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**COMPARISON OF TWO APPROACHES
IN TEACHING READING TO
LIMITED ENGLISH PROFICIENT STUDENTS
AND THEIR ACADEMIC ACHIEVEMENT**

by
Gloria Cruz

A THESIS

Submitted in partial fulfillment of the requirements of the Master of Arts Degree in the
Graduate Division of Rowan College of New Jersey
School Psychology
May 2, 1995

Approved by _____
Professor

Date Approved 5/3/95

ABSTRACT

Gloria Cruz
Comparison of Two Approaches in Teaching Reading to Limited English
Proficient Students and Their Academic Achievement
1995
Dr. John Klanderma
Seminar in School Psychology

The purpose of the study was to determine which of two instructional approaches, Whole-Language or Distar (Direct Instruction), was more effective in producing higher levels of academic achievement in bilingual first grade students. It was predicted that the bilingual students receiving instruction through the Whole-Language approach would demonstrate higher academic achievement than those receiving instruction through the Distar approach.

A Pre and Post District Skills Inventory Test for reading (Communication Arts) was administered to the students in each instructional approach group. There were nine students in each group. The resulting scores were analyzed statistically using a t test design for a comparison of the mean values of test scores on before and after instruction, and between groups after instruction, revealed that although gains within each group were significant, there was not a significant difference between groups' academic achievement. The results are discussed in the context of problems with sample size and students' native language.

MINI ABSTRACT

Gloria Cruz

Comparison of Two Approaches in Teaching Reading to Limited English
Proficient Students and Their Academic Achievement

1995

Seminar in School Psychology

The purpose of the study was to determine which of two reading instructional approaches, Whole-Language or Distar, was more effective in producing higher levels of academic achievement in bilingual first grade students. A t test revealed significant academic gains within each group but not a significant difference between groups.

Acknowledgments

God guided and comforted me along the way, and I am most thankful. I am also grateful to my husband, Jose Miguel, and my children Michelle, Michael and Jeanne Frances. My special thanks also to my sisters: Josephine, who put up with my stubbornness all this time; Elsie, who did most of the typing under demands for perfection; and Zaida, for reminding me that there was more to life than "books".

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Many thanks,

Gloria

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CHAPTER ONE

The Problem

Need/Purpose

Learning a second language is essential if the individual is to function and become part of the new culture. Limited English Proficient students (LEPs) are at a great disadvantage in our educational system, at least, temporarily, until they become completely proficient in English, many times at the cost of giving up their native language.

Finding out the best way or approach to teach our LEP students how to read in English is a primordial concern of those in the field of Bilingual Education. Changes in approaches or directions, limit the opportunity of evaluating the systems being utilized, and of arriving to conclusions that may affect decisions. Our LEP students, especially, are the ones to suffer the consequences. In occasions an approach might have been too demanding or ineffective when utilized with LEP students.

In doing my research, it was my objective to determine which of two approaches, Whole-Language or Distar (Direct Instruction) being utilized in bilingual classrooms (in the teaching of Reading), was more effective. The effectiveness of the approach was to be determined by the students' academic achievement as measured by the District's Skills Inventory Proficiency Test (Pre and Post), in the area of Reading (Communication Arts). This test was administered at the beginning of the school year and at the end. Also a Language Proficiency Test (Pre and Post) was administered as a measure of language proficiency before and after completing the school year. The students were then grouped for instruction according to dominant language as indicated by the test scores. The subjects in the study were LEP students in first grade learning to read in English.

It was my purpose in following this study to apply the results to enhance the teaching of LEP students, especially in reading and to adapt changes if necessary, according to the results.

Hypothesis

LEP students in a Bilingual, first grade, receiving instruction to read in English through the Whole Language Approach will demonstrate higher academic achievement than their counterparts who received the instruction utilizing the Direct Language Instruction (Distar).

History/Theory

Bilingual Education

In the article Bilingual Education, (Colce-Muria, 1985), the author gives us a brief account of its history and theory. United States has experienced the implementation of Bilingual Education for over two decades. In 1963, Dade County, in Florida started a public school Spanish English bilingual program for Cuban Americans and Anglos. In 1967, the Bilingual Education Act was added to the Elementary and Secondary Education Act of 1965. The Bilingual Education Act of 1967 was a response to political pressure from minority spokespersons, who pointed out that children of ethnic minority taxpayers were getting second class education because of language barriers, racist, and attitudes. The Supreme Court ruling in the Lau vs. Nichols case emphasized that public school systems are required by federal law to take positive action to help children who do not speak English.

In the state of New Jersey, the mandate for Bilingual Education became a law in 1975. The Camden City Board of Education has developed its Bilingual/English as a Second Language Program (ESL) Policy in which they recognize the importance of developing a policy and procedures that shall provide limited English proficient students with a smooth transition from the native language to English. The policy is a guide for the scheduled use of two languages in the bilingual education classroom and is based on practices that have proven effective in the acquisition of second-language skills. As my study develops changes in the New Jersey Bilingual Education Law have been proposed--

to Legislature.

The policy is in compliance with Chapter 19, Public Laws of 1975, Bilingual Education Act. Limited English proficient students, according to this, shall be provided a full time program of instruction that shall meet their cognitive academic needs and shall facilitate their successful integration into the monolingual English curriculum. It also fulfills the goals of Camden City Bilingual Education Program in that it promotes the development of the student's aural comprehension, speaking, reading and writing skills in the native language and in English when fewer than twenty (20) students of any one language classification are enrolled in the district, the district shall provide developmental English as a Second Language classes for these students.

The policy applies to all instructional and non-instructional activities between bilingual/ESL teachers and LEP students. It also states that teachers are to serve as positive linguistic role models in both the native and second language. Language usage on the part of the teacher will also be determined in large part by the language dominance and aural comprehension of the student(s).

The model of New Jersey Bilingual Education is basically a transitional one. This means that a child who comes into the program as monolingual in his native language will be increasing his proficiency of English until becoming monolingual in English.

There are some categories in which a bilingual student is classified according to his/her level of proficiency in English. These categories are as follows:

Lau:

- A. Monolingual in a language other than English.
- B. Dominant in a language other than English, but does know some English.
- C. Bilingual = Functional in two languages.
- D. Dominant in English but also functions in a language

other than English.

E. Monolingual in English.

Lau categories reflect the linguistic performance of the student and are based on the following:

- A. Teacher Observation
- B. Home Language Survey
- C. English Language Proficiency Test (Maculaitis Test)

The students included in my study belonged to Lau Categories B-C. They received all their academic instruction in English with some translation, only when necessary.

Direct Instruction Approach (Distar)

According to Engelmann and Osborn (1976), a major premise of Distar is that children, in order not to fail in school, must understand the Language of instruction which is simply the language used by the teachers. When the teacher, in presenting the lesson, assumes that the students understand her and that they can follow her directions without checking for comprehension, the child is at best just getting a foggy idea of what is to be done (McBride, 1979).

McBride in her study "The Use of Distar Language Program in an Urban Kindergarten" (1979) posits that the main objective of Direct Instruction Approach is to improve the basic skills of children assuming that all children can be taught. Other assumptions made by this approach which are equally important in the teaching of LEP students are, first that disadvantaged students must be taught more in the time available, that these students tend to be behind other students in the need to achieve, and that basic skills are essential to intelligent behavior.

According to McBride (1979), some features differentiating this approach from others include:

1. Use of scripted presentation of lesson.

2. Use of signaling.
3. Continued reinforcement.
4. Small group instruction.

Whole Language Approach

"Whole Language is grounded in the recent research on language, learning and teaching that shows that learning is natural" (Freeman and Freeman, 1992, p.4). Freeman and Freeman make reference to Goodman (1986) and Smith (1985), who had said that learning seemed easy when taking place outside of school but difficult in school. They proceeded to suggest ways to make learning in school as enjoyable and easy as it was outside of school (Freeman and Freeman, 1992).

Freeman and Freeman posit that Whole Language may be particularly appropriate for students whose first language is not English. They believe that the instruction that many bilingual learners have received in schools have been for the most part fragmented and disempowering and that Whole Language may be "the only road to success for bilingual learners" (Freeman and Freeman, 1992).

The authors believe that traditional methods are not working well for bilingual students. They believe also that to reverse this trend of school failure, a new method is required, and "Whole Language seems to be the answer" (Freeman and Freeman, 1992, p. 6).

The following are Whole Language Principles as presented by Freeman and Freeman (1992):

1. Learning proceeds from whole to parts.
2. Lessons should be learner centered.
3. Lessons should have meaning purpose for students now.
4. Learning takes place as groups engage in meaningful social interaction.

5. In a second language, oral and written language are acquired simultaneously.
6. Learning should take place in the first language to build concepts and facilitate the acquisition of English.
7. Learning potential is expanded through faith in the learner.

Definitions

Significant terms used in this study are defined thus:

1. **Academic Achievement** = used interchangeably with student or group achievement, refers to the performance measured in terms of test scores obtained from written tests such as Reading Inventory Proficiency Test (Communication Arts).
2. **English Language Proficiency Test** = means a test which measures English language skills in the area of aural comprehension, speaking, reading and writing (New Jersey Administrative Code, Title 6, Education, p. 3).
3. **Native Language** = means the language first acquired by the pupil, the language most often spoken by the pupil, or the language most often spoken in the pupils home, regardless of the language spoken by the pupil.
4. **LEP students** = Limited English Proficient students. Students in this study had all been tested using the Maculaitis Language Assessment Program.
5. **Reading** = according to Lau and Kinzer (1987), reading is a developmental, interactive and global process involving learned skills. It specifically incorporates an individual's linguistic knowledge, and can be positively and negatively

influenced by non-linguistic internal and external variables.

6. **Distar Approach** = refers to direct instruction utilized in teaching basic skills and language, especially to students with disadvantages such as inner-city kids, and students with limitations in English (LEP students).
7. **Whole Language Approach** = is a philosophy rather than a particular set of methods of activities. "The philosophical stance, based on research in psycholinguistics, sociolinguistics, child development, language learning, and curriculum theory, was derived from studies showing that children learn language most readily when it is whole, functional, and meaningful" (Cullinan, p. 46).

Assumptions

The underlying assumptions in the present study were that:

1. Exposing LEP students to Whole Language approach in learning to read in English will give them the opportunity to experience a variety of situations in language including phonics, literature, music, and these experiences will at the same time, enrich and motivate them, increase knowledge and develop proficiency in English as a second language as demonstrated by their academic performance.
2. The exposure to an approach such as Distar, would limit the students in the extent and quality of the learning of English as a second language as demonstrated through academic performance.
3. Students exposed to Whole Language would demonstrate a higher academic achievement as measured by their scores in the District Skills Inventory Test (Communication Arts).

4. Progress in language proficiency would result in higher academic achievement.
5. Socio-economic status of students was similar.
6. Schools demographics were comparable if not the same.
7. Students level of proficiency in English was similar.
8. Other factors such as students attendance, physical conditions, disposition or motivation were similar.
9. Teachers dedication and expectations were the same.
10. Conditions under which tests were administered were the same.
11. Period of time when Reading class was conducted was the same for each group.
12. Class duration was the same.

Limitations

It should be emphasized that limitations in the study are inevitable. One apparent limitation is the post facto data; groups not randomly selected. Another apparent limitation is that the children are primarily from low and middle level families on the socio-economic scale, thus effectively omitting representations of the upper-class. Results from the study will only generalize to similar settings and population.

Overview

In Chapter 2, there will be a review of literature. Any research or theories pertaining to the areas of Bilingual Education, Whole Language approach and Distar approach will be reviewed. In Chapter 3, the design of the study will be discussed. The sample, operational measures, testable hypothesis, design and analysis will be described. The methods of research will be clearly stated. In Chapter 4, the analysis of results will be examined. The hypothesis will be restated and the results interpreted.

In Chapter 5, results from the present study will be summarized and discussed. After reviewing the data, hypothesis supporting conclusions will be stated.

CHAPTER TWO

Review of Literature

Introduction

In the history of education there have been many theories of methods for teaching reading. Literature presents us with many attempts for finding the most efficient approach. Many of the studies support the Whole-Language Approach method, others are in favor of the Direct Language Approach.

In this review we will consider the main advantages, as well as some concerns regarding Whole-Language. A description of Distar Approach will be included as well.

Whole-Language (Description)

The Whole-Language Approach consists of a total immersion of the child in a literature filled environment. The students enjoy and participate in a relaxed atmosphere where no demands are made on the acquisition of letter or words recognition. There is no emphasis on spelling or writing.

Distar (Direct Instruction)

The Direct Instruction (Distar) consists of the teaching of letters and sounds, and the formation of words in a very structured manner. Specific guidelines or directions, are used in a sequential mode. The students must have mastered one step before advancing to the next.

Whole-Language: Findings

The following studies will demonstrate the advantages found in the use of Whole Language Approach.

According to Tunnell & Jacobs (1989), the Whole-Language movement has

renewed attention to individualized reading. A great variety of studies have attempted to compare literature based reading with basal and mastery learning instruction, while others have looked at growth within Whole-Language classrooms employing literature based reading programs.

Cohen (1968), in one of the most important studies, used a control group of 130 students in 2nd grade who were utilizing basal readers, and compared them to 155 children in an experimental group using a literature component along with regular instruction. The study took place in schools in New York City, where it was believed that the low socio-economic background of the students was a determinant factor in the students' academic retardation (Tunnell & Jacobs, 1989).

"The experimental treatment consisted mainly of reading aloud to children from 50 carefully selected children's trade picture books - books without fixed vocabulary or sentence length - and then following up with meaning related activities" (Tunnell & Jacobs, 1989, pp. 470-471).

The experimental group showed significant increases over the control group (on Metropolitan Achievement Tests and A Free Association Vocabulary Test administered in October and June) in word knowledge ($p < .005$), reading comprehension ($p < .01$), vocabulary ($p < .05$) and quality of vocabulary ($p < .05$). When the six lowest classes were compared, the experimental group showed an even more significant increase over the control (Tunnell & Jacobs, 1989).

These researchers replicated the above mentioned study and found basically the same results.

In another similar study Eldredge and Butterfield (1986) concluded that the use of children's literature to teach children to read had a positive effect upon students' achievement and attitude toward reading - much greater than the traditional methods used (Tunnell & Jacobs, 1989).

Another study done utilizing the Whole-Language approach was performed by Larrick in 1987. His study was done utilizing children at high risk of failure in New York City's west side. Ninety two percent (92%) of the children came from non-English speaking homes, 96% lived below the poverty level, and 80% spoke no English when entering school. The Open Sesame program started with 225 kindergarten students, offering them an opportunity to read in an unpressured, pleasurable way, neither basals nor workbooks were used. The major method of teaching consisted of immersion in children's literature and language experiences, and skills were taught primarily in meaningful context as children requested help in writing. He found a great level of success and as a result the program was extended gradually through 6th grade.

In their study, White, Vaughan, and Rorie (1986) also "reported that 1st grade children from a small, economically depressed rural community responded well to reading and writing programs not using a basal", (Tunnell & Jacobs, 1989, p. 472).

"Though quick to say that the children understood far more about reading process than could ever be measured by a pencil and paper test. White and her colleagues were also pleased that 20 of the 25 children scored a grade equivalent of 2.0 or better on the spring standardized tests. The other 5 children had scores of 1.6, 1.7, or 1.9, and the lowest percentile ranking was 54th", (Tunnell & Jacobs, 1989, p. 472).

In another study, K.S. Goodman (1965) verified reader's ability to recognize words with greater accuracy when they appear within a passage as opposed to when presented in lists in isolation. Goodman recorded the number of errors made when the readers were presented with the same words on lists and then within stories. He found that of the words that were missed on the lists, the first graders missed only thirty eight percent when presented in stories, third graders only missed eighteen percent in stories.

Conclusion

Studies on Whole-Language have shown that there are great advantages in using this approach. Among some of the advantages we find are:

1. the development of a positive attitude toward reading.
2. a positive effect upon students' achievement.
3. a greater development of related skills such as oral expression.
4. a global enrichment in general knowledge and social skills.

According to Tierney (May 1990), there is a concern of Whole-Language constricting itself with a restricted set of materials, instructional activities, and assessment practices. There is also the possibility that teachers will focus in the activities rather than on the child.

After extensively researching literature in the area of Whole-Language, I have developed my study with the purpose of finding its effectiveness in 1st grade Limited English Proficient students in a bilingual classroom. There was no previous study found that had been done with this population. This study will demonstrate that when teaching reading to Limited English Proficient students in a bilingual setting the Whole-Language approach proves to be most effective.

CHAPTER THREE

Design of the Study

Sample

The sample in the study consisted of eighteen (18) heterogeneous, first grade, Limited English Proficient students. There were two groups, one received reading instruction via the Distar (Direct Instruction) Approach (Group A), the other groups (Group B) through the Whole-Language approach. Group A consisted of three (3) boys and six (6) girls while Group B was formed by six (6) boys and three (3) girls. All students were of Hispanic origin, coming from low socioeconomic inner city schools in Southern, New Jersey.

The students had been placed in Bilingual classrooms after being screened through a survey (Home Language Survey) and a language proficiency test (Maculaitis Test). For instructional purpose the subjects had answered the New York Language Assessment Battery Test (NYLAB), which reflected dominant language, English or Spanish.

Permission for the use of test scores from these subjects was requested from the District's Board of Education. This was officially granted. (See Appendix 3.1) Subjects' names were not utilized in order to protect confidentiality, instead numbers were assigned to each student per group; Group A, 1 through 9; Group B, 1 through 9.

Design

The study is an ex post facto research design comparing two different groups (between subjects approach).

Group A consisted of first grade bilingual students, dominant in English. These received instruction in reading through the Distar Approach. The subjects in

Group B had similar characteristics but received reading instruction through the Whole-Language approach. Both groups received instruction in a bilingual classroom setting.

The dependent variable being considered was academic achievement.

Independent variables being the methods of teaching reading mentioned earlier.

Some confounding variables considered were teachers' years of experience, styles and differences in school that could have influence the findings. Since both teachers respond to the Bilingual Department have received Bilingual Certification and followed the same Bilingual Department supervisor's guidelines and recommendations, as well as having attended workshops together I assumed that differences were not significant to influence findings. Schools demographics are similar enough as to balance any other differences such as administrators styles or programs available to the students.

The subjects in this study were tested at the beginning as well as at the end of the school year (Pre and Post test). The test utilized was the District's Skills Inventory Proficiency Test - (Communication Arts). Each classroom teacher administered and scored the tests utilizing the Teacher's Guide and Answer Key included with the tests. Tests scores were reported to the schools principals and Bilingual Department after each testing period. These data have been analyzed using a t test statistical analysis and is presented in Chapter 4.

Measures

The District's Skills Inventory Proficiency Test was used by both teachers to assess the children's reading (communication) skills. This test was developed by teachers and supervisors working in the District. The format and skills presented followed the Comprehensive Tests of Basic Skills (CTBS/Fourth Edition-McGraw-Hill, 1989) design and the reading series by Houghton Mifflin. Content and accuracy was carefully monitored by the test developers and about twice as many items were created before final test selection. The test was tried out in the District's schools. The data

collected, as well as teacher's input, was utilized during the revision of the test. Items reflecting possible bias in language representation of people or subject matter were eliminated.

The main objective in developing this test was for diagnostic purposes only. It is a Pre and Post assessment tool. As a curriculum referenced test its content is grouped into clusters of items found in the Communication Arts curriculum such as:

- I. Word Analysis
- II. Vocabulary/Decoding
- III. Comprehension
- IV. Language Mechanics/Expression
- V. Locating, Organizing and Remembering (study skills)

The content validity of this test is high because the items included represent the subject matter it was intended to cover. This can be checked by comparing the content descriptions and test items to the Quarterly Topic Plans (QTP). The QTP are the corresponding skills to be covered during each marking period as established by the District's Board of Education. It also represents the content and skills present in the reading serie being used (Houghton Mifflin, 1989).

The test discriminative validity allows for grouping of students mastering and those non mastering the skills presented. It measures academic achievement demonstrating its face validity. It also contains the appropriate stimulus material related to the variable assessed (academic achievement).

Procedures

The dates for the administration of the District Skills Inventory Tests, Communication Arts are scheduled by the school district at the beginning of the school year. The test is administered for a period of three days during a forty-five (45) minutes period during the communication arts lesson period.

The subject in this study had already been screened and grouped following the Bilingual Guidelines in place. (See Chapter I). Each teacher administered the test following the Teacher's Guide that accompanies it. Each child received a test book in which they marked their answers. An instructional assistant monitored the students during the duration of the test. Each teacher had an instructional assistant. At the end of the testing period each teacher checked the test or tests using the Answer Keys provided. The use of the Answer Keys ensure objectivity in the scoring. Raw scores were then transformed into percentages utilizing a conversion table, also included in the Teacher's Guide.

Each teacher then completed a Checkpoint Summary Report including the scores for each test. They sent a copy to their corresponding school principals and another to the Bilingual Department. This procedure was repeated at the end of the school year.

Permission was then requested from the District's Board of Education for the access to these records. This was granted (See Appendix 3.1). Scores of students who had not completed the school year in the same school, with the same class, were not considered at all for this study. A list of names from each Checkpoint Summary Report was developed in alphabetical order. Scores for the Pre and Post tests were recorded. Later the names were substituted by numbers in order to maintain confidentiality.

Analysis

A t test statistical analysis was later performed on the data. The statistical results are analyzed and further explained in Chapter 4.

CHAPTER FOUR

Analysis of Results

Results

Based on the analysis of data the hypothesis will be stated and the results will be systemically presented. According to the significance of the results the hypothesis will be accepted or rejected and the results will be interpreted.

The hypothesis states that Limited English Proficient students (LEPs) in a Bilingual first grade, receiving instruction to read in English through the Whole Language Approach will demonstrate higher academic achievement than their counterparts who received the instruction utilizing the Direct Language Instruction (Distar).

A t test design for a comparison of the mean values of test scores on before and after instruction, and between groups after instruction, was performed. The level of significance was $p > .05$. When the statistical analysis was performed on the Pre and Post test mean values, the results indicated a non-significant difference. Based on these findings the decision was to fail to reject the null hypothesis. These findings are illustrated in Table 4.1 and Figure 4.1.

Table 4.1

Pre Test	Mean	t Value	F Value
Group 1	15.44	-.40	8.67
Group 2	17.55		
Post Test			
Group 1	77.33	.40	3.71
Group 2	74.00		

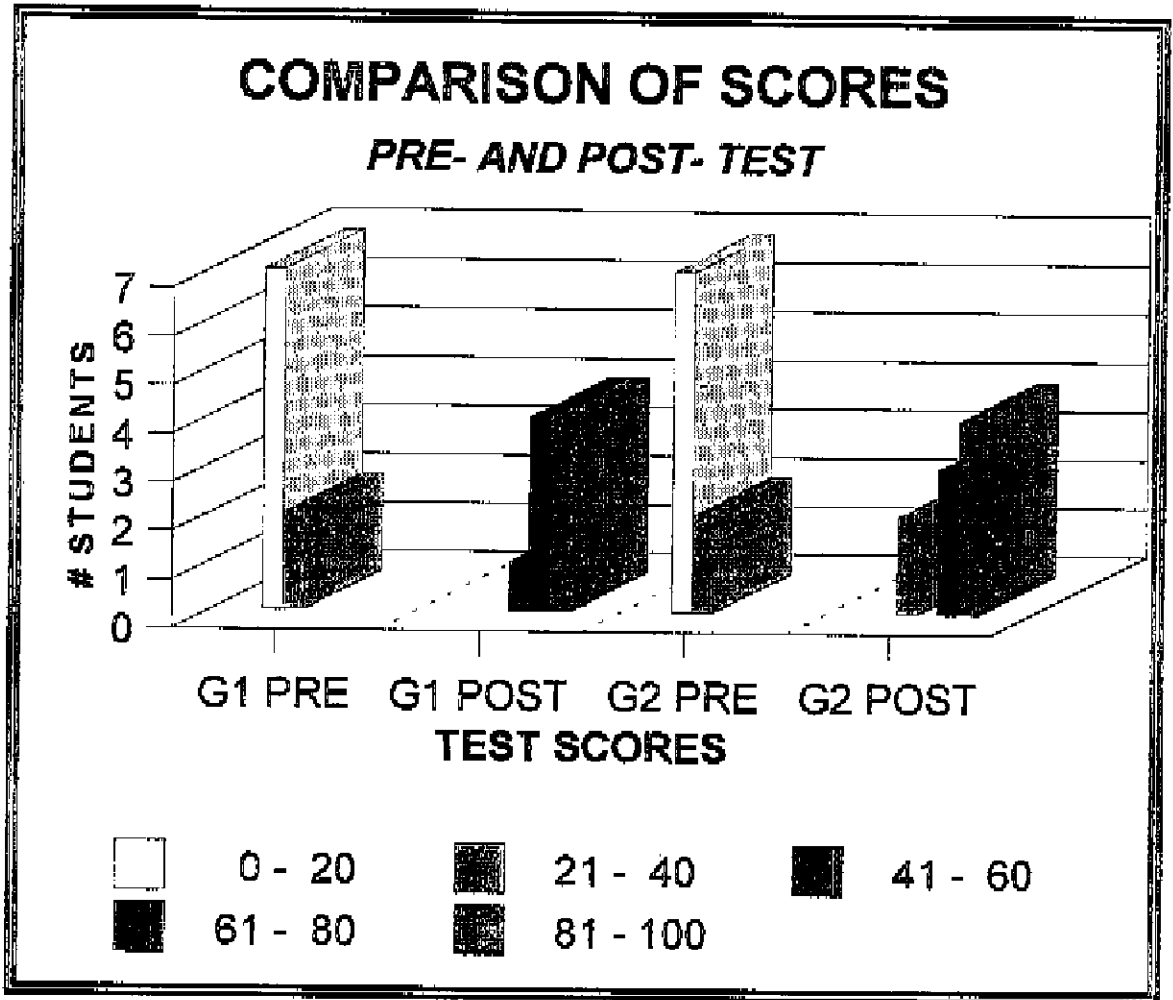


Figure 4.1.

In order to determine whether there was a significant difference in each group students' academic achievement, a t test was performed. Results from this t test indicated that there was a significant academic gain within each group, however, the between groups comparison showed that both groups gained equally from instruction. Table 4.2 and Figure 4.2 illustrate these findings.

Table 4.2

	Pre Test	Post Test	t Value
Gr. 1	$\bar{x}_1 = 15.44$	$\bar{x}_1 = 77.33$	10.67
Gr. 2	$\bar{x}_2 = 17.55$	$\bar{x}_2 = 74.00$	7.6

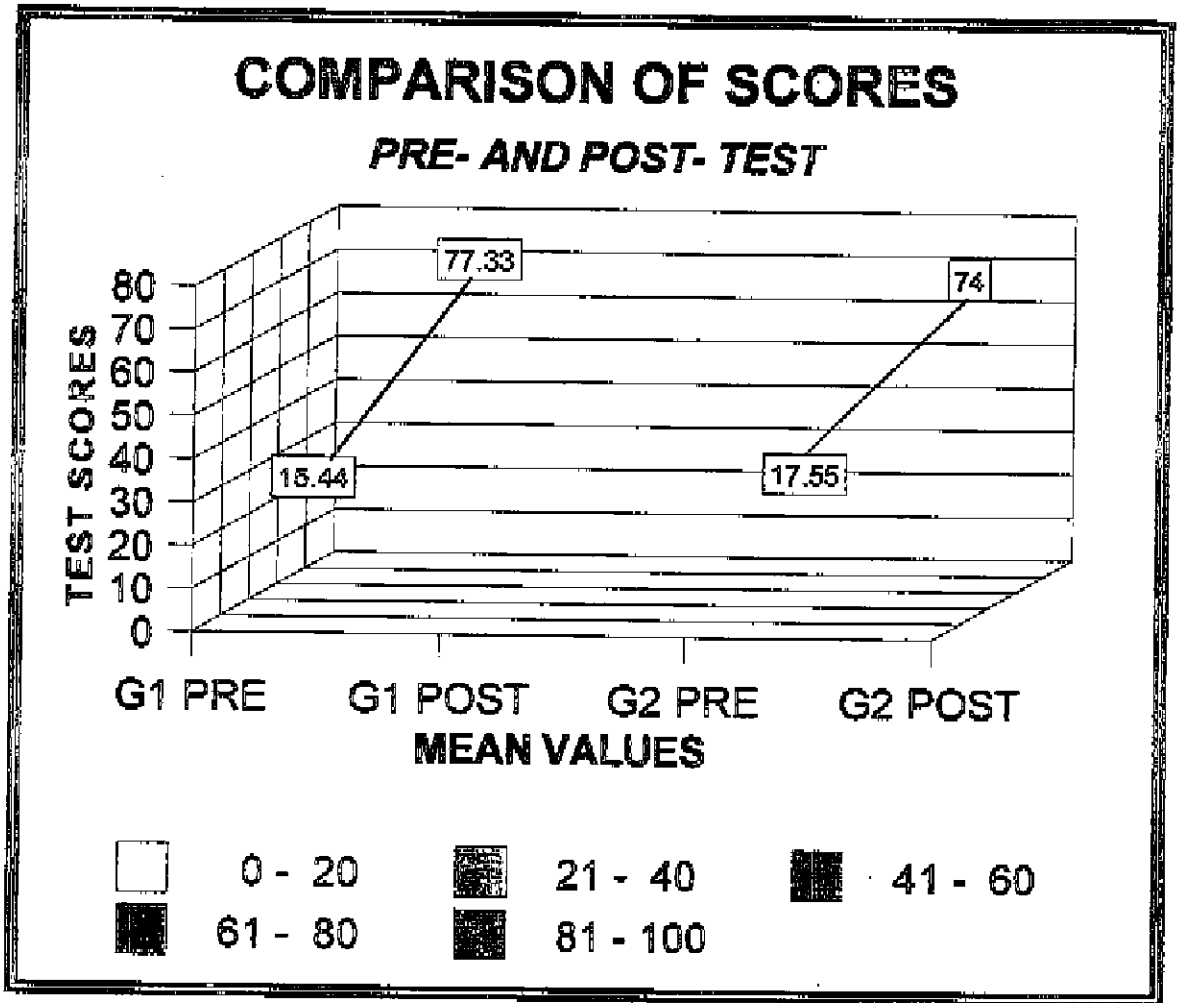


Figure 4.2.

Interpretation of Results

The results from the statistical analysis indicate that no significant difference exists between the mean values for Groups 1, 2, as reflected in scores for Pre/Post Reading tests. This indicates that there is not a significant difference between the instructional approaches, Distar and Whole Language, regarding academic achievement (as measured by the Inventory Skill Test) in Bilingual, first grade, inner city students. The study seems to indicate that children's academic achievement will develop at a comparable rate regardless of the approach being utilized.

Summary

The analysis of the data using t tests revealed first, that there was no significant difference between the groups before or after instruction. Secondly, that there was a significant gain within each group regardless of the instructional approach utilized. In conclusion, the findings seem to indicate that both groups gained equally from instruction.

The results of this study seem to indicate that both instructional approaches are as effective when being implemented with Bilingual first grade, inner city students', but as shown on Figure 4.2, although not significant, an improvement can be ascertained in the mean of G1 (Distar).

CHAPTER FIVE

Summary and Conclusions

Summary

The purpose of the study was to determine which of two instructional approaches, Distar (Direct Instruction) or Whole-Language, was more effective in producing higher levels of academic achievement in bilingual, first grade, inner-city students. It was predicted that the bilingual students receiving instruction through the Whole-Language approach would demonstrate higher academic achievement than those receiving instruction through the Distar approach.

The study was an ex post facto research. Pre and Post test scores from the District Inventory Skills Test, administered during the Fall and Spring of the previous school year (1993-94), were collected. The sample consisted of two groups of nine subjects each. Scores of students who had not completed the school year in the same school, with the same class, were not considered at all for this study. The data collected was analyzed using t tests.

A t test design for a comparison of the mean values of test scores on before and after instruction, and between groups after instruction, was performed. The level of significance was $p < .05$. When a t test was performed on the Pre test mean values scores for G₁ and G₂ ($\bar{x}_1 = 15.44$ and $\bar{x}_2 = 17.55$), and for Post test mean values scores ($\bar{x}_1 = 77.33$ and $\bar{x}_2 = 74.00$), the results indicated a non significant difference. Based on these findings the decision was to fail to reject the null hypothesis.

In order to determine whether there was a significant difference in students' academic achievement, a t test was prepared. The findings from this test indicated

that there was a significant academic gain within each group, however, the between groups comparison showed that both groups had gained equally from instruction. (See Table 4.2 and Figure 4.2).

Conclusions/Discussion

The results of this study seem to indicate that both instructional approaches, Distar and Whole-Language, are as equally effective when implemented with bilingual, first grade, inner-city students. There was, although not significant, an improvement in the mean of the Distar group when the analysis between Pre and Post test Mean Value scores were performed within the groups. (See Table 4.2 and Figure 4.2).

Results of this study are not definitive and the cautions that normally apply to the interpretation of results from quasi experimental research apply here. In addition, three other reasons may apply:

- the sample used for this study was too small for any definite conclusion to be drawn from the data;
- the time period between Pre and Post tests, nine months, may have allowed for difference in learning experience not exclusive of the instructional approach being implemented and;
- teachers' and students' attitudes and behaviors during testing may have influenced results. For example, a teacher may have positively reinforced her students before and during the test so that slow students may have tried harder during testing.

This study, although undertaken on a very small scale, presents data which is probably worth considering in evaluating the effectiveness of these two instructional approaches with LEP students. Proponents of Direct Instruction and those behind Whole-Language have all found evidence of the effectiveness of each approach. The results of

my study however, indicated a non-significant difference between these two approaches. Based on this situation, I would think that the process for examining the effectiveness of these approaches should be considered.

The difficulty of assessing the effectiveness of Whole-Language, for example, is found throughout the literature. One of the reasons given by McKenna (1990) is the diversified manner in which different people approach it; in some instances it may be the teacher's attitude (such as positive reinforcement, interest in literature and students' contributions), rather than the methods involved which may account for the differences and inconsistent research results. The problem of studying it in natural setting also provides for a variety of confounding variables during the course of the study. According to McKenna (1990), there is also the inadequacy of achievement tests to reflect the multiple dimensions of literacy acquisition present in this approach.

Implications

The results of the present study are important because there has been little research conducted with Spanish bilingual, first grade students in bilingual classroom settings. Most research on this subject has been conducted either on bilingual or native English speaking students at higher grade levels or with monolingual English speaking students only at the primary levels.

In duplicating this study it may be important to consider the level of English proficiency of the students involved, as well as the level of skills mastery in their native language. Additionally, the great diversity of levels in skills mastery one may expect to find at this primary level (first grade) may by itself limit a study of this nature. It may be more appropriate to study the effectiveness of instructional approaches such as Distar and Whole-Language at a higher grade level. If conducting this type of research at a first grade level an experimental approach may be more appropriate than an ex post facto study. One may also want to consider other aspects such as students' I.Q's and

parental involvement, when performing this type of study. The use of a larger sample in future studies is strongly recommended.

The importance of determining the most effective instructional approach in teaching LEP students is to better meet their needs and develop their academic skills. An effective instructional approach must not only help LEP students achieve the highest level of academic performance but should also develop their interest, creativity and provide and encourage the fullest development of language skills. In my opinion, an effective approach would be one which will help them achieve the highest level of academic performance with the most exposure to real life situations, literature richness, and hands-on activities. It must also address the students language limitations and encourage language development in a non- intimidating manner, without restricting the use of isolated words or sounds but integrating it in the lesson. I believe that a well rounded approach in which Whole-Language techniques are combined with the Distar approach techniques would even be more effective than either one of its components by itself. Future studies may be directed toward this model.

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APPENDICES

Appendix A

October 3, 1994

Gloria Cruz
1601-48th Street
Pennsauken, N.J. 08110

Dr. Roy Dawson
Superintendent
Camden Board of Education
201 Front & Cooper Streets
Camden, N.J. 08102

Dear Dr. Dawson:

My name is Gloria Cruz. I work for the Bilingual Department in Camden as a Resource Person. I am working toward a Master degree in School Psychology at Rowan College.

I would like to request permission hereby, to analyze data collected on Bilingual Program Participants for my Master Thesis. I would gladly share my findings with the Bilingual Program.

Thank you in advance.

Sincerely,



Gloria Cruz

cc: Dr. Mary A. Frazier
Mr. José A. Jiménez
Mrs. Migdalia Soto

Appendix B



BOARD OF EDUCATION
201 NORTH FRONT STREET
CAMDEN, NEW JERSEY 08102

OFFICE OF THE
SUPERINTENDENT OF SCHOOLS

(609) 966-2000
FAX (609) 966-2138

December 14, 1994

Ms. Gloria Cruz
Resource Person
Camden Board of Education
Bilingual Department
201 N. Front Street
Camden, NJ 08102

Dear Ms. Cruz:

It is a pleasure to notify you that at the meeting of the Board of Education held on October 24, 1994, your request to conduct a research study on "Analyzing Data Collected on Bilingual Program Participants" was approved.

Sincerely,

A handwritten signature in cursive script that reads "Roy J. Dawson, Jr.".

Roy J. Dawson, Jr., Ed.D.
Superintendent of Schools

RJD:md

COMMUNICATION ARTS
DISTRICT INVENTORY TEST
GRADE I

Test I Word Analysis

SAMPLE A	bear <input type="radio"/>	dot <input checked="" type="radio"/>	pet <input type="radio"/>	hide <input type="radio"/>
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1. come ten need have

2. game pan more sail

3. with nap can beach

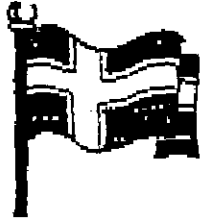

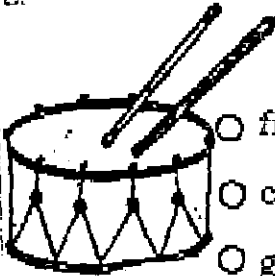

SAMPLE B	pet <input checked="" type="radio"/>	walk <input type="radio"/>	fan <input type="radio"/>	bug <input type="radio"/>
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4. up sun big shut





5. bed farm hook top

6. had cap tail fox

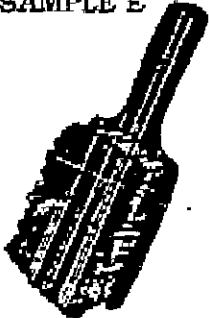
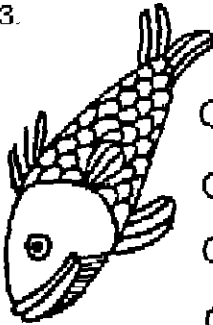


INITIAL BLENDS

<p>SAMPLE C</p>  <ul style="list-style-type: none"> <input type="radio"/> pl <input type="radio"/> sw <input checked="" type="radio"/> fl <input type="radio"/> fr 	<p>7.</p>  <ul style="list-style-type: none"> <input type="radio"/> tr <input type="radio"/> sw <input type="radio"/> fr <input type="radio"/> dr 	<p>8.</p>  <ul style="list-style-type: none"> <input type="radio"/> fr <input type="radio"/> cr <input type="radio"/> gl <input type="radio"/> dr 	<p>9.</p>  <ul style="list-style-type: none"> <input type="radio"/> sw <input type="radio"/> fr <input type="radio"/> dr <input type="radio"/> tr
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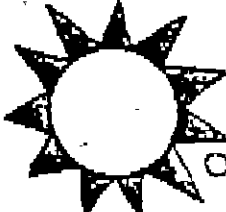
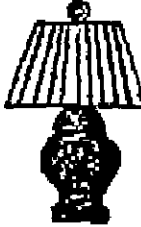
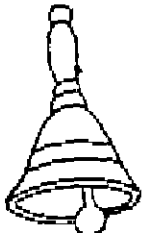
INITIAL DIGRAPHS

<p>SAMPLE D</p>  <ul style="list-style-type: none"> <input type="radio"/> th <input type="radio"/> sh <input checked="" type="radio"/> ch <input type="radio"/> wh 	<p>10.</p>  <ul style="list-style-type: none"> <input type="radio"/> wh <input type="radio"/> th <input type="radio"/> sh <input type="radio"/> ch 	<p>11.</p>  <ul style="list-style-type: none"> <input type="radio"/> th <input type="radio"/> sh <input type="radio"/> ch <input type="radio"/> wh 	<p>12.</p>  <ul style="list-style-type: none"> <input type="radio"/> ch <input type="radio"/> sh <input type="radio"/> th <input type="radio"/> wh
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FINAL DIGRAPHS

<p>SAMPLE E</p>  <ul style="list-style-type: none"> <input type="radio"/> th <input type="radio"/> ch <input type="radio"/> wh <input checked="" type="radio"/> sh 	<p>13.</p>  <ul style="list-style-type: none"> <input type="radio"/> sh <input type="radio"/> th <input type="radio"/> ch <input type="radio"/> wh 	<p>14.</p>  <ul style="list-style-type: none"> <input type="radio"/> wh <input type="radio"/> sh <input type="radio"/> ch <input type="radio"/> th 	<p>15.</p>  <ul style="list-style-type: none"> <input type="radio"/> th <input type="radio"/> ch <input type="radio"/> wh <input type="radio"/> sh
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VOWEL SOUNDS (Short)

<p>SAMPLE A</p>  <ul style="list-style-type: none"> <input checked="" type="radio"/> cot <input type="radio"/> rope <input type="radio"/> car 	<p>16.</p>  <ul style="list-style-type: none"> <input type="radio"/> box <input type="radio"/> nut <input type="radio"/> blue 	<p>17.</p>  <ul style="list-style-type: none"> <input type="radio"/> make <input type="radio"/> our <input type="radio"/> bat 	<p>18.</p>  <ul style="list-style-type: none"> <input type="radio"/> girl <input type="radio"/> eat <input type="radio"/> pet
---	---	--	---

VOWEL SOUNDS (Long)

<p>SAMPLE B</p>  <ul style="list-style-type: none"><input type="radio"/> wig<input type="radio"/> day<input checked="" type="radio"/> ride	<p>19.</p>  <ul style="list-style-type: none"><input type="radio"/> set<input type="radio"/> bean<input type="radio"/> cool	<p>20.</p>  <ul style="list-style-type: none"><input type="radio"/> bone<input type="radio"/> air<input type="radio"/> top	<p>21.</p>  <ul style="list-style-type: none"><input type="radio"/> for<input type="radio"/> game<input type="radio"/> pipe
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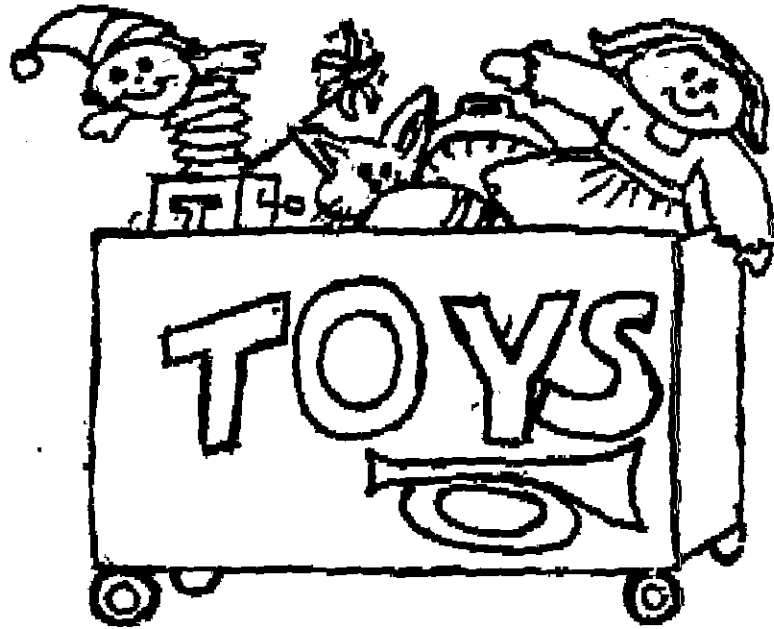
SIGHT WORDS

<p>SAMPLE A</p> <ul style="list-style-type: none"><input type="radio"/> four<input type="radio"/> mail<input type="radio"/> will<input checked="" type="radio"/> make	<p>22.</p> <ul style="list-style-type: none"><input type="radio"/> pretty<input type="radio"/> please<input type="radio"/> where<input type="radio"/> three	<p>23.</p> <ul style="list-style-type: none"><input type="radio"/> this<input type="radio"/> book<input type="radio"/> with<input type="radio"/> that	<p>24.</p> <ul style="list-style-type: none"><input type="radio"/> school<input type="radio"/> they<input type="radio"/> have<input type="radio"/> had
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TEST II VOCABULARY

WORD MEANING

<p>SAMPLE B</p> <ul style="list-style-type: none"><input type="radio"/> five<input checked="" type="radio"/> blue<input type="radio"/> pig<input type="radio"/> cake	<p>25.</p> <ul style="list-style-type: none"><input type="radio"/> hill<input type="radio"/> apple<input type="radio"/> mounds<input type="radio"/> father	<p>26.</p> <ul style="list-style-type: none"><input type="radio"/> year<input type="radio"/> tease<input type="radio"/> first<input type="radio"/> week	<p>27.</p> <ul style="list-style-type: none"><input type="radio"/> ball<input type="radio"/> new<input type="radio"/> jeans<input type="radio"/> rake
---	---	--	--



SAMPLE C

Kim will get the _____ out of the box.

- cake
- doll
- rug
- chin

28.

I am thirsty, so I will get a _____ of water.

- swim
- pail
- drink
- top

29.

Yesterday our class got _____ out of the library.

- shoes
- tools
- games
- books

30.

Anna feels tired, she needs to get some _____.

- sleep
- food
- flowers
- sheets

Sentence Meaning/Details

SAMPLE A The boy gets a glass of milk.



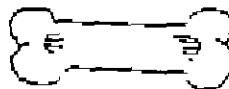
31. They have a ball.



32. I put the bug in a jug.



33. The bib is for baby.



SAMPLE B



Lisa will be in a play. She will be the princess. Lisa's mother made her a new dress. Lisa thinks the dress is beautiful. She will wear it in the play.

What will Lisa be in the play?

a horse

a princess

a tree

a mother



Animals come in many sizes. Some animals are big and some are small. A frog is so little you can hold it in your hand. A rabbit is also little, but a bear is very big. An elephant is bigger than a bear.

34.

What is this story all about?

- Frogs are silly animals.
- Animals come in many sizes.
- Elephants are bigger than bears.
- A bear is big.

This is a good day to clean. Mother will clean the yard. Father will wax the car. My brother and I will wash the dog.

35

The children will?

- wax the car
- clean the yard
- wash the dog
- have a party



THE SURPRISE

Eric wanted Angel to come to a party at his house. It was on Saturday. So he wrote her a letter.

When Eric ran to mail the letter, the wind blew it away. Eric chased the letter and bumped right into Angel. She was not happy. Eric was sad because he was sure Angel would not come to his party.

To Eric's surprise, Angel came. And she brought with her a parrot. It wished Eric a happy birthday.

36. Eric wanted Angel to:

- write him a letter
- play with him
- come to his party
- be his friend

37.

When was Eric's party?

- on Sunday
- on Saturday
- on Monday
- on Wednesday

38.

What happened to the letter?

- The wind blew it away.
- The mailman took it.
- Eric gave it to Angel.
- Eric left it at home.

39.

What did Angel give Eric?

- a puzzle
- a rabbit
- a letter
- a parrot

40.

Why was Eric surprised?

- Angel did not get the letter.
- Angel was not happy.
- Angel came to his party.
- Angel stayed home.

41.

Why did Eric bump into Angel?

- He wanted to see her.
- He was not looking.
- He wanted to talk.
- He wanted to go fishing.

42.

Why did Eric chase the letter?

- to see it
- to play with it
- to eat it
- to mail it

Test IV. Language Mechanics/Expression

SAMPLE A

Your birthday is on thursday.

-

43. it snowed a lot last January.

-

44. Maria and i are friends.

-

45. Please come to my party next saturday.

-

SAMPLE B

Where is my hat

- (.) (l) (?)

46. Lisa is my friend

- (.) (l) (?)

47. Get out of here

- (.) (l) (?)

48. Did you eat yet

- (.) (l) (?)

SAMPLE C

I saw _____ at the library.

- molly jones
- Molly jones
- Molly Jones

49

I have a new pet bunny. Her name is Fluff.

50

51

49. dear Grandma

Dear Grandma

dear grandma

50.

love

Love

LOVE

51. diane

DIANE

Diane

SAMPLE D

I can't play now.

- is not
- can not
- could not

52. Mom said, that we're going out.

- you are
- we are
- we will

53. But isn't it too cold?

- was not
- has not
- is not

54. No, it's nice outside.

- it is
- it will
- she is

SAMPLE E

The two planes are late.

-

55. The boys are playing.

-

56. A blue bike is lost.

-

57. Is the store crowded?

-

SAMPLE F

The man is fixing the car. He said, "Who will help me fix the car?"

- The car
 The man
 The fix

58. Kim wanted to go to the circus.
She wanted to see the elephants.

- Kim
 the circus
 the elephant

59. The boy was looking for a mitt.
And a dog helped him find it.

- A mitt
 The boy
 A dog

60. Janet and Artie made a snowman.
They put a hat on its head.

- snowman
 hat
 Janet and Artie

SAMPLE G

Ben reads a book.

61. Bailey runs in the race.

62. The dog barks at me.

63. Joey picks the flower.

SAMPLE H

He has a yellow bike.

64. This is a green leaf.

65. Yesterday was a sunny day.

66. Ted has six trucks.

SAMPLE I

- A small.
- A small tiger ran away.
- A small tiger.

67. These are my.
 These are my rabbits.
 These are.
68. The big apple is red.
 The big.
 The big apple.
69. Latonya and John.
 Latonya and.
 Latonya and John laugh and play together.

SAMPLE J

_____ were laughing.

- Five cats
- Five friends
- Five rabbits

70. _____ could go for a swim.

- Mother
- Then
- Dish


71. _____ like to have lunch.

- The hunt
- The girls
- A sun

72. _____ will read the book.

- School
- Bird
- Bob

SAMPLE K



Tom _____

- hops.
- jumps rope.
- runs fast.



73. Mother _____

- eats an apple.
- swims.
- builds a house.

74. Steve _____

- eats an apple.
- swims.
- builds a house.

75. Father _____

- eats an apple.
- swims.
- builds a house.

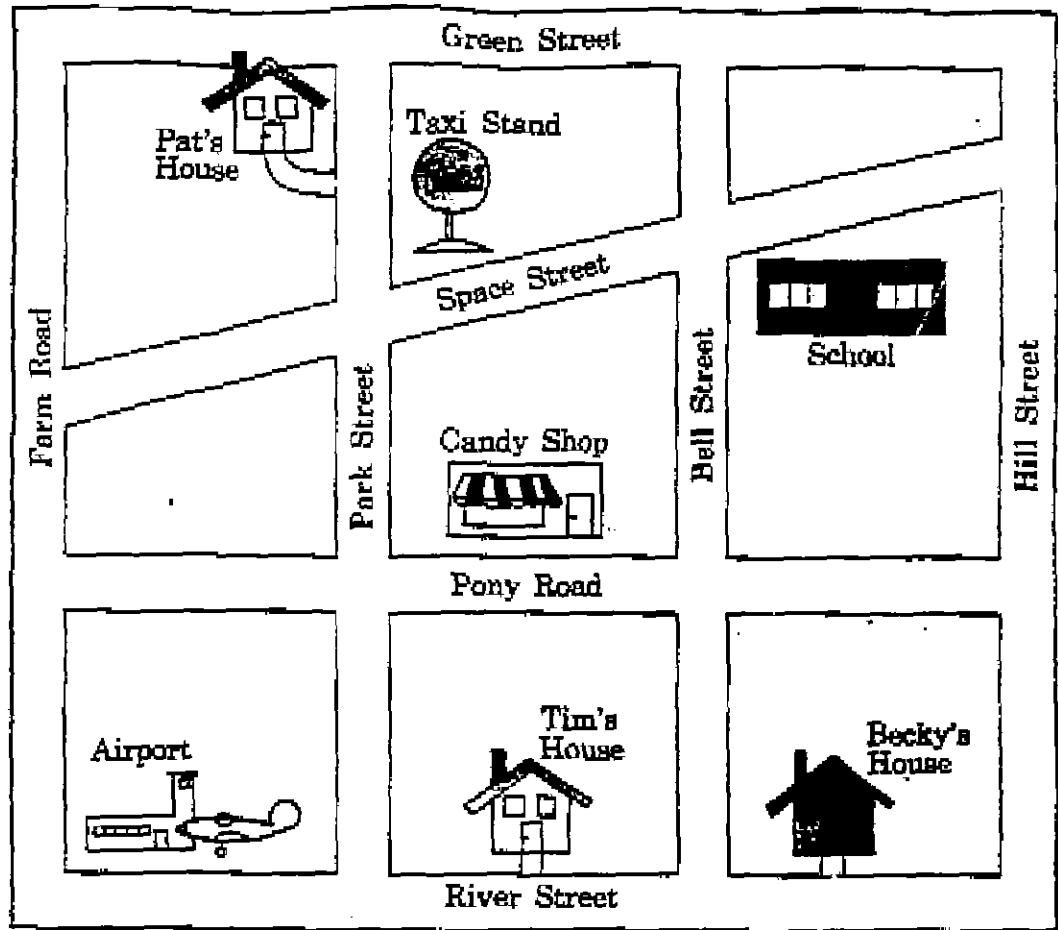
Test V Locating/Organizing/Remembering/Study Skills

SAMPLE A		
sun	rake	tree
<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

76. grass hot farm

77. office market library

78. under very wagon



79. On what road is the Candy Shop?

- Green Street
- Pony Road
- Farm Road

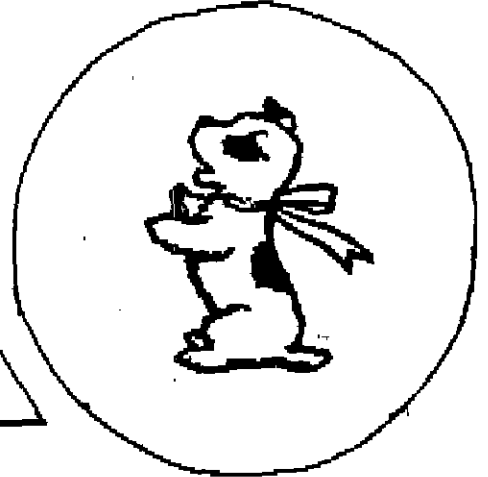
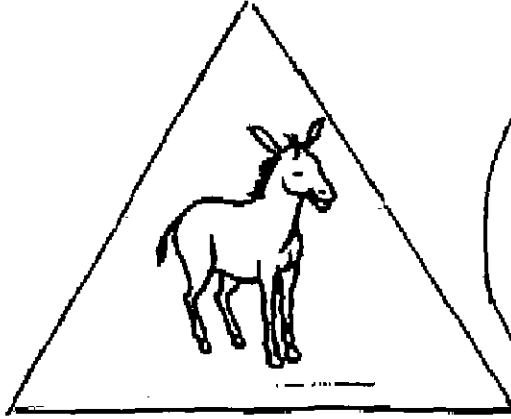
80. On what street is the Taxi Stand?

- Farm Road
- Hill Street
- Space Street

81. Where is Tim's House?

- between Pat's house and the Taxi Stand
- between the Airport and Becky's house
- between the Taxi Stand and the Candy Shop

SAMPLE B



82.

5

5

5



5

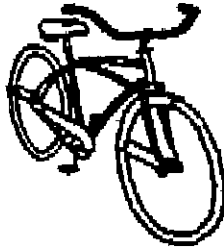
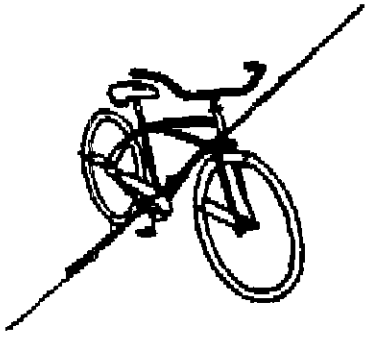
5



5



83.



84.

