fluent at deciphering print for meaning. Emans (1969) suggests that the use of a context strategy enables the child to use previous experience, language ability and the meaning of the words within the sentence to help decide what the word could be. K. Goodman (1970) considers that there are two contexts --semantic and syntactic--available to the reader. If these are utilized along with graphic information, the beginning reader is utilizing the same cueing system as the skilled reader. Weber (1968) found that over 90% of the substitutions made by grade one children in her study were both syntactically and semantically consistent with the preceding text. Frequently the errors made were semantically and graphically consistent with the remainder of the sentence as well. If not, self correction usually occurred. Other researchers have compared the effects of graphic and syntactic-semantic constraints on identification of unknown

words in connected discourse. Their overall findings indicate that miscues are based on syntactic and semantic information more often than graphic constraints. Out of 7,674 substitution errors made by first graders, Clay (1968) reported that 72% were syntactically appropriate but only 41% were attributed to grapheme-phoneme correspondences. K. Goodman (1965) found that first, second and third graders used similar cues to help with word identification. It would appear, then, that as text is read, the meaning that is gained helps the child to identify unknown words. Chomsky (1974) reports similar findings from a study in which young readers were surprised to discover that they could read in context words that they did not know in isolation. Such findings suggest that relevant syntactic and semantic cues are active when beginning readers encounter new words as they read.

Whilst certain researchers view the use of context in a positive way (K. Goodman, 1972; Smith, 1973), others question the implications. Ehri and Roberts (1979) employed context and isolation methods of word learning with grade one students. Half of the children read the words in meaningful sentence context, while the other half read words printed in isolation on flash cards. The context group learned more about word meaning but less about orthographic details than subjects who were taught with flash cards. It appears that extensive exposure is necessary to achieve a visual gestalt. As a result, the beginners'

knowledge of the printed word may grow slowly with this approach. Even in studies of word recognition in isolation, children do not ordinarily attend to total patterns or to all the letters in a word. Samuels and Jeffrey (1966) found beginning readers paid attention to only the first and last letters but not those within the word. Williams (1976) reports the results of a similar study conducted by Blumberg, Williams and Williams (1969) which also showed that first graders attended to the first letter as the most important cue. Marchbanks and Levin (1965) had kindergarten and first grade children select from a set of alternatives one word which was similar to a standard. The selection could be made on the basis of word shape or letter cue. The results were similar to those of Samuels and Jeffrey (1966) with initial letter cues used most frequently and word shape used least.

Since there is evidence to indicate the use of the cueing systems in young readers, this strength can be utilized by introducing new words in story contexts so that the reader can attach meaning to the words. The use of context to encourage the development of word recognition can be found in the literature related to the language experience approach as early as the 1920's (Hildreth, 1965).

A persistent criticism of the language experience approach is that students may not develop an adequate sight vocabulary because of the lack of control of vocabulary and the lack of repetition of words. There is, however, research

to refute this criticism. Kelly (1975) compared the performance of two groups of third grade remedial readers where one group used the language experience approach and the other a basal reading approach. After 15 weeks the experimental group had a sight vocabulary that was 22% greater than that of the basal group.

Another frequent criticism of the language experience approach focuses on the problems that develop when a child is introduced to reading using this approach and is then transferred to a basal reading program. Henderson, Estes and Stonecash (1972) addressed this problem in a study which focused on the size and nature of the reading vocabulary of 594 children in 21 grade one classes in Prince George, Maryland. These children had all been exposed to a language experience approach which used, as one of the procedures, word boxes for collecting and reviewing new words. Over half the words in the boxes were also in the first 100 words on the Lorge Thorndike word list. It was concluded by the researchers that the sight vocabulary of the language experience group compared favourably with that of the children who used basal readers.

The desirability of word bank use in the language experience approach has also been studied by Reifman, Pascarella and Larson (1981) who found that children using word banks received significantly higher scores on the Dolch list than did a control group who used a language experience approach without word bank instruction.

A recent study by Bridge, Winogard and Haly (1983) showed that sight words are better learned in the context of repetitive predictable books and language experience charts than in stilted primers. The experimental group learned more target words than the basal reader group. It was interesting to note that they also learned significantly more nontarget words.

In summary, research from K. Goodman (1970), Weber (1970), and Emans (1969) indicates that even young readers utilize semantic and syntactic contexts in their efforts to make print meaningful. This information indicates that reading can be introduced by presenting text that is connected in some way with children's experiences so that they will be able to use their language strengths to help decipher the words. The cautions of Samuels and Jeffrey (1966) and Williams (1976) that young children do not always attend to the total word but to the initial and final letters, and those of Ehri and Roberts (1979) that the beginner's knowledge of the printed word may grow slowly, since extensive exposure may be necessary to obtain a visual gestalt, merit consideration. The strength children have in the area of using semantic and syntactic information could be overpowered by their inability to differentiate the words within the text. A balance needs to be sought between the two. The answer may lie in providing opportunities for the child to focus on individual words in a story context. From the research in language experience studies, the use

of word banks appears to increase the child's chances of success with acquiring a sight vocabulary and also in transferring comfortably into a basal series. It appears that educators who wish to utilize language strengths must also provide opportunities for the child to receive added exposure to words within the text.

The Problem Reader

Cooper and Petrosky (1967) have compiled a number of observations from psycholinguistic researchers concerning the characteristics of fluent readers. Such readers, they say, are active participants who utilize all their knowledge of the world and the text. At all times they expect the text to make sense and they read to discover meaning rather than to identify unfamiliar words. Thus by using orthographic, syntactic and semantic redundancy in varying degrees they become risk takers who sample the text to receive enough information to predict the author's message. As fluent readers are confronted with different styles of writing they can shift their approach with the change in style in order to interpret meaning. Unfortunately not every reader develops this degree of efficiency in dealing with print. Like fluent readers, nonfluent readers have adequate syntactic and semantic information to read stories, but they do not use these skills effectively (K. Goodman, 1976; Rhodes & Brenson, 1976), rather they tend to overuse

graphophonic cues. According to Bower (1970) and Smith (1971), such readers have a tendency to attend to individual letters and words rather than phrases and sentences and often focus on even smaller units such as initial consonants. Gulknecht (1971) reports that although nonfluent readers may at times use all three language systems, their "syntactic and semantic strategies are not sufficiently developed to permit successful reading when the graphophonic strategies do not work" (p. 138).

K. Goodman and Burke (1970) and Weber (1968) show that proficient beginning readers do not make fewer miscues than nonfluent readers; rather they make different kinds of miscues. Proficient readers usually make miscues that retain the underlying meaning of the passage, whereas poor beginning readers make miscues that make little sense when the context of the passage is considered. The manner in which these two types of readers react to miscues is also different. Poor readers either correct immediately because they are over cautious and word bound or they plunge on and give no indication that the word supplied makes no sense. They are not monitoring for meaning. K. Goodman and Burke (1973) conclude that the biggest difference between the fluent and nonfluent reader is the ability to comprehend what is read.

There are many children in the nation's schools who would be termed problem readers or nonfluent readers by their teachers and a smaller percentage who would be considered nonreaders, since they have made little progress in the acquisition of literacy. These children are frequently

found in remedial reading or special education settings. Although it is difficult, if not impossible, to place a human being in a specific category, educators continue to try to organize classes and programs for children on the basis of similarity of problem. The standard classifications include learning disabled, mentally handicapped, physically handicapped and educationally disadvantaged. Of the four categories, the learning disabled, mentally handicapped and educationally disadvantaged present the reading teacher with the greatest challenge. A clearer understanding of the types of problems common to these children would enable the teacher to plan more efficient reading programs. Children from all of these categories may have varying degrees of difficulty with reading for different reasons.

Kirk, Klubham and Lerner (1978) use the term slow learner to include those individuals who are functioning in the borderline range (IQ 68-85). It is the borderline children who are often placed in special education classes, with this group comprising 10-15% of all school age children. They are usually different from their peers only in intellectual development. Slow learners have difficulty learning academic skills at the same chronological age as their peers and will continue to develop intellectually at a somewhat slower rate. According to Johnston (1963), the level of understanding of slow learners is usually superficial and limited when compared to average learners. Observations carried out in classroom settings indicate that "slow

learners are not as discriminating, able to judge or abstract, develop initiative, direct their own activities or detect and correct their errors" (p. 43). They also need more help in understanding their mistakes. Instruction must be at each child's learning level if it is to be successful. The content should be both meaningful and purposeful in relationship to the daily experiences of the children and thus give their learning a concrete base.

Many times the group labelled 'slow learners' also has members who fit into the classification 'culturally disadvantaged.' It is an accepted fact that educationally certain children have many social, physical and psychological disadvantages which affect their school performance. The causes of these disadvantages include poverty, poor health and broken homes. These primary problems often cause other problems, including poor diet, inadequate housing and lack of material things. As a result these children are not prepared for the middle class milieu and expectations of the school.

According to Tate (1971) a number of characteristics of disadvantaged children have been related to reading difficulties. The kinds of activities that these children engage in usually result from directives rather than guided supervision. For them, playing on the stairs or in the street, and doing menial tasks occupy the hours that middle class children may spend on crafts and piano practice. As a result, many disadvantaged children are lacking adequate

background in the types of activities that are usually pursued in the school setting. These children have also missed opportunities to engage in many activities that are considered the backbone of learning--reading and listening to books, playing with toys, using paper and pencils and experiencing an elaborate language code. Lack of opportunities to visit cultural and educational places narrows their intellectual growth. Tate also comments on disadvantaged children's difficulty with reading and suggests that the causes of the difficulty lie in three areas. (1) Their impoverished environments result in the curtailed functioning of the thinking process. (2) The stunting of auditory acuity and discrimination results from a noisy home background. (3) Incorrect forms of speech and a restricted language code are present from birth.

Kirk (1972) states that at least 1-3% of the school population is composed of disabled learners. It is somewhat difficult to define the learning disabled child because this term covers a wide variety of children. All children classified as learning disabled do not exhibit the same behaviours. It is possible that many of the behaviours attributed to the learning disabled are also displayed by "normal children." From research in the area of learning disabilities, Bryan and Bryan (1975) have compiled a list of the ten most common characteristics of the learning disabled child.

1. Hyperactivity is one of the most common character-

istics displayed by learning disabled children. This uncontrolled motor activity is out of place within the specific context in which it occurs and is also disruptive to other members of the group.

2. There may be perceptual motor impairments which include difficulties with sensory motor or perceptual motor learning.

3. There is often evidence of emotional disturbance which is demonstrated by emotional outbursts that are not befitting the situation and which appear unsuitable considering the child's immediate history.

4. General coordination deficits are common in learning disabled children. Such children may walk with an awkward gait, be poor in motor activities such as catching a ball or hopping or have difficulty performing activities, such as buttoning or writing, that require fine motor coordination.

5. Attentional disorders, such as distractability and perseveration, often cause academic problems. Distractible children show interest in all the things around them, rather than focusing on the required activity. Children who perseverate have the opposite problem. These children focus on the required activity but are unable to shift their attention from it.

6. Many learning disabled children rarely reflect before deciding on a plan of attack and often do not consider the consequences of their actions. This impulsivity

is evident in both academic and social pursuits.

7. Disorders of memory present learning problems. The difficulties usually arise in two areas: (1) in recalling material that should have been learned, and (2) in understanding abstract concepts.

8. Academic subjects, such as reading, writing, spelling and mathematics, cause difficulties.

9. Sometimes neurological signs are present which, though not clearly associated with specific neurological problems, are not within a range that is considered normal functioning.

10. Oral language disorders may be present. Children may be unable to comprehend the meaning of single words or connected discourse. There may also be difficulties with semantic, syntactic, morphologic and/or pragmatic rules.

When educators are attempting to decide on the best approach to use with problem readers, they will find little definitive advice in research literature. Even experts on normal readers do not agree on the one best approach to use in normal circumstances. Sitko, Semmel, Wilcove and Semmel (1977) note that "there seems to be no definitive support for asserting the superiority of one method over another" (p. 2). In U.S. Board of Education sponsored research comparing approaches used with first grade children, Bond and Dykstra (1967) conclude that no approach to special readers can overcome all the individual differences. They recommend that a combination of approaches has more effect

than a single approach. In a review of studies from 1960 to 1969 on reading instruction for brain injured children Reed, Rabe and Mankinen (1971) state that "the evidence that retarded readers with brain damage require special methods of instruction is extremely meager" (p. 289). They conclude that "there is little, if any, evidence to suggest that the teaching procedures for such children should differ materially from those used for another child with a reading problem of similar extent and degree but without brain damage" (p. 108). A number of other studies have compared the effectiveness of specific reading approaches to teaching reading to the mildly retarded (Dunn & Mueller, 1966; Dunn, Neville, Bailey, Pochanart & Pfost, 1967; Kaplan, 1971; Neville & Vandever, 1973; Woodcock & Dunn, 1967). The results of these studies provide little evidence to support the use of one method over another.

Researchers have not been successful in isolating one reading method as being most productive in teaching special children to read. Perhaps it is time, as Gillespie-Silver (1979) recommends, that the classroom teacher turn her attention to research that investigates how special children approach tasks and how content influences the reading process.

Since every class will include at least one child who experiences reading difficulties, the question of programming for problem readers becomes important to every teacher. Because the types of problems the children can experience are so diverse, researchers have not been able to recommend

a specific approach to use with problem readers.

The children who experience reading problems in school often come from backgrounds that have not provided adequate exposure to print. They might not have been read to or had access to paper and pencils. In many cases exposure to positive role models which accentuate the advantages of being literate (reading newspapers, directions or applications or reading for pleasure) is not part of their life. The language codes of such families might have been restricted and offered little in terms of language elaboration. Although all children need to be introduced to print in a way that utilizes their strengths, these children especially need an approach that compensates for their earlier disadvantages and builds on any strengths that are visible.

Whole Language Environments

Holdaway (1984) suggests that the characteristics of young language users be considered when designing an appropriate learning environment. Durkin (1970) was one of the first researchers to attempt to duplicate the positive home learning environment in a school setting. She assembled a pre-school, kindergarten curriculum and compared the reading ability of children in the experimental program with that of those who first received reading instruction in grade one. This research continued until

the end of grade four. While Durkin was responsible for the design of the program used with the experimental group in kindergarten and grade one, the school designed the program for them thereafter. It also designed the program for the control group. For the duration of the study, the children in the experimental group were more advanced in their reading ability than those in the control group. As the children progressed from grade to grade, the differences in their achievement decreased, possibly because of the graded nature of the materials used.

In 1978 Doake attempted to implement an alternate language arts program in a grade one class in Nova Scotia. In this study one group was introduced to reading using a shared book experience approach. This approach involved the repetitive reading of big books which featured highly predictable natural language. Language experience stories were also an integral part of the program. The control group followed the basal program. A Gates-MacGinitie reading test administered in February of the grade one year indicated that the shared book group had a mean achievement score in vocabulary and comprehension that the basal group did not achieve until June. The grade equivalent average difference reached 0.45 years in reading vocabulary and 0.44 years in reading comprehension.

Although actual studies of programs utilizing a whole language environment are limited, there seem to be many supporting the same thing in different terms. Indeed the

language experience approach is one such example. Various authors have discussed the type of atmosphere that will result in the maximum utilization of language strengths. K. Goodman and Y. Goodman (1979) state that the most important goal in designing an initial reading environment is to create conditions that will help children to learn to read and write as naturally as they learn to talk. The prime concern of teachers should be the use of methods to determine and expand on what the child has already learned about print from the home environment. Holdaway (1984) also recommends naturalizing the environment so that it reflects the true functions of literacy rather than presenting reading in a piecemeal manner which would destroy meaning and other inner-directed strategies. Holdaway's (1984) summary of the characteristics of developmental learners includes the following: brain radiating (using complexity from within), observing and emulating, making sense, predicting, approximating, self regulating, participating, practicing, risk taking, and pain-avoidance and pleasure seeking (p. 15). A closer examination of these characteristics suggests guidelines for programming. The result could be an environment that utilizes a great variety of children's literature as a program base. Predictable books which can be made into big books and used to develop reading in a shared approach were initially advocated by Holdaway (1978) and implemented by Doake (1979). Thus children would be introduced to print in a meaningful way and therefore

would learn to anticipate that print makes sense. The predictable nature of the materials used would allow for prediction, approximation, and self-correction and regulation. The teacher's role would be that of a model who presents literacy as a joyful, meaningful experience. The environment should encourage the development of the four language processes equally. Therefore, speaking, listening and writing should not be overlooked. Harold Hopkins (1977), in his book From Talkers to Readers the Natural Way, illustrates in brief text and cartoons how it is possible to strike such a balance in the primary classroom.

If children are going to use language to learn more about their world while also acquiring literacy, some vehicle must be sought to organize the curriculum. Browne, Byrne and Winter (1980), McCracken and McCracken (1972, 1979), and Rhodes (1983) suggest the use of themes as a possible answer to this problem. If the teacher is to use this organization within the classroom she must believe certain things about the learner. She must believe that children want to learn and can learn in their own way and that learning is rooted in first hand experiences. Piaget (1964) indicates that it is worthless to tell a child things if the child cannot experience them for himself. He must use all his senses in his active exploration of his world and needs the freedom to move, to manipulate and to interact with adults. Only after experiencing many concrete experiences can the child learn to deal with the abstract. Yardley (1974) emphasizes

that children are very curious about their world and "this curiosity acts as a child's most powerful drive. From his first moments, curiosity activates the child toward learning" (p. 10).

Children become proficient language users when they see that language is meaningful and purposeful and can serve a function in their lives and the lives of others. Learning to read, write, speak and listen in a meaningful context rather than by using a sequenced series of skills encourages this language use. Children learn to speak because they wish to communicate with those around them. They are interested in their immediate world which they find both intriguing and curious. Rhodes (1983) argues that language skills are best learned in the process of using language as a means to an end, to explore the world, rather than as an end in itself. Current literature presents a variety of terms and definitions for the organization of units of work. Browne, Byrne and Winter (1980) refer to the thematic approach as a collection of ideas, activities and teaching materials related to a chosen idea. The activities are planned and directed by the teacher and involve the children intellectually, physically and socially. Usually all areas of the curriculum are considered and the activities initiated are at different developmental levels. Each theme begins with a statement of objectives to be met as well as content to be covered.

McCracken and McCracken (1972) differentiate between

theme and unit. These authors classify the more structured approach of Browne, Byrne and Winter (1980) as a "unit" with a planned beginning, middle and end, whilst they see a theme as having only a beginning, with the reaction of the children determining the middle and end. Rhodes (1983) chooses an approach between these two extremes with her choice of "the thematic unit" which begins with a list of major concepts to be explored by the children. These concepts have a broad focus and in turn determine which resources, lessons and activities can be used. It is also possible to prepare more narrowly focused units, but these would necessitate more frequent unit preparation. The broadly based unit also permits more flexibility and creativity.

Ideas for themes come from a variety of sources, three of the most usual being the teacher, because of personal interests or knowledge of the needs of the learner, the required curriculum, and suggestions and interests of the children. The concepts to be studied within the theme are selected with the children's interests and needs in mind. Reading, writing, speaking and listening are utilized in integrated purposeful and meaningful ways in order to achieve the objectives.

The conclusions reached by many researchers interested in the most beneficial approach to the acquisition of literacy advocate a learning environment that attempts to duplicate the positive home learning environment. The strength of such an approach is the teacher's use of the

children's language abilities when they come to school while at the same time she endeavours to expand what they have already learned about print.

Summary

There is ample evidence to suggest that young children come to school already knowing a great deal about language and print. Children can use their knowledge of language (semantic and syntactic) as well as their knowledge of the world about them in their efforts to make sense of print. These strengths help children decipher unknown words when they occur in a context that makes sense to them.

The language experience approach was an early attempt to utilize the child's language base in the reading situation. Research has indicated that children exposed to this method of learning to read have progressed at least as well as children introduced to reading in other ways. The use of word banks to review words that have been presented in a story context further enhances the success rate of this approach. Recent researchers have indicated the desirability of such an approach and have advocated including other means of helping to produce a favourable reading environment. They would include the liberal use of children's books, exposure to writing at an early age using invented spelling, the use of meaningful text for reading and the teacher's presentation of literacy as a

joyful, meaningful experience. An introduction to literacy in this manner should encourage development of the predicting and confirming strategies needed to be a good reader. It should also encourage a balance between reading, writing, listening and speaking, since much of the text stems from children and their interests.

A survey of the literature reveals no one best approach to use with children who for different reasons are having difficulty with the reading process. Some authorities advocate a combination of approaches. It would seem that these children, more than any others, need to be introduced to reading by a method that will enable them to utilize any strengths they might possess. At the same time the approach should include components which would compensate for any deficiencies in the child's pre-school environment.

CHAPTER III

METHODOLOGY

This chapter presents a description of the variables, hypotheses, sample, materials and instruction and the statistical procedures utilized in the study.

This study was designed to determine whether the basal reader-phonics approach or the whole language approach was the more successful way of developing sight vocabulary in high risk grade one children. The two dependent variables were a set of vocabulary scores for all subjects obtained in May of the grade one year (1.8) and a set obtained in May of the grade two year (2.8). The treatment variable was whether the subjects were in group one, the basal reader group, or in group two, the whole language group.

Hypotheses

The questions posed in chapter one led to the following hypotheses:

1. For high risk grade one children the whole language approach will be more effective in promoting children's sight vocabularies than the basal reader-phonics approach.

2. For high risk grade one children any advantage in sight vocabulary development due to the use of the whole language approach in grade one will be maintained in grade

two.

3. For high risk grade one children both verbal ability and performance ability will be positively related to sight vocabulary development in both grade one and grade two.

4. For high risk grade one children age will be negatively related to sight vocabulary development.

Sample

The sample consisted of eleven children chosen from two grade one classes from a city school in two different years. Group one consisted of five children--one girl and four boys whose ages ranged from 73 months to 87 months. They were in grade one in 1979-1980 and in grade two in 1980-1981.

The remainder of the children--one girl and five boys--whose ages ranged from 69 months to 83 months comprised group two. This group attended grade one in 1982-1983 and grade two in 1983-1984.

Both groups received instruction in language arts and mathematics from a special education teacher during the morning session and were integrated with a regular grade one class for the remainder of the day.

In May of their kindergarten year, these children were designated as "high risk" children and were recommended to receive a thorough evaluation in the fall of their grade one year.

Instruments

The subjects were administered the Slosson Oral Reading Test (SORT) in late May of their grade one and grade two years. Both groups were administered the Weschler Intelligence Scale for Children-Revised (WISC-R) in the fall of their grade one year.

Materials and Instruction

Two different approaches requiring different materials were used with the children in this study. The children in group one were taught by a traditional method, using a variety of commercial materials. Because of the nature of the approach used with group two, children's language was used for text in addition to trade books and teacher-made materials.

Group One

The basic material used with group one was the Nelson Language Development Reading Program. The first four months of the school year were spent developing reading readiness by using commercial and teacher-made materials. The program focused on recognition of the letters of the alphabet, sounds of the consonants, rhyming words and the visual discrimination of words. Listening comprehension, story sequencing and recognition of colour words were also stressed. In January the group began the LDR pre-primer level Surprise,

Surprise and at the same time were introduced to vowel sounds and the blending of sounds to form words. In order to provide practice in utilizing this new skill, teacher-made and commercial materials were used as reading practice. Activities were used to show children how to "attack" an unfamiliar word by using their knowledge of sounds. These practices continued for the remainder of the year with the group completing in mid-June the three pre-primer level readers--Surprise, Surprise, Kittens and Bears and Pets and Puppets.

A regular part of the program also consisted of a take-home reading program in which each child could choose a simple story book to read at home. When the child had finished reading the book, it was signed by the parent and returned.

The sight vocabulary in the Nelson pre-primers was put on flash cards and time was spent each day on activities which focused on practice in recognizing the vocabulary in isolation. Sometimes these words in combination with phonetically regular words were used in simple short stories that were sent home for practice.

Group Two

In September the children in group two were introduced to reading with a whole language approach. This consisted of materials developed by the students in structured language experience lessons, repetitive poetry and predictable trade books. The children were encouraged to write in personal

journals, and replies were written by the teacher. Each day children were given the opportunity to talk and listen. The curriculum was organized by using themes. This framework allowed the teacher to present material in a meaningful whole and to use the interests of the children.

Poetry, trade books, filmstrips, pictures and real objects which complemented the theme were utilized. When possible, a big book that fitted the theme was purchased or made by the teacher. These books were read aloud by the teacher while she pointed to the words on each page. As they became familiar with the text, children were encouraged to read along with the teacher. Often the story was taped and small copies of the book were placed at the listening center where small groups could read along while the teacher worked with other children.

As children became familiar with the story they were given opportunities to use semantic and graphophonic cues to predict words. To encourage the development of these strategies, the teacher decided beforehand at which points prediction could readily occur and then, while reading, stopped to allow students to fill in words. Their attention was also drawn to words and spaces, beginning letters and lengths of words. Children were encouraged to focus on specific vocabulary by having word hunts in which the teacher named words or showed cards and the children had to find and circle the designated word. Underlining, circling, and variations in print, too, were used to call attention to

specific vocabulary. These activities were also carried out with poems and charts. In this way children's attention was drawn to specific words while they still maintained the context.

The teacher was mindful of the necessity of providing practice in reading as skills developed. Each day a ten to fifteen minute period was provided for silent reading. Another important aspect of practice was the take home reading program, which included materials prepared in class and repetitive books and poems. This program allowed the parents to play an active part in their children's developing reading ability and it ensured that all the children were exposed to books at home. A list of take home reading material is presented in Appendix A and a list of predictable books in Appendix B. A theme on rain, which illustrates how the various activities were used, is presented in Appendix F. Examples of focusing and practice techniques used with big books and charts to focus on sight vocabulary in context can be found in Appendices C and D.

Limitations of the Study

1. The sample used in this group was not randomly selected, but was comprised of special education classes for grade one students in 1979-80 and 1982-83.

2. The number of children included in the special education group determined the size of the sample. In

1979-80 five children from the grade one population were included while in 1982-83 six children were included, making a total of 11.

3. Because of the size of the sample it is not possible to generalize the results obtained in this study to all special education groups.

4. The study examines only one result of the whole language approach--sight vocabulary.

CHAPTER IV

FINDINGS AND DISCUSSION

In this chapter the results of the statistical analysis and four case studies--two from each group--are presented and discussed.

Relationships Between the Variables

Pearson product moment correlations were calculated to determine the relationship of one variable to another. The zero order correlations that were considered are those: (1) between the whole language approach and sight vocabulary achievement at the end of grade one (ACH I); (2) between the whole language approach and sight vocabulary at the end of grade two (ACH 2); (3) between Achievement 1 and Achievement 2; (4) between verbal ability and Achievement 1; (5) between performance ability and Achievement 2; and (6) between age and Achievement 2 (see Table 1).

Two one-way analyses of variance were carried out to determine if the treatment was significant.

The correlation between treatment and Achievement 1 was -0.547, which was not significant. Neither were the results of the one-way analysis of variance conducted on treatment and achievement 1 significant (see Table 2). Therefore Hypothesis 1 which states that for high risk

Table 1

Zero Order Correlations, Means and Standard Deviations for Variables in Whole Language and Sight Vocabulary Study (N = 11)

Variables	AGE	TREAT	VBL	PERF	ACH1	ACH2	DIFF	MEAN	S.D.
AGE	1.000							79.818	5.741
TREAT	-0.297 (n.s.)	1.000						1.545	0.522
VBL	-0.214 (n.s.)	-0.282 (n.s.)	1.000					80.545	13.102
PERF	-0.537 (n.s.)	-0.284 (n.s.)	0.410 (n.s.)	1.000				89.909	11.096
ACH 1	-0.206 (n.s.)	-0.547 (n.s.)	0.184 (n.s.)	0.214 (n.s.)	1.000			1.000	0.245
ACH 2	-0.086 (n.s.)	0.850 (.001)	-0.247 (n.s.)	-0.319 (n.s.)	0.743 (.001)	1.000		1.573	0.555
DIFF	0.006 (n.s.)	0.828 (.001)	-0.446 (n.s.)	-0.563 (n.s.)	0.411 (n.s.)	0.916 (.001)	1.000	0.573	0.408

Key to mnemonics: TREAT = Treatment; VBL = Verbal Score on WISC-R Intelligence Test; PERF = Performance Score on WISC-R Intelligence Test; ACH1 = Achievement on Slosson Oral Reading Test at grade 1.8; ACH2 = Achievement on Slosson Oral Reading Test at grade 2.8; DIFF = Difference between ACH1 and ACH2.

Significance levels for coefficients are given in parentheses.

grade one children, the whole language approach will be more effective in promoting children's sight vocabularies than the basal reader-phonics approach, was rejected. Although the results were not significant, it is important to note that there was a much wider range in the scores. The difference in group one was 0.1 and that in group two was 0.8.

Table 2

One-Way Analysis of Variance Results: Effects of Treatment on Achievement at 1.8 (N = 11)

Variable	Sum of Squares	d.f.	Mean Square	F-Ratio	Significance Level
ACH1	0.30018	3	0.10006	2.336	n.s.
	0.29982	7	0.042823		

When treatment and Achievement 2 were considered, the correlation was 0.850, which was significant at the .001 level. A significance level of .001 means that the probability was only one in one thousand that this was an accidental finding. In Table 3, the effects of the whole language approach on achievement at the end of grade two are presented. The results were significant at the .001 level and it would appear that achievement was significantly better at the end of the second year than at the end of the first year. Hypothesis 2, which states that for high risk

grade one children any advantage in sight vocabulary development due to the use of the whole language approach in grade one will be maintained in grade two, was therefore accepted.

There was a correlation of 0.743, significant at the .001 level, between sight vocabulary achievement at the end of grade one and at the end of grade two. It would appear that there was a delayed effect when using a whole language approach, since the advantages of using the approach were not significant until grade two.

Table 3

One-Way Analysis of Variance Results: Effects of Treatment on Achievement at 2.8 (N = 11)

Variable	Sum of Squares	d.f.	Mean Square	F. Ratio	Significance Level
ACH2	2.2255	1.	2.2255	23.390	.001
	0.85633	9.	.095148		

Hypothesis 3, which states that for high risk grade one children, both verbal ability and performance ability will be positively related to sight vocabulary development in both grade one and two, was rejected because verbal ability and performance ability were negatively related to sight vocabulary by the end of grade two. The relationships were not significant but correlations of -0.247 for verbal and -0.319 for performance would seem to be of importance.

Hypothesis 4, which states that for high risk grade

one children age will be negatively related to sight vocabulary performance, was rejected because the relationships between age and achievement at the end of grade one (-0.206) and at the end of grade two (-0.086) were not significant. Had the samples been larger the negative coefficients would probably have been significant.

Case Studies

The results of statistical procedures carried out in this study indicated that the whole language approach did enable children to gain a better sight vocabulary by the end of grade two than did the basal reader-phonics approach. There were other advantages to using this approach that were not evident in these results but were revealed by a close examination of the individual children in this study. In an effort to present a comprehensive view of the value of using a whole language approach as compared to a basal reader-phonics approach, four case studies are presented. Two children--Shawn and Don--were chosen from the basal reader group and two--Mark and Amy--were selected from the whole language group.

Shawn

Shawn was the youngest of six children from a lower socioeconomic family. This child lived in poverty conditions, although his father worked periodically. For various

reasons the children in the family were physically neglected. Shawn was usually poorly cared for. His lunches were scanty and the teacher often had to supplement them with food from school. His home environment caused him to start school severely educationally disadvantaged. He was a very withdrawn child who cried frequently and asked for his brother. He rarely talked to the teacher and did not interact with the other students. His lack of basic concepts and his immature behaviour resulted in his being detained in kindergarten an extra year.

When he began grade one his kindergarten behaviour pattern continued. Shawn rarely spoke and when he did it was usually in a whisper. He did not converse with the other children and preferred to work quietly. Testing in the fall of his grade one year indicated many weaknesses. The Peabody Picture Vocabulary Test (PPVT), which measures receptive vocabulary at the word level, showed a discrepancy of 16 months between his chronological age and his mental age. He was unaware of the everyday things and people around him. Such simple terms as barber, autumn, casserole and binoculars were unknown to him. This weakness in background knowledge and his lack of basic concepts were also apparent when the WISC-R intelligence test was administered. On the information subtest, which samples accumulated general information of a factual type, he obtained a scaled score of 6 out of a possible 20. His lowest score was obtained on the Similarities subtest which required him to verbalize

associations between pairs of words. The test begins with very concrete words and gradually progresses to more abstract ones. His scaled score was 3 out of 20. The Vocabulary subtest required him to express the meaning of words as they were read by the examiner, beginning with very concrete ones. His scaled score was 6 out of 20. His overall performance on the test was a full score of 76 with 78 on performance and verbal subtests. A verbal description of his placement on the ~~WISC-R was~~ given as borderline intelligence. Even though Shawn had spent an extra year in kindergarten, he still did not know all of the letters or numerals and he could print only his first name.

He was, however, a very determined worker who took his school work seriously and attempted, without question or comment, any task the teacher provided. When he was unable to complete an item he would sit passively and wait for the teacher to notice his difficulty. He never had to be spoken to because of bad behaviour, since he did not interact with his fellow classmates. When he was not in class, he could be found with his older brother. He made very little progress socially throughout the year.

Academically, Shawn progressed well in his first term and managed to learn all of the letters and the numerals to 10. By Christmas he could read some of the colour words. Through hard work, he completed the three pre-primers by June. He was a very word-conscious reader and did not read on to utilize context clues. His comprehension was poor.

In many instances he had no information to bring to the print. The teacher used some pre-reading activities when getting children ready to read a story, but Shawn needed even more than were provided in the daily lessons. Of the children's books that the teacher read throughout the year, very few were of an informational nature. Pictures and filmstrips were utilized infrequently; therefore, Shawn was not exposed to enough activities that would help him increase his knowledge about the world, a prerequisite to comprehension. The major part of the day was focused on the acquisition of words. On the Slosson Oral Reading Test given in May of grade one, Shawn scored 0.8. This score was consistent with his daily work and also with the scores of his classmates.

In grade 2 he was again placed in the special education group for language arts and mathematics. He made some improvement socially in grade two and played with one of the other boys when not in class. He still hardly ever talked in school and did not appear to be happy. The teacher rarely saw him smile and never saw him laugh.

During the grade two year he completed the last two books in the grade one program, Whiskers and Toy Box. On his Slosson test at the end of grade two he obtained 1.3, the highest score in his group. Shawn has continued in Special Education classes since his grade two year and has continued to progress very slowly. In grade 5 mid-year he obtained a 2.3 score on a Slosson Oral Reading Test. On a

Gates-MacGinitie Reading test, which was administered at the same time, he attained scores of 2.2 on Vocabulary and 1.7 on Comprehension. The five point discrepancy in favour of vocabulary was indicative of his strength in word recognition rather than comprehension.

An overview of this case study reveals a number of difficulties which Shawn experienced in his early primary education. His home background had not prepared him for the demands of the school. He was poorly cared for and poorly fed, and was not exposed to a stimulating home environment. When he entered school his insecure nature did not allow him to take full advantage of the program. He was lacking in many concepts and background knowledge, and the design of the program did not provide frequent times and topics for group discussion. When he began to read, his comprehension was poor, possibly because he had little information to bring to the print. He had more success in developing a sight vocabulary than he did in comprehending what he read. When these problems are considered a number of questions can be posed concerning the best approach to use in the future with children exhibiting similar problems. The major problem in Shawn's early years appeared to be the lack of pre-school preparation. Coming from a home that provided neither verbal stimulation nor school-related materials (pencils, books) left him ill prepared for learning to read. One wonders whether a whole language approach would have compensated for his lack of pre-school

preparation. It would have immersed him in a literature environment and exposed him to good reading models and books and it would appear that children who come from poor home environments need this even more than children from middle class homes. One wonders too whether the materials such as books, filmstrips and fieldtrips could have better developed the background knowledge which is needed for comprehension. These questions are now impossible to answer in Shawn's case but they merit future consideration in connection with children displaying similar characteristics.

Don

Don was the youngest of three children from a middle class family. He transferred into the grade one group from Ontario at the end of September. A report from his former school indicated that Don was an energetic, active kindergarten child who enjoyed activities and got along well with others. It was reported that his knowledge of academic skills was limited and he had difficulty settling down to work.

In November of his grade one year, Don was referred for assessment because of his difficulties with retention of the alphabet and problems with visual motor tasks. The Rutgers Drawing Test was administered and Don had difficulty copying many of the shapes. He scored one and a half years below his chronological age. The results of the WISC-R intelligence test indicated that he was functioning in the

average range of intelligence. There were, however, two interesting scores in his profile. On the Vocabulary subtest, which measures the child's ability to express the meaning of specific words, Don obtained a scaled score of 4 out of a possible 20. The factors tapped by this subtest include expressive language and broad language experience obtained through reading or verbal interaction.

On the Object Assembly subtest, a timed test in which the child has to assemble various puzzles that depict objects, he obtained a scaled score of 15 out of 20. The factors tapped by this subtest include spatial orientation, visualization, spatial relationships, perseverance, patience and confidence. These scores were surprising, since they were exactly opposed to his performance on daily tasks. His teacher had always considered him very fluent when expressing his ideas. On the other hand his attempts at any type of written activity usually produced less than favourable results. His overall WISC-R score of 102 was composed of a verbal score of 97 and a performance score of 108. During this evaluation Don was most talkative, expressed a dislike for any kind of school work and commented that he liked to play best of all.

A meeting was held with his parents to discuss the results of the assessment. The teacher decided to suggest ways the parents could help Don at home and thus reinforce what was done in school. Up to this point, the parents had instituted their own routine and activities which were not

productive. For the next several months he was exposed to a variety of activities to encourage the retention of his letters. Don had great difficulty remembering information that was presented visually. Many of the activities involved a motor element--drawing the letters in sand or scratching them in modelling clay. After a variety of experiences, he slowly began to recognize the letters, but by June he still did not recognize all of them.

In January he was introduced to the first pre-primer in the Nelson Language Development Readers. He needed constant repetition both at home and in school to retain the sight vocabulary as it was presented in the readers.

Don continued to be a talkative boy who presented himself as being very confident. Many times his overconfidence caused him to do poorly. He assumed he could do well, but failed to attend to details and thus made careless mistakes. He liked to work very quickly so that his work would be finished. He dutifully returned his take-home reading books, but he never showed any great interest in reading. Many of the things he did were done because they were expected by the teacher.

As the year progressed, Don continued to have difficulty remembering vocabulary. When he could read the words his comprehension was usually good. The approach he was exposed to rarely included discussion of context clues or use of the child's language strengths. It was unfortunate that the two areas in which he could excel were not part of the teaching

approach that year. Don was forced to rely on his knowledge of words by sight and then piece the words together to obtain meaning. Although the importance of meaning was stressed, no examples were used to illustrate this to the children.

In March of his grade one year Don scored 0.5 on the Slosson Oral Reading Test. Two months later he scored 0.8. This was favourable progress and compared well with the other children in his group. By the end of grade one he had completed the three pre-primers.

In September he began grade two in the special education group for reading only. He completed two more readers, Whiskers and Toy Box. As more vocabulary was taught, Don experienced great difficulty discriminating among the words. He tended to confuse words, since he usually focused on the beginning and ending consonants. He was not making effective use of context and did not monitor his reading as he went along. When the Slosson Oral Reading Test was administered in May of his grade two year, Don's score showed no progress beyond his grade one score. The Gates-MacGinitie Reading Test was also administered at this time, and on it he scored 1.6 in vocabulary and 1.5 in comprehension. His teacher felt that this was a fairly accurate score for him when his daily work was considered.

Don again received special education help in grade three and the next year he repeated that grade. He spent part of the year in a regular group and the remainder in a

special education group. A Slosson Oral Reading Test given at the end of this year yielded a score of only 1.7 although he had had four years of reading instruction. In February of that year, because of reading difficulties, he was seen at the Diagnostic and Remedial Unit at Memorial University for a complete evaluation. The remediation program designed for Don included a sound phonetic base to foster word identification. Materials at his instructional level were used to build a sight vocabulary and increase comprehension. Don continued to attend sessions at the Diagnostic Unit throughout grade three and into grade four. When he entered grade 4 he was placed in a remedial reading group at school. During the summer prior to grade four he attended a summer program and made good progress in sight word development. He scored 3.4 on the Slosson in September of grade four. His sight vocabulary improved over the year and he scored 4.3 on a final test at the end of grade four. A Gates MacGinitie Reading Test was administered in March of grade four. He did not answer enough vocabulary items correctly to score, but he did score 1.8 on the comprehension subtest.

A final report at the end of grade four from the Diagnostic Unit included a section which discussed Don's behaviour when he approached reading tasks. It was felt by the clinician that his major problems were a short attention span and the use of avoidance tactics. By the end of his grade four year a more mature behaviour pattern had developed. His self-esteem had improved with remediation and he was

approaching reading tasks with enthusiasm. On an oral reading passage from the Burns and Row Inventory he made many errors, frequently read nonsensical words and did not self correct. Despite these problems he was able to comprehend the passage well and made inferences. It would appear that Don is still very "word conscious" and is functioning at a word level and not a meaning level.

An overview of this case study reveals a number of difficulties Don experienced with reading. In the beginning stages he had difficulty remembering the names of letters and did not know them all by the end of grade one. He had similar difficulty with sight vocabulary. He was not particularly interested in completing written assignments or in silent reading and completed such tasks to have them out of the way. By the end of grade two Don had already begun to experience reading failure which in turn probably contributed to his developing avoidance tactics. These facts about his school progress were difficult to understand in light of his intelligence.

A number of questions warrant consideration. Could the use of themes, which would have exposed him to interesting topics and materials, have extended his spoken vocabulary and fostered an interest in reading? It appeared that one of his major problems was the negative attitude he developed because of his failure. Could the use of predictable books have allowed him to use his language strengths to gain a positive attitude toward reading and books? Could the use

of whole language strategies have provided him with experiences that would have presented reading as a meaning-seeking activity rather than a word calling one? At this time these questions are impossible to answer, but they do deserve theoretical consideration since there are often children who exhibit characteristics similar to Don's. The use of the activities previously noted could possibly be helpful in such cases.

Mark

Mark was the youngest of four children from a middle class home. From birth he had had serious health problems which resulted in hospitalization and operations. Mark's first contact with special services occurred in 1978 when he was three. At that time he was seen by a speech-language pathologist because he was speaking in one word sentences. During the next year he attended a preschool language group. Initially he was reluctant to participate, but at the end of fourteen weeks some improvement was noted. He continued to receive speech therapy throughout his kindergarten year. During his second year in school he was transferred to a special class for children with language disorders. When he was not working individually with the language disorder teacher, he participated in the regular kindergarten program.

The tests that were administered to determine Mark's eligibility for the language class indicated that he dis-

played a variety of language and academic problems. The Peabody Picture Vocabulary Test (PPVT) showed a six month discrepancy between his chronological age and his mental age. On the auditory comprehension subtest of the Zimmerman Preschool Language Scale, he scored 4 years 6 months in comparison to his chronological age of 6 years 3 months. The Goldman-Fristoe Test of Articulation revealed that his articulation pattern was characterized by a number of speech sound substitutions and omissions. An intelligence test (WISC-R) yielded a full scale score of 69 with a nine point difference between his verbal score of 62 and his performance score of 71. Upon entering grade one his academic skills were evaluated. The Brigance Inventory of Basic Skills showed weaknesses in all major areas surveyed. He scored 28% on letter recognition and 40% on recognition of numerals to 10. Matching activities revealed that he had developed neither one-to-one correspondence nor conservation of number. He was inconsistent in his attempts to print his first name. Sometimes he could do it correctly but at other times he wrote the letters out of sequence or omitted several. He could not print his surname. Out of the eight colours tested, he was able to tell the names of only two.

When Mark was compared to the other children in his group, his academic and language problems combined to produce the most severe educational problems of all the children. In spite of the fact that he had spent an extra

year in school and had received a great deal of individual language remediation, he was still not functioning at grade level.

In the group, Mark was a pleasant child who tried hard to please his teachers. He was aware of his difficulties, and he would observe other children in the group perform required activities and then attempt to copy their efforts. He was embarrassed when given individual help within the group and he desperately wanted to do what his classmates did. He was usually attentive in a small group setting and was able to work independently to complete activities that were within his capabilities.

Mark's most outstanding problem was his poor memory. This was evident in every area of his educational program. He often unsuccessfully searched his memory for specific words to name objects and events and could not remember the names of letters or numerals without constant repetition. In his efforts to express himself he would often have to resort to using a substitute for a word, for example, he might call Santa Claus Ho Ho. Severe problems with syntax added to his difficulties in expressing his ideas. Pronoun usage was a great problem. "Her do it" and "Him go to school" were regular usage patterns in his daily speech. He also confused pronoun referents and often used her for a male. Difficulties with tenses were also evident. Mark appeared to understand the concept of past, present and future when he was spoken to but he was not able to utilize

this knowledge in his expressive language. He spoke in the present tense only. Prepositions were also problematic for him and he could not recall the correct one to use in specific situations.

When he was exposed to print in an effort to encourage reading, his problems were even more pronounced. By the latter part of November he had been exposed to many charts, predictable books and poems. Focusing techniques had been employed to call attention to specific words in context, but still Mark had acquired a sight vocabulary of only five words. At this point, his classmates had a sight vocabulary of approximately 25-30 words. Mark attended well to all the activities and volunteered to circle words on the chart or find matching words in the word hunts, but was often unable to locate them without teacher help. He appeared to be enjoying the activities and did not seem to realize that he did not know as many words as his classmates.

A parent interview was held in the latter part of November to discuss his progress. His two teachers expressed their concern about his lack of progress and the possibility of his never learning to read well because of his extreme memory problems. Following the interview, a reevaluation of Mark's program by his teachers led to changes and additions to his program. They felt that Mark was fitting into the group well and that he was content with the types of activities to which he was being exposed, but that he needed greater repetition of material to develop

a sight vocabulary. Even with his syntax problems he had begun to utilize context and to realize that text had to make sense. It was felt that these strengths should continue to be utilised and developed. The language disorder teacher wrote simple story books using pictures and repetitive sentence structures. The books always contained vocabulary that Mark was being exposed to in his reading group. These books were then sent home for him to read to his parents. They proved to be a great success and were special to him because they were made for him. The reading teacher used every opportunity in the small group to set up situations in which Mark could practice his newly acquired knowledge in front of his classmates. Positive feelings about his achievement resulted in added interest. In February a Slosson Oral Reading Test (SORT) was administered and his score of 0.6 illustrated his growing ability to remember the words. He could read many of the pre-primer level story books in the take-home reading program. By making effective use of context he was often able to read materials that were of a higher reading level than indicated by the score achieved on the Slosson test. Mark's feelings about reading continued to be very positive. When visitors came to the group, he would volunteer to read one of "his" books. By the end of the year he was very comfortable with his reading and his negative "can't do" which was frequently heard in kindergarten and the first months in grade one in answer to any teacher request, was seldom heard. His

Slosson score in May of grade one was 0.7. When compared to the other members of his group, Mark had made the least progress. His teachers, however, felt that he had made the greatest progress when his multiple handicaps were taken into consideration.

In September of his grade two year his score on the Slosson was 0.4, which was a regression of three points. After several weeks of exposure to print he began to remember many of the words he had learned in grade one. In grade two, Mark began to work in the Nelson Language Development series. The first two pre-primers had been included in the books he read in grade one. He also learned how to work in the workbook toward the end of grade one. Additional language activities such as class news, charts, predictable poems and stories and journals were used. The take-home reading program continued to give Mark opportunities to practice his developing skill. By the end of grade two he had completed the third pre-primer of the series--Pets and Puppets--and had also completed Whiskers, a beginning grade one book. On the final Slosson testing in May of Mark's grade two year he obtained a score of 1.8. His teacher felt that this was a very high score for him and not consistent with his daily performance which was still within a low to mid grade one range. Such inconsistencies were part of Mark's overall progress, since his performance fluctuated from day to day. At times, he would have trouble remembering the words he wanted and at other

times he easily retrieved them from memory. When the acquisition of sight vocabulary was considered, Mark had made almost two years' progress in two years of instruction. This was favourable progress considering his academic problems.

A Gates-MacGinitie Reading test administered at the end of grade two yielded a vocabulary score of 1.6 and a comprehension score of 1.5 for an overall score of 1.5. This was consistent with his teacher's evaluation of his reading in daily situations. Mark's continued interest in reading and his enjoyment from having mastered the written code were evident only to those who watched him work each day. His progress was slow and steady, but it was miraculous, considering his memory problems.

From an examination of this case study it appears that the whole language approach was of benefit to Mark in a number of ways. Initially it appeared that he would not be able to benefit from the approach because of his severe language and memory problems. All that was needed, however, was a modification that allowed more repetition within a whole language framework. The teamwork of Mark's two teachers and his parents contributed to his success in learning to read. With his severe memory problems, the exposure he gained in the class setting was not adequate. Another modification helped his syntax develop. A structured language experience approach utilizing sentence beginnings allowed him to express his ideas. This also

exposed him to correct syntax in a variety of meaningful situations. Even with his major difficulties in syntax, Mark was exposed to sentences that focused on his ideas and thus were meaningful. In this way he was reading text that he composed, and because of this, early in the year he began to realize that print has meaning.

The use of books with predictable language patterns enabled Mark to experience pleasurable, positive feelings about reading. In a basal approach he would have needed to acquire a much more extensive vocabulary before being given storybooks to read. Reading various books allowed him exposure to repetition of words he had already met in charts and other books.

Although Mark had tremendous learning difficulties, the use of a whole language approach enabled him to learn that print is meaningful, to read at a mid grade one level after two years, to develop an interest in reading books and, finally, to use language structures he was exposed to in print to help him develop his oral language.

Amy

Amy was the second of three children from a working class family. When she entered kindergarten, she was an extremely quiet, reserved child who rarely spoke to the teacher or her classmates. Her kindergarten teacher was concerned about her lack of verbal responses and her poor progress in academic areas. Thus she was referred for a thorough assessment in the fall of her grade one year.

Results from the Brigance Screening Test indicated that she recognized 54% of the alphabet and all of the numbers to 10. She was able to match quantities and had developed conservation of number. The results of the WISC-R intelligence test confirmed her general weakness in the verbal area. There was a twenty point difference between her verbal score of 70 and her performance score of 90. This discrepancy caused the guidance counsellor to suspect a possible language delay or disorder. Amy was then referred to the speech language pathologist for an in depth language assessment. On the Peabody Picture Vocabulary Test (PPVT), administered by the speech language pathologist, Amy showed a discrepancy of 20 months between her age equivalent score and her chronological age. The Test of Language Development revealed a 29 month discrepancy. Sentence imitation was particularly difficult for Amy, and in it she scored almost three years below her chronological age. The language pathologist concluded that Amy seemed to understand various grammatical skills but was delayed in vocabulary and expressive language skills.

An interview with her mother revealed that Amy tended to be a quiet child at home, but that she did converse with other members of her family. She was not an inquisitive child and rarely asked questions. During the interview the importance of encouraging language at home and the link between language and learning to read were discussed. The teacher suggested that Amy's mother take her to the library

and choose some fictional and factual books to read aloud to her and then encourage her to talk about what she had learned. Since she was a passive child, the necessity of engaging Amy in conversations about everyday events was also stressed. The mother was receptive to the teacher's suggestions and agreed to help Amy in any way she could.

Amy's behaviour during the first two months of grade one was similar to that displayed in kindergarten. As she became accustomed to the routines of the group and the personality of its members, she began to venture into group conversations. She developed rapport with the teacher and with the other children and became more and more verbal. The types of activities the children engaged in helped to speed up this process. Every Monday there was a class news period during which the children had the opportunity to tell the group any news they might have. The teacher recorded their responses on a chart. Amy volunteered nothing freely until one day during the second month in school when she volunteered information about her cat. From that day on she slowly became a contributing member of the group. The frequency and amount of speaking done by the other children in the group provided a quiet "pressure" for her to contribute. Efforts were made to make the topics discussed relevant to the children so that the need to share would be strong. She particularly liked the shared reading activity since she could be anonymous in the group, which gave her the confidence to take part. As she began to make more progress with

her reading, she gained confidence and began to contribute more in group discussions. She was an excellent worker and would stay with a task until it was completed. She was very interested in the take-home reading program and faithfully returned her books daily.

The variety of materials, including pictures, filmstrips, information and fictional books, realia and real life experiences in the form of fieldtrips, coupled with subsequent discussion, helped to extend Amy's background knowledge--a necessary prerequisite to reading comprehension.

An interview with Amy's mother in early December verified Amy's interest in reading. Amy's mother also reported that Amy was talking more freely at home and that she was asking for books of her own. This interest spurred the mother into purchasing books for Amy. A Slosson Oral Reading Test administered in February indicated that Amy had made tremendous improvement in sight vocabulary. Her score of 1.0 suggested a year's growth in six months. The test administered in May of grade one yielded a score of 1.3. Amy, who had been a non-reader in September, had gained a year and three months in 9 months. Even more impressive was the change in her desire to interact with the group. By June, she was still a somewhat reserved child, but at appropriate times she talked freely and laughed. She spent her free time reading the books in the classroom.

In September of grade two Amy scored 1.2 on the Slosson Oral Reading Test. She had retained most of the

vocabulary she had acquired in grade one. Having read the stories in the three pre-primers in grade one, she began the Nelson Language Development Series with Toy-Box, a book for the end of grade one. Since she had done selected pages in the Nelson workbooks in grade one, she had no difficulty coping with the transition into a basal series. She also continued to be exposed to language activities similar to those she had experienced in grade one. By the end of grade two Amy had completed Magic Story Box and Saturday Magic, comfortably functioning for instructional purposes at a low grade two level. Her score of 1.9 on the Slosson test in June of grade two was consistent with her daily performance. On the Gates MacGinitie Test, given in May of grade two, she scored 1.6 on vocabulary and 1.9 on comprehension, with an overall score of 1.7. Although Amy continued to work well during her grade two year, she did not make the same degree of progress that was evident in grade one.

From an examination of this case study it appears that the whole language approach was of benefit to Amy's academic development in many ways. One of the most noticeable changes was in her willingness to present her ideas in the group and to participate in other group activities. The use of themes and the frequency of discussions helped to encourage her oral language. The various materials (for example, filmstrips and books) used throughout the year exposed her to a variety of concepts and information about teacher-chosen topics. The use of such materials made possible the development of

extensive background knowledge in which Amy was weak.

Her exposure to a variety of story books that she could read at home stimulated her interest in books and also provided her parents with a concrete way to help their child. Her mother reported her pleasure in knowing exactly how she was to help her daughter with her reading each night. Frequent practice needed to develop reading ability was encouraged both in school and at home. The fact that Amy continued to be an ardent book lover two years later attests to the value of an early introduction to a take-home reading program. The importance the teacher placed on books and reading in the daily program also served to encourage a positive attitude toward reading.

In summary, it appears that Amy's exposure to a whole language approach had a positive effect on her oral language development and the development of background knowledge. She became interested in books and reading and she could read at a high grade one level after two years of instruction.

Summary

The four children included in these case studies all experienced individual difficulties in acquiring reading skills. A closer examination reveals some commonalities among them. Amy and Shawn began school as very passive, introverted children who rarely participated in classroom discussions or activities. Their knowledge of the world

around them was restricted. At the beginning of grade one, Amy slowly began to change as she became more comfortable with the other children in the group, who were verbal and interested in the topics presented. The focus on topics that were of interest to the others slowly elicited interest and verbal response on her part. Over the year, there was a noticeable increase in her participation in conversation and discussion. There was little change in Shawn, except for his friendship with one child, even after two years with the same group. Amy's background knowledge and general awareness of the world around her increased as a result of her exposure to a variety of books and materials. That there is a link between background knowledge and reading comprehension is generally accepted and seems to be confirmed in a comparison of Shawn's and Amy's Gates MacGinitie Reading Test Scores. Amy scored 1.7 on the comprehension subtest in May of her grade two year while Shawn did not achieve this score until grade five.

Don and Mark appeared to have severe memory difficulties and, as a result, they both needed a great deal of repetition to remember words. One would have expected Don to be a good reader when his intelligence score was compared to the lower scores achieved by the other three subjects of the case studies. This was not the case. Although Mark's intelligence score was 33 points lower than Don's, there was only a one-point difference in their sight vocabulary scores at the end of grade one. Mark's exposure to words

in a variety of contexts appeared to give him the repetition he needed to commit the words to memory. There was also evidence that Mark had begun to use his limited knowledge of language early in grade one by utilizing context clues and prediction as he read. Early in grade one he was aware that reading had to make sense. It is interesting to note that Don was still operating at a word level and applied many nonsensical words when he was tested in grade four. Even with Mark's severe language difficulties, he was able to achieve the same score as Don on the comprehension subtest of the Gates MacGinitie Reading Test at the end of grade two. Mark also developed positive attitudes toward reading and willingly read his special teacher-prepared books to others. He sought books in the classroom and read during silent reading sessions. Don, on the other hand, participated in the take-home program without enthusiasm and did not seek books during school hours. He developed a poor attitude toward his difficulty in acquiring reading skills, which possibly contributed to the development of avoidance tactics in subsequent years.

Amy and Mark, the two children from the whole language group, scored higher on the sight vocabulary tests than did the children in the basal reader-phonics group. Even more important than their higher scores on word identification was their development of positive attitudes toward reading and their awareness that reading was a meaning seeking activity. Therefore, they achieved a desirable balance between word identification and meaning.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

This study was designed to discover whether a basal reader-phonics approach or a whole language approach would produce larger sight vocabularies in high risk grade one learners. Since these children come to school with many disadvantages both intellectually and socially, it would appear that any program implemented with them would need to build on their strengths while compensating for any lack in their pre-school environment. The whole language approach used in this study attempted to meet the needs of such learners. The whole language approach has a theoretical foundation in the psycholinguistic theory of reading and encourages the use of children's strengths in language--their syntactic and semantic knowledge--as a basis for developing reading.

The sample in this study was composed of eleven children from two grade one classes in two different years. Group one, consisting of five children who were in grade one during 1978-80, was taught through the Nelson Language Development Reading Program with an added teacher designed phonics program. The first four months focused on readiness activities, and the remainder of the year was spent using the pre-primers of the LDR Program, phonics lessons and easy books for take

home reading.

Group two, composed of six children who attended grade one in 1982-83, was taught through a whole language approach. This group was introduced to reading and writing through themes. Each day children were exposed to print in meaningful situations through language experience, predictable books, repetitive poetry and personal writing using invented spelling. These materials were also used in a take-home reading program. Various focusing and practice techniques were utilized to ensure that the subjects would focus on specific words while still profiting from the advantages of being introduced to words in a meaningful context.

The development of sight vocabulary in both groups was measured by the Slosson Oral Reading test (SORT) which was administered to both groups in May of their grade one and two years. The WISC-R was administered early in the grade one year to obtain verbal and performance ability scores. Correlations were calculated to determine the relationship between the variables. Two one-way analyses of variance were conducted to determine if the treatment was significant. Four case studies--two from each group--were included to illustrate advantages of the whole language approach not apparent in the statistical study.

Of the four hypothesis tested in the study only one was accepted. Hypothesis 1--for high risk grade one children the whole language approach will be more effective in promoting children's sight vocabularies than the basal reader-

phonics approach--was rejected. The whole language approach did not promote a larger sight vocabulary at the end of grade one although a wider spread of sight vocabulary scores was noted.

Hypothesis 2--for high risk grade one children any advantage in sight vocabulary development due to the use of the whole language approach in grade one will be maintained in grade two--was accepted since the results were significant at the .001 level. There appeared to be a cumulative effect of whole language that did not become evident until grade two.

Hypothesis 3--for high risk grade one children both verbal ability and performance ability will be positively related to sight vocabulary performance in both grades one and two and Hypothesis 4--for high risk grade one children age will be negatively related to sight vocabulary performance--were rejected because the relationships were not significant.

Conclusions

The conclusions of this study are drawn from the findings in chapter IV.

1. The whole language approach is viable to use with high risk learners in grade one. This approach allows individuals to acquire a vocabulary in keeping with their individual abilities.

2. The effects of using whole language become more noticable in grade two.

3. The utilization of good children's literature and activities in a whole language approach encourage children to view reading as a meaningful activity.

4. To help children become lovers of books it is necessary to provide many literature based activities throughout the reading program.

5. Highly predictable books should be provided for children who are slow in developing sight vocabulary.

6. Children's literature can be used to develop background knowledge.

7. A whole language approach exposes language disordered children to predictable language patterns which aid in developing syntax.

Recommendations

The whole language approach was viable when used with the high risk learners in this study. It is therefore recommended that it be used in other special education classes to determine whether similar results will be obtained.

The development of sight vocabulary is a necessary aspect of learning to read, since beginning readers must identify most of the words in a text in order to derive meaning from the print. It is concluded from the results

of this study that a whole language approach, which places emphasis on connecting text and meaning from the start, will produce readers who utilize more meaning-seeking strategies than do children instructed through other approaches. Therefore it is recommended that this conclusion receive further investigation.

A characteristic of students who were instructed through the whole language approach was their active involvement with and enjoyment of books. There was evidence in the case studies from that group that this interest was still strong by grade three. It is recommended that children initially instructed through a whole language approach be studied in grade six to determine whether they will have maintained this interest in reading.

BIBLIOGRAPHY

Beers, J., & Henderson, E. A study of developing orthographic concepts among first graders. Research in the Teaching of English, 1977, 11, 133-148.

Bond, G., & Dykstra, R. (Eds.) Interpreting the first grade reading studies. In The first grade reading studies: Findings of individual investigations. Newark, Del.: International Reading Association, 1967.

Bower, T. Reading by eye. In H. Levin & J. P. Williams (Eds.), Basic studies in reading. New York: Basic Books, 1970.

Bridge, C. A., Winogard, P., Healey, D. Using predictable materials VS. pre-primers to teach beginning sight words. The Reading Teacher, 1983, 36, 884-889.

Browne, B., Byrne, J., & Winter, L. The learning match. Englewood Cliffs, N.J.: Prentice-Hall Inc., 1980.

Bryan, T. H., & Bryan, J. H. Understanding learning disabilities. Port Washington, N.Y.: Alfred Publishing Co., 1975.

Carroll, J. B., & Chall, J. B. (Eds.). Toward a literate society: The Report of the Committee on Reading of the National Academy of Education. New York: McGraw-Hill, 1975.

Carroll, J. B., & Walton, M. Has the reel reeding prablum bin lade bear? In L. B. Resnick & P. A. Weaver (Eds.), Theory and Practice of Early Reading (Vol. 3). Hilldale, New Jersey: Lawrence Erlbaum Associates, 1979.

Chomsky, C. Write first. Read later. Childhood Education, 1971, 47, 196-199.

Clark, M. M. Young fluent readers. London: Heinemann Educational Books, 1976.

Clay, M. M. A syntactic analysis of reading errors. Journal of Verbal Learning and Verbal Behaviour, 1968, 7, 434-438.

Clay, M. M. What did I write? London: Heinemann Educational Books, 1975.

Cooper, C. R., & Petrosky, A. R. A psycholinguistic view of the fluent reading process. Journal of Reading, 1976, 20, 184-207.

De Ford, D. E. (Ed.) Learning to write: An expression of language. Theory into Practice, 1980, 19, 149-232.

Doake, D. Book experience and emergent reading behaviour. Paper presented at the annual meeting of the International Reading Association, Atlanta, May 1979.

Dunn, L. M., Mueller, M. H. The efficacy of the ita and PLDK with grade one disadvantaged children: After one year. (IMRID Papers & Reports). Nashville: George Peabody College for Teachers, 1966.

Dunn, L. M., Neville, D., Bailey, C. F., Pochanart, P., & Pfost, P. The effectiveness of three reading approaches and an oral language stimulation program with disadvantaged children in primary grades. An interim report after one year of the cooperative reading project (IMRID Behavioural Science Monograph No. 7). Nashville: George Peabody College for Teachers, 1967.

Durkin, D. Children who read before grade one. The Reading Teacher, 1961, 14, 163-166.

Durkin, D. Children who read early. New York: Teacher's College Press, 1966.

Durkin, D. A language arts program for pre-first grade children: Two year achievement report. Reading Research Quarterly, 1970, 5, 534-565.

Ehri, L. Beginning reading from a psycholinguistic perspective: Amalgamation of word identities. In F. B. Murray (Ed.), The recognition of words. Newark, Delaware: International Reading Association, 1978.

Ehri, L., & Roberts, K. Do beginners learn printed words better in context or in isolation? Child Development, 1979, 50, 675-685.

Emans, R. Use of context clues. In Figurel, J. A. (Ed.), Reading and realism. Proceedings of 13th Annual Convention of the International Reading Association, 1969.

Flesch, R. Why Johnny can't read and what you can do about it. New York: Harper, 1955.

Gardner, K. Early reading skills. In Reading skills: Theory and practice. London: Ward Lock Educational, 1970.

Gillespie-Silver, R. Teaching reading to children with special needs. Columbus, Ohio: Charles E. Merrill, 1979.

Goodman, K. S. A linguistic study of cues and miscues in reading. Elementary English, 1965, 42, 639-643.

Goodman, K. S. The psycholinguistic nature of the reading process. In K. S. Goodman (Ed.), The psycholinguistic nature of the reading process. Detroit: Wayne State University Press, 1968.

Goodman, K. S. Behind the eye: What happens in reading. In K. S. Goodman and O. S. Niles (Eds.), Reading process and program. Urbana, Illinois: National Council of Teachers of English, 1970.

Goodman, K. S. Orthography in a theory of reading instruction. Elementary English, 1972, 49, 1254-1261.

Goodman, K. S. Reading: A psycholinguistic guessing game. In H. Singer & R. Ruddell (Eds.), Theoretical models and processes of reading. Newark, Delaware: International Reading Association, 1976.

Goodman, K. S. The know-more and know-nothing movements in reading: A personal response. Language Arts, 1979, 56, 657-663.

Goodman, K. S., & Burke, C. L. When a child reads: A psycholinguistic analysis. Elementary English, 1970, 121-129.

Goodman, K. S., & Burke, C. L. Theoretically based studies of patterns of miscues in oral reading. Final Report. Detroit: Wayne State University, 1973. (ERIC 097 708)

Goodman, K. S., & Goodman, Y. Learning about psycholinguistic processes by analyzing oral reading. Harvard Educational Review, 1977, 47, 317-333.

Goodman, K. S., & Goodman, Y. Learning to read is natural. In L. B. Resnick & P. A. Weaver (Eds.), Theory and practice of early reading (Vol. 1). Hilldale, New Jersey: Lawrence Erlbaum Associates, 1979.

Goodman, Y. Beginning reading development: Strategies and principles. In R. P. Parker & I. A. Davis (Eds.), Developing Literacy. Newark, Delaware: International Reading Association, 1983.

Gulknecht, F. A. A psycholinguistic analysis of the oral reading behaviour of selected children identified as perceptually handicapped. Unpublished doctoral dissertation, Wayne State University, Detroit, Michigan, 1971.

Hall, M. A., Moretz, S. A., Statom, J. Writing before grade one. A study of early writers. Language Arts, 1976, 53, 582-585.

Harste, J., Burke, C., Woodward, V. Children, their language and world: Initial encounters with print. Final report. NIE Project #NIE-G-79-0132, 1982.

Harste, J., Carey, R. Comprehension as setting. In New Perspectives on comprehension. Monograph in Language and Reading Studies. Monographs in Teaching and Learning. Bloomington, Indiana: Indiana University School of Education, 1979.

Henderson, E., Estes, T., Stonecash, S. An exploratory study of word acquisition among first graders at mid-year in a language experience approach. Journal of Reading Behaviour, 1972, 4, 21-31.

Hildreth, G. Experience related reading for school beginners. Elementary English, 1965, 42, 280-297.

Holdaway, D. The foundations of literacy. Sydney: Ashton Scholastic, 1979.

Holdaway, D. Stability and change in literacy learning. Exler, New Hampshire: Heinemann Educational Books, Inc., 1984.

Hopkins, H. H. From talkers to readers the natural way. New York: Scholastic, 1977.

Johnston, G. O. Education for the slow learner. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1963.

Kavanagh, J. F., & Mallingly, T. Language by ear and by eye: The relationship between speech and reading. Cambridge, Mass.: M.I.T. Press, 1972.

Kelly, A. M. Sight vocabulary and experience stories. Elementary English, 1977, 52, 527-528.

King, M. L. Learning how to mean in written language. Theory into Practice, 1980, 19, 163-169.

Kirk, S. A. Educating exceptional children. Boston: Houghton Mifflin Co., 1972.

Kirk, S. A., Klubham, Sr. J. M., Lerner, J. M. Teaching reading to slow and disabled learners. Boston: Houghton Mifflin Co., 1978.

Lenneberg, E. H. Biological foundations of language. New York: Wiley & Sons, 1967.

Mandler, J. M., & Johnston, N. S. Remembrance of things passed: Story structure and recall. Cognitive Psychology, 1977, 9, 111-115.

Marchbanks, G., & Levin, H. Cues by which children recognize words. Journal of Educational Psychology, 1965, 56, 57-61.

McCracken, R. A., & McCracken, M. J. Reading is only the tiger's tail. San Rafael, California: Leswing Press, 1972.

McCracken, R. A., & McCracken, M. J. Reading, writing and language. Winnipeg: Peguis Publisher Ltd., 1979.

Neville, D., & Vandever, T. R. Decoding as a result of synthetic and analytic presentation for retarded and nonretarded children. American Journal of Mental Deficiency, 1973, 77, 533-537.

Piaget, J. Development and Learning. In R. Ripple and V. Rockcastle (Eds.), Piaget rediscovered. Ithaca: Cornell University, 1964.

Plessas, G. P., & Oakes, C. R. Prereading experiences of selected early readers. The Reading Teacher, 1964, 17, 241-245.

Read, C. Pre-school children's knowledge of English phonology. Harvard Educational Review, 1971, 41, 1-34.

Read, C. Children's categorization of speech sounds in English. Research Report No. 17. Urbana, Illinois: National Council of Teachers of English, 1975.

Reed, T. C., Rabe, E. F., Mankinen, H. Teaching reading to brain-damaged children: A review. In D. D. Hammill & N. R. Bartel (Eds.), Educational perspectives in learning disabilities. New York: John Wiley & Sons, 1971.

Reber, A. S., & Scarborough, D. L. Towards a psychology of reading: The proceedings of the CUNY conferences. Hillside, N. J.: Lawrence Erlbaum Associates, 1977.

Reifman, B., Pascarella, E., & Larson, A. The effects of word bank identification on sight word acquisition. Journal of Educational Research, 1981, 74, 175-178.

Rhodes, L. K. Organizing the Elementary Classroom for Effective Language Learning. In U. H. Hardt (Ed.), Teaching reading with the other language arts. Newark, Delaware: International Reading Assocation, 1983.

Rhodes, L. K., & Brinson, B. A psycholinguistic analysis of EMR children reading materials of varying predictability. Bloomington, Indiana: Indiana University, 1976.

Samuels, S. J. Modes of word recognition. In H. Singer & R. B. Ruddell (Eds.), Theoretical Models of Processes of Reading (2nd Ed.). Newark, Delaware: International Reading Association, 1976.

Samuels, S. J., & Jeffrey, W. Discriminability of word and letter cues used in learning to read. Journal of Educational Psychology, 1966, 57, 337-340.

Schvanevilt, R., Ackerman, B. P., & Semlear, T. The effect of semantic context on children's word recognition. Child Development, 1977, 48, 612-616.

Sitko, M. C., Semmel, D. S., Wilcove, G., & Semmel, M. I. The relationship of word and sentence associations of EMR children to reading performance. Bloomington, Indiana: Center for Innovation in Teaching the Handicapped, Indiana University, 1977.

Smith, F. Understanding reading. New York: Holt, Rinehart & Winston, 1971, 1978a.

Smith, F. Psycholinguistics and reading. Toronto: Holt, Rinehart & Winston, 1973.

Smith, F. Learning to read by bringing meaning to text. Unpublished Manuscript, Ontario Institute for Studies in Education, Toronto, 1977.

Smith, F. Reading without nonsense. New York: Teachers College, Columbia University, 1978b.

Sutton, M. H. First grade children who learned to read in kindergarten. The Reading Teacher, 1965, 19, 192-196.

Tate, D. J. Teaching the disadvantaged. Palo Alto, California: Peek Publications, 1971.

Teale, W. H. Positive environments for learning to read: What studies of early readers tell us. Language Arts, 1978, 55, 922-932.

Thorndike, P. W. Cognitive structures in comprehension and memory of narrative discourse. Cognitive Psychology, 1977, 9, 77-110.

Torrey, J. W. Learning to read without a teacher: A case study. Elementary English, 1969, 46, 550-556, 658.

Weber, R. A. Linguistic analysis of first grade reading errors. Journal of Verbal Learning and Verbal Behaviour, 1968, 7, 434-437.

Weber, R. M. The study of oral reading errors: A survey of the literature. Reading Research Quarterly, 1968, 4, 96-119.

Williams, J. Reaction to modes of word recognition. In H. Singer & R. B. Rudell (Eds.), Theoretical Models of Processes of Reading (2nd Ed.). Newark, Delaware: International Reading Association, 1976.

Wiseman, D., & Watson, D. The good news about becoming a writer. Language Arts, 1980, 57, 7, 750-755.

Woodcock, R. H., & Dunn, L. M. Efficacy of several approaches for teaching reading to the educable mentally retarded. U.S. Office of Education Project. Nashville: George Peabody College for Teachers, 1967.

Yardley, A. Structure in early learning. London: Evans Brothers Ltd., 1974.

APPENDIX A

Suggested Books

for Take-Home Reading Program

BOOKS FOR TAKE HOME READING PROGRAM

Academic Press
School Department
55 Barber Green Road
Don Mills, Ontario
M3C Z1A

1. Breakthrough Books
2. This Is the Way I Go
3. Can You Do This?

Addison-Wesley
P.O. Box 580
Don Mills, Ontario
M3C Z8T

4. Children's Language Program Reading Booklets
5. First Read By Myself Books
6. Our Book Corner

Doubleday Canada Limited
Educational Division
105 Bond Street
Toronto, Ontario
M5B 1Y3

7. Chime In

Gage Publishing Ltd.
164 Commander Blvd.
Agincourt, Ontario
M1S 3C7

8. Words Alive
9. Mini Books (Expressways)
10. 6X8 Books (Expressways)
11. Reading Corner 1

Ginn & Company
Educational Publishers
3771 Victoria Park Avenue
Scarborough, Ontario
M1W 2P9

12. Start With Rhymes
13. Once Upon A Time Series
14. Get-Ready Books
15. Ready-Set Go Books
16. Small Read-Together Books

Holt, Rinehart & Winston Ltd.
55 Horner Avenue
Toronto, Ontario
M8Z 4X6

17. Instant Readers

Methuen
2330 Midland Avenue
Agincourt, Ontario
M1S 1P7

18. Read It Yourself Books
19. Methuen Caption Books
20. Readalongs
21. Instant Readers
22. The Terraced House Books
23. Read to Read
24. Methuen Story Readers
25. The Helen Piers Mouse Books
26. The Helen Piers Rabbit Books

Nelson Canada,
1120 Birchmount Road
Scarborough, Ontario
M1K 5G4

27. Nelson Venture Library - Level P

28. Nelson Venture Library - Level 1

The Resource Centre
P.O. Box 190
Waterloo, Ontario
N2J 3Z9

29. Monster Books

30. Thunder the Dinosour

31. Gay Colour Reader

32. Instant Readers

APPENDIX B

Predictable Books

Predictable Books

Adams, Pam. This Old Man. New York, N.Y.: Grossett & Dunlap, 1974.

Adler, D. A. You Think It's Fun to be a Clown. New York, N.Y.: Doubleday, 1980.

Alain. One, Two, Three, Going to Sea. New York, N.Y.: Scholastic, 1964.

Aliki. Go Tell Aunt Rhody. New York, N.Y.: Macmillan, 1974.

Aliki. Hush Little Baby. Englewood Cliffs, N.J.: Prentice-Hall, 1968.

Aliki. My Five Senses. New York, N.Y.: T. Y. Crowell, 1962.

Aruego, J., & Dewey, D. We Hide, You Seek. New York, N.Y.: Greenwillow, 1979.

Asch, Frank. Monkey Face. New York, N.Y.: Parents' Magazine Press, 1977.

Ayal, Ora. UGBU. New York, N.Y.: Harper & Row, 1979.

Balian, Lorna. The Animal. Nashville, Tenn.: Abingdon Press, 1972.

Balian, Lorna. Where in the World Is Henry? Scarsdale, N.Y.: Bradbury Press, 1972.

Barahas, Sarah. I Was Walking Down the Road. New York, N.Y.: Scholastic, 1975.

Barton, Byron. Buzz, Buzz, Buzz. New York, N.Y.: Scholastic, 1973.

Barrett, Judi. Animals Should Definitely Not Wear Clothing. New York, N.Y.: Random House, 1962.

Baum, Arline, & Baum, Joseph. One Bright Monday Morning. New York, N.Y.: Random House, 1962.

Becker, John. Seven Little Rabbits. New York, N.Y.: Scholastic, 1973.

Beckman, Kau. Lisa Cannot Sleep. New York, N.Y.: Franklin Watts, 1969.

Bellah, Melanie. A First Book of Sounds. Racine, Wis.: Golden Press, 1963.

Berenstain, Stanley, & Berenstain, Janice. The B Book. New York, N.Y.: Random House, 1971.

Bonne, Rose, & Mills, Alan. I Know an Old Lady. New York, N.Y.: Rand McNally, 1961.

Bornstein, Ruth. Little Gorilla. New York, N.Y.: Scholastic, 1976.

Bowden, Joan. The Bean Boy. New York, N.Y.: Macmillan, 1979.

Brand, Oscar. When I First Came to This Land. New York, N.Y.: Putnam's Sons, 1974.

Brandenberg, Frany. I Once Knew a Man. New York, N.Y.: Macmillan, 1970.

Brown, Anthony. Bear Hunt. New York, N.Y.: Atheneum, 1979.

Brown, Marcia. The Three Billy Goats Gruff. New York, N.Y.: Harcourt, Brace, Jovanovich, 1957.

Brown, Margaret Wise. Four Fur Feet. New York, N.Y.: William R. Scott, 1961.

Brown, Margaret Wise. Goodnight Moon. New York, N.Y.: Harper & Row, 1947.

Brown, Margaret Wise. Home for a Bunny. Racine, Wis.: Golden Press, 1956.

Brown, Margaret Wise. Where Have You Been? New York, N.Y.: Scholastic, 1952.

Brown, Ruth. A Dark, Dark Tale. New York, N.Y.: Dial Press, 1981.

Burmingham, John. The Blanket. New York, N.Y.: T. Y. Crowell, 1976.

Burmingham, John. The Dog. New York, N.Y.: T. Y. Crowell, 1976.

Burmingham, John. Mrs. Gumpy's Outing. New York, N.Y.: Scholastic, 1970.

Carle, Eric. The Grouchy Ladybug. New York, N.Y.: T. Y. Crowell, 1977.

Carle, Eric. The Mixed Up Chameleon. New York, N.Y.: T.Y. Crowell, 1975.

Carle, Eric. The Very Hungry Caterpillar. Cleveland, Ohio: Collins World, 1969.

Charles, Norma. See You Later, Alligator. New York, N.Y.: Scholastic, 1974.

Charlip, Remy. Fortunately. New York, N.Y.: Parents' Magazine Press, 1964.

Charlip, Remy. Mother, Mother, I Feel Sick. New York, N.Y.: Parents' Magazine Press, 1966.

Charlip, Remy. What Good Luck! What Bad Luck! New York, N.Y.: Scholastic, 1969.

Considine, Kate, & Schuler, Ruby. One, Two, Three, Four. New York, N.Y.: Holt, Rinehart & Winston, 1965.

Cook, Bernadine. The Little Fish That Got Away. Reading, Mass.: Addison-Wesley, 1976.

de Regniers, Beatrice. Catch a Little Fox. New York, N.Y.: Seabury Press, 1970.

de Regniers, Beatrice. The Day Everybody Cried. New York, N.Y.: Viking Press, 1967.

de Regniers, Beatrice. How Joe the Bear and Sam the Mouse Got Together. New York, N.Y.: Parents' Magazine Press, 1967.

de Regniers, Beatrice. The Little Book. New York, N.Y.: Henry Z. Walck, 1961.

de Regniers, Beatrice. May I Bring A Friend? New York, N.Y.: Atheneum, 1972.

de Regniers, Beatrice. Willy O'Dwyer Jumped in the Fire. New York, N.Y.: Atheneum, 1968.

de Vries, Joh. In My Back Yard. New York, N.Y.: Scholastic, 1975.

Domanska, Janina. If All the Seas Were One Sea. New York, N.Y.: Macmillan, 1971.

Duff, Maggie. Johnny & His Drum. New York, N.Y.: Henry Z. Walck, 1972.

Duff, Maggie. Rum, Pum, Pum. New York, N.Y.: Macmillan, 1978.

Einsel, Walter. Did You Ever See? New York, N.Y.: Scholastic, 1962.

Emberley, Barbara. Drummer Hoff. Englewood Cliffs, N.J.: Prentice-Hall, 1967.

Emberley, Barbara. Simon's Song. Englewood Cliffs, N.J.: Prentice-Hall, 1969.

Emberly, Ed. Klippity, Klop. Boston, Mass.: Little, Brown, 1974.

Ets, Marie Hall. Elephant in a Wall. New York, N.Y.: The Viking Press, 1972.

Ets, Marie Hall. Play With Me. New York, N.Y.: The Viking Press, 1955.

Flack, Marjorie. Ask Mr. Bear. New York, N.Y.: Macmillan, 1932.

Galdone, Paul. Henny Penny. New York, N.Y.: Scholastic, 1968.

Galdone, Paul. The Little Red Hen. New York, N.Y.: Scholastic, 1973.

Galdone, Paul. The Three Bears. New York, N.Y.: Scholastic, 1972.

Galdone, Paul. The Three Little Pigs. New York, N.Y.: Seabury Press, 1970.

Ginsburg, Mirra. The Chick & the Duckling. New York, N.Y.: Macmillan, 1972.

Ginsburg, Mirra. Good Morning Chick. New York, N.Y.: Greenwillow, 1980.

Greenburg, Polly. Oh Lord, I Wish I Was a Buzzard. New York, N.Y.: Macmillan, 1968.

Hoffman, Hilde. The Green Grass Grows All Around. New York, N.Y.: Macmillan, 1968.

Hogrogran, N. One Fine Day. New York, N.Y.: Macmillan, 1971.

Hutchins, Pat. Good Night Owl. New York, N.Y.: Macmillan, 1972.

Hutchins, Pat. Rosie's Walk. New York, N.Y.: Macmillan, 1968.

Hutchins, Pat. The Surprise Party. New York, N.Y.: Collier, 1969.

Hutchins, Pat. Titch. New York, N.Y.: Collier, 1971.

Keats, Ezra Jack. Over in the Meadow. New York, N.Y.: Scholastic, 1971.

Kent, Jack. The Fat Cat. New York, N.Y.: Scholastic, 1971.

Klein, Lenora. Brave Daniel. New York, N.Y.: Scholastic, 1958.

Kraus, Robert. Whose Mouse Are You? New York, N.Y.: Collier, 1970.

Kraus, Ruth. Bears. New York, N.Y.: Scholastic, 1948.

Kraus, Ruth. The Happy Egg. New York, N.Y.: Scholastic, 1967.

Kraus, Ruth. What A Fine Day For ... New York, N.Y.: Parents' Magazine Press, 1967.

Langstaff, John. Frog Went a Courtin'. New York, N.Y.: Harcourt, Brace, Jovanovich, 1955.

Langstaff, John. Gather My Gold Together. Four Songs for Four. Garden City, N.Y.: Doubleday, 1971.

Langstaff, John. Oh, A Hunting We Will Go. New York, N.Y.: Atheneum, 1974.

Langstaff, John. Soldier, Soldier, Won't You Marry Me? Garden City, N.Y.: Doubleday, 1971.

Langstaff, John. The Golden Vanity. New York, N.Y.: Harcourt, Brace, Jovanovich, 1972.

Laurence, Ester. We're Off to Catch a Dragon. Nashville, Tenn.: Abingdon Press, 1969.

Lexau, Joan. Crocodile and Hen. New York, N.Y.: Harper & Row, 1969.

Lobel, Anita. King Rooster. Queen Hen. New York, N.Y.: Greenwillow, 1975.

Lobel, Arnold. A Treeful of Pigs. New York, N.Y.: Greenwillow, 1979.

Mack, Stan. 10 Bears in My Bed. New York, N.Y.: Pantheon, 1974.

Martin, Bill. Brown Bear, Brown Bear. New York, N.Y.: Holt, Rinehart & Winston, 1970.

Martin, Bill. Fire! Fire! said Mrs. McGuire. New York, N.Y.: Holt, Rinehart & Winston, 1970.

Martin, Bill. The Haunted House. New York, N.Y.: Holt, Rinehart & Winston, 1970.

Mayer, Mercer. If I Had ... New York, N.Y.: Dial Press, 1968.

Mayer, Mercer. Just For You. New York, N.Y.: Golden Press, 1975.

McGovern, Ann. Too Much Noise. New York, N.Y.: Scholastic, 1967.

Memling, Carl. Ten Little Animals. Racine, Wis.: Golden Press, 1961.

Merriam, E. Do You Want to See Something? New York, N.Y.: Scholastic, 1965.

Milts, A. Over the Rolling Sea. New York, N.Y.: Scholastic, 1967.

Moffett, Martha. A Flower Pot Is Not a Hat. New York, N.Y.: E. P. Dulton, 1972.

Patrick, Gloria. A Bug in a Jug. New York, N.Y.: Scholastic, 1970.

Peek, Merle. Roll Over! A Counting Book. Boston: Houghton, Mifflin, 1981.

Peppe, Rodney. The House That Jack Built. New York, N.Y.: Delacorte, 1970.

Poluskin, Maria. Mother, Mother, I Want Another. New York, N.Y.: Crown Publishers, 1978.

Preston, Edna Mitchell. Where Did My Mother Go? New York, N.Y.: Four Winds Press, 1978.

Quackenbush, Robert. She'll Be Comin' Round the Mountain. Philadelphia, Pa.: J.B. Lippincott, 1973.

Quackenbush, Robert. Poems for Counting. New York, N.Y.: Holt, Rinehart & Winston, 1965.

Quackenbush, Robert. Skip to my Lou. Philadelphia, Pa.: J. B. Lippincott, 1975.

Rokoff, Sandra. Here Is a Cat. Singapore: Hallmark Children's Editions. No date.

Scheer, Jullian, & Marvin Bileck. Rain Makes Applesauce. New York, N.Y.: Holiday House, 1964.

Scheer, Jullian, & Marvin Bileck. Upside Down Day. New York, N.Y.: Holiday House, 1968.

Sendak, Maurice. Where the Wild Things Are. New York, N.Y.: Scholastic, 1963.

Sendak, Maurice. Chicken Soup With Rice. New York, N.Y.: Scholastic, 1962.

Shaw, Charles B. It Looked Like Spilt Milk. New York, N.Y.: Harper & Row, 1947.

Shulevity, Uri. One Monday Morning. New York, N.Y.: Scribner's, 1967.

Scaar, Grace. What Do the Animals Say? New York, N.Y.: Scholastic, 1972.

Sonneborn, Ruth A. Someone Is Eating the Sun. New York, N.Y.: Random House, 1974.

Spier, Peter. The Fox Went Out on a Chilly Night. Garden City, N.Y.: Doubleday, 1961.

Stover, JoAnn. If Everybody Did. New York, N.Y.: David McKay, 1960.

Tolstoy, Alexei. The Great Big Enormous Turnip. New York, N.Y.: Franklin Watts, 1968.

Welber, Robert. Goodbye, Hello. New York, N.Y.: Pantheon, 1974.

Wildsmith, Brian. The Twelve Days of Christmas. New York, N.Y.: Franklin Watter, 1972.

Williams, Garth. The Chicken Book. New York, N.Y.: Scholastic, 1970.

Withers, Carl. A Rocket in My Pocket. New York, N.Y.: Scholastic, 1967.

Wolkstein, Diane. The Visit. New York, N.Y.: Alfred A. Knopf, 1977.

Wonduska, William. All the Animals Were Angry. New York, N.Y.: Holt, Rinehart & Winston, 1970.

Zaid, Barry. Chicken Little. New York, N.Y.: Random House, No date.

Zemach, Harve. The Judge. New York, N.Y.: Farrar, Straus & Giroux, 1969.

Zemach, Margot. Hush Little Baby. New York, N.Y.: E.P. Dutton, 1976.

Zemach, Margot. The Teeny Tiny Woman. New York, N.Y.: Scholastic, 1965.

Zolotow, Charlotte. Do You Know What I'll Do? New York, N.Y.: Scholastic, 1965.

Zolotow, Charlotte. It's Not Fair. New York, N.Y.: Random House, 1976.

APPENDIX C

Focusing Techniques

Focusing Techniques

These activities may be used with charts or big books to encourage the children to focus on a word while still preserving the context of the text. These techniques have come from a variety of resources including:

Holdaway, D. The Foundations of Literacy. Sydney: Ashton Scholastic, 1979.

McCracken, R. A., & McCracken, M. H. Reading Is Only the Tiger's Tail. San Rafael, California: Leswing Press, 1972.

McCracken, R. A., & McCracken, M. J. Reading, Writing & Language. Winnipeg: Peguis Publishers Ltd., 1979.

1. Masking. Holdaway (1979, p. 76) describes a mask teachers can use when a word needs to be isolated from its context to enable the children to focus on the specific details of the word.

2. Overhead Projector Coverups. Another device described by Holdaway (1979, p. 75) is an ordinary overhead transparency with a cardboard frame which can be used with the overhead projector. A long strip of cardboard is attached on the right side. Staples are used to make slots for the cardboard coverups. These strips may be moved as the class reads along.

3. Pointing. Marie Clay's studies (1972, pp. 71-73) indicate that pointing is an important strategy to use during early reading, since it encourages children to see the one to one relationship between spoken and written words. It also indicates that reading has a left to right

progression. Clay recommends that the pointing should be word by word rather than in a sweeping motion.

4. Different Print. The use of big print with small, different styles of print or a change in colour or format encourages the children to focus their attention on specific words.

5. Different Colours. Specific words can be written in colour while the text is being prepared, or the teacher can direct students' attention to specific words by circling them in different colours.

APPENDIX D

Practice Activities

Practice Activities

1. Word Cut Outs. Words from a chart text are cut out and taped to the chalkboard or wall. The children must read along the chart until they come to the missing word. They must then find the correct word and tape it in its correct position. Often children will need to read beyond the blank space to obtain additional information.

2. Word Boxes. Words that have received attention in books and charts may be included in a classroom word box. Print the word on one side of a card and a sentence containing the word in a helpful context on the other side. These cards can then be used for a variety of word games.

3. Pocket Chart Sentences. Any word placed in the class word box can also be placed on smaller word cards for use in a pocket chart. The children can arrange the words to form sentences which are then read. The teacher may also dictate a sentence and have a student find the appropriate words and arrange them in order.

4. Repetitive Sentences. A number of basic words can be reinforced by using a frame sentence technique. The teacher writes the first part of a sentence and the child orally completes it as the teacher records the response. Attention can be drawn to the repetitive words by underlining or colour change.

5. Teacher Made Booklets. Teachers can make their own repetitive booklets to be used by the children to practice previously "introduced" words. Old workbooks are a good source of pictures. The text should be strongly connected to the pictures and thus be highly predictable. A possible title could be, Where Is It? with text such as: The dog is in the house. The bread is on the table.

6. Take-Home Reading Program. A collection of easy predictable books or other simply written books can be used for a take-home reading program. The teacher organizes a method of signing out books daily and the stories are read by the child to the parent. A list of the books read by each child is compiled. Stickers can be used as reinforcement after so many books are read.

7. Taped Stories. Predictable books that have been practiced in class can be recorded on tape. The children read along with the tape, pointing at each word. This setup allows children easy access to their favourite books and also frees the teacher for other activities.

APPENDIX E

Rain Theme

Sample of the Organization of a Theme Used in the Study

Theme: Rain Grade Level: One

Objectives:

1. To expose children to the language of literature
2. To encourage interest in good literature
3. To present reading and writing as meaningful, purposeful activities
4. To develop an awareness of left to right progression
5. To develop a concept of word
6. To develop knowledge of the various aspects of rain listed in the content
7. To develop predicting skills while listening to stories being read
8. To introduce the initial consonants r, f, c, m, in the context of stories
9. To introduce sight vocabulary in a meaningful context and focus on the following words: rain, walk, falls, run, play, in, the, they, makes, said
10. To introduce new vocabulary in connection with rain

Content:

A. How Rain Helps

- to encourage growth of plants
- to clean and refresh the environment
- to provide water for various human activities

B. Activities in the Rain

- listening to the rain
- walking in the rain
- watching the rain
- playing in the rain

C. Rain Is Interesting

- sudden changes in the environment often accompany rain
- rain falls in different ways
- the physical changes that result from rain (e.g. puddles, floods)
- rainbows come after rain

D. How Rain Is Made

Daily Organization. The activities in this theme could be initiated over a three-week time block. It is possible to utilize this approach in a language arts time block. The interest and abilities of the pupils help the teacher decide appropriate activities. The following activities can be included in each day's timetable and other activities can be chosen to complete the day.

1. Weather forecast
2. Big book reading
3. Poetry reading
4. Ongoing vocabulary development
5. Journal writing
6. Concept development

1. Introduction

Arrange a suitable picture display of various aspects of rainy weather and collect suitable books in the bibliography from the library.

Begin the theme by discussing the pictures. Talk about

the different things rain can do. Begin a structured language experience chart and allow each child to tell one thing the rain can do. Record the sentences on chart paper. Begin each sentence with - Rain can .... If any of the children's ideas correspond to the pictures previously discussed, they may be used as captions for the display.

2. Reading in Context

Begin each morning session with a weather report written on the chalkboard for the children to read. After several days some of the words will become familiar. This is a good predicting activity, since the weather outside will give a good indication of the content of the message.

3. Poetry

Spend time each morning reading several of the poems selected for the theme. These poems should be written on charts and displayed so all children can see the print as it is being read.

4. Big Books

Two good books to reproduce as big books include Where Is Everybody? by Remy Charlip and The Rain Puddle by Adelaide Holl. Procedures for using big books can be found in Holdaway's The Foundations of Literacy (1979).

5. Present Peter Spier's Rain, a beautifully illustrated wordless picture book, to encourage discussion of what you can do in the rain. Record all the words that the children

suggest. Give each student a large sheet of paper to illustrate what they like to do in the rain. Encourage as many different illustrations as possible. As each picture is finished ask the child to compose a sentence to go with his/her picture. Record the sentence on a strip of paper and clip to the picture. Sort the pictures into two piles and use them as illustrations for two big books. Record the sentence in big print under each picture. The pages may be laminated to make them more durable.

Use the book as text on future days. Use many of the focusing and practice techniques in Appendices 3 and 4 to encourage the recognition of the vocabulary.

6. Vocabulary Development

(a) Brainstorm for the various places you can find water. Record them on a chart.

Water in a _____

pond	sea	sink	
river	bathtub	toilet	
ocean	cup	puddle	etc.

(b) As various books are being read to the children, have them listen to find words that tell the different kinds of rain or what rain is like. This should be an ongoing activity and the list should grow from day to day. Some of the following words plus many others should arise:

drizzle	wet	damp
mist	shower	downpour

A good book to start with would be Uri Shulevitz's Rain, Rain Rivers.

These words can be attractively arranged on a display board with clouds, raindrops and children holding umbrellas. (See Art Activities, #8).

7. Writing

(a) Provide an assortment of pictures about rainy weather. Allow the children to choose one they each like and write or tell a sentence about it. All the pictures are then displayed on the wall. Each child reads his sentence and the class tries to find the matching picture.

(b) Read the book Rain Makes Applesauce by J. Schier. Discuss the "silly talk" in the book and encourage the class to come up with their own absurdities. Make a list of them on chart paper. Each child can then choose one to illustrate or can write an original one. The pictures can be sorted into their own class book with accompanying text. This can then be used as reading material.

8. Art

Use Charlotte Zolotow's The Storm Book to begin this activity. You will also need paper, wax crayons, gray wash (tempera and water) and brushes. Discuss how to make the picture show that it is windy (trees bent, umbrella lifting). Children draw a spring scene using wax crayons. Then the gray wash is used to give the effect of an overcast day.

Read the poem "The Umbrella Brigade" in Childcraft, Poems and Rhymes (p. 93). Children make cutouts of themselves wearing raincoat, hat and rubber boots. Search through wallpaper samples for suitable patterns to use for the umbrella. The handle can be made from popsicle sticks.

The book Umbrella by Taro Yashima could also be read to introduce this activity or after it is completed.

This activity can accompany the big book The Rain Puddle.

After the children have become familiar with the story, ask them if they have ever seen anything in puddles. Hopefully someone will suggest colour swirls made by oil or gas spills. (If not, hints might help.)

You can get the same effect with paper and water. Place a 9 x 13 inch pan on newspaper. Add 2 tablespoons turpentine and fill the pan half full of water. Add ½ teaspoon of oil paint. Stir with a stick. The paint floats on top. Lay a piece of white paper flat on top and lift off. Dry. You will have a very interesting design.

The directions for this activity can be put on chart paper and read as each step is performed.

9. Concept Development

Throughout the theme every opportunity should be taken to read a variety of books on the topic. Discussion could revolve around the concepts listed at the beginning of the theme.

Evaluation

1. Place the sight words that received attention throughout the theme on word cards. Use a pocket chart to combine the words and make sentences. Encourage the children to take turns reading the sentences. Some of the children may be able to combine the words to create their own sentences for the class to read.

2. A final chart should be made by combining the information the class has learned about rain. Number the items and allow each child to choose a number. He/she will illustrate the sentence for the number chosen. The information can be shared with another class by letting the child show his/her picture and tell the fact.

3. Informal evaluation can be carried out throughout the theme. Ongoing teacher comments on pupil progress can be made on individual file cards which may be kept in a master box for easy access.

BIBLIOGRAPHY

Charlip, R. Where is everybody? Reading, Mass.: Addison-Wesley, 1957.

Holl, A. The rain puddle. New York: Lathrop, 1965.

Schier, J. Rain makes applesauce. New York: Holiday House, 1964.

Shulevitz, U. Rain, rain, rivers. New York: Farra, 1969.

Spier, P. Rain. New York: Garden City, New York: Doubleday, 1982.

Yashima, T. Umbrella. New York: Viking, 1958.

Zolotow, C. The storm book. New York: Harper, 1952.

APPENDIX F

DATA MATRIX

Case	Sex	Age	T Treatment	V Verbal	P Performance	1.8 S_1	2.8 S_2
1	M	87	1	80	93	.9	1.0
2	F	82	1	72	100	.9	1.1
3	M	86	1	73	80	.8	1.3
4	M	73	1	97	108	.8	.8
5	M	80	1	100	85	.9	N/A
6	M	77	2	80	78	.9	1.7
7	M	86	2	62	71	.7	1.8
8	M	69	2	67	96	1.1	2.1
9	F	79	2	70	90	1.3	1.9
10	M	83	2	90	87	1.5	2.7
11	M	76	2	95	101	1.2	1.7