

UTILIZATION OF LANGUAGE
EXPERIENCE AS A FEATURE
OF READING READINESS

CENTRE FOR NEWFOUNDLAND STUDIES

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UTILIZATION OF LANGUAGE EXPERIENCE AS A
FEATURE OF READING READINESS

An Internship
submitted to
The Department of Curriculum and Instruction
Memorial University of Newfoundland

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

by

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ABSTRACT

The primary purpose of this study was to investigate the effectiveness of a supplementary language experience approach on kindergarten performance in reading readiness.

The two main hypotheses explored were:

1. There are no significant differences in the level of reading readiness as measured by the Metropolitan Readiness Test (Form P, Level II) between the control group and the experimental group at the conclusion of the investigation after scores are adjusted for pretest differences by an analysis of covariance.

2. There are no significant differences in oral language development between the control group and the experimental group as measured by the Peabody Picture Vocabulary Test (Form B) at the conclusion of the investigation after scores are adjusted for pretest differences by an analysis of covariance.

The sample consisted of forty-two kindergarten students from one elementary school under the jurisdiction of the Roman Catholic School Board for St. John's. The test battery for each child consisted of the Metropolitan Readiness Test (Form P, Levels I and II) and the Peabody Picture Vocabulary Test (Forms A and B). The Breakthrough to

Literacy program was the specific language experience approach utilized. The study began in early October 1978, following pretesting, and continued for a period of six and one-half months, ending on April 30, 1979.

Results were analyzed statistically by means of an analysis of covariance. In reading readiness, only total raw scores obtained from the sum of all subtests of each Metropolitan Readiness Test (Form P, Levels I and II) were subjected to statistical analysis as the objective of the investigation was to examine overall performance rather than focus on any individual components. In oral language development, as well, the raw scores on the Peabody Picture Vocabulary Test (Forms A and B) were utilized for analysis.

At the .05 level of confidence, statistical analysis revealed that there were no significant differences between the experimental group and the control group in either reading readiness or oral language development. The statistical results, however, provide somewhat limited information due to the small sample size utilized and to the method employed in pretesting and in the formation of the experimental and control group. The investigator's subjective interpretation, having participated in the study for a period of six and one-half months, was that utilization of the Breakthrough to Literacy program for language experience was more suited to a grade one or an advanced kindergarten class.

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CHAPTER I

THE PROBLEM

Introduction

Background of the Study

Reading readiness is a concept broad in scope and difficult to delimit. Generally speaking, however, it is concerned with two diverse attributes: time and experience. The element of time involves such concepts as social and emotional maturity, mental age and physiological development. It implies that the kindergarten year should be one wherein a child has time to mature or unfold at his own rate and in his own individual way (Goodacre, 1970; Hillerich, 1966; Miller, 1972). Experience, on the other hand, recognizes that certain skills such as visual discrimination, auditory discrimination, oral language facility, directionality, hand-eye coordination and knowledge of letter names are not exclusively dependent on maturation and should be taught to facilitate beginning reading instruction. Whether a school emphasizes the time or the experiential factor, a reading readiness program will be deemed successful only in terms of the extent to which children experience success in reading as well as acquire favourable attitudes (Hillerich, 1966).

The language experience approach, while adaptable to many grade levels, has received most attention at the beginning reading stage. It is a reading method which is based on sound linguistic and psychological understandings (Hall, 1976).

The linguistic foundation for language experience reading is related to the view that reading is a language-based process. Students entering school for the first time are language users who possess considerable linguistic competence. This language can provide a foundation on which to build initial reading instruction. The written language a child encounters right from the beginning is whole, natural and relevant, and serves as an excellent vehicle for demonstrating that language conveys meaning and that the written code represents the oral code (Hall, 1976). Stauffer (1969) reiterates a similar relationship between language and reading.

Reading is one facet of language and one means of communication and should from the very beginning of reading instruction be taught as such through a language-experience approach. (p. 59)

The psychological basis of language experience learning rests on the view that active student participation in learning not only fosters success but also results in the development of favourable attitudes, both towards reading and towards the self (Hall, 1972; Sinatra & Kinsler, 1976; Stauffer, 1969; Zirbes, 1951). Language experience learning

recognizes the uniqueness of the individual. It starts where the learner is and provides relevant experiences in an optimal learning environment. The student, through the creation of his own reading materials, is utilizing material of high personal interest and is, at the same time, actively involved in the reading process (Hall, 1972; Hall, 1976).

Sylvia Ashton-Warner (1963) has expressed the power of children's language as an approach to beginning reading instruction. Similarly, Loban (1963) stated that when the kindergarten teacher emphasizes oral expression based upon the children's experiences, she is creating highly motivational content for reading one's own material. This, in turn, provides the basis for subsequent and easy transfer to reading what others have written.

The language experience approach also helps provide a natural transfer from pre-reading to beginning reading through the use of group and personal experience stories (Hall, 1976). It develops the skills necessary for beginning reading instruction with functional, student-created materials, rather than through methods remote from the children's experiences. In this way, the language experience approach satisfies both the time and the experience factors of reading readiness and ensures optimal learning for each kindergarten student.

Introduction to the Problem

While there are many effective approaches to the teaching of reading readiness, a language experience approach through utilization of children's oral language in the creation of student materials appears to be a very natural way to lead students to reading (Hall, 1972). Meaningful instruction in skills of visual discrimination, auditory discrimination, letter names, left-right progression, language concepts and language development can be provided with pupil-composed materials in a language experience framework (Hall, 1976). The language experience approach also provides a natural transition from pre-reading to beginning reading, as children are exposed to their oral language encoded in written form through the use of individual and group experience stories (Hall, 1976).

The language experience approach for teaching reading is founded on the oral language facility of children. Numerous researchers have demonstrated that by the time children are of school age, the overwhelming majority of them have developed sufficient oral language capabilities to provide the foundation for reading instruction (Durkin, 1966; Loban, 1963). They, as well, usually have had enough experiences to provide the meaning or concept base necessary for initial reading instruction. Thus, the interrelatedness of language and experience form the core of language

experience learning. The child's speech determines the language patterns of the reading materials and his experiences determine the content (Hall, 1976). Initial reading instruction, therefore, should be relevant to the student when the materials being read are expressed in his own language and rooted in his experiences (Hall, 1976).

An area of equal concern is making reading readiness and beginning reading instruction meaningful to the child. Language experience by its very nature is a meaning centered approach, as the content is based on the actual life experiences of the child (Sinatra & Kinsler, 1976).

Wrightstone (1951) summarized investigations in which activity-related methods (i.e., language experience approach) were compared with standard basal reading programs. He concluded that by the end of the third grade, pupils who were systematically taught by activity-related methods were reading as well or better than pupils instructed through traditional basal approaches.

In the language experience approach, as in no other reading readiness program, students are taught to read by a method similar to the way they learned to speak (i.e., they are taught to read in a reading situation) (Hall, 1976). Further, through adaptation of content to individual student interests and needs, motivation to learn to read is increased. As Van Allen (1965) stated:

Children learn best what they want to learn. If they want to read they can and will provided they do not meet so much frustration and discouragement that they give up before they gain enough confidence and skills to make the reading habit a pleasure. (p. 5)

Rationale for the Study

Reading readiness is broader in scope and more fundamental in nature than basal-centered programs would suggest (Zirbes, 1951). While reading readiness does involve the acquisition of such pre-reading skills (e.g., visual discrimination, auditory discrimination, oral language concepts, letter recognition, eye-hand coordination and left-right progression) Zirbes contends that reading readiness also calls for an approach which enriches and utilizes children's own experiences and oral language as a matrix for the development of reading. Many research studies lend support to this statement.

Blakely and Shadle (1962) compared a basal-centered reading readiness program with materials which grew out of children's own experiences and found that while girls did equally well in either approach, boys achieved significantly greater scores on the informal approach. They concluded that experience is more meaningful in developing reading readiness.

O'Donnell (1968) compared a basal-centered reading readiness program in the kindergarten with a conceptual language experience approach. In the latter method he

identified major concepts in the various subject matter fields and used them as a basis for providing informal language experiences. The conceptual language experience method proved to be superior.

O'Donnell (1968) reported, while no careful studies have been done to compare formalized readiness in the kindergarten with a rich language program, it would appear that the language experience approach can achieve instructional goals more suited to grade one and not compromise on the basic principles of child development.

Horn (1966) studied the effectiveness of three methods of developing reading readiness with Spanish-speaking children. Although he did not study language experience directly, he stated that new readiness programs which stress language development, extension of experience, and favourable self-concepts should be developed.

The Cooperative Research Program in first grade reading instruction which was implemented during the 1964-65 school year represented a major attempt to explore the effectiveness of various reading approaches. It was sponsored by the U.S. Office of Education and included 27 individual studies and a total of approximately 20,000 first grade students (Bond & Dysktra, 1967; Gallagher, 1975; Stauffer, 1967). Six of the studies dealt with the language experience approach. Bond and Dysktra (1967), in summarizing the language experience approach and basal reading approach,

reported that while relatively few significant differences were found between the approaches, those which did exist favoured the language experience approach. The differences, however, were not of much practical value in terms of actual reading achievement. They concluded that the success of language experience indicates that the addition of the approach to a reading program can be expected to make a positive contribution to that program.

The second and third grade phase of the Cooperative Research Program showed similar results, although they were not as significant as at the first grade level. At the second grade, for example, the studies conducted by Stauffer and Hammond (1967), Kendrick and Bennett (1967), and Vilscek, Cleland and Bilka (1967) all favoured the language experience approach.

It would appear from the studies illustrated that the language experience approach is a good beginning reading program in its own right. When used in combination with a basal approach, it should, therefore, prove more beneficial than either approach alone. As Wrightstone (1951) noted with reference to the language experience approach and basal programs, the real issue is not which method is better, but rather what contribution each method could make to the development of an effective reading program. At the reading readiness level, therefore, it would be pertinent to investigate if children's own experiences in combination with a traditional kindergarten program would be more effective in

developing readiness to read than the use of the regular readiness program by itself. As noted previously, the use of a formal reading readiness program as well as the teaching of reading is often advocated for kindergarten students (Miller, 1972; Newman, 1965; Spache, 1977). The desirability of such instruction, however, has yet to be established. The addition of the language experience approach which uses a reading situation to teach pre-reading skills should, therefore, provide useful instruction which is applicable to the demands of beginning reading without compromising children's needs and interests.

Statement of the Problem

The objective of this study is to investigate whether or not utilization of a supplementary language experience program, in conjunction with the regular kindergarten reading readiness program, will result in increased readiness for reading for the first year of formal reading instruction.

Significance of the Study

Implications from the above studies suggest that the majority of investigations undertaken have been in the area of beginning reading. Hall (1970) contends that research should be conducted to

investigate whether the language experience approach can be utilized effectively to develop

specific readiness skills such as oral language facility, left-to-right progression, visual discrimination, auditory discrimination, and the desire to read through meaningful and natural reading-type situations. (p. 27)

She further contends that there is a need for research in the language experience approach in combination with other reading approaches.

Brazziel and Terrell (1962) conducted a six-week readiness program with culturally disadvantaged first grade children which emphasized experience charts. They reported that not only were experience materials meaningful reading content for such children when used in conjunction with other readiness activities, but the experimental group obtained higher scores on the Metropolitan Readiness Test than did the control group.

Bond and Dykstra (1967) state that there is some indication that low readiness pupils perform better in a basal program, whereas high readiness students are more successful with a language experience approach. They pointed out, however, that sampling problems may have contributed to this tendency.

Hall (1965) found that the language experience approach was superior to the basal approach in improving the reading readiness of culturally disadvantaged first graders when the results of Metropolitan Readiness Test scores were analyzed after one semester of instruction.

It would therefore seem worthwhile to attempt an investigation in the utilization of a language experience program as an integral part of the total kindergarten reading readiness program, in the preparation of students for initial formal reading instruction.

Hypotheses

The following hypotheses will be, for the purpose of statistical analysis, stated as null hypotheses. If significant statistical relationships are found at the .05 level of confidence between the specified variables, the null hypotheses will be rejected.

Specific Hypothesis

1. There will be no significant differences in oral language development between the control and experimental group as measured by the Peabody Picture Vocabulary Test (PPVT) at the outset of the investigation.
2. There will be no significant differences in the level of reading readiness as measured by the Metropolitan Readiness Test (Form P, Level I) between the control and experimental group at the outset of the investigation.
3. There will be no significant differences in the level of reading readiness as measured by

the Metropolitan Readiness Test (Form P, Level II) between the control and experimental group at the conclusion of the investigation after scores are adjusted for pretest differences by an analysis of covariance.

4. There will be no significant differences in oral language development between the control and experimental group as measured by the Peabody Picture Vocabulary Test (Form B) at the conclusion of the investigation after scores are adjusted for pretest differences by an analysis of covariance.

Definition of Terms

Language Experience Approach: The language experience approach is a beginning reading approach which utilizes the language and thinking of the learner as a foundation for instruction. The approach integrates the language arts skills of listening, speaking, reading, and writing. The rationale for the approach is often expressed thus:

What I can think about, I can talk about.
What I can say, I can write.
What I can write, I can read.
I can read what I write and what other people
can write for me to read.

(Van Allen, 1963)

The Breakthrough to Literacy program is the specific language experience approach used in this study. It is an

initial literacy approach designed to teach reading and writing to primary grade students. Approximately one-fourth of the reading readiness block each day is utilized for language experience activities. Initially the students received training in creating stories on the flannelboard through the use of Story Figures. As they became proficient in telling stories, they dictated their own to the investigator, and they were introduced to the Classroom Sentence Maker, a stage which helps students convert their thinking and speaking into writing and build up expectations of what words and sentences look like. The last phase of the Program, at the kindergarten level, involved the children making their own sentences in the Student Sentence Maker, which is a smaller version of the Classroom Sentence Maker. They continued, however, to receive group instruction in the Classroom Sentence Maker. Story dictation was also maintained throughout all phases of the Program.

Reading Readiness Skills: Reading readiness skills are those particular behaviors which reading research has demonstrated are characteristic of development at the time a child is ready to read and are not exclusively dependent on maturation (Weber, 1975).

Regular Reading Readiness Program: The regular reading readiness program is comprised of the following: (a) The Thomas Nelson and Company workbook, Down in Hickory Hollow,

which is accompanied by language development pictures; (b) The Nelson pre-primer, Funny Surprises, a workbook and an activity book both of which are designed to reinforce skills taught in the pre-primer; (c) Kit A and Kit B, an oral language and a phonics program developed by Ginn and Company for reading readiness instruction; and (d) Field Trips (approximately twenty in number) in conjunction with the above texts.

The regular reading readiness program is designed to develop specific pre-reading skills. It provides practice in development of oral language facility, visual discrimination, auditory discrimination, hand-eye coordination, gross and fine motor skills, letter recognition, directionality, rhyming, initial consonant sounds and whole-part relationships. It also permits children to begin beginning reading when they are diagnosed to be ready for such instruction.

The major difference between the experimental and control reading readiness program, then, is one of emphasis. The experimental program provides more intensive instruction in oral and written language and uses it as a major vehicle wherein pre-reading skills can be developed. The regular reading readiness program, on the other hand, while cognizant of the importance of language, views it merely as one of many essential pre-reading skills (e.g., visual discrimination, auditory discrimination, letter recognition, and hand-eye coordination).

Limitations of the Study

In the interpretations of the results of this study certain limitations must be considered. The conclusions must be limited to the population sampled, which consisted of three regular kindergarten classes at St. Patrick's Hall School. The classes were comprised totally of boys and therefore the results can only be generalized to such classes. The Breakthrough to Literacy was selected as the specific program for the language experience approach although there are other methods which could be utilized. Also, reading readiness was only measured by use of the Metropolitan Readiness Test (Form P, Levels I and II) and comparisons were limited to results derived from these tests.

CHAPTER 2

REVIEW OF THE LITERATURE

Introduction

The review of the literature is organized into five main sections. The first section provides an overview of the history and the chief characteristics of the language experience approach. The second section deals with the early research studies on the language experience approach in reading. The third section discusses reading readiness under two headings: i) available evidence on informal versus formal programs in developing readiness for reading; ii) the effectiveness of the language experience approach. In the fourth section the present status of the language experience approach is reviewed in terms of its utility as a method for teaching reading. Finally, related literature which examines the relationship between oral language growth and the language experience approach is presented.

History of the Language Experience Approach

The language experience approach is not new in its philosophy or methodology. Its initial introduction in the

United States was in the early twentieth century when experience charts were used to teach beginners to read (Miller, 1972). Cooke, a teacher at the Chicago Institute, was the first to use such techniques (Gallagher, 1975). She believed that children should learn to read as naturally as they learned to talk, through the use of their own language patterns and experiences, and that simultaneous use of both reading and writing in the form of experience charts would provide reinforcement of these skills (Gallagher, 1975).

Experience-related reading instruction, however, was not used extensively until the 1920's when the "activity movement" became common (Hildreth, 1965). The activity curriculum focused on the behavior and needs of the student and used both to plan the daily program as well as individual units of study. The movement spread rapidly from 1925 for a period of 20 years, then enthusiasm for the approach slowed and modifications changed its original character somewhat (Hildreth, 1965). The experience-centered method of teaching reading instruction was first termed the "experience method" by Smith in 1934 and by this time most of the basic practices of the method had been formulated (Spache, 1973). More recently it has been termed the language experience approach.

Hildreth (1965) outlined the characteristics of the experience-related approach in the 1920's and 1930's. Her

criteria were based on descriptions of reports and research studies in the primary grades:

i) Reading materials were based on children's own experiences and current interests and used children's own language patterns;

ii) Initial reading experiences were integrated with other language skills such as listening, speaking, writing and spelling; and thus proved to be mutually reinforcing for individual language skills;

iii) Commercial readers were delayed until children had worked with activity related materials and their introduction depended on student achievement. The use of experience materials continued after commencing the readers;

iv) The vocabulary of experience materials was not controlled to conform to any basic work list or basal text. It was based on the normal vocabulary of the children and used their natural oral language patterns;

v) Experience related reading was considered to be part of learning to read rather than reading readiness instruction. No attempt was made to impose artificial reading activities from workbooks;

vi) Experience related material included writing on blackboards, preparation of bulletins, labels, captions and experience charts. Most of the material was derived as needed rather than prepared in advance;

vii) Manuscript style printing was used from the 1920's onward;

viii) Extensive use was made of attractive books for telling stories and reading aloud;

ix) From the beginning pupils practiced all the skills and habits used by mature independent readers. The use of experience material for developing basic skills was supplemented by hand-made drill exercises, practice charts and work sheets using the chart vocabulary;

x) The relationship between reading and writing was fully recognized.

The language experience approach to teaching reading as the term is currently used has come to be closely associated with the development of the approach used in the San Diego County schools under the direction of Roach Van Allen in the late 1950's (Gallagher, 1975). It was called the San Diego County Research Study Project (1958-61) and it was developed out of a desire on the part of many teachers and administrators in the San Diego area to investigate a variety of well balanced approaches to teaching reading (Van Allen, 1961). The study was extensively reported and the subsequent publication of Clayrice and Van Allen language experience program for the primary grades appears to have revived interest in the approach (Gallagher, 1975).

While there are many variations in the language experience approach as it is used today, the general methods

and philosophy remain basically the same from author to author (Stauffer, 1969). The consistent aspects of the approach have been documented by Gallagher (1975). They include:

i) The language arts skills of speaking, listening, reading and writing are integrated. It recognizes that communication is part of all learning and that when language activities are both integral and functioning in the total teaching plan, they may be more easily mastered than when they are kept separate and artificial;

ii) Pupil-composed material constitutes a major source of reading material. Initially, the teacher writes down the students' stories. These stories can be recorded in group or individual form on the blackboard, newsprint, or as an integral part of students' drawings. They are used to develop basic skills. As children mature in reading ability, other books are made available as resource materials for reading;

iii) No vocabulary control is imposed on the reading material other than the extent of the child's speaking vocabulary;

iv) There is no need for ability groups or for regular reading periods. The teacher may wish to use small groups for conferences or for individual skill development but grouping is temporary and flexible;

v) Motivation is inherent in the approach. Children

find materials personally interesting and relevant when they help create the stories themselves. Success is built into the program from the beginning through the involvement of each child, immediate reinforcement and constant achievement.

Early Research Studies in the Language Experience Approach

In 1951 Wrightstone summarized existing research on the language experience approach and basal readers. He stated that no definitive studies were available comparing these two methods of instruction but that related research which consisted primarily of comparing experience or activity curricula with those of conventional or traditional curricula permitted inferences about the relative merits of each approach. He concluded that while the trend favoured the experience programs, the real issue, as noted in Chapter One, was not which method was better but rather what contribution each method could make to the development of an effective reading program.

In the research studies reviewed by Wrightstone (1951), Hildreth (1965), Gallagher (1975) and examined by the present investigator, only two studies reported negative findings for the experience or activity method of teaching reading. Both of these studies, one by Lee (1933) and one by Gates, Batchelder and Bertzner (1926) found students inferior in reading achievement at the end of grade one.

No studies were found in this early period on the language experience approach at the reading readiness level or on language experience in combination with basal reading. These early studies, nevertheless, and other more recent research in the primary grades, help to establish the relative effectiveness of the language experience approach in relation to the basal approach at primary level.

Lee (1933) surveyed the reading achievement in a voluntary state-wide testing program in California and concluded that the schools which reported using a great deal of activity were lower in silent reading than those schools which used some, very little, or no activity work. The validity of this study, however, can be seriously questioned in that teacher ratings only determined the degree to which a curriculum was an activity curriculum.

Gates, Batchelder and Bertzner (1926) compared a modern systematic approach to an opportunistic method of teaching. The study which was conducted in the Horace Mann School during the 1923-24 school year only included grade one students and was limited to two classes of 25 students each. Also, the opportunistic method rested almost totally on students' own desires to learn to read, write or spell, with little attempt being made to provide organized instruction. The systematic method, on the other hand, had a predetermined range of skills and materials arranged in developmental order which the pupils were expected to master.

The systematic method resulted in considerably greater achievement in reading, arithmetic and spelling at the end of grade one, while the opportunistic group excelled only in writing and drawing. The groups were equivalent in attitudes, social and personal habits and in general information accrued.

The research studies which show positive results with the utilization of an experience-based curriculum over the traditional program, however, far outweigh the negative results of the two studies cited above.

Wrightstone (1944) conducted a six-year investigation of activity programs and regular programs in selected New York City schools. Appraisals were made of the effects of each program on school practices, children, school personnel and parents. The results of the evaluation of the advisory committee and the State Department of Education showed that the activity program was as effective as the conventional program in developing children's mastery of fundamental knowledge and skills and that it was more effective in developing children's attitudes, interests, social behavior, ability to think and ability to work on their own initiative.

Tippett et al. (1927) used the experience method at the Lincoln School Teachers College, New York. The program emphasized the development of reading through materials derived from a rich curriculum of experiences suited to beginning readers. Results of tests of reading ability were

not very satisfactory at the end of grade one but by grade two and three students scored at the national norms and consistently surpassed them in grades four to six.

Hunnicutt (1943) examined the differences in reading patterns of children in four New York City schools in an activity versus a regular program over a six-year period. The children in activity schools read more books, had a wider range of tastes in literature and read a slightly better content than did children exposed to a regular program. He concluded that the effectiveness of the activity program on children's reading was favourable.

Similarly, Smith (1937) and Meriam (1933) reported studies showing pupils in activity curricula read as well or better than those in traditional curricula. Smith kept stenographic records of the repetition of basic words under the experience method of initial reading instruction compared with repetition present in basal reading. He concluded that the first grade child taught by the experience method not only received sufficient reinforcement of basic words but that he was likely to receive more reinforcement than the child in the basal method. Meriam carried out various experiments with activity related reading instruction with Mexican American children in California and found that, based on standardized tests, these children's progress was highly satisfactory in this approach.

While these early research studies tend, on the whole, to favour the experience approach to reading over the traditional approach, it must be noted that they contained many limitations. Often they lacked adequate statistical treatment of data, had inadequate control of extraneous variables or used a small population sample (Galagher, 1975). As is the case with modern studies in the language experience approach, there are many differences in method, materials, populations, and teachers which combine to make comparisons difficult (Hall, 1965; Lohmann, 1968).

Reading Readiness Research

General Reading Readiness Research Studies

The reading readiness controversy, as illustrated in Chapter One, is concerned with the issue of early skills instruction versus a child-oriented approach. Hillerich (1966, 1967) has examined existing research studies on reading readiness supporting or disclaiming the early introduction of readiness skills and concluded that while many children are ready for specific skills instruction before grade one, there is still no definite research evidence as to whether such teaching can best be taught to select groups or to all on an exposure level.

There are very few research studies to suggest that formal teaching in kindergarten is not effective. Hillerich

(1977) pointed out that this situation is probably attributable, in part, to the lack of studies involving pre-reading skills by proponents of informal kindergarten programs as compared to studies by investigators favouring the teaching of specific skills.

Bradley (1956) investigated the effects of delaying formal systematic instruction in reading readiness until a child was ready. The study which extended over a two-year period included two groups of children, both of whom were exposed to different programs. The experimental group's program reflected the concept that readiness training is designed to stimulate growth in all areas of development, with formal instruction being delayed until each child was ready. The control group, on the other hand, had formal instruction immediately upon entry to grade one. At the end of three years the results significantly favoured the child development approach. The experimental group were superior in all respects of reading development. She concluded that the amount of time devoted to readiness in some schools may be insufficient.

Ploghoft (1959) studied use of readiness workbooks in kindergarten versus a general program. He found that students exposed to a program which provided opportunities for social growth, music, rhythm and other experiences, made similar gains in readiness as did the workbook group. His population sample, however, was small. It only included

one teacher and two sections of kindergarten, one of which used readiness workbooks and one which did not. He also did not indicate the type of workbook used whether it provided specific skills instruction or was merely concerned with generalized language activities. He concluded that reading readiness was too involved to be contained within the pages of a workbook.

By contrast, many studies have demonstrated the effectiveness of teaching formal skills in kindergarten reading readiness programs. Brzeinski (1964) has perhaps carried out the most widely known of these studies. It was conducted in Denver and involved approximately 4,000 students in 122 classrooms. There were two experimental and two control groups: i) control group one had a regular program in kindergarten and in grade one and later grades; ii) control group two had a regular program in kindergarten, but an experimental program in grade one and later grades; iii) experimental group one had an experimental program in kindergarten and a regular program in grade one and later grades; iv) experimental group two was a full-term experimental group. The control group in kindergarten received "regular" classroom instruction, with no attempt being made to teach specific skills. The experimental group received 20 minutes per day in basic reading skills. Pupils were tested periodically using standardized reading tests and other measures such as quantity and quality of reading and

specifically designed tests. The results significantly favoured kindergarten students who had received formal instruction.

Schoephoerster, Bornhart and Loomer (1966) replicated the Denver study in Grand Forks North Dakota schools. Four hundred and ninety-six students were involved, with 23 classes each in the experimental and control groups. A consensus was reached among the kindergarten teachers that a pre-reading program should consist of skills specifically related to learning to read. Two hypotheses were tested: i) kindergarten students of three defined levels of ability who follow a structured readiness program which included a workbook will achieve a significantly higher reading readiness score than comparable groups who use the informal approach; ii) a greater percentage of children in the experimental group will excel the students for passing on a readiness test at the end of the kindergarten year. Both hypotheses were accepted. The experimental group as a whole and at all ability levels were superior to the control group, with the below average group's mean score being significant at the .01 level of confidence, and a greater percentage of children in the experimental group as a whole and at each level of ability exceeded the standard for passing in the pre-reading inventory of skills than did the control group.

Hillerich (1963) also investigated the effects of teaching pre-reading skills in kindergarten. The study

involved 22 sections of kindergarten and sought an answer to four questions: i) How successfully would students master pre-reading skills requiring use of oral context and consonant letter-sound associations to read printed words? ii) Would such instruction be more effective with or without a workbook? iii) Could the skills be retained over the summer months? iv) Would teaching of specific reading skills result in higher reading achievement at the end of grade one? Results showed that 70 percent of kindergarten students mastered the skills at the end of the kindergarten year and that 88 percent of children using workbooks mastered those skills in comparison to 50 percent of those without workbooks. There was a statistically significant difference in forgetting during the summer months but the amount was determined to be of little practical significance, and at the end of grade one, there were significant differences in favour of children who had been taught pre-reading skills in kindergarten, despite their (slightly lower academic aptitude when compared to the control group.

Hillerich (1965) replicated his study the following year with all students using workbooks. He found that 83 percent of the kindergarteners mastered the skills with retention over the summer indicating only a loss of 1.1 points.

Kelly and Chen (1967) moved beyond pre-reading skills to an investigation of the effects of formal reading

instruction on kindergarten students with respect to reading achievement, attitude toward reading and attitude toward school. The study was carried out in 1963 and involved 221 students in two schools in Livermore School District of California. Subjects were divided into four categories on the basis of their high or low standing on the California Test of Mental Maturity, Form 1957S, and the Lee-Clark Readiness Test, and were then assigned randomly either to two treatments of readiness instruction or two of formal reading instruction. Posttest results reported that subjects in the formal reading program exceeded subjects in readiness instruction, but that attitude toward reading and attitude toward school were not as favourable for the former group.

Sutton (1964) examined the effects of offering reading instruction in the kindergarten to students who exhibited an interest in reading. Fifteen to 20 minutes of formal reading instruction was provided each day. Test scores showed, as one would expect, that students made significant progress over the control group and maintained it in grade one. A high correlation was also noted between reading skills and ability and desire to write.

These studies clearly suggest the effectiveness of teaching pre-reading skills in kindergarten and perhaps even reading. However, as Hillerich (1977) noted, not all children master these skills, therefore, it is of utmost

importance that a teacher choose methods that are suitable to children's needs and interests. Durkin (1963, 1964, 1970, 1977) also concurred with this viewpoint when she pointed out that reading instruction for kindergarten students must be of a kind that will add both enjoyment and self-esteem to the lives of five-year-olds.

Reading Readiness Research Studies in the Language Experience Approach

There are few studies available on the language experience approach at the pre-reading stage, and, unfortunately, as indicated earlier, none which examine the present topic under investigation. Those studies which do exist, however, tend to favour the language experience approach over regular programs, and thus suggest the possible feasibility of incorporation of language experience with traditional program, whether these programs are formal or informal.

O'Donnell (1968) investigated the effects of an informal concept-centered language experience kindergarten program with a basal-centered program in promoting general readiness for reading. The conceptual language experience program involved the identification of major concepts in subject matter fields and used them as a basis for providing informal language experiences. The population consisted of 78 students in two treatment groups, randomly assigned to

one of four kindergarten sections. The major measure of reading readiness was the Metropolitan Readiness Test, Form B, but other tests such as the Allyn and Bacon Pre-Reading Test, the Wepman Auditory Discrimination Test, Form II, and the Murphy-Durrell Reading Readiness Analysis were also used.

An analysis of variance on two subtests of the Metropolitan Readiness Test and an analysis of covariance on four subtests revealed no significant difference between the treatment groups on various subtests, but an analysis of covariance on the total mean scores for both groups showed a significant difference in achievement at the .05 level of confidence in favour of the conceptual language experience method. An analysis of variance on the Allyn and Bacon Pre-Reading Test visual subtest, revealed a significant difference at the .01 level of confidence for pupils in the conceptual language experience group. The Wepman Auditory Discrimination Test adjusted for Form I, however, revealed no significant differences between groups.

Utilization of systematic instruction in workbooks as a measure of promoting discrimination skills did not produce any significant differences. Direct instruction in discrimination of letter forms and letter names did not produce an advantage for the basal group on the letter names subtest of the Murphy-Durrell Reading Readiness Analysis. The incidental exposure to letters through labelling, experience charts and classroom signs resulted in slightly

higher mean scores in favour of the conceptual language classes. He concluded, therefore, that the conceptual language experience approach was superior to the basal-centered approach in promoting general readiness for reading.

Blakely and Shadle (1961) investigated whether or not kindergarten children showed more readiness and potential for reading after exposure to the readiness books of a basal reading program or after exposure to an activity program of experiences. The basal program centered on the Scott, Foresman, We Read Pictures readiness workbook, while the experimental group's program grew out of the children's interests and provided freedom to participate in various activities. The population consisted of two groups of 28 kindergarten students each. Their selection was made on the basis of age, with children in the experimental and control groups being paired so that the mean ages of both groups of girls was 5.5 and both groups of boys 5.9. The Metropolitan Readiness Test, Form R, an Informal Reading Readiness Check List and a Maturity Check List were used as testing instruments. There were no significant differences at the beginning of the study, as determined by these three instruments. Posttest results revealed the total experimental group made a greater mean gain during the period of the study than did the control group on all three measures and that the differences were significant on the latter two tests. The total experimental group also made a higher mean

score on the Scott, Foresman end-of-the-book test than did the total control group but the differences were not statistically significant.

When the differences were examined in terms of sex, however, differences prevailed. The experimental boys showed greater gain on all measures than did the control boys and the differences were statistically significant in the case of the Metropolitan Readiness Test (readiness section, the Reading Readiness Appraisal Check List and the Scott, Foresman Test. The girls in the experimental and control group, on the other hand, showed no significant differences in gain in all measures. Blakely and Shadle concluded that as kindergarten boys developed significantly greater readiness with the experience-activity approach and girls do equally well with both approaches, the former is recommended at the kindergarten level in preference to the latter.

Two serious limitations to this study should be noted: i) the size of the sample was very small and this factor seriously limits the reliability of the results; ii) the workbook provided generalized language activities rather than specific skill instruction and thus the differences in programs was one of degree rather than type.

Brazziel and Terrell (1962) sought to determine if a change in registration, combined with parental involvement in reading readiness which emphasized experience charts, would help alleviate the effects of a low socio-economic

background. Twenty-six Negro first graders who had no kindergarten experience made up the control group and three first grade sections with 23, 21, and 20 children respectively, comprised the control group. The readiness program lasted for six weeks. At the end of the period, the Metropolitan Readiness Test was administered: The experimental group scored at the fiftieth percentile, the national average, while the three control groups scored only at the sixteenth, fourteenth and twentieth percentiles. The difference was significant at the .01 level of confidence. While the authors found the experience material meaningful for children when used in conjunction with other readiness activities and materials, the actual effect of the language experiences cannot be assessed.

Hall (1965) developed and evaluated a language experience program for teaching readiness to first grade, culturally disadvantaged children. Five first grade classrooms in one public school in the District of Columbia formed the experimental group, while five first grade classrooms exposed to a regular readiness program based on reading readiness workbooks and pre-primers of a basal series formed the control group. The study was carried out from September to December, 1964. The investigator worked with the teachers in the experience group and also prepared a guide for teaching the program. The results of the Gates Primary Reading Test showed significant differences in favour

of the experience group in developing word recognition and in sentence reading than with the regular approach.

O'Donnell (1968) had summarized the literature dealing with reading readiness programs in the kindergarten. He noted that while there is a considerable lack of agreement regarding the effectiveness of certain education practices, several generalizations are discernible.

i) Reading readiness instruction may be better described as early reading instruction;

ii) Children may be taught to read prior to grade one, but the desirability of the practice still is unresolved;

iii) Younger children make less progress than older children of comparable intelligence when exposed to the same programs;

iv) Success in beginning reading is dependent upon many interacting factors: quality of instruction, degree of individualization, pacing, maturity and expectations of the teacher;

v) A child's success in readiness instruction is dependent upon his/her level of perceptual functioning rather than upon physical development;

vi) There are no observable detrimental social and emotional effects due to formal reading instruction prior to grade one;

vii) The child's level of concept formation is closely related to his language development;

viii) Varied educational opportunities for kindergarten children to interact with the physical environment can greatly enhance cognitive and language development and thus subsequent readiness for reading.

ix) Young children can profitably be exposed to significant content that is appropriate to their level of development. This content can be used as the basis for thinking, talking, writing and reading about their experiences.

Language Experience Research Studies in Developmental Reading

The first major research study comparing the language experience approach with the basal method appears to be the San Diego Reading Study (Van Allen, 1961). The five-year investigation under the direction of Roach Van Allen, at that time a curriculum coordinator for the San Diego County schools, was concerned with improving beginning reading instruction. After examining many approaches to teaching reading, the research team selected three for detailed study: the basal reading approach, the individualized reading approach and the language experience approach. The basic hypothesis of the study was that there was no single best or only way to teach reading. The results supported the hypothesis in that the three approaches were all determined to be more than satisfactory methods of teaching beginning reading.

Prior to this study, the language experience approach was used primarily as a supplementary method of teaching reading. The participating language experience teachers found, however, that their students made as much or more progress on the essential reading skills, measured by standardized reading tests, as did the students who had direct instruction of skills. The reporting of these results, plus the subsequent publication of Roach Van Allen's Learning to Read Through Experience renewed interest in the language experience approach as a sound method of teaching reading.

The Cooperative Research Studies, sponsored by the United States Office of Education, represented a major attempt to investigate the effects of various beginning reading approaches. Six of the 27 studies compared the language experience approach with the basal reading method. As noted previously, Bond and Dykstra (1967) summarized the results of these studies at the first grade level and reported that while relatively few significant differences appeared between the two methods, those that did exist favoured the language experience approach. These differences, however, were not of much practical value in terms of actual achievement. They concluded that the addition of the language experience approach could be expected to make a contribution to any kind of reading program.

The second grade phase of the studies was summarized by Dykstra (1968), and revealed, in general, that there were no significant differences between the language experience approach and the basal approach. Achievement in the two methods after two years of instruction was quite similar, with fewer significant differences in treatments at the end of the second grade than at the end of the first grade.

The limitations of these studies as examined by Vilscek (1968) and Dykstra (1968), and which are relevant to the present investigation are:

- i) There were wide variations in individual studies in the selection and assignment of schools, teachers and pupils in experimental and control groups;
- ii) The basal approach varied from project to project in the type of series and materials used;
- iii) The language experience approach was not identical in each study (i.e., the developmental factors utilized);
- iv) Evaluations were carried out as far as second or third grade, thus making conclusions or interpretations concerning later reading ability impossible;
- v) Although attempts were made to minimize the placebo and Hawthorne effects, innovative approaches, plus an awareness on the part of teachers and students that they were participating in a research study, may have affected results to some extent.

The six First Grade Studies which used the language experience approach were Kendrick (1966); Hahn (1966); McCanne (1966); Vilscek, Morgan and Cleland (1966); Stauffer (1966); and Harris and Sewer (1966).

Kendrick (1966) compared the language experience approach to the teaching of language arts with the traditional basal approach, which used the Ginn Reading Series. The study was designed to measure skills in reading, writing, listening and speaking, as well as measure pupil interest and attitude toward reading. A total of 1,609 first grade students taught in 54 classrooms in the San Diego County area participated in the study.

At the end of the first grade no significant differences were found between the experimental and control groups for most of the analyses performed. Significant differences were observed for only approximately one-fourth of the comparisons. Of these, 10 favoured the traditional method while only five favoured the experimental method.

When the study was extended into the second grade (Kendrick & Bennett, 1967) more measures were significant at the .01 level of confidence. Twelve of these favoured the experimental group and 11 the traditional group, which represented a substantial gain over the previous year. They concluded that the experimental approach appeared to enhance achievement in the areas measured in the study somewhat better than did the traditional method and that

girls seemed to profit more so than boys. They also noted that the language experience approach may improve achievement in other subject areas, as reflected in the superior performance of the lower socio-economic group on the science-social studies and arithmetic concepts subtests of the Stanford Achievement Test.

Hahn (1966) compared three approaches to the teaching of beginning reading: ITA, the language experience approach and basal reading. Teachers of the basal program followed closely the practices suggested in the teacher manuals of the series, while the ITA and language experience groups used dictated and written material as the basic source of instruction. Thirty-six teachers from 12 school districts in Oakland County, Michigan, participated in the study. Students in all three groups responded equally well on the San Diego Reading Attitude Test. No one method, however, was found to be consistently superior in terms of achievement to the other two approaches due possibly to variations in pupil skills and experiences as well as variations in teacher competencies.

The ITA and language experience approach had significantly higher scores than the basal program on the Gates and Fry Word Lists. No significant differences were found in Spelling among the three groups when ITA spelling was accepted. The Capacity-Achievement relationships were strongest for the language experience group in Paragraph

Meaning and for ITA and language experience groups in Word Study. Students in both language experience and ITA approaches wrote more freely and extensively throughout the year than did the basal group and teachers commented on the eagerness and independence children developed in this activity.

The second grade phase of the study (Hahn, 1967) continued to show the pattern of differences in performance noted at the end of grade one. There were no significant differences on standardized tests between the ITA and language experience groups. Language experience pupils, however, read more books and wrote longer stories than did the ITA group. When comparisons were made between the language experience and basal approaches, the former group obtained higher scores on Word Meaning, Paragraph Meaning, Science-Social Studies concepts, Spelling, Word Study and Language areas of the Stanford Achievement Test. They also recognized more words on the Fry and Gates Word Lists, read more books and wrote longer stories. The basal group were stronger on mechanical skills in writing. They concluded that the language experience group demonstrated greater control of basic reading and writing skills than did the children in the basal group.

This study was also extended into the third grade (Hahn, 1968). At this level, achievement in both experimental groups equalled that of the basal group. Language experience

students were superior on Word Recognition, Spelling and Paragraph Meaning. Both the language experience and ITA students read more books, but the basal group was superior in the mechanics of English.

McCanne (1966) compared three different approaches to teaching beginning reading to Spanish-speaking children: the basal approach, a modified English language approach and the language experience approach. The basal method proved to be superior to the other approaches. Language experience students only achieved significantly higher scores than the basal group on a measure of writing fluency. She concluded that certain cultural traits and values as well as lack of familiarity with the experimental methods may have contributed to the success of the basal approach.

Vilscek, Morgan and Cleland (1966) investigated two approaches to teaching beginning reading, a coordinated basal language arts approach and an integrated experience approach. Seven hundred and fifty students in 24 classrooms were selected from approximately 300 first grades in Pittsburgh Public schools to take part in the study. They were randomly assigned to the two instructional methods. Results at the end of the first grade showed that pupils in the integrated experience approach had significantly higher mean scores at the .01 level of confidence than did pupils in the coordinated basal approach on Word Meaning, Paragraph Meaning, Vocabulary and Word Study sections of the Stanford Achievement Test and

on the San Diego Reading Attitude Inventory. They also had significantly higher mean scores at the .05 level of confidence on the Gates Word List and the Karlsen Word List, Creative Writing Mechanics Ratio and the Minnesota Test of Creative Thinking.

At the end of the second grade 18 of the original 24 classes comprised the pupil population. Findings revealed that pupils taught through the integrated experience approach no longer had significantly higher achievement than pupils in the coordinated basal approach in reading, but the scores were still higher than the latter group on attitude toward reading, arithmetic, science-social studies and spelling.

At the close of the third year, there were no significant differences in achievement between the groups except on measures of Creative Thinking, Oral Reading and Creative Writing.

Stauffer's (1966) study was designed to compare a language arts approach to beginning reading with a basal reader approach. Five hundred and twenty-eight students from three towns in Southern Delaware participated in the first grade phase of the study. Results showed that the experimental group scored significantly higher at the .01 level of confidence than did the control group on tests of Word Reading, Paragraph Meaning and Spelling. They both did equally well on the tests of Word Study, and Vocabulary. The control

group, however, scored significantly better on the Arithmetic test. There were no differences in attitude toward reading for the sample as a whole or on a sex basis. On an individually administered Gilmore Oral Reading Test, the experimental group scored significantly higher than the control group on accuracy but not on rate of reading. On each of the three measures of Word Recognition and the measures of Written Language, the experimental group-random sample scored significantly higher than the control group. When reading readiness and intelligence were held constant, the experimental group scored significantly higher on all measures except Word Study skills on the Stanford Achievement Test and on Rate of Oral Reading. Stauffer concluded that the language arts approach to beginning reading instruction was an effective method.

At the end of the second grade phase of the study (Stauffer & Hammond, 1967) found that the overall results were similar to those at the end of grade one. The experimental group scored significantly higher on Word Meaning, Science and Social Studies concepts, Spelling, Word Study skills and Language sections of the Stanford Achievement Test, Rate and Accuracy of Oral Reading and two tests of Word Recognition. In the random Creative Writing sample, they also rated high on originality, interest and story consistency. There were no significant differences in Reading Attitude between both groups. They concluded that while

both approaches were effective ways of teaching reading at the second grade level, the language arts approach was the more effective of the two. Of all the differences in performance between treatments all, aside from the Arithmetic subtest for the boys on the Stanford Achievement Test, favoured the language experience group.

Results at the end of the third grade (Stauffer & Hammond, 1968) showed that the language arts group scored significantly higher scores on the Science and Social Studies concepts and Spelling sections of the Stanford Achievement Test on Speed and Accuracy in Oral Reading, on two measures of Word Recognition, and on Length of Story and Variety of Word Usage and Writing Mechanics in Creative Writing. The author concluded that the language arts approach will result in good results in reading instruction throughout the primary grades.

The Craft Project (Harris & Sewer, 1966) was designed to compare the skill-centered approach with the language experience approach for teaching beginning reading to culturally disadvantaged Puerto Rican and black children in New York City. Each method had two variations: i) basal reader approach; ii) basal reader approach using phonovisual method instead of the word attack lessons in the basal readers; iii) the language experience approach; iv) the language experience approach supplemented by audiovisual material. At the end of grade one, the results showed slight

but consistent differences favouring the skills-centered approach over the language experience approach. The language experience approach with audiovisual supplements resulted in greater achievement for these students on several tests than the regular language experience approach.

The second grade phase of the project (Harris, Sewer & Gold, 1967) still indicated no significant differences between pairs of methods or between the skills-centered approach and the language experience approach.

At the third grade phase (Harris & Morrison, 1968) there were still no significant differences between the two major approaches or among the four instructional methods. Again, there were large differences within methods rather than between methods.

The following generalizations with regard to the Cooperative Research Project have been outlined by Gallagher (1975):

i) Significant differences in reaching achievement in favour of either approach at the first grade level tend to disappear by the third grade;

ii) Differences appear to be greater from classroom to classroom and school to school than between treatments;

iii) Trends noted for language experience studies in some projects such as higher scores in spelling, science-social studies concepts and in arithmetic concepts, have implications for future studies.

She concluded that, in general, the results supported a conclusion that the language experience approach is an effective method of teaching primary reading.

Additional Research Studies on the Language Experience Approach and the Basal Approach

In addition to the Cooperative Research Project other research studies have compared the language experience approach with the basal method.

Lane (1963) conducted a one-year study from grades one to six which compared the basal reading approach, the language experience approach and individualized reading. He used 59 teachers in 12 different school districts in California. Pupils were measured in terms of reading achievement, personal and social adjustment and attitude toward reading. While exceptional gains were reported in all three methods, there was no clear cut superiority of any approach.

Lamb (1972) compared a modified basal method with the language experience method in grade one, in 10 inner-city schools in Indianapolis. Monthly training sessions were held and the Medley and Smith Observation Scale and rating-reading were used by each teacher. The pupils were administered the following tests: Otis-Lennon Mental Abilities Test in January, an adaptation of the Anskov's Primary Pupil Attitude Inventory in March and the California Reading Test in May.

He concluded that: i) for both achievement and attitude, no significant differences occurred between the two groups when classes were treated as units; ii) achievement differences favoured the language experience group when pupils were treated as units. He concluded that the results corroborated those of many of the first grade studies in which the language experience approach was not found to be significantly superior in terms of reading achievement.

Marquadt (1974) compared a coordinated reading and language arts program which utilized most of the basic techniques of the language experience approach with a conventional basal program. The study was only carried out for one year, in two second and two third grade classrooms. She reported no significant differences as measured by the SRA Achievement Tests, but the lack of control of experimental variables limited the interpretation of the results.

Pienaar (1977) has investigated the Breakthrough to Literacy, a language experience program. The study, which had no control groups, was conducted in two experimental classes in Saskatoon schools, a grade one class (English language) and a grade two class in a separate school (French). After six months of exposure, the students in both classes were posttested on the Gates-MacGinitie Reading Tests. The grade one students were found to be reading on a grade level of 2.6 and the grade two students at 3.7. They also made great gains in free-writing, in oral expression, in

self-confidence and in perseverance. Since no control groups were used, however, it was not possible to say if the results obtained were statistically significant. The investigator concluded, based on his research experience in South Africa where similar gains were achieved over a similar period, and where these gains were found to be significant at better than the .01 level of confidence when compared to gains made by control groups, that it was reasonable to assume that the scores obtained would have comfortably exceeded those made on another reading scheme. The results of this study, however, should be viewed very cautiously for many reasons: i) only two classes were used, a grade one class and a grade two class, with 22 and 17 students, respectively; ii) no control group was used; iii) there appeared to be no attempt to control for initial differences in pupils, or other extraneous variables such as teacher quality and the Hawthorne effect; iv) only the Gates-MacGinitie Reading Tests were used, plus the Canadian Cognitive Abilities Test, Primary 1, Form A, at the grade one level; v) there seem to be discrepancies in the results given in that the score of 2.6 for grade one is dated December 1975, when, in fact, Pienaar stated that post-testing was conducted in April 1975. If this date is correct, the grade one students would be four months into grade two and, thus, the results for these students is considerably altered.

Oral Language Development in the Language
Experience Approach

Two studies have reported significant gains in oral language development based on the language experience approach. Again, neither of these is at the reading readiness stage. Giles (1966) compared the relative gains made in the development of oral language skills of two groups of first grade pupils when using the language experience approach and the basal approach. Aspects of oral language measured were extent of verbalization; vocabulary, expression of tentativeness, use of basic sentence structures, use of mazes, use of colorful and vivid expression. Two language samples were collected from individual students, one in October and one in May. The experimental group were found to be superior in vocabulary, use of expression of tentativeness, use of colorful and vivid expression and use of mazes. He also noted that the language experience approach was more effective for boys than girls.

Stauffer and Pikulski (1974) investigated the extent of oral language growth in 50 first grade children taught by the language experience approach. The children were randomly selected from those who had participated in Stauffer's 1966 study which examined the effectiveness of the language arts approach and the basal reader approach in first grade reading. Analysis was made on the basis of notebooks which contained each student's entire dictated

material for one year, and measured sentence length, number of words used, number of sentences used, and number of prepositions and pronouns. The students showed substantial gains in all dimensions, with growth in average number of words and sentences being especially impressive. They concluded that these results, in addition to indicating significant growth in oral language facility, suggested that the language experience approach fostered an eagerness to share ideas.

Summary

This review of the literature has been concerned with kindergarten reading readiness and the role of the language experience approach in promoting its development. The nature of general reading readiness research was discussed, followed by the limited number of studies available on the language experience approach at the readiness level. While much attention has been devoted to this approach in reading at the primary grades, little effort has been expended in determining its utility in kindergarten.

The language experience approach to teaching reading builds upon the existing experiential background and language usage of children. The approach was examined in terms of its history, early research studies, its current status in primary reading, and finally, its relationship to language development.

CHAPTER III

SOURCES OF DATA: METHOD AND PROCEDURE

Introduction

This chapter will present an overview of the procedures to be used in the study. It describes: i) the setting of the study; ii) the selection of the experimental and control group; iii) the testing instruments utilized; iv) the language experience approach for the experimental group; v) method and procedure in (a) pretesting; (b) post-testing; and (c) treatment of data.

Setting for the Study

This study took place in St. John's, a city located on the eastern coast of Newfoundland, with a population of approximately 130,000 inhabitants. It was conducted within the Roman Catholic School Board of St. John's, a board which presently employs 853 teachers and has a student enrollment of over 20,000. The school district is divided into three areas. They are: i) St. John's Centre, encompassing sixteen schools in all categories, from primary, elementary, junior high and high schools to all-grade schools; ii) The West, which ranges from Kilbride, Goulds and Newtown to Manuels in

Conception Bay, and has eleven schools, in all categories; and iii) The Northeast, covering an area from Virginia Park to Torbay, Pouch Cove and Bell Island, with twelve schools, again encompassing all categories outlined above.

St. Patrick's school is the only school which was used in the investigation. It is an all-boys school, located in the centre of the City and has a population of 643 students, ranging from kindergarten to grade eight, which employs 38 teachers. Prior to the 1978-79 academic year, the School was actually two schools, St. Patrick's Primary Hall and St. Patrick's Elementary, but both buildings have now been combined under one principal.

Selection of the Experimental and Control Group

The Roman Catholic School Board in St. John's was contacted in June 1978 to determine whether or not the investigator might conduct a study on the language experience approach at the kindergarten level. Once approval was obtained, permission was sought from the principal of St. Patrick's School. His response was also favorable.

The organization of the kindergarten at St. Patrick's School is not typical of most Newfoundland schools. In September of each year all students who have registered for kindergarten are randomly placed in individual classes, where they are assessed over a four to five-week period to determine whether they are ready to handle a regular

kindergarten program. Those found not ready, Based on teacher observation and testing, are placed in a junior kindergarten.

The population of the study was comprised of all the regular kindergarten students attending St. Patrick's School for the 1978-79 academic year. The students ranged in age from 4.9 to 7.5, with the mean age being 5.6. These were divided into three classes of eighteen, seventeen and fourteen students respectively, with each class being taught by a different teacher.

The kindergarten class taught by the investigator comprised the experimental group. It had a population of seventeen students, only fifteen of whom were eligible to participate in the study. The exclusion of the two students was necessary as they were not members of the class at the time of pretesting. The control group was formed from the two remaining regular classes and had a population of thirty-two students, twenty-seven of whom were included in the study.

The investigator utilized two covariates as measures of initial equality: i) the pretest scores of the Metropolitan Readiness Test (Form P, Level I) and the Peabody Picture Vocabulary Test (Form A)..

The Testing Instruments

Two standardized tests were used in the study, the Metropolitan Readiness Tests, Levels I and II, and the Peabody Picture Vocabulary Test, Forms A and B.

The Metropolitan Readiness Tests, 1976 Edition, Levels I and II are required to provide adequate measurements of the wide range of skills in kindergarten and beginning grade one. Level I is designed for use in the beginning through to the middle of kindergarten, while Level II is designed for use at the end of kindergarten and beginning of grade one.

Level I concentrates upon the more basic pre-reading skills. The subtests were selected by Nurss and McGauvran, authors of the 1976 edition of Metropolitan Readiness Tests, after extensive research to determine the types of measures that would be most relevant to kindergarten pre-reading skill development (Teacher's Manual: Interpretation and Use of Test Results, 1976).

Auditory Memory: This test measures the pupil's immediate recall of a series of words spoken by the teacher. It is an important reading readiness skill, as early learning, especially reading, is a sequential process involving the ability to remember and associate sounds with visual symbols.

Rhyming: Rhyming, the ability to hear and discriminate among medial and final sounds in a rhyming context, is

considered to be another important auditory skill.

Letter Recognition: This test measures the student's ability to recognize both upper- and lower-case letters when they are named by the administrator.

Visual Matching: Much of early school learning involves the ability to discriminate among visual symbols. This test measures visual-perceptual skill in matching letter series, words, numerals, and letter-like forms.

School Language and Listening: Basic cognitive concepts as well as simple and complex grammatical structures are measured by this test. The items are designed to measure listening comprehension and require that students integrate and reorganize information, draw inferences, and analyze and evaluate material presented orally. These abilities are important for future development of reading comprehension skills.

Quantitative Language: This test measures understanding of basic quantitative concepts of size, shape, and number-quantity relationships, skills which are important for mathematical and other types of conceptual learning.

Only the visual and language components, subtests three to six, form skill areas. The two auditory tests do not constitute a sufficiently meaningful, well-defined auditory cluster. Rhyming is a very specific auditory

skill, while Auditory Memory is a much more generalized skill.

Level II focuses upon the more advanced, high-level skills important in beginning reading and mathematics.

Beginning Consonants: This test measures the ability to discriminate among the initial sounds of words, an important auditory decoding skill.

Sound-Letter Correspondence: This test measures student's ability to identify letters corresponding to specific sounds in words.

Visual Matching: Visual-perceptual skill in matching letters, numerals, and letter-like forms is measured by this test.

Finding Patterns: An important perceptual skill is the ability to locate formations of letter-groups, words, numerals, or artificial letters when these are embedded in larger groupings of similar content. Finding Patterns measures student's ability to separate a pattern visually similar from the context in which it is placed.

School Language: This test measures basic cognitive concepts as well as simple and more complex grammatical structures.

Listening: This test measures the ability to integrate and reorganize information, to draw inferences, and to

analyze and evaluate material presented orally, skills which are vital to the development of reading comprehension.

Quantitative Concepts: This is an optional test. It measures important basic mathematical concepts such as number-numeral correspondence, conservation, part-whole relationships, and quantitative reasoning.

Quantitative Operations: This is also an optional test. It measures counting and simple mathematical operations such as addition and subtraction.

Level II has four skill areas, the Auditory, Visual Language and Quantitative (optional) components.

The Metropolitan Readiness Tests provide a survey of some important skills needed in early learning. Tests in auditory and visual skill areas concentrate on rather narrow, but important, abilities which are needed in decoding sounds and symbols. Tests in the language skill area, on the other hand, emphasize broad language comprehension, reasoning and conceptual abilities that are important both in reading and mathematics.

The Peabody Picture Vocabulary Test is a measure of listening vocabulary. It is an individual test and can be used for age groups 2 to 18. The test consists of asking a student to point to one of four pictures on a page in response to a word stimulus. The administrator continues until the student misses six out of eight consecutive responses.

The Language Experience Program Used by the
Experimental Group

The Breakthrough to Literacy program was the language experience approach chosen for this study. The Breakthrough program was developed by the Schools Council Program in Linguistics and English Teaching at the University College, London. It has been tested and used extensively and successfully in British, Australian and American primary schools.

The Breakthrough to Literacy program is an initial literacy approach designed to teach reading and writing to primary grade children and remedial reading to middle and upper grade students. It coordinates children's work and play with language and leads from listening and speaking to reading and writing. It is based on knowledge of the structure of our language and an understanding of the learning process. It provides the organization and materials necessary to teach reading and writing in both a linguistic and culture setting relevant to the child. An important aspect of the program is its recognition of the fact that a child is an individual with personal needs. Its goal is to suggest teaching strategies and provide materials to meet each child's needs as a person.

Three basic assumptions underlying the program are:

- i) Reading from the very beginning should be linked to the child's spoken language. His language is a major resource

for learning to read and write and to present him with written language unrelated to his own is to cut him off from what he knows;

ii) The material children read should be closely related to their own interests and experiences and should include forms of imaginative writing;

iii) The teacher should be an active participant in the learning process, constantly offering guides and help (Teacher's Resource Book, The Breakthrough to Literacy Program, 1973).

The program is comprised of the following components:

Story Figures: These are brightly colored figures designed for use on a flannelboard. The pictures primarily revolve around family life, but a few deal with fantasy. They provide the first critical steps to a child's "breakthrough to literacy." Their use precedes the introduction to written language.

Nursery Rhymes: Rhymes provide a wide range of basic grammatical patterns and have a strong appeal to young children. Their purpose in the program is to begin the integration of spoken and written language. They are also designed to enlarge children's experiences and tap a rich source of fact, fantasy and gentle "horseplay with language."

The Breakthrough Books: The books are based on actual stories told by children; the language patterns are natural and child-centered. Each book is 16 pages long, illustrated in full color and written in large readable type. The stories involve everyday incidents in a child's life as well as imaginative stories about witches and giants. The books are divided into three levels of complexity. There are also four books of traditional rhymes and poems in addition to the books. These are thematically grouped.

The Teacher's Sentence Maker and Stand: The teacher's sentence maker contains 130 words and additional blank cards for other words. The stand is used to hold the word cards while children are composing their phrases and sentences. The sentence maker helps students convert their thinking and speaking into writing. Its use helps children build up expectations of what words and sentences look like.

The Student's Sentence Maker and Stand: Students are given their own sentence maker and stand after they recognize approximately 12 to 15 words and are familiar with its use. It is a smaller version of the teacher's sentence maker. This component forms the heart of the Breakthrough program. It allows for extensive practice of language skills and helps students produce a great variety of sentences that they can read. Initially the teacher writes the sentences in a specially designed book, but as soon as they are ready,

students write their own sentences.

Project Folder: The project folder is a blank version of the student's sentence maker. It is used to store words on particular topics which reduces the need to store such words in the student's sentence maker. It is also good for children who are using a large variety of personal words, but are not quite prepared to graduate from the sentence maker.

The Student's Word Maker: The student's word maker is a small folder with pockets containing individual letters and consonant digraphs. Through its use children can learn to construct visually familiar words and then unfamiliar words. It helps students to be more aware of the visual characteristics of words, phrases, and sentences, while at the same time developing an awareness of the correspondence between letters and sounds and the way written words are composed.

The Breakthrough to Literacy program was initiated during the first week of October 1978, with all children working with Story Figures. The students, working in groups of five and six, told stories, both factual and fantasy, based on the Story Figures. In the beginning stories were merely one to two sentences in length and centered totally around the pictures they put on the

flannelboard. After the first weeks, however, students began to select limited numbers of figures and from these composed original stories.

Nursery rhymes were also introduced in October. They were used primarily in conjunction with Unit Two of Ginn and Company's Kit A which forms part of the regular kindergarten reading readiness program. As noted previously, one of the primary purposes of this component is to provide the link between oral and written language. The investigator, while utilizing this technique in the manner recommended by the Breakthrough program, felt that extensive use of experience charts and stories dictated and illustrated by the students, based on field trips taken during the fall semester and other personal experiences, was a more meaningful and "realistic" way to integrate or bridge written and spoken language.

The teacher's sentence maker was begun with approximately one-half of the experimental class at the beginning of the winter semester. Continued use was still made of Story Figures, experience charts and student stories. The remainder of the class required further work with Story Figures before proceeding to the next stage of the program. The Student Sentence Makers, which formed the heart of the program, were only able to be utilized for approximately two months, and then only by one-half of the class.

The experimental group was exposed to instruction in the Breakthrough to Literacy program for seven months.

Method and Procedure

Pretesting Period

Pretesting was carried out from September 25 to October 2. Its chief purposes were: i) to determine the equivalency of the experimental and control groups at the outset of the study; ii) to measure actual gains made from pretesting to posttesting.

The Peabody Picture Vocabulary Test (PPVT), Form A, was administered to establish initial equivalency of the experimental and control groups at the outset of the investigation. The pretesting of the PPVT was primarily the responsibility of the investigator, but assistance was received from one of the two kindergarten teachers in the control group who also operates as a half-time primary remedial reading teacher at the school. The administration and scoring of the test was done in the exact manner as specified in the test manual.

The Metropolitan Readiness Test, Level I, Form P, was also used as a measure of initial equivalency of the experimental and control groups at the outset of the investigation. It was administered by each of the three kindergarten teachers to her own class, again, in the exact

manner as specified in the Teacher's Manual. Scoring regulations were also strictly adhered to. A sample booklet was used prior to pretesting to familiarize students with the procedures followed in the Metropolitan Readiness Test, and to determine those who were not mature enough to handle the test. Subtests one to four were then administered separately on four consecutive days and subtests five and six were completed on day five. All testing was done between 9:00 a.m. and 10:00 a.m. each morning.

As noted previously, the results obtained from the Metropolitan Readiness Test, the Peabody Picture Vocabulary Test and teacher observation were also utilized to determine those students who were too immature socially, emotionally, physically or academically to handle the regular kindergarten program. These students were assigned to a junior kindergarten program and one of the two teachers in the control group, who was the only full-time kindergarten teacher, taught the program. At the formation of the junior kindergarten it was decided that the teacher who taught this program could keep the best students in her former two kindergarten classes and then distribute the remainder of her students to control teacher one and to the experimental group on the basis of the number of students taken from each class for the junior kindergarten.

Posttesting Period

Posttesting was carried out between April 30 and May 4, 1979. All subjects were tested utilizing the Metropolitan Readiness Test (Form P, Level II). Each of the six subtests were administered according to the directions specified in the test manual, with two subtests being administered daily. Posttesting was conducted in a large room with all students present. Each teacher took turns administering the individual subtests while the remaining two supervised.

The Peabody Picture Vocabulary Test (Form B) was administered to all students by Dr. Marc Glassman, the investigator's supervisor for this study.

Procedure in Treatment of Data

The objective of this investigation was to determine whether or not a supplementary language experience program in conjunction with the regular kindergarten program would result in greater readiness for reading at the end of the kindergarten year.

The pretest and posttest data collected were analyzed by the covariance technique which adjusts scores to account for initial differences between groups on variables related to performance. The procedure was carried out by computer.

Summary

In order to accomplish the purpose of this study, to evaluate the effects of a supplementary language experience approach on kindergarten reading readiness, the procedures described in the chapter were employed. First, sources of data were examined: the setting of the study, the selection of the experimental and control group, the testing instruments and the language experience program used. The method and procedure involved in pretesting, posttesting and in the treatment of data concluded the chapter.

CHAPTER IV

FINDINGS AND DISCUSSION

This chapter is divided into two sections. In the first section the specific findings of the study are considered in relation to the hypotheses formulated in Chapter One. The second section discusses these findings.

Preliminary Hypothesis 1: There will be no significant differences in the level of reading readiness as measured by the Metropolitan Readiness Test (Form P, Level I) between the control and the experimental groups at the outset of the investigation.

Table IV.1 presents an analysis of variance of the Metropolitan Readiness Test (Form P, Level I) pretest scores for the experimental and control groups. The F ratio of .006 was not significant at the .05 level of confidence. Therefore, preliminary hypothesis 1 was accepted.

Preliminary Hypothesis 2: There will be no significant differences in oral language development between the control and experimental groups as measured by the Peabody Picture Vocabulary Test (Form A) at the outset of the investigation.

TABLE IV.1

ANALYSIS OF VARIANCE OF THE METROPOLITAN READINESS PRETEST SCORES
FOR THE EXPERIMENTAL AND CONTROL GROUPS

Source	Sums of Squares	Degrees of Freedom	Mean Square	F
Between	1.3	1	1.3	.006
Within	8813	40	220.3	

Table IV.2 provides an analysis of variance of the Peabody Picture Vocabulary Test (Form A) pretest scores for the experimental and control groups. The F ratio of .06 was not significant at the .05 level of confidence. Therefore, preliminary hypothesis 2 was accepted.

Main Hypothesis 1: There will be no significant differences in the level of reading readiness as measured by the Metropolitan Readiness Test (Form P, Level II) between the control and experimental groups at the conclusion of the investigation after scores are adjusted for pretest differences using analysis of covariance.

This hypothesis was accepted. The analysis of covariance F ratio of 1.07 was not significant at the .05 level of confidence (see Table IV.3).

Main Hypothesis 2: There will be no significant differences in oral language development between the control and the experimental groups as measured by the Peabody Picture Vocabulary Test (Form B) at the conclusion of the investigation after scores are adjusted for pretest differences using analysis of covariance.

This hypothesis was accepted. The analysis of covariance F ratio of .93 was not significant at the .05 level of confidence (see Table IV.4).

TABLE IV.2

ANALYSIS OF VARIANCE OF THE PEABODY PICTURE VOCABULARY PRETEST SCORES
FOR THE EXPERIMENTAL AND CONTROL GROUPS

Source	Sums of Squares	Degrees of Freedom	Mean Square	F
Between	3.38	1	3.38	.06
Within	2199	40	54.98	

TABLE IV.3

METROPOLITAN READINESS TEST (FORM P) ANALYSIS OF COVARIANCE RESULTS

	Sums of Squares	Degrees of Freedom	Mean Square	F	P
Pretest	3655.2	1	3655.2	20.2	<.001
Treatment	193.2	1	193.2	1.07	.31
Residual	7056.0	39	180.9		

TABLE IV.4

PEABODY PICTURE VOCABULARY TEST (FORMS A AND B) ANALYSIS OF COVARIANCE RESULTS

	Sums of Squares	Degrees of Freedom	Mean Square	F	P
Pretest	592.4	1	592.4	18.2	<.001
Treatment	30.3	1	30.3	.93	.34
Residual	1268.1	39	311.3		

Discussion of Results

The results obtained in the previous section indicated that the use of a supplementary language experience approach in kindergarten as taught through the Breakthrough to Literacy program, resulted in no significant differences in reading readiness and oral language development between the experimental and control groups at the conclusion of the investigation. A strong cautionary note must be included here in relation to the use of analysis of covariance. The small sample size utilized in the investigation made it very easy to demonstrate that there were no significant differences between the experimental and control groups in reading readiness or oral language development. Consequently, the results obtained provide little information.

Table IV.5 indicates that in reading readiness the mean of the control group rose by 1.9 throughout the course of the study, while that of the experimental group declined by 3.69 over the same period. This resulted in a difference of 4.48 points in favor of the control group on the posttest adjusted mean.

In oral language development, however, the adjusted means were much closer at the end of the investigation (see Table IV.6). The control group was superior to the experimental group by 1.77 points. At the outset of the investigation the means of the experimental group for both reading readiness and oral language development were higher than the control

TABLE IV.5

EXTENT OF DIFFERENCES IN PRETEST AND POSTTEST ADJUSTED MEANS FOR THE EXPERIMENTAL
AND CONTROL GROUPS ON THE METROPOLITAN READINESS TEST (FORM P, LEVELS I and II)
AND THE PEABODY PICTURE VOCABULARY TEST (FORMS A AND B)

	MRT	PPVT
Experimental	-3.69	+2.93
Control	+1.19	+5.30

TABLE IV.6

PRETEST MEANS AND POSTTEST ADJUSTED AND UNADJUSTED MEANS FOR THE EXPERIMENTAL AND CONTROL GROUPS ON THE PEABODY PICTURE VOCABULARY TEST (FORMS A AND B)

Treatment Group	Pretest Means	Posttest Adjusted Means	Posttest Unadjusted Means
Experimental	52.00	54.83	55.13
Control	51.40	56.70	56.59

group by .40 and .60, respectively (see Tables IV.6 and IV.7)...

That the experimental group showed up slightly superior in terms of results on the Metropolitan Readiness Test (Form P, Level I) and the Peabody Picture Vocabulary Test (Form A) at the outset of the investigation, but inferior in terms of results by the end of the study can possibly be attributed to many factors. The two most obvious explanations that cannot be overlooked are: i) that time spent on more intensive language experience activities through the Breakthrough to Literacy program could perhaps have been better utilized by a more informal approach to language experience or by more emphasis on the regular reading program; and ii) that the control group experienced superior teaching in comparison to that received by the experimental group. Table IV.8 presents data on the teaching experience of the three kindergarten teachers who participated in the investigation. It shows the total number of years teaching as well as kindergarten experience. As can be seen, the experimental group's teacher had more experience with kindergarten students, but control teacher number one was by far the most experienced of the three teachers.

It is the opinion of the investigator and the two other kindergarten teachers who participated in the study that the most overriding consideration affecting the outcome of the results was that the students in the experimental

TABLE IV.7

PRETEST MEANS AND POSTTEST ADJUSTED AND UNADJUSTED MEANS FOR THE EXPERIMENTAL AND CONTROL GROUPS ON THE METROPOLITAN READINESS TEST (FORM P, LEVELS I AND II)

Treatment Group	Pretest Means	Posttest Adjusted Means	Posttest Unadjusted Means
Experimental	45.00	41.31	41.46
Control	44.60	45.79	45.70

TABLE IV.8

TEACHING EXPERIENCE OF THE THREE KINDERGARTEN TEACHERS WHO PARTICIPATED
IN THE INVESTIGATION

	Kindergarten	Other Primary	Elementary & High School	Total
Experimental	5	2	2	9
Control # 1	2	14	0	16
Control # 2	0	0	7	7

group were, on the whole, not as academically capable as the students in the control group. In actual fact, 33.3 percent of the experimental group had been in a junior kindergarten for the 1977-78 academic year in comparison to 18.5 percent of the control group, and all junior kindergarten students at that time had been taught by control teacher number one. In reviewing the Cumulative Records in May 1979, it was the teacher's opinion that all of these students who subsequently formed part of the experimental group were not likely to adequately complete kindergarten after their second year in school.

At the beginning of the 1978-79 school year all 63 kindergarten students were assigned to one of four classes.

As noted in Chapter Three, these students were assessed both formally and informally during the month of September 1978, and those found unready to handle a regular kindergarten program were placed in a junior kindergarten. The number of students to attend junior kindergarten was limited to fifteen in order to allow for the maximum development of each. Three other students from the experimental group and two from the control group were also eligible for junior kindergarten but unfortunately had to be placed in the regular program. The organization of the junior kindergarten resulted in large part in the loss of randomization of the students in the investigation. Control teacher #1, who was the only full-time kindergarten teacher, was again assigned

the junior kindergarten for the 1978-79 school year and consequently in redistributing the students in two of the regular classes to the experimental teacher and to control teacher # 2, she wished to retain the best of her two original classes, combining them into one morning class.

Table IV.9 presents the percentages of students in the experimental and control group that were classified as being high, average, and low students. A student was determined to be a low student on the basis of academic potential displayed and/or his level of maturity, which also affected his ability to perform well in kindergarten. These ratings were carried out in May 1979, and were based on the subjective findings of the three kindergarten teachers who participated in the investigation.

These subjective ratings may appear contradictory for the experimental group in that they showed up slightly superior on both the Metropolitan Readiness Test (Form P, Level I) and the Peabody Picture Vocabulary Test (Form A) at the outset of the investigation. The perceived superiority of the experimental group at that time could be attributed, in part, to the method of administration of the Metropolitan Readiness Test. At the end of the investigation posttesting for the Metropolitan Readiness Test was conducted in a large room with all students present. Each of the teachers administered portions of the Metropolitan Readiness Test (Form P, Level II) while the remaining two supervised.

TABLE IV.9

PERCENTAGE OF STUDENTS IN THE EXPERIMENTAL AND CONTROL GROUP CLASSIFIED AS
HIGH, AVERAGE, AND LOW STUDENTS IN KINDERGARTEN

	High	Average	Low
Experimental	20.00	33.3	46.7
Control	25.90	51.80	22.2

Pretesting, however, was carried out individually by each teacher in her own classroom, from 9:00 to 10:00 a.m. each morning, for four consecutive days, beginning September 28, 1978. Control teacher # 1, who had, on the whole, the best class, consistently finished each session approximately fifteen to twenty minutes earlier than did the experimental teacher or control teacher # 2, which, consequently, may have artificially lowered pretest scores in reading readiness for the control group. It is equally true to point out, however, that the two remaining teachers may have allowed too much time for students to complete items, therein artificially inflating pretest reading readiness scores.

The second factor which may have affected the outcome of posttest results on reading readiness was the differences in Levels I and II of the Metropolitan Readiness Test. Level I of the test, despite having items with an average difficulty of 65-70 percent, was relatively easy for kindergarten students who had been in a junior kindergarten the previous year in that five of its six subtests consisted of rhyming, alphabet recognition, visual discrimination, school language and quantitative language, areas which are intensively taught in the junior kindergarten. Level II, on the other hand, was also designed so that all the items had the same range of difficulty as Level I. The authors structured it thus because they felt that this would result in achieving better discrimination among pupils of average and below average

ability. More accurate assessment of above average pupils was not as important because such pupils are less likely to need special attention to correct pre-reading skill deficiencies (Nurss & McGauvran, 1976). The 33.3 percent of the experimental group who were in junior kindergarten in 1977-78 and who were not expected to be ready to leave kindergarten at the end of the second year all did poorly on four of the six subtests of the readiness test. Two of the subtests measured beginning consonants and sound/letter correspondence (the auditory component), areas in which these students were not ready for instruction as they correlate highly with ability to successfully handle initial reading experiences (see Table IV.10). The last two subtests in which the second year kindergarten students did poorly were school language and listening (the language component). These students found it extremely difficult to listen and analyze all the information that was necessary for them to complete the items correctly. As can be seen from Table IV.8 both the experimental and control groups found the auditory and language component difficult in comparison to the visual component.

A third factor must also be noted in accounting for the outcome of the results--the size of the sample. Because the study was limited to fifteen students in the experimental group and twenty-seven in the control group, such considerations as the physical health, ego strength, or the presence of

TABLE IV.10

PERCENTAGE OF STUDENTS WITH PERCENTILE RANKS OF HIGH, AVERAGE, AND LOW AS SPECIFIED BY THE METROPOLITAN READINESS TEST (FORM P, LEVEL II).

	AUDITORY COMPONENT			VISUAL COMPONENT			LANGUAGE COMPONENT		
	High	Average	Low	High	Average	Low	High	Average	Low
Experimental	13.3	40.0	46.7	20.0	79.3	07	13.3	33.3	53.4
Control	22.2	44.5	33.3	40.7	40.7	18.3	18.5	44.4	37.0

hyperactive students may have had a significant effect on posttest results.

Summary

This chapter presented the findings of the study derived from the analysis of data. It also attempted to explain and interpret these findings in order to shed further light on the study. Chapter V will present a more detailed summary of the conclusions and recommendations based on the aforementioned findings.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This concluding chapter is comprised of three sections. The first section is a summary of the study with a restatement of its purpose as well as a brief review of the procedure and the findings of the analysis of the data. The second and third sections discuss the conclusions and recommendations of the study.

Summary

The purpose of this study was to investigate whether or not kindergarten students who are subjected to a regular reading readiness program plus a supplementary language experience program would be more ready to read by the end of kindergarten than students who are exposed to a regular reading readiness program only.

Two main hypotheses of the study were: i) There will be no significant differences in the level of reading readiness as measured by the Metropolitan Readiness Test (Form P, Level II) between the control and experimental groups at the conclusion of the investigation after scores are adjusted for pretest differences by an analysis of covariance; ii).

There will be no significant differences in oral language development between the control and experimental groups as measured by the Peabody Picture Vocabulary Test (Form B) at the conclusion of the investigation after scores are adjusted for pretest differences by an analysis of covariance.

Forty-one kindergarten students from St. Patrick's School in St. John's participated in the investigation. These were selected from the total kindergarten sample of 63 students. Fifteen students were deemed unable to take part in the study based on initial screening for kindergarten readiness and were placed in a junior kindergarten. The remainder of the students not included either transferred in or out of kindergarten after the study commenced and consequently were unable to participate.

At the beginning of the 1978-79 school year all 63 students were randomly assigned to one of four kindergarten classes. However, the formation of the junior kindergarten one month into the school year resulted somewhat in a loss of randomization and dropped the number of classes participating to three.

Three kindergarten teachers were involved in the study, two of whom formed the control group and one the experimental group. The Breakthrough to Literacy program was the specific language experience approach employed in the study.

Pretesting was conducted from September 25 to October 2, 1978. It consisted of the administration of the Metropolitan Readiness Test (Form P, Level I) and the Peabody Picture Vocabulary Test (Form A). After pretest results were tabulated the junior kindergarten was formed as well as the final composition of the experimental and control groups. The study began on October 8 and concluded on April 30, a duration of six and one-half months. At the conclusion of the study posttests, which consisted of the Metropolitan Readiness Test (Form P, Level II) and the Peabody Picture Vocabulary Test (Form B), were administered.

For the purpose of this study, in the area of reading readiness, only total raw scores obtained from the sum of all subtests of each Metropolitan Readiness Test (Form P, Levels I and II) were subjected to statistical analysis, in that the objective of the investigation was to examine overall performance rather than focus on any individual components (e.g., visual discrimination or auditory discrimination). In oral language development, as well, the raw scores on the Peabody Picture Vocabulary Test (Forms A and B) were utilized for analysis. Data were analyzed for statistical significance at the .05 level of confidence by applying an analysis of variance to the two preliminary hypotheses to determine equivalence of the experimental and control groups at the outset of the investigation, and an analysis of covariance to the two main hypotheses to measure treatment effects.

Summary of Findings

This study found that at the .05 level of confidence there were no significant differences for the hypotheses formulated.

Main Hypothesis 1

Application of analysis of covariance on the total raw scores of the Metropolitan Readiness Test (Form P, Level II) revealed no significant differences between the experimental group (adjusted $M = 41.3$) and the control group (adjusted $M = 45.8$) in reading readiness. Therefore, the null hypothesis was accepted.

Main Hypotheses 2

Application of analysis of covariance on the raw scores of the Peabody Picture Vocabulary Test (Forms A and B) revealed no significant differences between the experimental group (adjusted $M = 54.9$) and the control group (adjusted $M = 56.3$) in oral language development. The null hypothesis was accepted.

Conclusions and Discussion

The conclusions of the study derived from the findings of the data on the two main hypotheses of the

study were as follows:

1. The use of a supplementary language experience approach in the kindergarten resulted in no significant difference between the experimental and control groups in the level of reading readiness displayed at the conclusion of the investigation, as measured by the Metropolitan Readiness Test (Form P, Levels I and II).

2. The use of a supplementary language experience approach in the kindergarten resulted in no significant differences between the experimental and control groups in the level of oral language development at the conclusion of the investigation, as measured by the Peabody Picture Vocabulary Test (Forms A and B).

Limitations of the study were identified in Chapter One. These limitations should be considered in the interpretation of the results of this study.

The conclusions of the study have direct applicability only to the sample of kindergarten students at St. Patrick's School on whom the study was based. These students, on the whole, were disadvantaged students. Based on data received at the 1978-79 Kindergarten Registration, it was found that at least two-thirds of the students had fathers who were unemployed, or on welfare. Others had occupations such as labourer, carpenter, or stevedore. Since September 1977 the Roman Catholic School Board for St. John's, in acknowledgement of the sizable percentage of students who

enter kindergarten at St. Patrick's School functioning at least one to two years below the level of typical five-year-old children, have approved the formation of a junior kindergarten for that school. Given the limitations of the study, therefore, the results obtained could be generalized to other schools which have kindergarten students similar to those found at St. Patrick's School.

The Breakthrough to Literacy program was selected as the specific language experience approach to be utilized. Another type of program, such as a more informal language experience approach as proposed by Van Allen (1962) may have been better suited to kindergarten and would have achieved different results. The Breakthrough program is a formal language experience program; it supplies specific materials for use and suggests when and how they should be implemented. The main component of the program, the student sentence maker, focuses on the generation of sentences using the vocabulary students can recognize in print. In the sense that it relies heavily on a component that requires a certain command of vocabulary, is it more suited to an average/above average kindergarten or a grade one class? Kindergarten students of the type found at St. Patrick's School could perhaps have profited more from an informal approach based primarily on student experiences and experience stories.

Results in reading readiness and oral language development also were limited to the measurements made by

the Metropolitan Readiness Test (Form P, Levels I and II) and the Peabody Picture Vocabulary Test (Forms A and B).

Choices of different tests might have affected the outcome of the study in a different manner. In the area of reading readiness, for example, there are many tests from which to select and each has a different content to some degree.

The Metropolitan Readiness Test at Level II didn't have any subtest on letter recognition, a skill which according to research (see Lowell, 1971) has been found to be a definite predictor of reading readiness. It also contained a subtest on beginning consonants and another on sound-letter correspondence, areas which are more applicable to early grade one. In addition, the authors, Nurss and McGovern, structured the Metropolitan Readiness Tests so that all items would have a 65 to 70 percent difficulty range. Their purpose in this was to pinpoint those students who were really experiencing difficulty in reading readiness rather than select from among others who were of average or above average status. Similarly, another measure of oral language development, such as having students tell a story and recording word count, may perhaps have more accurately reflected the level of oral language development rather than the use of the Peabody Picture Vocabulary Test.

In addition to the factors examined above, two further limitations which became apparent during the course of the study must also be noted in the interpretation of hypotheses

one and two.

As pointed out in Chapter Four, the formation of the junior kindergarten resulted in much loss of the initial randomization of the experimental and control group, which had occurred on entry to kindergarten. When the students were reassigned it was decided that one control teacher could form a class which was comprised of the best students from her former classes. The remainder of her students either became part of the junior kindergarten or were distributed randomly between the second control teacher and the experimental group. While this factor was a serious drawback, it was beyond the control of the investigator. Also, at the beginning of the study it was felt that analysis of covariance, a technique which adjusts pretest scores to obtain initial between group equivalence, could perhaps take care of the differences between the experimental and control groups. During the course of the investigation, however, it became apparent that with 46.7 percent of the experimental group classified as below average students, even an analysis of covariance couldn't handle the gap existing between the two groups.

The method of pretesting could also have affected the outcome of the results. This variable should have been more rigorously controlled in that all students could have been tested together as was the case during posttesting.

Given these limiting factors, plus the small sample size, the statistical results provide somewhat limited information. However, having participated in this study for a period of six and one-half months, the investigator concludes that many invaluable subjective interpretations can be made. These interpretations are as follows:

1. The Breakthrough to Literacy program is not suited to the average or below average kindergarten child. In the Story Figures component, for instance, which forms the beginning of the program, students must tell stories in response to pictures. This ability presupposes that students possess considerable oral language fluency. Many students do not possess this fluency, especially those who are of below average ability or who are very immature. This component is followed by and can be used in conjunction with Nursery Rhymes. The next two aspects of the program deal with the Classroom Sentence Maker and the Student Sentence Maker. The Classroom Sentence Maker is not supposed to be introduced until students display good oral language fluency and it must be continued until they have learned to recognize twelve to fifteen words. At this time the Student Sentence Maker is begun. This component is a smaller version of the Classroom Sentence Maker and it permits students to make sentences with their known words. This type of work is somewhat advanced for the below average kindergarten child. In addition, even if such students could handle it competently,

there are perhaps other less formal approaches to help encourage early reading development, which would be more suited to five-year-old children. Therefore, time spent on the Breakthrough to Literacy program, especially for the 46.7 percent of the experimental class who were below average students, could possibly have been far more profitably utilized by more informal language experience activities, or in more time spent on the regular reading readiness program.

2. Breakthrough to Literacy program could be used successfully with advanced kindergarten students who are ready to read on entry to school or those who will be ready to read within the first three months. These students, in most cases, display sound oral language fluency and are ready and eager to learn words. To ensure optimal success, however, it would be advisable to implement it on a supplementary basis, or, in the event it is utilized as the primary reading readiness program, to provide a great variety of additional work using field trips, experience charts and individual student-dictated stories, to teach essential readiness skills.

3. The ideal placement of the Breakthrough to Literacy program, in the opinion of the investigator, is at the grade one level, in that students must demonstrate a certain degree of competence in many essential early reading skills before they can successfully work with this program.

The Breakthrough program also would appear to be excellent at that level in terms of promoting an excitement about learning to read. The students in the experimental class who began reading the first pre-primer of the Nelson basal series, Funny Surprises in late January 1979, enjoyed generating their own sentences and having a record kept of them in their own special book. They were motivated by the way they could manipulate language. There was a general eagerness about reading among these students; they were always "reading" books and loved to write stories.

The Breakthrough program could be used, at this particular level, as the primary reading approach, although it is especially useful as a supplementary method because it is so easily incorporated into any basal program. Also, as there are no lesson plans provided, utilizing it as a primary approach would require a very competent teacher to manage it alone successfully.

Recommendations

The following recommendations are proposed as a result of the present study.

1. A research study on language experience should be conducted at grade one level utilizing the Breakthrough to Literacy program. It should be explored both on a supplementary basis and as a main approach in comparison to a

basal program.

The subjective results of this study suggest that at grade one, the language experience approach taught through the Breakthrough program is an area in need of study. This program was designed primarily for beginning reading, although it is flexible enough to be used with any primary grade and in remedial reading at higher levels. Therefore, it would seem profitable to conduct a research study at the beginning reading level.

2. This study should be replicated at the kindergarten level, but only where sufficient numbers of students are available, so that its real effects may be more accurately ascertained statistically. Also, all variables such as pretesting and the formation of the experimental and control groups should be more strictly controlled than in the present study. It would also be useful to conduct a study employing only students who are classified as high readiness students on entry to kindergarten. This study could be carried out on a supplementary basis or as a main approach in comparison to the regular reading readiness program.

3. A study should also be conducted in the kindergarten using a more informal approach to language experience, such as the Language Experiences in Reading program developed by Roach Van Allen and Claryce Allen (1969). This program uses children's experiences as the primary basis from which to develop reading readiness and reading. Again, it could

be done on a supplementary basis as well as a main approach in place of the regular reading readiness program.

As noted previously, the Breakthrough to Literacy program can possibly be used successfully with above average kindergarten students, but as a formal language experience program. It would be worthwhile to conduct a research study utilizing an approach more in keeping with the needs and interests of kindergarten children. At the same time, an attitudinal scale could be incorporated into the study to determine student preferences.

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