

A SURVEY TO DETERMINE READING IMPROVEMENT AND  
EXTENT OF PHONIC DISABILITY PRECEDING AND FOLLOWING  
A SUMMER READING CLASS AT ROSSVILLE RURAL HIGH SCHOOL

by

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## INTRODUCTION

The aims and objectives of reading instruction in our schools have definitely shifted in recent years. A few years ago it was enough for the child glibly to pronounce words appearing on the printed page. Now it is considered much more important for him to be able to comprehend rapidly and indicate by specific reactions his understanding of the material. This is the application of a sound philosophy of education. Life situations demand an ability to grasp quickly and accurately the meaning of printed symbols. Only infrequently are we called upon to read orally. Classroom problems and many life situations also require the skillful use of books. Thus, reading is something more than the rapid perception of printed symbols and the memory and organization of materials read. It involves the abilities to use libraries and books as sources of information and pleasure.

As a means of gaining information and pleasure, reading is essential in every content subject, such as history, geography, science, and literature. In fact, progress in these subjects depends to a greater degree upon the ability of pupils to read rapidly and intelligently than upon any other single factor. Good teaching must, therefore, provide the methods and materials for the improvement and refinement of the reading habits and skills that are required in most

school situations and in all life activities involving reading. By the same logic there must be reliable, accurate devices for measuring the desired abilities and identifying important weaknesses.

Such devices were the basis of this study which was concerned with measuring the abilities and identifying weaknesses for the evaluated students of a summer reading class at Rossville Rural High School.

#### Statement of the Problem

The purpose of this investigation was: (1) to determine whether there was any significant difference between the California Phonics Survey<sup>1</sup> pre-test and post-test, and (2) to determine whether there was any significant difference between the scores on the Iowa Silent Reading<sup>2</sup> pre-test and post-test.

#### Hypotheses for the Experimental Part of the Study

The author's two hypotheses for this study concerned the difficult and elusive problem of assessing phonic and general reading improvement.

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<sup>1</sup>Grace M. Brown and Alice B. Cottrell, California Phonics Survey (Monterey, California: California Test Bureau, 1963).

<sup>2</sup>H. A. Greene, A. N. Jorgensen and V. H. Kelley, Iowa Silent Reading Test (Chicago, Illinois: World Book Company, 1943).

1. There will be no significant difference between the pre-test and post-test results for the California Phonics Survey administered at the beginning and conclusion of the summer reading class.
2. There will be no significant difference between the pre-test and post-test results for the Iowa Silent Reading Examination administered prior to summer school and at the conclusion of summer school.

#### Definition of Terms

Phonics - This is a method of sounding letters or groups of letters so as to get clues to the meaning of printed words that the student cannot recognize at first sight.

Phonic Disability - Throughout this paper the term phonic disability shall be interpreted to mean the lack of ability on the part of a student to differentiate the various sounds of letters. The degree with which he is disabled is determined by the cutting scores on the California Phonics Survey. There are three degrees of disability: (1) some, (2) serious, and (3) gross.

Configuration - Configuration refers to the visual perception of a word on the basis of its general appearance as opposed to the perception of accurate printed letter combinations.

Rigidity - This is the inability to disassociate auditory from visual associations in the perception of words.

Digraph - A combination of two vowels or consonants to represent a single sound, as bread or traffic, is the definition of a digraph.

Diphthong - A diphthong is a combination of two vowels each of which retains a sound.

Blend - Two consonant letters used together to spell a single sound, such as blue is referred to as a blend. These are also considered to be consonant digraphs by some authorities.

Summer Reading Class - This term refers to the reading class taught during the summer of 1966 at Rossville Rural High School. This class was established with the intention of improving the reading ability of the educationally deprived children within the boundaries of the school district involved.

#### REVIEW OF THE LITERATURE

Title I of the 1966 Elementary and Secondary Education Act authorized more than one billion dollars for local school systems to improve the educational opportunities of children from low-income families whose specific needs had not been met by regular school programs.

Although these funds could be used in many areas of

education, heavy emphasis was placed on remedial types of reading programs. In many communities Title I funds were used for summer instructional programs. This was the case at Rossville Rural High School.

Following are some general reports of summer reading programs instituted under Title I. In Lewistown, Montana, a Title I summer reading project was established with the intent of correcting poor study habits, improving self-image and preventing the regression that normally takes place during the summer months. The program allowed at least an hour each day for children to be grouped with others who had similar reading problems. Post-test scores on the Durrell-Sullivan and the Metropolitan Reading Test indicated improvement. Sixty-seven participants advanced at least one quartile.<sup>1</sup>

In El Paso, Texas, a summer program of reading was established offering students of all ages and grade levels instruction for one hour daily. The Gates Reading Survey and the Gilmore Oral Reading Test were administered both before and after the project. Gains in silent reading comprehension were uneven. Silent reading vocabulary showed

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<sup>1</sup>Palmer M. Scott, "Title I - Catalyst for Change in Montana," The Reading Teacher, 20:318, January, 1967.

more consistent gains.<sup>1</sup>

A special summer reading program for teenagers was partly financed from Title I funds in Washington, D. C. These teenagers from grades six, seven, and eight of the public and participating private schools were identified as seriously retarded in reading. Their abilities ranged from very low to very high. With few exceptions the participants showed measurable growth in reading ability. The most rewarding growth, however, was the growth in self-confidence.<sup>2</sup>

Edna Morgan, director of the Bureau of Reading Education in New York City, has this to say about Title I projects:

Personnel from the Bureau of Reading Education as well as from other divisions in the New York State Education Department have been evaluating the Title I reading programs in the State of New York for several months. We are not surprised as formal evaluation reports pour into our offices, for we have seen within months of the passage of the original legislation, in school district after school district all over our state vastly improved instructional situations in basic reading skills for that segment of our population that needs them most.<sup>3</sup>

Several methods of teaching these summer programs are

<sup>1</sup>Deck Yoes, Jr., "Reading Programs for Mexican-American Children of Texas," The Reading Teacher, 20:307, January, 1967.

<sup>2</sup>Kathryn Wentzel Lumley, "Mobile Reading Units in Washington, D. C.," The Reading Teacher, 20:323, January, 1967.

<sup>3</sup>Edna Morgan, "Big City Plans Under Title I," The Reading Teacher, 20:328, January, 1967.

being used. One unique method which shows promise is that of programmed instruction. This type of material is especially rewarding for the slow learners since they can see themselves progress. There is little doubt that this program is therapeutic in nature. The children are not competing with one another as is natural with traditional materials - they are competing only with themselves. Anxieties are reduced. Each student is assured that he can learn and is learning. This type of program has been used by Sister Mary Gerard in a summer program. She has this to say about a portion of that program:

Parents of 25 school children with reading problems found this approach virtually revolutionary in its results when used during a five-week summer session. This method gives slow learners a chance for recognition and advancement. Just five weeks of daily work with the program did much to restore the confidence of these 25 children.

The phonics which they mastered in that time was unbelievable. In the early part of the series the child meets only letters that have a constant phonetic value... as he progresses the materials allow him to practice his phonetic word-attack skills until he has built sufficient vocabulary to attack with accuracy slightly nonphonetic words in context. A slow student who might be classified as a "nonreader" in a class using a traditional text can learn to read at his own pace.<sup>1</sup>

Summer programs appear to be here to stay. Formerly only the large urban high schools were able to support a summer program, but with the financial assistance of the

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<sup>1</sup>Sister Mary Gerard, "Programmed Progress for Slow Readers," Catholic School Journal, 66:42, February, 1966.

Federal Government the suburban and even small rural schools are able to offer summer programs. Because of the modern technological advances aiding the farmers, the youngsters who formerly were busy on the farms are now free to attend school year round. Many of these youngsters are eager to "catch up" in areas where they are weak. So the summer reading program appears rather solid. Investigations need to be made into the areas of reading, and studies such as this one need to be made. With such information schools beginning such projects will have a foundation laid. They will benefit from the mistakes and information gained by the "pioneers" in this area.

#### SCOPE AND PROCEDURE

The accumulation of data for this study was the result of the two tests: (1) California Phonics Survey and, (2) Iowa Silent Reading Examination. The Iowa test was administered as a predictive test for the purpose of selecting students for the summer reading program. This test was given before the close of the Spring Semester to one hundred students. The thirty-three students scoring at or below the twentieth percentile were invited to enroll in the summer reading class. All fifteen students who participated in the course were administered the second form of the Iowa Silent Reading Examination at the conclusion of the summer session

to determine their general reading improvement. All fifteen were administered the California Phonics Survey the first day of classes and again took a second form of this same examination the last day of classes.

#### Population Description

The students who participated in the summer reading class were either students enrolled in Rossville Rural High School or incoming freshmen. Like many of the students who attend the Rossville schools, these students were largely from farm families. The majority of Rossville's students are transported to school from the surrounding farms.

Rossville Rural High School is a four year school with an enrollment of 144 students. It has been approved and accredited by Kansas State Department of Education as a STANDARD SCHOOL. It is also a member of the NORTH CENTRAL ASSOCIATION OF COLLEGES AND SECONDARY SCHOOLS. The school offers thirty-six units of credit, taught by twelve faculty members. Although the setting of the high school is in a rural community, its curriculum offers students a variety of courses most of which are college oriented.

The high school is located in the rural community of Rossville, Kansas. Rossville has a population of 850. The community was originally a farming community, but has become a "bedroom" for Topeka which is located fifteen miles east. The residents of Rossville are educationally minded. Many of

them work in Topeka and see the importance of good schools. The farms lying adjacent to Rossville are large farms located in the fertile Kaw Valley. The owners of these farms also support the educational advancement of Rossville. As an example of the communities' interest in education, a new library with several thousand volumes is being constructed.

The subjects of the study, numbering fifteen, were volunteers from a group of students invited to participate, and all were previously tested as part of the basic testing program at Rossville Rural High School.

The population at the time of summer school consisted of eight boys and seven girls ranging in age from thirteen to seventeen, with an average age of fifteen. The educational level ranged from grade eight to grade eleven. Their abilities ranged from 78 IQ to 102, with 91.5 being the average.

Because of their poor experiences with reading classes and school, these students were not an initially enthusiastic group. The majority were introverts and required much attention before "loosening up" to the point of being responsive and educationally receptive.

#### Limitations of Research

Since all of the subjects in the investigation were administered the Iowa Silent Reading pre-test in April as a part of the regular testing program, some of the changes

which occurred could have been a result of the incidental reading instruction in their regular classes during April and May prior to the summer reading class in June.

Another limitation is the small size of the population in the investigation. Because of this small group, the study does not warrant elaborate statistical treatment.

The lack of motivation exhibited by some of the students was also a factor of limitation. Summer time is not school time for some students.

#### Description of Summer Reading Program

The summer reading program consisted of eight weeks of classroom work. The class periods were of one and a half hours in length, five days a week. The students were not required to attend every session, however, none of the students proved to be a chronic absentee. Since this was a summer program and this low ability group of students needed individual attention, no homework was assigned. All work was done within the one and a half hour class.

The basic text or source of materials for the summer reading program was: Basic Reading Skills for High School Use.<sup>1</sup> The reading skills taught were done so in two week blocks. The four blocks consisted of: (1) word form and

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<sup>1</sup>Marion Monroe, Gwen Horsman, and William S. Gray, Basic Reading Skills for High School Use (Chicago, Illinois: Scott, Foresman and Co., 1958).

sentence meaning, (2) word analysis (phonics), (3) context clues, and (4) phrase and sentence meaning.

The first block, "Word Form and Sentence Meaning", dealt with the identification of words by their visual form. A fluent reader skims along the lines of print, and his mind responds with meanings for most of the words he sees. He is aware of the many possible connotations and denotations of words and readily associates the appropriate meaning with a word, depending on the way it is used in context. Students who have weaknesses in this area will confuse words similar in appearance, for example: reading or spelling brought or bought. They may fail to see how such inflected and derived forms as scurried or dishonesty are related to their root words scurry or honest. They may spell poorly because they cannot call up clear mental images of words, skip unfamiliar words in their reading, not stopping to consult a dictionary or even to ask about meaning, associate only one meaning with a word, or read only the first definition of a word they chance to look up, or fail to respond to or to enjoy what they read. To strengthen their weaknesses lessons are presented to utilize those skills the students are lacking. A typical example from a lesson would be to underline the word that answers each question correctly, for example: "Which is a young horse? colt, bolt, volt".<sup>1</sup>

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<sup>1</sup>Ibid, p. 17.

The second block taught was "Word Analysis (Phonics)". Phonetic analysis is the means by which we note the relationship between sound and printed symbols. It is based on the ability to: (1) hear accurately, vowels, consonants, and accent, (2) associate the sounds of vowels and consonants with appropriate letter symbols, (3) blend these sounds into syllables and the syllables into meaningful word wholes with appropriate accent, and (4) use visual clues in word forms that aid in determining vowel sounds, syllabic divisions, and accent.

Students who have had little or no training in using phonetic analysis may not be sensitive to the consonant and vowel sounds in our language and be unable to discriminate between these sounds. They may try to sound out unfamiliar words, letter by letter, because they do not understand visual clues to a vowel sound or they may be unable to interpret dictionary pronunciation symbols. The type of work presented in this lesson series included such directions as:

Pronounce the words below, and think of the consonant sounds that you blend together at the beginning of each one, underline the letters that make up this consonant blend.<sup>1</sup>

Examples of such words are: blast, frame, skill, sprawl.

Reading is the process of receiving ideas and impressions, not an exercise in pronunciation; therefore, the

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<sup>1</sup>Ibid., p. 52.

third block was entitled "Context Clues". The reader who seeks and uses context clues is demanding meaning from the printed page. The use of context clues is based on the understandings that: (1) a word may have more than one meaning, and that (2) meaning must be determined in light of context.

The lessons presented in this category dealt with various clues to sentence meaning and word meaning. An example is working with homonyms. The student was instructed to write the correct homonym in each blank. "After Joe had \_\_\_\_\_ his boat to the dock, he strolled to the end of the pier to watch the \_\_\_\_\_ come in. (Choices - tide, tied)"<sup>1</sup>

The fourth block of work was "Phrase and Sentence Meaning". No matter how glibly a student can pronounce words, unless he understands their meaning and their relationship to each other in the sentence in which they occur, and unless he is sensitive to the larger context of the paragraph and the story, he will fail to interpret what he reads. Students who are weak in this area may fail to understand pronoun reference, lack understanding of the way in which total context influences the implications of a sentence within it, or fail to grasp ideas that are implied. The majority of the

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<sup>1</sup>Ibid., p. 40.

lessons presented in this unit dealt with interpretation of a sentence or paragraph by answering questions which followed each example. An example from this lesson is: "It is disappointing to be unable to get tickets for a show you want to see. - Does this sentence mean that you would be glad if you were able to get the tickets? \_\_\_\_\_" <sup>1</sup>

Supplementing the basic text were weekly spelling lists of words to be studied and spelled as they were pronounced, as well as the silent reading of library books for which the students were required to write reports.

The spelling words for the weekly test were taken from "A Core Vocabulary in Reading and Writing".<sup>2</sup> The library books were chosen by the author from the school's library on the basis of their reading difficulty and interest level for the students in the summer reading class. The written reports required of the students were elementary in form asking detailed questions about the plot as well as what was gained from reading the book. An outline of the plot was also required and proved effective in helping the students understand the purpose and importance of outlining.

#### Description of the California Phonics Survey

The California Phonics Survey is a unique examination

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<sup>1</sup>Ibid., p. 69.

<sup>2</sup>George C. Kyte, "A Core Vocabulary in the Language Arts," The Phi Delta Kappan, 35:231-234, March, 1953.

in that it is administered orally by the instructor or by a tape which accompanies the tests. Each student is given a test booklet and answer sheet. The instructor or tape recorder pronounces each item and the students try to locate this pronunciation in printed form and place their answers on the answer sheet.

The items in the Survey included all of the common speech sounds of the English language in their more usual spellings. Care has been taken to avoid the possibility of errors stemming from regional speech differences, uncommon spellings, ambiguous combinations of letters, or finer points of pronunciation. The five exercises do not measure different kinds of phonic skill; each item contributes to the overall pattern of errors a student may make. The test is divided into five units largely to provide variety in the mode of presentation and to obviate any fatigue effect. The lively and unusual content of each exercise helps to ensure a high level of interest for students at all levels.

All items in the test offer a choice of five responses including a "None". One of the exercises requires the student to find the printed form that corresponds to a spoken word or sound. Another consists of items each based on a short sentence ending with an imaginary name or term. The whole sentence is pronounced, then the stimulus word or words is repeated. The student is to select the printed form

that corresponds to what he has heard. Another exercise uses real words which require the student to match what he hears with the correct printed form. A fourth exercise consists of items based on rhyming words. The student is to select the printed response that rhymes with the whole sound of the spoken stimulus word. The fifth exercise adds a new element in that the student must pronounce the words and sounds to himself. None of the letter groups in this section correctly spells a real word, but one or more of the choices for each item, when properly pronounced, may have the same sound as a real word.

Another important part of the test is the diagnostic key with which the teacher may check the errors of the student and classify these errors into one of the six diagnostic categories. The purpose of these categories is to give the reading instructor a more specific idea of where phonic difficulty exists.

The first diagnostic category consists of Long-Short Vowel Confusion. Errors in this category indicate confusion with regard to the rules for the pronunciation of long and short vowels. An example from the test would be: lick was an alternative to be chosen representing the spoken word like.

Another area of vowel difficulty is labeled Other Vowel Confusion. Errors in this category indicate confusion

with regard to any of the other vowel sounds, and the correct pronunciation of the vowel digraphs. An example: the choice of wodpick might be chosen as representing the spoken sound would peck.

The second diagnostic category pertains to Confusion With Blends and Digraphs. Errors in this category indicate ignorance of the correct pronunciation of consonant digraphs or of consonant blends, and confusion between single consonants and consonant blends. Example: clear might be chosen to represent the spoken sound cheer.

A second part of consonant difficulty is labeled Consonant-Vowel Reversals. Errors in this category show a tendency to transpose vowels and consonants and, therefore, to pronounce the word incorrectly by reversing the letter sounds. Example: slag is an alternative that might be chosen as representing the spoken sound salg.

The third diagnostic category deals with Configuration. Included in this classification are errors that occur because the student, instead of perceiving the printed letter combination accurately, guesses the answer on the basis of general appearance known as configuration. Example: physic might be chosen for the spoken word psychic.

The fourth diagnostic category deals with Endings (suffixes). Errors in this category all dealt with misreading of suffixes, that is, grammatically significant ends

of words. Example: easy-slimmer might be chosen for the spoken easy-slimming.

Negatives and Opposites; Sight Words, make up the fifth diagnostic category. Two error groups are combined in this classification because of the small number of items in each, and because in both categories an apparently minor error in word perception could produce a major error in the perception of meaning. An example of negatives and opposites: determined might be chosen for undetermined. An example from the sight word group: though might be chosen as a match from spoken through.

The sixth diagnostic category is Rigidity. Errors in this category seem to occur when the student is in some way too tied to the visual appearance of words. He cannot dissociate auditory from visual associations in the perception of words, even with specific instructions to do so.

Example: the letter combination wrooph may be correctly identified as having the verbal sound of roof.

Completing the diagnostic categories is an area known as Unclassified Errors. These errors consist of an examinee marking two answers or no answers on an item. Also tabulated in this area are errors representing the difference between the examinee's total diagnostic errors and the total possible score of seventy-five.

### Description of the Iowa Silent Reading Test

The Iowa Silent Reading Test goes far beyond the ordinary general survey of a single phase of silent reading abilities. The test is designed to cover a wide range of the skills known to be indispensable to effective reading of the work study type. The test measures three broad general areas of silent reading abilities; namely, (1) rate of reading at a controlled level of comprehension, (2) comprehension of words, poetry, sentences, paragraphs, and longer articles, and (3) ability to use skills required in locating information. Each of these fields is covered in a number of different ways by means of eleven different types of materials arranged in seven subtests, requiring a total testing time of 45 minutes and resulting in nine different subtest scores, each with special significance.

TEST 1. Rate and Comprehension. In this test the pupil is asked to read two somewhat diverse types of prose at a rate which, for him, is best for clear comprehension. The first deals with science content and the second with social studies material. For the sake of simplicity in recording rate of reading, the Rate score is expressed in terms of the total number of sentences read in one minute in each of the articles. Comprehension exercises designed to hold the pupil to a given level of understanding of the content accompany the articles, a different type for each article.

The Comprehension scores based on the exercises for the two selections are combined into a single score to represent one of the nine subtest scores for the test. Thus Test 1 is a measure of rate of reading under specific comprehension conditions. It yields two of the subtest scores.

TEST 2. Directed Reading. This part of the test is designed to measure the pupil's ability to comprehend general and specific situations expressed in the content without unduly stressing memory. While this test is designed to measure the ability to comprehend and answer questions of a rather detailed type, it makes a special effort to avoid pure identification or matching of words.

TEST 3. Poetry Comprehension. One important phase of silent reading is the reading and understanding of poetry. This test, by a series of questions based upon a poem, measures the understanding of the poem as shown by ability to find passages which answer the questions.

TEST 4. Word Meaning. Much of the difficulty that certain pupils have in studying their textbooks is due to lack of knowledge of the more or less technical words in the subject. To a certain extent pupils must be trained specifically for assimilative reading in each subject, and this training must consist primarily of development of a vocabulary in that subject. This test has been designed, therefore, to measure understanding of significant words in four

high school subjects: social science, science, mathematics, and English.

TEST 5. Sentence Meaning. The sentences comprising this are stated in such a way that in each case the meaning of the sentence as a whole must be comprehended. So far as possible, the content difficulty of each sentence has been kept on a level with the comprehensional difficulties involved. In general, the sentences are arranged in ascending order of difficulty of response.

TEST 6. Paragraph Comprehension. Two specific aspects of paragraph comprehension are included in this test: namely, (1) the ability to select the central topic of the paragraph, and (2) the ability to identify details essential to the meaning of the paragraph.

TEST 7. Location of Information. This test includes two major elements involved in locating information. Part A refers the pupil directly to a simple index as a source of answers to specific questions. Part B measures the ability to select words under which information about a given question might be found. Each part yields a subtest score.

#### DATA

Since the purpose of this investigation was to determine significant differences between the pre and post-tests for the California Phonics Survey as well as the Iowa Silent

Reading Examination, statistics were compiled for that purpose.

Table I shows the pertinent statistics recorded. This table has within it the statistics for the pre and post-tests for the California Phonics Survey. The scores the author used were the total scores. He did not attempt to break these down into individual errors since Form 2 of the California Phonics Survey does not have diagnostic keys for each area of the examination. In Appendix A of this study are the complete data used in the study.

TABLE I  
STATISTICAL RESULTS OF THE CALIFORNIA PHONICS SURVEY  
PRE AND POST-TESTS

	PRE-TEST	POST-TEST
Number of students Tested . . . . .	15	15
Mean . . . . .	38.40	44.13
Standard deviation . . . . .	8.8	9.3
Standard error of the mean . . . . .	2.35	2.49
Standard error of the differences between the means. . . . .		3.42
t. . . . .		1.67

All of the students enrolled in the summer program, fifteen in number, were administered the pre and post-tests,

Form 1 and 2, respectively. The pre-test mean was 38.40, the post-test 44.13; the difference between the means 5.73. It is interesting to note that the median for the pre-test was 36, two points below the mean, and the median for the post-test was 42, also two points below the mean.

With a  $t$  of 1.67 for 29 degrees of freedom, the probability is greater than 5 per cent that the difference between the means is due to chance. Therefore, the author's first hypothesis: (1) There will be no significant difference between the pre-test and post-test of the California Phonics Survey administered at the beginning and conclusion of the summer reading class, can be accepted. In other words, no significant difference seemed to exist between the extent of phonic disability before and after the summer reading program.

Table II contains the statistical data for the pre and post-tests, Forms Am and Dm, for the Iowa Silent Reading Examination. The total score on the Iowa Silent Reading Examination is the score with which the author based his work. This total score included seven test areas, some of which included skills not taught during the summer session. Like the preceding table, these statistics were used to find a  $t$  with which the significant difference for the two tests could be determined.

TABLE II  
 STATISTICAL RESULTS OF THE IOWA SILENT READING  
 PRE AND POST-TESTS

	PRE-TEST	POST-TEST
Number of Students Tested. . . . .	15	15
Mean . . . . .	136.46	147.80
Standard deviation . . . . .	6.5	9.5
Standard error of the mean . . . . .	1.74	2.54
Standard error of the differences between the means. . .		3.07
t. . . . .		3.7

Again all fifteen summer school subjects were administered both forms of this examination. The mean for the pre-test was 136.46 and 147.80 for the post-test. The difference between the two means was 11.34. Again it is very interesting to note how closely the mean and the median were alike on this test. The median for the pre-test was 134.5 and for the post-test 148.

With a t of 3.7 for 29 degrees of freedom, the probability is less than 1 per cent that the difference between the means is due to chance. Therefore, the author's second hypothesis: (2) There will be no significant difference between the pre-test and post-test results for the Iowa Silent

Reading Examination administered prior to summer school and at the conclusion of summer school is refuted and it can be concluded that a difference did exist. In other words, there was evidence of reading improvement.

#### SUMMARY AND CONCLUSIONS

The results of this study led the author to believe that an eight week summer session with two weeks of concentration on phonics just wasn't sufficient time to remedy the phonic difficulty that these high school age students had. By the time students reach high school and retain the phonic problems the subjects for this study had, they may need greater number of drills in phonic instruction to attain a level of competency to succeed in the area of reading. Working with the high school student who is retarded in reading is far different than working with the retarded reader in the elementary school. With the older student, there are many psychological factors which cloud the picture and inhibit the student's eagerness to improve. The older student too has developed many bad habits in terms of reading which are ingrained in his method and this rigidity will not allow him to easily accept a new method.

The type of materials used for the program may have contributed to the lack of sufficient improvement. More work and investigation needs to be done in this area of materials

suitable for retarded readers. Perhaps the programmed method of reading described in the Review of Literature needs to be given an extensive trial in remedial reading.

The author is still optimistic that the high school student can improve his phonic ability. A different approach or at least more concentrated effort in the area of phonics would be a rewarding experience.

Although there was no evidence that the summer program aided the students in the area of phonics, some good did result from the project. The data concerning the overall reading improvement of the subjects in this study was encouraging. The total score for the Iowa Silent Reading Examination included subscores from the seven areas already described in this study. Although all of the seven areas were not studied per se in the summer program, the majority of the areas are related in certain aspects.

Improvement in the general reading ability of these students could be attributed to several things. The relaxed atmosphere of a summer session is conducive in releasing tensions which could ordinarily impede the students progress. Being in a homogeneous group also contributed to the relaxation of the anxieties that most of these retarded readers brought with them to class.

The material used in the program was not the usual form of "reading literature" the high school student is

exposed to. The fact that the poorest reader finally had something he could read and study may have also contributed to his improvement.

Even though the improvement in one area of the total summer program was not satisfactory the significant improvement made by the subjects in general reading ability supports the idea of continued summer programs with the intention of improving the retarded readers in the high school age group.

**BIBLIOGRAPHY**

## BIBLIOGRAPHY

- Brown, Grace M. and Alice B. Cottrell. California Phonics Survey. Monterey, California: California Test Bureau, 1963.
- Gerard, Sister Mary. "Programmed Progress for Slow Readers," Catholic School Journal, 66:42, February, 1966.
- Greene, H. A., A. N. Jorgensen and V. H. Kelley. Iowa Silent Reading Test. Chicago, Illinois: World Book Company, 1943.
- Kyte, George C. "A Core Vocabulary in the Language Arts," The Phi Delta Kappan, 35:231-234, March, 1953.
- Lumley, Kathryn Wentzel. "Mobile Reading Units in Washington, D. C.," The Reading Teacher, 20:323, January, 1967.
- Monroe, Marion, Gwen Horsman, and William S. Gray. Basic Reading Skills for High School Use. Chicago, Illinois: Scott, Foresman and Company, 1958.
- Morgan, Edna, "Big City Plans Under Title I," The Reading Teacher, 20:328, January, 1967.
- Scott, Palmer M. "Title I - Catalyst for Change in Montana," The Reading Teacher, 20:318, January, 1967.
- Yoes, Deck Jr. "Reading Programs for Mexican-American Children of Texas," The Reading Teacher, 20:307, January, 1967.

APPENDIX

## APPENDIX A

Following are the scores for the four tests used as a basis for this investigation:

California Phonics Pre-Test

27  
27  
29  
30  
31  
34  
35  
36  
41  
43  
44  
44  
48  
50  
57

California Phonics Post-Test

31  
32  
32  
36  
40  
40  
41  
42  
46  
49  
50  
52  
53  
53  
65

Iowa Silent Reading Pre-Test

127  
130  
130  
130  
133  
134  
134  
135  
135  
136  
140  
141  
144  
148  
150

Iowa Silent Reading Post-Test

130  
130  
142  
142  
144  
144  
146  
148  
149  
150  
154  
156  
158  
162  
162

A SURVEY TO DETERMINE READING IMPROVEMENT AND  
EXTENT OF PHONIC DISABILITY PRECEDING AND FOLLOWING  
A SUMMER READING CLASS AT ROSSVILLE RURAL HIGH SCHOOL

by

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A. B., Kansas Wesleyan University, 1961

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AN ABSTRACT OF A MASTER'S REPORT

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

College of Education

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Manhattan, Kansas

1967

The aims and objectives of reading instruction in our schools have definitely shifted in recent years. A few years ago it was enough for the child glibly to pronounce words appearing on the printed page. Now it is considered much more important for him to be able to comprehend rapidly and indicate by specific reactions his understanding of the material. This is the application of a sound philosophy of education. Life situations demand an ability to grasp quickly and accurately the meaning of printed symbols.

Many high school students have fallen behind in reading ability and have not been offered the opportunity to improve their deficiencies. The Federal Government has now come to the aid of such students with the Elementary and Secondary Education Act which provides funds for aiding those students who are handicapped. Rossville High School welcomed the opportunity to offer a program of reading instruction during the summer of 1966. This program was designed to aid the students who had reading difficulties. This summer reading class taught by the author was the basis for this investigation.

The purpose of this investigation was: (1) to determine whether there was any significant difference between the California Phonics Survey pre-test and post-test, and (2) to determine whether there was any significant difference between the total scores on the Iowa Silent Reading pre-test

and post-test.

The accumulation of data for this study was the result of the two tests: (1) California Phonics Survey and, (2) Iowa Silent Reading Examination. The Iowa test was administered as a predictive test for the purpose of selecting students for the summer reading program. This test was given before the close of the spring semester to one hundred students. The thirty-three students scoring at or below the twentieth percentile were invited to enroll in the summer reading class. All fifteen students who participated in the course were administered the second form of the Iowa Silent Reading Examination at the conclusion of the summer session to determine their general reading improvement. All fifteen were administered the California Phonics Survey the first day of classes and again took a second form of this same examination the last day of classes.

Two null hypotheses were formulated for the investigation. They were: (1) There will be no significant difference between the pre-test and post-test results for the California Phonics Survey administered at the beginning and conclusion of the summer reading class. (2) There will be no significant difference between the pre-test and post-test results for the Iowa Silent Reading Examination administered prior to summer school and at the conclusion of summer school. A t test was applied to determine the acceptance or rejection

of these hypotheses.

The first hypothesis was accepted because the possibility was greater than 5 per cent that the difference between the means was due to chance. The second hypothesis was refuted because there was a less than 1 per cent possibility that the difference between the means was due to chance.

Although the summer class did not seem to cause lessening of phonic disability, it did seem to aid students in their reading ability.