

A FOLLOW-UP STUDY OF SELECTED SUBJECTS WHO
ATTENDED THE CENTRAL STATE UNIVERSITY
READING CLINIC

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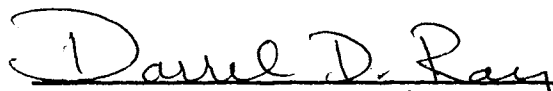
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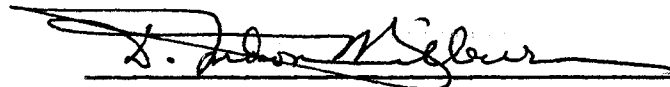
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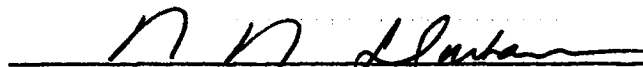


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TABLE OF CONTENTS

Chapter	Page
I. PRESENTATION OF THE PROBLEM	1
Introduction	1
Need for the Study	3
Purpose of the Study	5
Limitations	6
Definitions of Terms	6
Procedure	8
II. REVIEW OF THE LITERATURE	10
Introduction	10
Selected Follow-Up Studies	10
Summary	22
III. RESEARCH PROCEDURES	24
The Sample	24
Testing Instruments	25
Methods of Gathering Data	28
IV. PRESENTATION AND TREATMENT OF DATA	30
V. SUMMARY AND CONCLUSIONS	62
General Summary of the Investigation	62
Summary of Findings	63
Conclusions	65
Recommendations	68
Theoretical Implications	69
A SELECTED BIBLIOGRAPHY	71
APPENDIX A - PARENT RESPONSES	75
APPENDIX B - INSTRUMENTS	77
APPENDIX C - COVER LETTERS	83

LIST OF TABLES

Table	Page
I. Comparison of Reading Comprehension Achievement Between Pre and Post-Clinic Evaluation and Follow-Up Actual Reading Level and Reading Expectancy Level	32
II. Comparison of Vocabulary Test Scores Between Pre and Post-Clinic Evaluation Reading Levels and Reading Expectancy Levels in Grade Equivalents	34
III. Comparison of Spelling Test Scores Between Pre and Post-Clinic Evaluation Spelling Levels and Reading Expectancy Levels	36
IV. Comparison of Reading Achievement Between Pre and Post-Clinic Test Scores by Grade Levels	40
V. Comparison of Reading Vocabulary Between Pre and Post-Clinic Test Scores by Grade Levels	42
VI. Comparison of Spelling Achievement Between Pre and Post-Clinic Test Scores by Grade Levels	45
VII. Student Informal Inventory Summary Sheet	47
VIII. Parent Informal Inventory Summary Sheet	48
IX. A Survey of the Interests and Activities of Subjects	55

LIST OF FIGURES

Figure	Page
1. Distribution of Subjects and Parents by Percentiles on <u>California Test of Personality</u> - Personal Adjustment	51
2. Distribution of Subjects and Parents by Percentiles on <u>California Test of Personality</u> - Social Adjustment	53
3. Distribution of Subjects and Parents by Percentiles on <u>California Test of Personality</u>	54

CHAPTER I

PRESENTATION OF THE PROBLEM

Introduction

A major concern of educators and community leaders today is the large number of students faced with reading disability problems. Reports by Bond and Tinker (1967) indicate that from 10 to 24 per cent of pupils are seriously retarded in reading, and a large portion of these are reading disability cases. Research supports the theory that reading disability crosses all levels of intelligence and socio-economic backgrounds. Research has provided a substantial amount of data about possible causes of reading disability (Bond and Tinker, 1967; Heilman, 1972; Strang, 1957; and Pollack and Piekarz, 1963). The cause is seldom attributed to a single factor but to several factors operating simultaneously. Because of the high value society attaches to literacy, the effects of reading disability are many and often tragic for the person involved.

The reading clinic was originated in response to the great demand for help by educational agencies and the public at large. The clinic is still a popular source of help for children with reading problems and the number of clinics has almost doubled in recent years. Although many reading clinicians, parents, and some teachers praise the services provided by the reading clinic, the findings reported by researchers in the field are sharply divided. Many do not agree with the method

used by the majority of clinics to report their success. Others feel that the instruments used for diagnosis lack the sensitivity necessary to measure the success of the total clinic program. Still others feel that the effectiveness of the clinic program cannot be measured until after the student returns to the regular classroom setting.

The importance of evaluation in any type of educational program is seldom disputed. Evaluation can lead to refinement of techniques and improvement of services. According to Triggs (1943), better work is possible only when the results of what is already being done are known.

Many reasons have been suggested for the lack of effective evaluations for remedial reading programs. Triggs (1943) and Fiedler (1972) both suggest that the lack of adequate diagnostic instruments impede the evaluation attempts. Triggs continues by stating that the interrelationship of reading with nearly every present-day academic accomplishment makes it almost impossible to determine where the reading process ends and the academic area begins. Darling (1969) says that the cognitive reading skills receive much attention but the affective domain is ignored in research and in teaching practices. This lack, according to Darling, represents a severe imbalance in reading instruction and strategies for teaching and methods of evaluating this domain must be provided. Longitudinal studies are few. It would seem that more follow-up studies could do much to clear up many of the "gray" areas concerning the far-reaching effects of special reading instruction.

Need for the Study

This study was undertaken primarily to gather and analyze information related to the changes in reading performance of former students of Central State University Reading Clinic. The attitude of these students and their parents toward services provided by the clinic is also reported.

The services provided by the clinic have been in great demand since the clinic was opened seventeen years ago. The parents of the students receiving reading instruction are usually pleased with the results. Post-clinic tests show that most students make considerable improvement. There is always a waiting list of students wanting to enroll. Once they have completed the clinic program, however, the contact ends.

Inasmuch as the University is located near a metropolitan area, and the university population as a whole has shown a substantial growth each year for the past ten years, it seems reasonable to assume that the requests for clinic services will continue to increase. No follow-up study has been done. It is felt that the information collected from this study could be helpful in planning more effective instructional changes and/or expansion of clinic services.

The Central State University Reading Clinic

The Reading Clinic of Central State University began operation in 1957. The primary purpose of the Clinic since its inception has been to support the main function of the university, that of teacher training. The addition of reading instruction as a clinic function serves two purposes. First, the clinic serves to strengthen the

teacher training program of the university as a whole. Second, the clinic offers a much needed service to children enrolled in the public schools who are in need of special reading instruction.

The clinic program consists of four phases: (1) the pre-clinic diagnosis; (2) the instructional program; (3) the post-clinic evaluation; and (4) the case study report. The pre-clinic evaluation consists of personal observations of the subject by the clinician, the administering of appropriate reading and developmental tests, and the evaluation of data which could help provide an understanding of the nature and possible causes of the reading problems. The instructional program consists of a series of planned activities based on the subject's needs and interests. This program is planned by the clinician and implemented with the assistance of college seniors and graduate students enrolled in clinical practices.

The majority of subjects are placed in small group settings, not to exceed four. Other subjects are tutored individually or in pairs, depending on similar problems, ages, and interests. Because of limited facilities and personnel, clinic enrollment is limited to approximately fifty subjects per semester.

The post-clinic evaluation consists of post-testing and reporting any observed changes in attitude toward reading, self-image and study and reading habits. A case study report is written for the subject and filed in his permanent record folder which is kept at the Clinic. This report is made available to professional personnel at the request of the parents.

Purpose of the Study

The purpose of this study is to provide follow-up information concerning selected subjects who attended the Central State University Reading Clinic. An investigation was made of (1) the reading level of these subjects before and after clinical reading instruction and during the follow-up study; (2) the actual reading level as compared with the reading expectancy level; (3) the attitude of the subject toward reading as viewed by the subject and by his parents; (4) the self-concept of the subject and his parents; and (5) the role played by the parents and teachers after the clinic experience.

More specifically, data from reading and personality tests, inventories, rating scales, and case study reports were analyzed in order to seek answers to the following questions:

1. What is the reading level of the subject before and after clinic instruction and during the follow-up study?
2. What is the relationship between the academic performance and the reading level of the subject?
3. What is the parent's view of the subject's reading level?
4. What is the subject's attitude toward reading as viewed by the subject? By the parent?
5. What role will reading play in the subject's future plans?
6. What is the subject's present self-concept? Is there a relationship between the self-concept of subject and parent?
7. What special instruction in reading has the subject received since his clinic experience?
8. What rating would subjects and parents give services offered by the Reading Clinic?
9. What did subjects and parents like best about services offered by the Reading Clinic?

10. What did subjects and parents like least about services offered by the Reading Clinic?
11. What is the attitude of the parents toward sending another child to the Reading Clinic?
12. What additional services would parents like to see offered by the Reading Clinic?

Limitations

The following limitations are present in the study:

1. The study involves 25 subjects who attended the Central State University Reading Clinic for one or two semesters between 1967 and 1972.
2. Reading achievement tests data are limited by the validity and reliability of the tests used and by the competency of the examiners.
3. No attempt was made to control race, sex, or other sociological factors.
4. Findings will be limited to the factors measured by the tests, reading attitude and interest rating scales, and other data used in this study.

Definitions of Terms

For the purpose of this study the following terms will be operationally defined:

Reading Clinic. Reading Clinic refers to the Central State University Reading Clinic, Edmond, Oklahoma. The two main functions of this clinic are: (1) to provide practical experiences for understanding and working with children experiencing reading difficulties, and (2) to provide diagnostic and remedial reading instruction to clients enrolled in the remedial reading program.

Remedial Reading Program. Remedial Reading Program or Clinic Reading Program is an individualized reading program for helping students with reading problems. It is designed in keeping with the instructional needs and characteristics of the students.

Short-Term Remedial Program. The short-term remedial program or clinic program refers to the remedial reading program that is of short duration: one or two semesters. The instructional periods vary from three to five per week with class periods not exceeding one hour in length.

Subjects. Subjects are those students who enroll in the reading program at CSU to improve skills in reading comprehension, vocabulary, spelling or rate of reading in special cases, or a combination of these skills.

Disabled Reader. A disabled reader is the individual whose actual reading achievement is lower than his expected reading achievement based on his reading expectancy level.

Reading Expectancy Level. Reading expectancy level is the individual's reading expectancy based on the Bond Reading Expectancy Formula:

$$\left(\frac{\text{I.Q.} \times \text{Years in School}}{100} \right) + 1$$

Average I.Q. The average I.Q. in this study will refer to those scores as determined by the Stanford-Binet Intelligence Scale or the Wechsler Intelligence Scale for Children which rank between 85 and 120 on the Intelligence Scale for ranking I.Q. scores.

Diagnosis. Diagnosis refers to a systematic and rational explanation of the individual's ability to make anticipated progress in learning to read. Diagnosis includes four levels: identification of

reading difficulties, classification of difficulties, determination of specific reading needs, and a summary of the various causal factors that might contribute to the individual's disability in reading.

Self-Concept. Self-Concept refers to the way a person sees himself. Self-concept for this study will be defined by the scores on the sub-scales on the California Test of Personality. The sub-scales include: (1) Self-Reliance; (2) Sense of Personal Worth; (3) Sense of Personal Freedom; (4) Feeling of Belonging; (5) Withdrawing Tendencies; and (6) Nervous Symptoms.

Procedure

The subjects for this study were selected from among a larger population of clinic subjects, primarily on the basis of parental consent, grade level, and the availability of I.Q. scores, and scores from standardized reading tests administered immediately preceding and following participation in the clinic reading program at Central State University.

The following criteria were used to further screen subjects:

1. Subjects must have an I.Q. of 85 or above.
2. Subjects must have made initial contact with clinic between September, 1967 and June, 1972.
3. Subjects must have been classified as a disabled reader in one or more reading skills at the time of initial clinic testing.
4. Metropolitan Reading Tests or Gates-MacGinitie scores must have been available for pre and post-clinic period and retest scores for the second semester, 1974.
5. Subjects and parents must have agreed either to return to the clinic for follow-up testing and completing questionnaire information or to scheduling a testing session in the home.

The sample consisted of 25 subjects who met the outlined criteria.

Questionnaires were mailed to parents enlisting their cooperation by:

(1) encouraging the child to participate in the study; (2) transporting child to and from clinic for retesting or setting an appointment date for testing at home; and (3) supplying appropriate data requested of parents.

Students were given a choice of dates to return to the clinic for retesting, at which time an appropriate form of the Metropolitan or the Gates-MacGinitie Reading Tests was administered. Using pre and post-clinic instruction test scores and the Bond Reading Expectancy Formula, each subject's actual reading grade level and reading expectancy level were computed for pre and post-clinic instruction and follow-up testing.

Grade level averages in reading comprehension, reading vocabulary, and spelling were compared for pre and post-clinic instruction period; then post-clinic test scores were compared with follow-up test scores. The reading expectancy levels for post-clinic and follow-up testing were also compared.

Data from the California Personality Inventory, questionnaires completed by parents and subjects, and other relevant data were used to evaluate the subject's present attitude toward reading and his present self-concept.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

Research is extensive concerning the causes and treatment of reading disabilities. As more public attention is focused on this area, more response is being generated. One method of response is the establishment of more remedial reading clinics to help the disabled reader but we have yet to assemble enough reliable data to determine the effectiveness of these programs. The survey of the literature in this study will be confined to follow-up studies of remedial reading programs and related studies that will help to justify the assumption that remedial reading clinics are indeed serving the purpose for which they were established; that purpose being to help students develop to their intellectual capacity level in reading.

Selected Follow-Up Studies

Numerous studies reported in literature reveal important relationships between remedial reading instruction and increased skill in reading. Not only is there an increase in reading skill but many report that the child's personality undergoes a desirable change as his reading skills improve.

Balow and Blomquist (1965) published the results of a follow-up study of 32 young adults who had been diagnosed at the University of

Minnesota Psycho-Educational Clinic as seriously disabled readers when they were in elementary school ten to fifteen years earlier. The subjects were all male with average intelligence as measured by the Stanford-Binet Intelligence Scale or the Wechsler Intelligence Scale for Children. The initial reading level for these subjects ranged from two to five years below grade expectations.

The follow-up study consisted of three phases: telephone interviews, direct testing, and securing information from close relatives because subjects were not available for contact. The subjects were divided into three groups: Group I consisted of the nine subjects who agreed to return to the clinic for direct testing. Group II consisted of the fourteen subjects who were available for telephone interviews. Group III consisted of those subjects who were not available for direct testing or interviews.

The Gates Reading Survey showed an average reading grade of 10.9 in vocabulary and 10.2 in comprehension for the subjects in Group I. The Minnesota Multiphasic Personality Inventory showed some deviation from normal behavior in personality assessment. Nearly all of the subjects had sporadic instruction in remedial reading throughout elementary and senior high school years. Only five did not graduate from high school and more than half attended post high school vocational schools and perhaps 20 per cent will graduate from college. Even more impressive, less than half are employed in semi or unskilled labor and none are unemployed.

Tufvander and Zintz (1957) made a follow-up study of eighty-two students who were referred to the Educational Clinic at Iowa State Teachers College for diagnosis of reading difficulties. The sample

was divided into two groups ranging in ages from 8 to 17 years and in grade placement from Grade I to Grade XI. Group I consisted of forty children who received diagnosis and recommendations from the clinic, but no remedial instruction. Group II or the experimental group included forty-two children who were given a diagnosis and an average of eight weeks of remedial reading instruction at the clinic. Both groups represented severe cases of retardation in reading achievement and were representative of all socio-economic levels.

The results of this study as indicated through the use of Chi-square showed that the performance of the experimental group was practically the same as that of the control group. Most growth was evident when remedial instruction was continuous after leaving the clinic and when parents attempted to help the child at home. Seventy-five per cent of the parents believed that proper guidance services in early school years could have helped prevent the problem.

Following are observations to support the authors' contention that the Iowa State Teachers College Reading Clinic is providing a valuable service to retarded readers and to the parents and schools who work with them:

1. Of the 82 cases observed, 40 were making normal growth and 21 were making better than normal growth.
2. Improvement in social adjustment was evident in 46 per cent of the cases.
3. More satisfactory reports on school progress were reported by 69 per cent of the cases.

Several reasons for a lack of evidence to account for the failure to find statistically significant evidence of greater growth by pupils having remedial reading instruction at the clinic than by those pupils who were diagnosed only are cited.

1. The lack of sensitivity of the measuring instrument and population sampling.
2. The partial breakdown of communication between clinic, school, and parents of clients.
3. Special help from teacher was available to more members of Group I.
4. Thirty per cent of Group I received private remedial instruction after they left the clinic to only 10 per cent of Group II.
5. More reading growth takes place when parents receive clinical recommendations and actually follow them.

A follow-up study of children who attended a summer reading program at the Indiana University Center for Child Study was made by Jack W. Humphrey (1962) for his doctoral study. The investigation sought to determine the effect of the summer reading program on the children in attendance. Fifty-six children were assigned to a primary, intermediate, or advanced section. Each child's performance in and attitude toward reading were studied to determine nature of attitudes in regular school classrooms, the effectiveness of reports to parents and schools, the parents' feelings toward the program, and the reading growth of the students.

At the end of the program questionnaires were sent to parents and teachers to help evaluate the summer reading program. Standardized reading tests were given the children at the beginning and end of the program and expected reading gains were computed. Thirty-two of the participants were visited twice in their regular classrooms to further observe their attitudes and behavior. The findings of this study are somewhat discouraging. (1) Teachers in general do not follow recommendations and reports from the center. (2) Teachers need adequate materials if they are to be effective in helping disabled readers.

(3) Students' attitudes were better immediately following the program than later on as the year progresses. (4) Parents feel that the gain made in the summer reading program continues through the following school year. (5) Reports are an aid to parents in helping them to help children read better. (6) Parents are able to judge realistically the progress made by children in reading. (7) Apparent poor attitude and progress during the summer reading program are no indicators that learning is not taking place, nor are they predictors for the rest of the year. (8) The attitudes of children play an important role in the success or failure in remedial reading work. (9) Both individual and group study are necessary to better understand follow-up reports of reading programs.

Kenneth Walker (1963) reported a follow-up study of two methods of treating retarded readers in a doctoral study. The first group, described as the diagnostic group, had diagnostic reading and intelligence tests at the clinic. Then test reports, including reading level, I.Q. range, and specific remedial suggestions, were sent to the schools and parents. No check was made on the post-diagnostic training of these subjects. The second group, described as the clinic group, received diagnosis and clinic instruction averaging one hour per session three to five times per week.

The criteria for selection of subjects for both groups included I.Q.'s between 89 and 123; grade placement at the time of clinic contact in the fourth, fifth, or sixth grades, and availability of scores from the Iowa Test of Basic Skills for the school testing period just preceding or following clinic contact, and the year following the base testing period. Twenty clinic and thirty-five diagnostic subjects

met the criteria.

The subtests of the ITBS were used to measure reading development. A three-factor analysis of variance was used. The within variable in every analysis was the ITBS reading test score secured during the first year of clinic contact compared with subsequent yearly test scores: the between variable in all analyses of the clinic and diagnostic groups. Comparisons were made in combination with each of the following variables: sex, degree of retardation, grade level, age, and I.Q. for a period of two years.

Some of the results were: (1) Clinic boys and diagnostic boys and girls made significant gains during the first year; clinic girls did not make a significant gain. On the second year analysis the sex difference was not found. No clinic and diagnostic group differences were found to be associated with any other variables of age, degree of retardation, grade level, and I.Q. (2) There was a significant difference between the high and low I.Q. groups in the expected direction. (3) Degree of retardation at the time of clinic contact was unrelated to the amount of reading progress on a year's follow-up test. (4) Younger retarded readers were found to reach older retarded readers in achievement by two years past clinic contact. (5) Fourth and fifth grade subjects were found to gain more during the first year than the sixth grade subjects. By the end of the second year, no difference was found to be associated with grade level.

Harold Newman (1964) investigated the effectiveness of a remedial reading class in a vocational high school. Thirty-three graduates and 34 dropouts who were enrolled in the reading classes between September, 1958, and June, 1961, were selected as subjects.

Most dropouts and graduates reported a better self-concept following remediation; however, dropouts did not report similar improvement in reading comprehension or grades. Both groups failed to make appreciable reading gains after remediation or to seek or receive any additional help in reading.

Newman recommends that students whose reading grades on standardized reading tests fall below 6.0 be required to spend two one-hour periods a day in a reading-centered Communications Core and an equal amount of time reading in the content areas.

Balow (1968) summarized the results of three separate studies to provide evidence of intensive remedial instruction for seriously disabled readers. He was primarily interested in the immediate and continued growth in reading skills after termination of the program.

One hundred thirty-six subjects were selected on the basis of diagnostic classification and place of residence. Subjects judged to have serious emotional problems or sensory handicaps were excluded. All socio-economic groups were represented with the majority of subjects coming from lower middle-class and working-class background. Girl subjects made up 20 per cent of the total population and all subjects were ranked in the normal range of intelligence by the Binet or Wechsler intelligence scale. The teaching method was eclectic and students were given individual and small-group instruction.

The findings of these three groups were summarized. Initially these students had a functional reading level three to four years below their average fifth or sixth grade age, as indicated by standardized reading tests. They were making progress in the regular classroom at approximately half the rate of the normal pupil. Most

had not established independence in word recognition. During remedial instruction, the 36 subjects in Sample I progressed at 12 times the regular class rate; the subjects in Sample II progressed at nine times the regular class rate. Data were not available for calculation of this figure for Sample III. Following the remedial instruction, continuing growth seemed to depend upon continued assistance. The subjects in Samples II and III received additional help and the rate of growth over the follow-up period was approximately 75 per cent of normal growth. Few pupils in Sample I received additional help. While they did not lose the reading skills they had acquired during the time spent in the clinic, they did not continue to develop on their own.

The writer concluded that:

Severe reading disability is not corrected by short-term intensive course treatment, even though it is ameliorated by such help. That severe reading disability is probably best considered a relatively chronic illness needing long-term treatment rather than the short course typically organized in current programs.

Stone (1967) made a follow-up study of 83 off-campus elementary and secondary students who attended the reading laboratory of the University of Florida for at least 10 hours of remediation between the years 1957-58 and 1962-63. Because students from many geographical areas were included in this doctoral study, the test material was mailed to the subjects.

The investigation was concerned with (1) the educational level attained; (2) a self-evaluation of the present reading ability and attitude toward reading; and (3) the administration of untimed power tests of comprehension.

The findings reported were that (1) ninety-five per cent of the

students reported that they were able to cope with their reading needs; (2) slightly more than half of the participants had graduated from college; the others had either graduated from or were attending high school. Stone mentions that the success of these students might be due in part to the fact that half of the parents completed high school or college and could have provided the motivation for the success of the students.

Hardin (1964) made a study of the changes in reading abilities, attitudes and behavior of reading clinic clients for his doctoral study. According to Hardin's study, measured gains were made in reading achievement by 24 of the 29 subjects and positive changes in behavior were observed.

Follow-up studies by Lovell, Byrne, and Richardson (1963); Lovell, Johnson, and Platts (1962) and Muehl and Forell (1973-74) report the finding that children diagnosed as poor readers in elementary and junior high school continue as a group to be poor readers later on in school.

Both Walker (1963) and Muehl and Forell (1973-74) found that the younger subjects were better readers at follow-up. Muehl and Forell, Walker, and Lovell, Johnson and Platts all found a relationship between I.Q. and reading improvement in the expected direction.

Among researchers finding no significant difference between reading improvement of the experimental and control groups or between reading groups receiving varying amount of instruction were Turner (1967), Shaver (1970), Perkins (1966), Lovell, Byrne and Richardson (1963; Buerger (1968); and Cashdan and Pumfrey (1967). The latter pair also

suggest continuing instruction following remediation for the best results.

Perkins reported that the subjects in her study made reading gains inconsistent with intelligence levels. Chansky (1963) found no empirical support for the belief that children with high I.Q.'s made the greatest progress in remedial reading. He found, instead, that perhaps the history of failure or responsiveness to small-group instruction was found to be related to improvement in reading.

Wilson (1960) reported in his doctoral study on the scholastic improvement of successful remedial students. His hypothesis that successful remedial students do show improved scholastic performance was supported by the findings of this study.

Eli Ross (1969) made a longitudinal study of the reading improvement of remedial students in a private clinic two to three years later. Clinic and control groups were used in the study. The findings support the theory that students receiving clinic instruction do continue to profit from this instruction after leaving the clinic; and that there is a high success ratio between completing the number of remedial sessions recommended by the clinic and achieving up to grade level during the follow-up study.

Adams (1960) reported in her doctoral study a follow-up of 555 pupils from the reading clinics of the St. Louis public schools. The results showed that 90 did not finish grade school; 59 were still in grade school; 77 did not attend high school; and 123 graduated from high school. While the investigator did not find a single key to the success or lack of success in the scholastic achievement of the students

since their dismissal from the reading clinic, she did conclude:

- (1) that the students in this study made gains comparable with those reported in other studies under similar circumstances;
- (2) that acquiring independent word attack skills was important to continuing success after clinic instruction ended;
- (3) that seven out of ten children studied later graduated from grade school and one out of five graduated from high school;
- (4) that the possibility of disabled readers graduating from college was remote; and
- (5) that students who have to repeat grades have a higher drop-out rate.

Warner (1973) made a follow-up study of clients from the Oklahoma State University University Reading Clinic for her doctoral study. The purpose of the study was to report changes in reading ability and attitude toward reading and to measure the present self-concept of clients who were diagnosed at the Center. The effectiveness of the use of the case study report by parents and school personnel was also investigated. Her findings supported the conclusions that

- (1) most of the clients in the study made gains in measured reading achievement;
- (2) the Oklahoma State University Clinic was providing a valuable service to clients in terms of providing parents with suggestions for remediation for the child diagnosed;
- (3) school personnel observations and follow-up testing and evidence of independent reading practices of clients did not agree;
- (4) a majority of clients were below average in personal adjustment;
- (5) the extent of reading disability is not related to the self-concept of clients;
- (6) a majority of clients were reading below their actual grade placement;

- (7) a greater percentage of schools and teachers do not utilize the case study report; and
- (8) better communication is needed between the clinic and the public schools.

The study made by Silver and Hagan (1963) involved 25 children with specific perceptual defects and neurological immaturities who had been followed 12 years into young adulthood. The findings indicated that maturation does not fully overcome specific perceptual and neurological problems; and that children with specific reading disability and neurological problems tend to have greater perceptual deficits as adults than do those children with specific reading disability but without neurological problems. These children also show less improvement in reading.

Thompson (1971) investigated the attitudes, social acceptance, and academic achievement of students in a six-week tutoring program in remedial reading. The conclusions were that the program had a high positive value to 41 per cent of the subjects in the development of a better self-concept and an additional 12 per cent may have been helped. The social behavior and acceptance of 24 per cent was improved and 47 per cent of the subjects showed academic improvement. Thompson also reported that the change in the learning environment to the college campus was an asset to the remedial reading program and that the procedures in the regular classroom are often inadequate for continued improvement.

Buerger (1966) made a follow-up study of the educational progress and attitudes of remedial and non-remedial groups for his doctoral research. His findings supported the hypothesis that pupils who received remedial reading instruction did not make greater long-term

educational progress than a similar control group. Some indication of improved attitudes of the remedial group was found. He suggested the need for more research in this area, and agreed with Balow that reading disability is, for the most part, a chronic condition needing long-term treatment.

Lumpkin (1959) investigated the relationship of the self-concept to achievement in reading for his doctoral study. The study sample included 50 fifth grade students who were equally divided between underachievers and overachievers. The total presentation was designed to provide a comprehensive picture of the differences between the two groups. Findings indicated that overachievers in reading demonstrated superior academic performance, revealed more positive self-concepts, achieved higher levels of adjustment, and liked reading. They were also accepted by their peers and teachers. Underachievers were measured proportionally in the opposite direction. The researcher concluded that the self-concept does influence behavior and determine the direction and degree of the student's expression in academic work and social relationships.

Summary

The research reviewed for this study falls into two groups: (1) the follow-up of a single group of disabled readers, or (2) a comparison of the reading and academic progress of a control group and an experimental group of subjects. The results of studies of both groups have several similarities. Most of the researchers agree that (1) there is little differences between the reading growth of student in the control or experimental group after remedial instruction ends;

(2) that continued growth seems to depend upon continued assistance;

(3) there is a relationship between the self-concept and reading achievement. Although the long-term effects of remedial reading instruction are not confirmed in these studies, they do point up the need for continued research.

CHAPTER III

RESEARCH PROCEDURES

The Sample

The population for this study consisted of elementary school students who were enrolled at the Central State University Reading Clinic between September, 1967, and June, 1972. These dates were chosen for the following reasons: (1) students receiving clinic instruction between these dates would still be attending the public school and would be easier to contact for retesting; (2) these students would have completed clinic instruction long enough for possible long-range effects to be more accurately evaluated.

To be included in the study sample the following data had to be available for each student: (1) an I.Q. score from the Stanford-Binet Intelligence Scale or the Wechsler Intelligence Scale for Children and (2) pre and post-clinic reading instruction test scores from the Metropolitan Reading Tests or the Gates-MacGinitie Reading Tests. No attempt was made to control race or sex. Socio-economic level was not identified as a variable, however, all of the subjects came from middle class homes where parents were working in skilled or semi-skilled professions; all of the subjects were of the Caucasian race, with the exception of two black subjects; and four girls--three Caucasian and one black were included.

The master list consisted of 136 students who were eligible to be included in this study. During the process of checking addresses and telephone numbers of the parents of these students, 24 names were dropped from the master list. A letter explaining the nature of the study and asking for the cooperation of the parents was mailed to the remaining 94 prospective subjects. A copy of this letter is included in Appendix C. Each letter contained a self-stamped and addressed reply envelope. Seventeen letters were returned marked "address unknown." Only 11 parents returned the test confirmation date forms as requested by the investigator. Of these responses, 10 parents agreed to cooperate; one parent expressed a willingness to cooperate if the testing session could be arranged at their new out-of-town address; and one parent said her daughter did not want to cooperate. Five parents telephoned to confirm their appointment for retesting. As a follow-up procedure, 25 parents were contacted by telephone to encourage their participation in the study. Other parents were mailed a letter reminding them of the dates on which the retesting would be done. In the final analysis, 28 students were retested.

Testing Instruments

Some of the testing instruments were predetermined: namely, the Metropolitan Achievement Tests and the Gates-MacGinitie Reading Tests. An appropriate form of one of these tests was administered to each subject, depending upon which test was used for the pre and post-clinic instruction evaluation of reading performance.

The Metropolitan Achievement Tests are comprised of 10 subtests, three of which were administered to the subjects used in this study;

namely, the word knowledge, reading, and spelling subtests.

Test 1, Word Knowledge, is a 55-item vocabulary test. In each item the word to be defined is presented in a very brief sentence; the pupil selects from five choices the one which best completes the sentence. Emphasis is on the literal meaning of words.

Test 2, Reading, consists of a series of reading selections, each followed by several questions designed to measure various aspects of reading comprehension. The selections are graduated in difficulty through control of vocabulary, sentence length and structure, and overall length. There is a definite progression from easy to difficult questions as the student proceeds through the test. The time limit is very generous.

Test 3, Spelling, is a 55-item, recognition type test. The task for the student is to judge whether the underlined word presented in an illustrative sentence is spelled correctly or incorrectly. In the latter event, he must provide the correct spelling, which tends to discourage indiscriminate guessing.

The Gates-MacGinitie Reading Tests consist of a series of tests to measure reading skills. The vocabulary and comprehension subtests were administered to the subjects used in this study.

The Vocabulary Test samples the student's reading vocabulary. The test consists of 50 items, each consisting of a test word followed by five other words, one of which is similar in meaning to the test word. The student's task is to choose the word which means most nearly the same as the test word. Gradually the words become more difficult.

The Comprehension Test measures the student's ability to read complete prose passages with understanding. It contains 21 passages

in which a total of 52 blank spaces have been introduced. For each blank space there are five choice answers and the student must decide on the answer which best completes the meaning of the whole passage. The passages become progressively more difficult during the latter part of the test.

The California Test of Personality is used as an instrument for evaluation of problems in personal and social adjustment. The items in the first half of the test are designed to measure evidences of six components of personal security. These components are: (1) Self Reliance; (2) Sense of Personal Worth; (3) Sense of Personal Freedom; (4) Feeling of Belonging; (5) Withdrawing Tendencies; and (6) Nervous Symptoms.

The items in the second half of the test are designed to measure six components of social security. These components are: (1) Social Standards; (2) Social Skills; (3) Anti-Social Tendencies; (4) Family Relations; (5) Occupation Relations; and (6) Community Relations. A total adjustment score is achieved by summing the scores of all twelve component parts.

The completion of the Profile included in this test package is also helpful as a first step in the interpretation and use of the test results. The Profile graphically illustrates the adjustment of the student in terms of percentile ranks for the total test and for Personal Adjustment and Social Adjustment separately. The percentile ranks suggest areas of difficulty when scores are significantly low. An appropriate form of this test is available for all levels, beginning on the primary level and continuing through adulthood.

The Interest and Activities section was also administered so that the information revealed could be used in connection with the scores on the Personal Adjustment and Social Adjustment Tests. Four types of information are provided by this section: (1) activities which the examinee likes and engages in; (2) activities which he likes but does not engage in; (3) activities which he dislikes and avoids; and (4) activities which he dislikes, but for some reason does engage in. This test is recommended by many psychologists and professors of leading universities as an excellent instrument for identifying the types of maladjustment from which a student may be suffering, and adjustment problems are not restricted to a few "problem" individuals.

An Informal Inventory was used to assess the student's attitude toward school and reading. The first half of the Inventory consisted of ten statements concerning the student's reading attitude and interests to be rated on a Likert-type Scale. The second part of the Inventory consisted of questions concerning the student's grades in his present classes at school, his choice of a possible life career, and his evaluation of CSU clinic services.

A similar Inventory was used by the parents of the students to get their opinions of subject's reading habits and skills, and to determine if the parent was satisfied with services received at Central State University Reading Clinic. The parent was also administered the Adult Form of the California Test of Personality.

Methods of Gathering Data

Gathering of data for the study was begun during the Fall semester, 1973, when the Clinic files were examined for subjects to use for the

study. During the Spring semester, 1974, subjects were retested. The first testing session coincided with a surprise spring freeze and only ten subjects kept the appointment. A second test was scheduled and letters were again mailed to parents; this time no reply was requested. Instead, the investigator chose to contact as many parents as possible by telephone. Twenty-five parents were contacted and their replies are included in Appendix A of this study. Thirteen students were retested during the second testing session. Appointments were made with five parents who preferred that the testing be done at the subject's home and these children were tested during the two weeks following the second testing session.

Assisting the investigator with the testing was another doctoral candidate who is also a reading specialist. All tests were scored and interpreted by the investigator. Changes in reading performance were observed by comparing the test scores for the pre and post-clinic reading instruction with the follow-up reading test scores. These scores were then compared with the reading expectancy grade level score for each student, computed according to the Bond Reading Expectancy Formula. Test scores in word recognition, comprehension, and spelling were used in making comparisons.

Personal Adjustment and Social Adjustment test scores were tabulated and analyzed. Data from questionnaires, inventories, and case study reports, when appropriate, were interpreted and categorized for summary reports.

CHAPTER IV

PRESENTATION AND TREATMENT OF DATA

The purpose of this chapter is to present a detailed account of the treatment of follow-up information gathered concerning selected subjects who attended Central State University Reading Clinic and the resultant findings. This investigation includes an examination of the test scores made by the subjects at the beginning and end of the clinic instruction period and during the follow-up study; an assessment of the attitudes of the subjects toward reading as indicated by the subjects and their parents; a measurement of the self-concept of the subjects and their parents; and an evaluation of the services provided for the subjects attending the Central State University Reading Clinic.

The questions and answers are discussed as follows:

1. What is the reading level of the subjects before and after clinic instruction and during the follow-up study?

Pre and post-clinic reading levels and follow-up reading grade levels were computed on the basis of scores taken from either the Metropolitan or the Gates-MacGinitie Reading Tests, depending upon the tests from which scores were available from pre and post-clinic instruction at Central State University Reading Clinic. The actual reading level was then compared with the reading expectancy level based on the Bond Reading Expectancy Formula for post-clinic and follow-up evaluation. Reading achievement was measured in three areas: (1) comprehension; (2) vocabulary; and (3) spelling. The results of

achievement in these areas are presented in Tables I through VI, and Figures 1, 2, and 3.

Table I shows the difference in reading comprehension from pre-clinic evaluation to follow-up evaluation. The post-clinic test scores revealed the following data: 24 of the 25 subjects made improvement in reading comprehension ranging from one month (0.1) to four years, three months (4.3); one subject remained at the same level for pre and post-clinic evaluation; and 15 subjects were reading at or above reading expectancy level. On the follow-up test only four subjects were reading at or above reading expectancy level; 10 subjects were reading at grade level; and four subjects showed serious regression.

Table II shows the changes in vocabulary skills from pre-clinic evaluation to follow-up evaluation. The post-clinic test scores indicated that 22 of the 25 subjects made improvement in vocabulary skills ranging from one month (0.1) to three years, two months (3.2). Seventeen subjects demonstrated reading vocabulary skills at or above reading expectancy level. The follow-up evaluation showed a serious deficit in reading vocabulary skills. Only three subjects demonstrated vocabulary skills at reading expectancy level and six at grade level.

Table III shows the changes in spelling performance from pre-clinic evaluation to follow-up evaluation. The post-clinic test scores indicated that 24 subjects made improvement in spelling skills; one subject regressed five months (0.5). Fourteen subjects demonstrated spelling skills at or above reading expectancy level; one subject showed serious regression. On the follow-up test only two subjects demonstrated spelling skills at reading expectancy level; four demonstrated spelling skills at their grade level.

TABLE I
 COMPARISON OF READING COMPREHENSION ACHIEVEMENT
 BETWEEN PRE AND POST-CLINIC EVALUATION AND
 FOLLOW-UP ACTUAL READING LEVEL AND
 READING EXPECTANCY LEVEL

Subject Number	Pre-Clinic Reading Grade Level	Post-Clinic Reading Grade Level	Difference	Reading Expectancy Grade Level	Difference
1	5.7	6.1	+0.4	5.9	+0.2
2	5.5	6.6	+1.1	4.7	+1.9
3	4.2	6.1	+1.9	5.2	+0.9
4	4.2	4.3	+0.1	5.5	-1.2
5	3.3	5.0	+1.7	6.9	-1.9
6	3.4	4.5	+0.9	4.6	-0.1
7	4.9	6.8	+1.9	5.7	+1.1
8	3.0	5.5	+2.5	5.5	0.0
9	3.4	3.9	+0.5	3.2	+0.7
10	4.9	6.4	+1.5	5.2	+1.2
11	6.6	8.4	+1.8	5.8	+2.6
12	2.5	2.8	+0.3	3.0	-0.2
13	4.8	5.5	+0.7	8.7	-3.2
14	3.5	4.7	+1.2	4.4	+0.3
15	4.4	4.9	+0.5	3.9	+1.0
16	5.5	5.8	+0.3	6.1	-0.3
17	5.1	8.1	+3.0	6.5	+1.6
18	3.5	4.9	+1.4	4.4	+0.5
19	0.0	4.3	+4.3	4.8	-0.5
20	3.9	3.9	0.0	4.0	-0.1
21	4.5	6.5	+2.0	5.6	+0.9
22	3.4	5.5	+2.1	3.2	+2.3
23	3.1	3.2	+0.1	2.7	+0.5
24	2.1	3.4	+1.3	3.0	+0.4
25	2.8	4.9	+2.1	6.0	-1.1

TABLE I (Continued)

Subject Number	Grade Level	Follow-Up Reading Level	Difference	Follow-Up Reading Expectancy Level	Difference
1	12	10.0+	-	12.7	-
2	11	*10.0	-	13.4	-
3	11	3.9	-	11.5	-7.6
4	11	9.2	-	12.3	-3.1
5	10	-	-	8.6	-
6	10	10.0+	+	11.7	-1.7
7	10	*10.0	+	11.5	-
8	10	*10.0	+	10.1	-
9	9	*10.0	+	9.7	-
10	9	9.9	+	10.3	-0.4
11	9	10.9+	+	10.6	+0.3
12	9	4.2	-	9.2	-5.0
13	9	10.5	+	10.9	-0.4
14	9	5.3	-	7.8	-2.5
15	9	7.7	-	8.7	+1.0
16	8	8.2	+	8.2	0
17	8	12.6	+	8.7	+3.9
18	8	5.7	-	7.8	-2.1
19	8	5.7	-	9.9	-4.2
20	8	6.8	-	8.1	-1.3
21	7	7.2	+	7.9	+0.7
22	7	5.6	-	7.6	-2.0
23	7	5.1	-	6.1	-1.0
24	7	6.0	-	6.9	-0.9
25	7	6.0	-	8.1	-2.0

*When student's score was higher than Table score, the highest table score in category measured was substituted if this score did not give student a minus rating.

TABLE II
 COMPARISON OF VOCABULARY TEST SCORES BETWEEN PRE AND
 POST-CLINIC EVALUATION READING LEVELS AND READING
 EXPECTANCY LEVELS IN GRADE EQUIVALENTS

Subject Number	Pre-Clinic Vocabulary Grade Level	Post-Clinic Vocabulary Grade Level	Difference	Reading Expectancy Level	Difference
1	5.5	5.8	+0.3	5.9	-0.1
2	6.5	6.9	+0.5	4.7	+2.2
3	5.5	6.4	+0.9	5.2	+1.2
4	4.0	3.7	-0.3	5.5	-1.8
5	2.9	3.0	+0.1	6.9	-3.9
6	4.5	4.7	+0.2	4.6	+0.1
7	4.1	5.7	+1.6	5.7	0
8	3.0	5.2	+2.2	5.5	-0.3
9	4.0	4.7	+0.7	3.2	+1.5
10	6.9	7.1	+0.2	5.2	+1.9
11	5.8	7.9	+2.1	5.8	+2.1
12	2.0	2.3	+0.3	3.0	-0.7
13	5.8	8.8	+3.0	8.7	+0.1
14	4.7	6.0	+1.3	4.4	+1.6
15	5.0	6.6	+1.6	3.9	+2.7
16	6.2	7.2	+1.0	6.1	+1.1
17	6.0	9.2	+3.2	6.5	+2.7
18	3.2	3.8	+0.6	4.4	-0.6
19	5.0	5.4	+0.4	4.8	+0.6
20	3.8	4.3	+0.5	4.0	+0.3
21	4.4	4.0	-0.4	5.6	-1.6
22	3.2	5.0	+1.8	3.2	+1.8
23	2.9	4.7	+1.8	2.7	+2.0
24	2.3	3.7	+1.4	3.0	+0.7
25	5.2	4.8	-0.4	6.0	+1.2

TABLE II (Continued)

Subject Number	Grade Level	Follow-Up Vocabulary Grade Level	Difference	Follow-Up Reading Expectancy Grade Level	Difference
1	12	5.8	-	12.7	-6.9
2	11	*		13.4	*
3	11	10.0	-	11.5	-1.5
4	11	9.8	-	12.3	-2.5
5	10	-		8.6	-
6	10	9.8	-	11.7	-1.7
7	10	*10.0	+	11.5	-1.5
8	10	9.8	-	10.1	-0.3
9	9	9.8	+	9.7	+0.1
10	9	*10.0	+	10.3	-0.3
11	9	10.0	+	10.6	-0.6
12	9	4.1	-	9.2	-5.1
13	9	5.9	-	10.9	-5.0
14	9	6.7	-	7.8	-1.1
15	9	8.1	-	8.7	-0.6
16	8	8.4	+	8.2	+0.2
17	8	7.3	-	8.7	-1.4
18	8	5.4	-	7.8	-2.4
19	8	3.7	-	9.9	-6.2
20	8	5.1	-	8.1	-3.0
21	7	8.4	-	7.9	+0.5
22	7	5.8	-	7.6	-1.8
23	7	5.3	-	6.1	-0.8
24	7	5.2	-	6.9	-1.7
25	7	7.7	+	8.1	-0.4

*When student's score was higher than Table score, the highest table score in category measured was substituted if this score did not give student a minus rating.

TABLE III
 COMPARISON OF SPELLING TEST SCORES BETWEEN PRE AND
 POST-CLINIC EVALUATION SPELLING LEVELS AND
 READING EXPECTANCY LEVELS

Subject Number	Pre-Clinic Spelling Grade Level	Post-Clinic Spelling Grade Level	Difference	Reading Expectancy Level	Difference
1	5.4	5.7	+0.3	5.9	-0.2
2	4.4	6.1	+1.7	4.7	+1.4
3	4.4	4.5	+0.1	5.2	-0.7
4	3.8	4.1	+0.3	5.5	-1.4
5	5.3	7.2	+1.9	6.9	+0.3
6	4.8	5.1	+0.3	4.6	+0.5
7	4.4	5.3	+0.9	5.7	-0.4
8	3.5	5.3	+0.8	5.5	-0.2
9	4.6	5.0	+0.4	3.2	+1.8
10	6.0	6.6	+0.6	5.2	+1.4
11	5.6	8.0	+2.4	5.8	+2.2
12	2.3	4.1	+1.8	3.0	+1.1
13	4.8	4.3	-0.5	8.7	-4.4
14	6.7	7.1	+0.4	4.4	+2.7
15	7.9	8.2	+0.3	3.9	+4.3
16	5.1	6.0	+0.9	6.1	-0.1
17	4.0	5.3	+1.3	6.5	-1.2
18	2.5	5.0	+2.5	4.4	+0.6
19	5.3	6.0	+0.7	4.8	+1.2
20	3.6	4.0	+0.4	4.0	0
21	4.1	5.3	+1.2	5.6	-0.3
22	3.5	4.2	+0.7	3.2	+1.0
23	2.5	3.5	+1.0	2.7	+0.8
24	2.3	3.8	+1.5	3.0	+0.8
25	5.0	5.1	+0.4	6.0	-0.9

TABLE III (Continued)

Subject Number	Grade Level	Follow-Up Spelling Grade Level	Difference	Follow-Up Reading Expectancy Grade Level	Difference
1	12	10.0+	-	12.7	-2.7
2	11	7.1	-	13.4	-6.3
3	11	7.3	-	11.5	-4.2
4	11	7.0	-	12.3	-5.3
5	10	4.7	-	8.6	-3.9
6	10	6.8	-	11.7	-4.9
7	10	9.8	-	11.5	-1.7
8	10	8.7	-	10.1	-1.4
9	9	8.2	-	9.7	-1.5
10	9	9.4	+	10.3	-0.9
11	9	9.0	+	10.6	-1.6
12	9	5.1	-	9.2	-4.1
13	9	8.2	-	10.9	-2.7
14	9	10.0+	+	7.8	+2.2+
15	9	*10.0	+	8.7	-1.3
16	8	7.9	-	8.2	-0.3
17	8	6.3	-	8.7	-2.4
18	8	5.5	-	7.8	-2.3
19	8	6.8	-	9.9	-3.1
20	8	5.3	-	8.1	-2.8
21	7	5.8	-	7.9	-2.1
22	7	5.4	-	7.6	-2.2
23	7	6.5	-	6.1	+0.4
24	7	5.5	-	6.9	-1.4
25	7	4.7	-	8.1	-3.4

*When student's score was higher than table score, the highest table score in category measured was substituted if this score did not give student a minus rating.

2. What is the statistical relationship between the academic performance and the reading level of the subject?

According to the grading system used by the public junior and senior high schools in Oklahoma, a grade of A or B represents above average progress; C represents average progress; D represents unsatisfactory progress; and F represents failure to show progress. The academic progress of the subjects used in this study is reported from information recorded by the subjects on the Student Informal Inventory.

Following is a list of the classes surveyed and the total number of students reporting grade averages according to the categories listed:

<u>Classes Surveyed</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>F</u>	<u>No Grade</u>
English	1	8	12	3	1	0
Mathematics	6	7	8	2	0	2
Social Studies	5	7	9	3	1	2
Total Students	12	20	29	8	2	4

The present reading levels of these students are listed in Table I. These reading levels were computed from scores taken from the Metropolitan or Gates-MacGinitie Reading Tests during the follow-up study. According to this report, 40 per cent of the subjects are reading at or above grade level as compared with 81.4 per cent reporting average and above grades in subjects required for college-bound students. Only 2.7 per cent of the subjects reported making failing grades and 10.7 per cent reported making "D's."

3. What is the parent's view of the subject's reading level?

Parents responded to this question on the Parent Informal Inventory. Specifically, parents were asked how they would rate

their child's reading ability at the present time. Following is a list of the number of responses listed for each choice:

Reading at Grade Level	13
Reading Below Grade Level	8
Reading Above Grade Level	1
Uncertain	1

The responses indicate that 56.5 per cent of the parents feel the child is reading at grade level; 34.7 per cent feel the child is reading below grade level; 4.3 per cent feel the child is reading above grade level; and 4.3 per cent are uncertain of the child's reading ability.

Tables IV through VI show the changes in reading performance by grade levels on the reading comprehension, vocabulary, and spelling tests for pre and post-clinic evaluation and on the follow-up tests.

Table IV shows changes in reading performance by grade levels in reading comprehension skills. According to grade level averages, reading improvement was made by each of the grades tested on the post-clinic test. The average reading expectancy level was reached by grades 7, 8, and 11.

Table V shows changes in reading vocabulary performance by grade levels. According to grade level averages, reading vocabulary achievement was made by each of the grades tested on the post-clinic test. The average reading expectancy level was reached by grades 7, 8, 9, and 11.

TABLE IV

COMPARISON OF READING ACHIEVEMENT BETWEEN PRE AND
POST-CLINIC TEST SCORES BY GRADE LEVELS

Present Grade Level Average	No. Years Since Remedial Clinic Average	Avg. Rem. GL	Pre-Clinic Reading Grade Average	Post-Clinic Reading Grade Average	Average Gain	+ or - Present Grade Level Average	Reading Expectancy Level Average	+ or - Reading Expectancy Level Average
11.25	6	4.75	4.9	5.77	+0.87	+1.02	5.32	+0.45
10	4.67	5.5	3.65	5.45	+1.75	-.05	5.67	-0.22
9	4.86	4.00	4.30	5.23	+0.93	+1.23	4.89	-0.34
8	3.4	4.80	4.50	5.40	+1.80	+0.60	5.16	+0.24
7	<u>3.2</u>	<u>3.80</u>	<u>3.18</u>	<u>4.70</u>	<u>+1.52</u>	<u>+0.90</u>	<u>4.10</u>	<u>+0.60</u>
Average								
8.92	4.48	4.2	4.10	5.28	+1.35	+0.74	4.98	+0.14

The tenth grade reading average was the only one out of the five grades that was below grade level at the end of the clinic session. The seventh, eighth, and ninth grade averages were slightly above their expectancy level.

TABLE IV (Continued)

Average Present Grade Level	Average Years Since Clinic	Post-Clinic Reading Grade Level	Follow-Up Reading Grade Level	Average Gain	+ or - Average Present Grade Level	Follow-Up Reading Expectancy Level	+ or - Reading Exp. Level
11.25	6	5.77	7.7	+1.93	-3.8	12.47	-4.77
10	4.67	5.45	10.0	+4.55	0.0	11.47	-1.47
9	4.86	5.23	8.23	+3.00	-0.77	9.6	-1.37
8	3.4	5.40	7.80	+2.40	-0.20	8.54	-0.74
7	<u>3.2</u>	<u>4.70</u>	<u>5.98</u>	<u>+1.28</u>	<u>-1.02</u>	<u>7.32</u>	<u>-1.34</u>
Average							
8.92	4.48	5.28	7.80	+2.63	-1.15	9.53	-1.73

Although all of the follow-up grade averages showed an improvement over the post-clinic test scores, all of the grade averages with the exception of the tenth grade were below grade level. All of the grade averages were below reading expectancy level.

TABLE V

COMPARISON OF READING VOCABULARY BETWEEN PRE AND
POST-CLINIC TEST SCORES BY GRADE LEVEL

Present Grade Level Average	No. Years Since Remedial Clinic Average	Avg. Rem. GL	Pre-Clinic	Post-Clinic	Average Gain	+ or -	Reading Expectancy Level Average	+ or -
			Reading Grade Average	Reading Grade Average		Present Grade Level Average		Reading Expectancy Level Average
11.25	6	4.75	5.35	5.7	+0.35	+0.95	5.32	+0.38
10	4.67	5.5	3.62	4.65	+1.03	-0.85	5.67	-1.02
9	4.86	4.0	4.88	6.2	+1.32	+2.2	4.89	+1.31
8	3.4	4.8	4.84	5.98	+1.14	+1.18	5.16	+0.82
7	<u>3.2</u>	<u>3.8</u>	<u>3.6</u>	<u>4.44</u>	<u>+0.84</u>	<u>+0.64</u>	<u>4.10</u>	<u>+0.34</u>
Average								
8.92	4.48	4.2	4.35	6.63	+2.28	+0.82	4.98	+0.36

At the end of the clinic session, the tenth grade reading level average was slightly below grade level. The seventh, eighth, ninth, and eleventh grade reading vocabulary averages measured above grade level and reading expectancy level.

TABLE V (Continued)

Average Present Grade Level	Average Years Since Clinic	Post-Clinic Reading Grade Level	Follow-Up Reading Grade Level	Average Gain	+ or - Average Present Grade Level	Follow-Up Reading Expectancy Level	+ or - Reading Exp. Level
11.25	6	5.77	8.53	+2.76	-2.97	12.47	-3.94
10	4.67	5.45	9.85	+4.40	-0.15	11.4	-1.55
9	4.86	5.23	7.47	+2.24	-1.53	9.6	-2.13
8	3.4	5.40	5.98	+0.58	-2.02	8.54	-2.57
7	<u>3.2</u>	<u>4.70</u>	<u>6.48</u>	<u>+1.78</u>	<u>-0.52</u>	<u>7.32</u>	<u>-0.84</u>
Average							
8.92	4.48	6.89	7.50	+0.61	-1.42	9.53	-2.03

The follow-up test scores revealed a wide discrepancy between actual grade level and reading grade level averages for grades eight, nine, and eleven. Grades seven and ten showed a slight deficit. All of the grades appeared functioning below reading expectancy level.

Table VI shows changes in spelling achievement by grade levels. According to grade level averages, improvement in spelling skills was made by each of the grades tested on the post-clinic test. The average reading expectancy level was reached by all of the grades with the exception of grade 11.

4. What is the subject's attitude toward reading as viewed by the subject? By the parent?

The attitude of each subject in the study was measured by answers to questions listed on the Student Informal Inventory. The number of students responding to each of the ten questions is listed by categories in Table VII. The data presented in this table indicates that 44 per cent of the subjects are not interested in reading at the present time; 44 per cent of the subjects are interested in reading at the present time; and 12 per cent are uncertain. The table also indicates that 56 per cent of the subjects very seldom read for pleasure; 12 per cent spend more of their leisure time reading for pleasure and 32 per cent are uncertain.

The parents' opinions of the attitude of the subjects toward reading are presented in Table VIII. The report indicated that only 13 per cent of the parents feel the child spends much of his leisure time reading; 74 per cent of the parents feel the child spends very little of his leisure time reading; and 13 per cent are uncertain of the child's reading habits.

TABLE VI

COMPARISON OF SPELLING ACHIEVEMENT BETWEEN PRE AND
POST-CLINIC TEST SCORES BY GRADE LEVELS

Present Grade Level Average	No. Years Since Remedial Clinic Average	Avg. Rem. GL	Pre-Clinic Spelling Achievement Grade Average	Post-Clinic Spelling Achievement Grade Average	Average Gain	+ or - Present Grade Level Average	Reading Expectancy Level Average	+ or - Reading Expectancy Level Average
11.25	6	4.75	4.5	5.1	+0.6	+0.35	5.32	-0.22
10	4.67	5.5	4.5	5.72	+1.22	+0.22	5.67	+0.05
9	4.68	4.0	5.41	6.18	+0.77	+2.18	4.88	+1.30
8	3.4	4.8	4.1	5.26	+1.16	+0.46	5.16	+0.10
7	<u>3.2</u>	<u>3.8</u>	<u>3.48</u>	<u>4.38</u>	<u>+0.90</u>	<u>+0.58</u>	<u>4.10</u>	<u>+0.28</u>
Average								
8.92	4.48	4.2	4.47	5.39	+0.92	+1.19	4.98	+0.30

The spelling achievement test scores were very encouraging. At the end of the clinic session all of the grade averages were above the actual grade level. Only the eleventh grade scored slightly below reading expectancy level.

TABLE VI (Continued)

Present Grade Level Average	Average Years Since Clinic	Post-Clinic Spelling Achievement Level Average	Follow-Up Reading Grade Level Average	Average Gain	+ or - Present Grade Level Average	Follow-Up Reading Expectancy Level Average	+ or - Reading Expectancy Level Average
11.5	6	5.1	7.85	+2.75	-3.65	12.47	-4.62
10	4.67	5.72	7.75	+2.03	-2.25	10.47	-2.72
9	4.86	6.18	8.56	+2.38	-0.44	9.6	+1.04
8	3.4	5.26	6.36	+1.10	-1.64	8.53	-2.17
7	<u>3.2</u>	<u>4.38</u>	<u>5.58</u>	<u>+1.20</u>	<u>-1.42</u>	<u>7.32</u>	<u>-1.74</u>
Average							
8.92	4.48	5.39	7.28	+1.89	-1.64	9.53	-2.25

The follow-up grade averages showed post-clinic gain; however, none of the averages were up to grade level or reading expectancy level.

TABLE VII

STUDENT INFORMAL INVENTORY SUMMARY SHEET

Questions	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
1. The instruction I received at the Reading Clinic was worthwhile.	11	10	4	0	0
2. My reading skills continued to improve after I left the Reading Clinic.	7	8	10	0	0
3. I have very few reading assignments for my school work.	2	7	4	9	3
4. I have received additional help with reading since I left the Reading Clinic	3	8	2	7	5
5. Our English teacher very often gives us a chance to choose from several reading assignments.	3	6	2	5	9
6. I read well enough to prepare myself for the career of my choice.	7	11	3	3	1
7. Reading does not interest me at the present time.	3	8	3	6	5
8. My reading speed is satisfactory for my needs.	2	8	10	3	2
9. If I have the opportunity, I will enroll in another reading course.	2	4	12	3	4
10. I very seldom read for pleasure.	6	8	8	1	2

TABLE VIII

PARENT INFORMAL INVENTORY SUMMARY SHEET

Questions	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
1. <u>(Subject's name)</u> 's school work is satisfactory.	3	11	1	7	1
2. _____ 's grades improved after he left the Reading Clinic.	3	13	3	4	0
3. _____ enjoys school.	1	13	4	5	0
4. _____ is involved in extra-curricular activities.	3	13	0	5	2
5. _____ spends much of his leisure time reading.	0	3	3	12	5
6. _____ reads with enough understanding to get his homework without assistance.	3	11	3	5	1
7. _____ 's attitude toward reading improved after he left the Clinic.	3	8	9	3	0
8. _____ has received satisfactory help in reading at his school.	0	10	6	5	2

5. What role will reading play in the subject's future plans?

Responses indicated that 36 per cent of the subjects felt they read well enough to pursue the career of their choice as compared with 56 per cent who did not and eight per cent who were uncertain. Eighty-one per cent of the subjects who listed careers that they would like to pursue for a life profession were making passing grades in school. The career choices and average grades made by the subjects are listed below.

Career Choice	Grade
1. Dairy Farmer	B-
2. Forest Ranger	B-
3. Forest Ranger	B
4. Mechanic (mucanick)	D-
5. Chemist	B+
6. Secretary	A-
7. Nursing Home Attendant	D
8. Model	C
9. Zoologist	C-
10. Builder	C
11. Builder (Builter)	D-
12. Manage father's company	B
13. Accountant	C
14. Scientist	B
15. Doctor (Father's Profession)	C
16. Artist (Mother's Profession)	C-
17. Uncertain	9 subjects

6. What is subject's present self-concept? Is there a relationship between self-concept of subject and parent?

The self-concept of an individual is viewed as a developmental phenomenon resulting from a dynamic interaction between the individual and his environment (Bodwin, 1959). Strang (1957) agrees that self-concepts are learned; that they are built in many subtle ways which foster good or bad in the way a child sees himself. According to Maslow (1954), each individual needs to think well of himself and to receive recognition from others. "Satisfaction of self-esteem need leads to feelings of self-confidence, worth, strength, capability, and adequacy of being useful and necessary in the world. But thwarting of these needs produces feelings of inferiority and helplessness."

The California Test of Personality was used to measure the self concept of subjects and their parents. This test is divided into two parts: personal adjustment and social adjustment. Figure 1 shows that a total of 80 per cent of the subjects scored below the 50th percentile on the personal adjustment scale. The "Self-Reliance" subtest was the only one of the six subtests where more subjects rated at or above the 50th percentile; even so, the margin was very narrow with 13 subjects rating above and 12 subjects rating below the 50th percentile. On the "Withdrawing Tendencies" subtest, 20 of the 25 subjects rated below the 50th percentile.

Figure 1 also shows that 50 per cent of the parents completing the Personal Adjustment Test rated below the 50th percentile. On the "Sense of Personal Freedom," "Withdrawing Tendencies," and "Nervous Symptoms" subtests more parents rated above the 50th percentile by a narrow margin. On the "Personal Worth" subtest, 85 per cent of the parents rated above the 50th percentile.

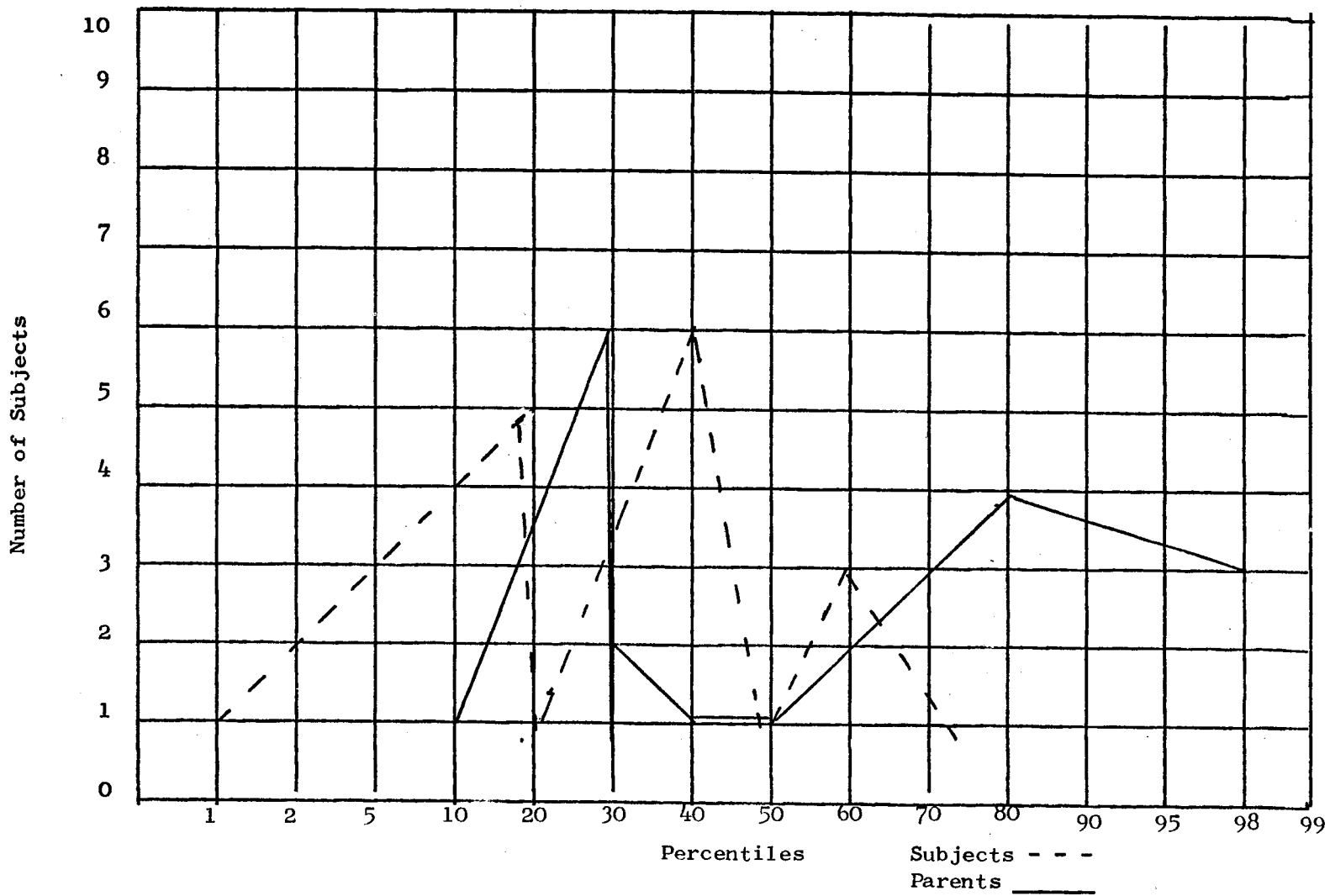


Figure 1. Distribution of Subjects and Parents by Percentiles on California Test of Personality - Personal Adjustment

Figure 2 shows how subjects and parents rated on the Social Adjustment Scale. Twenty-one of the 25 subjects rated below the 50th percentile on the "Social Standards," "Social Skills," "Anti-Social Tendencies," and "School Relations" and "Community Relations" subtests. Twenty subjects made averages below the 50th percentile on the total social adjustment section. One subject did not complete this section of the test. Twenty-two parents completed the social adjustment section. Of this total, only seven rated below the 50th percentile. Unlike the low ratings on the personal adjustment section, parents ranked much higher than the subjects on this test.

Figure 3 shows a comparison of the ratings of parents and subjects on the California Test of Personality as a whole. Fifty per cent of the parents rated above the 50th percentile as compared with 12 per cent of the subjects.

The Interests and Activities Inventory indicated that fewer than half of the subjects either liked or participated in many of the activities listed. The four female subjects included in the sample indicated that they liked to sew and that they did sew; all four subjects attended church but only three liked church; two belonged to gangs but neither indicated that they liked gangs; and only one of the female subjects indicated that she liked housework. The strongest preferences for the group as a whole were (1) going camping; (2) riding a bicycle; (3) climbing or hiking; (4) driving an automobile; and (5) playing with pets. The study of literature and history were among the least preferred activities but these subjects received a high rating for participation. Table IX shows the reaction of the subjects to the interest and activities listed.

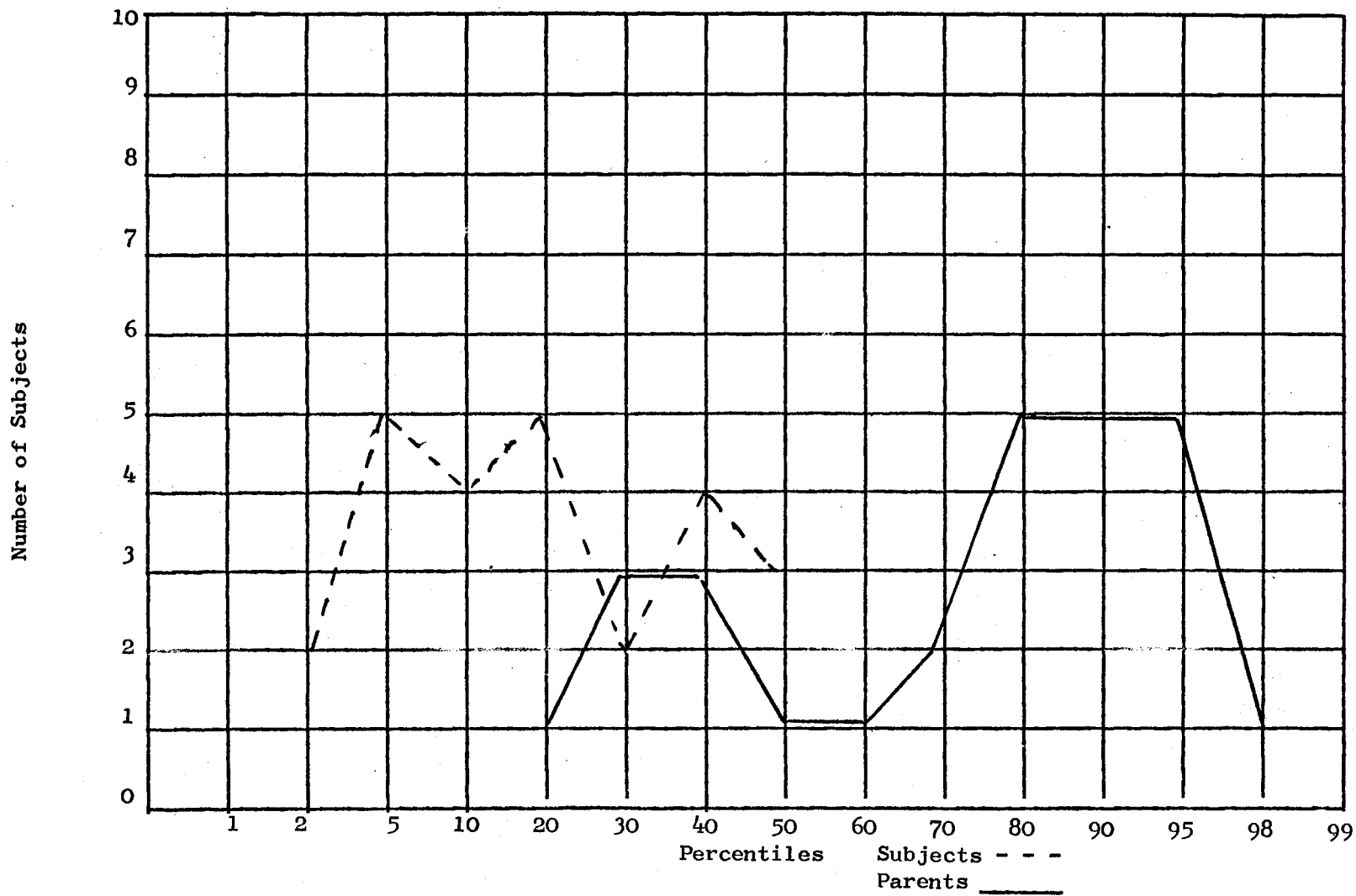


Figure 2. Distribution of Subjects and Parents by Percentiles on California Test of Personality - Social Adjustment

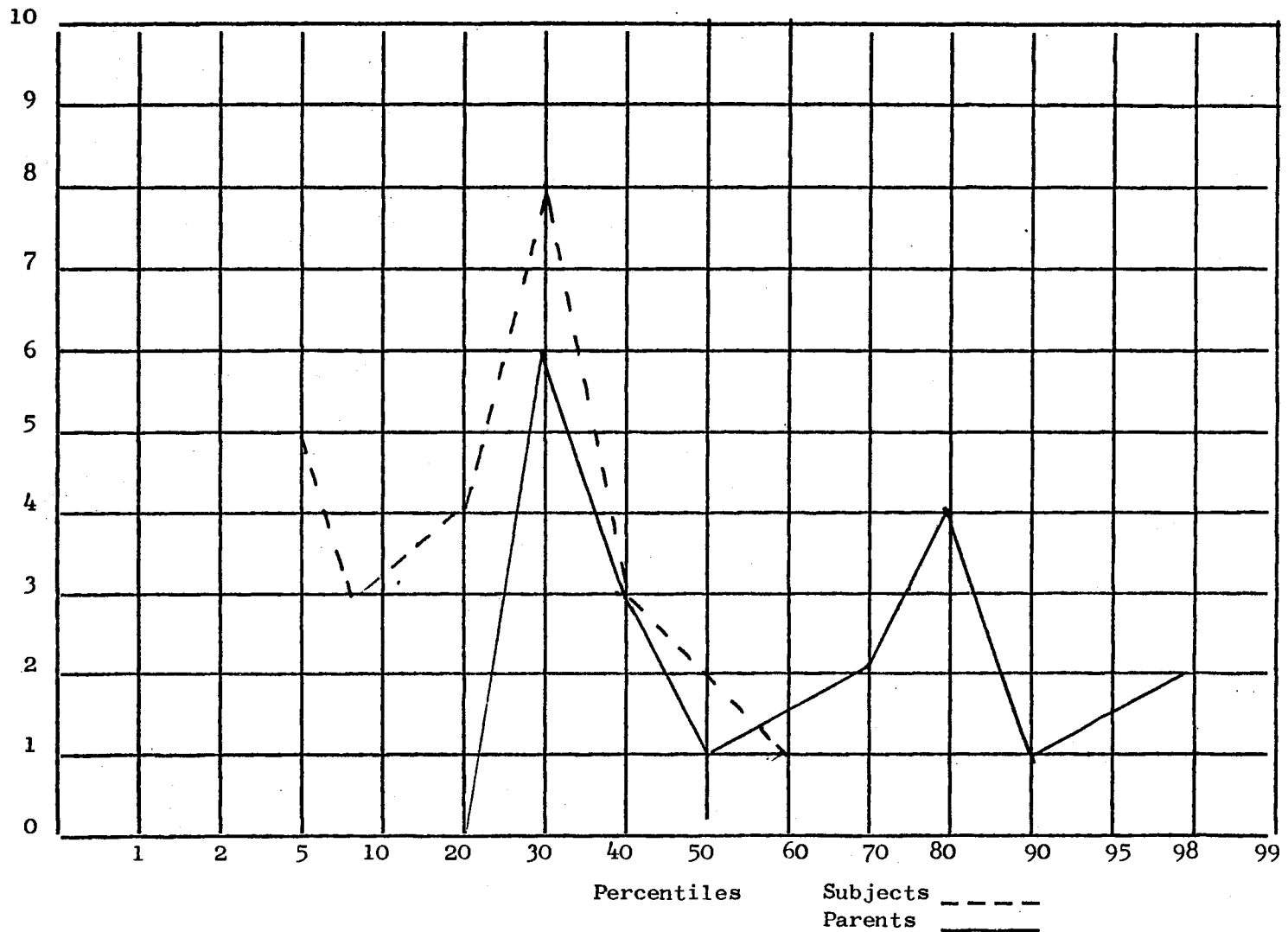


Figure 3. Distribution of Subjects and Parents by Percentiles on California Test of Personality

TABLE IX
A SURVEY OF THE INTERESTS AND
ACTIVITIES OF SUBJECTS

Interests or Activities	Like	Do
1. Play the radio	15	16
2. Read stories	9	13
3. Go to movies	15	15
4. Read comic strips	9	9
5. Work problems	4	16
6. Study history	3	14
7. Study science	11	16
8. Study literature	2	15
9. Do cross-word puzzles	10	5
10. Study trees	4	4
11. Study birds	6	5
12. Study animals	14	13
13. Study butterflies	4	4
14. Draw or paint	10	12
15. Work in laboratory	7	7
16. Model or design	5	6
17. Do housework	1	7
18. Sing	6	6
19. Play piano	7	6
20. Make a scrapbook	4	8
21. Keep a diary	4	4
22. Write poems	7	5

TABLE IX (Continued)

Interests or Activities	Like	Do
23. Speak pieces	3	2
24. Play instrument	10	9
25. Visit museums	9	6
26. Collect stamps	2	4
27. Collect coins	10	8
28. Collect autographs	6	4
29. Collect pictures	6	6
30. Use a camera	9	13
31. Sew or knit	5	5
32. Repair things	10	18
33. Make boats	7	4
34. Make airplanes	7	7
35. Make radio	7	5
36. Work with tools	13	15
37. Have a garden	4	9
38. Drive automobile	16	15
39. Play with pets	16	20
40. Raise animals	14	14
41. Go fishing	12	11
42. Climb or hike	17	16
43. Skate	9	7
44. Ride a bicycle	18	18
45. Ride a horse	13	14

Table IX (Continued)

Interests or Activities	Like	Do
46. Practice first aid	5	5
47. Play cards	14	15
48. Play dominoes	6	7
49. Play checkers	8	10
50. Play chess	8	11
51. Go to church	9	15
52. Go to Sunday School	6	13
53. Belong to a club	10	12
54. Belong to YMCA or YWCA	6	8
55. Go to parks	11	14
56. Engage in sports	13	12
57. Go to a circus	7	8
58. Sing in a chorus	4	3
59. Sing in a glee club	4	2
60. Belong to a gang	7	7
61. Play ping pong	13	11
62. Play croquet	5	2
63. Play ball	10	10
64. Play tennis	12	9
65. Go hunting	14	9
66. Go riding with others	15	18
67. Play in a band	6	5
68. Go to church socials	7	10

TABLE IX (Continued)

Interests or Activities	Like	Do
69. Play in an orchestra	3	3
70. Go to parties	15	17
71. Go to dances	9	9
72. Be officer of a club	7	5
73. Be a class officer	6	3
74. Go camping	19	19

7. What special instruction has subject received since his clinic experience?

Fourteen of the subjects are attending schools offering special reading classes, however, only three of the subjects are presently enrolled in a reading class. These three subjects ranked above reading expectancy level on the follow-up comprehension test. Forty-four per cent of the parents felt their children did not get enough help with reading at school. However, 60 per cent said the subjects read well enough to get homework without assistance and 64 per cent said the subjects were doing satisfactory work in school.

Four per cent of the subjects in the study had received private reading instruction since leaving the clinic. Fifty-six per cent indicated they did not read well enough to pursue the career of their choice; forty-eight per cent admitted having many school assignments requiring reading; yet twenty-eight per cent indicated they would not

enroll in another reading course.

8. What rating would subjects and parents give services offered by the Clinic?

Eighty-four per cent of the subjects indicated that they felt the time spent at the Reading Clinic was worthwhile; forty-four per cent of this total agreed strongly with this statement. The parents unanimously agreed that the clinic experience was worthwhile.

9. What did subjects and parents like best about services offered by the Clinic?

*Replies to this question are listed along with the number of responses:

Best Likes Services	Number of Replies
Personal attention received by the child	8
Variety of teaching methods used made learning fun	2
Developed subject's confidence in ability to read with understanding	6
Developed a feeling of belonging	1
Developed the reading habit	7
Increased reading rates	1
Improved comprehension ability	6
Improved subject's ability to pay attention	1
Improved study habits	1

*Some parents included several replies to a question.

10. What did you like least about the services offered by the Clinic?

Replies to this question are listed along with the number of responses.

Least Liked Services	Number of Replies
Sessions too long	1
Travel to and from Clinic	1
A girl being the lone member of her sex in a reading group	1
Discontinuing instruction before subject reaches grade level	3
Limiting the number of sessions a student may attend Clinic	3
Interest in reading ended with Clinic instruction	1
Little evidence of improvement in speaking skills	1
Difficulty meeting class schedule	2
Lack of enthusiasm on part of child	2
Can't think of anything I disliked	6

11. What is the attitude of parent about sending another child to the CSU Reading Clinic?

This question was answered 100 per cent in the affirmative by the parents. Several parents contacted by telephone who were unable to take part in the study were also complimentary of the instruction offered by the Clinic.

12. What additional services would parents like to see offered by the Clinic?

Additional Services Recommended	Number of Requests
More parental counseling on how to help child at home	4
Follow-up class for former clinic students	4
An adult program	1
A program for developmental readers	2
Expansion of the program to service more children	1
Testing children earlier so they will not have to wait so long before receiving help	2
Not sure	8

CHAPTER V

SUMMARY AND CONCLUSIONS

General Summary of the Investigation

It was the primary purpose of this study to present follow-up information about students who attended Central State University Reading Clinic. Hopefully, the information gathered can contribute to the development of a more effective program for students experiencing reading problems.

A majority of follow-up studies concerning students who attended reading clinics have reported difficulty in locating former students and in getting their cooperation to participate in follow-up studies. It was, therefore, the opinion of the investigator of this study that students presently enrolled in junior and senior high school might be more cooperative and easier to locate. For these reasons, no students receiving clinical instruction before May, 1967, were contacted.

Specifically, the purposes of the study were:

- (1) to report changes in reading performance of former students of Central State University Reading Clinic;
- (2) to report the present attitude of the students toward reading and their reading performance, as indicated by the students and their parents;
- (3) to report the relationship between the self-concept and the attitude of students toward reading as compared with their actual reading performance;

- (4) to report the attitude of students and parents toward services offered by the CSU Reading Clinic; and
- (5) to suggest the role of parents and teachers if students receiving clinic reading instruction are to continue to show improvement in reading and reading related skills after they leave the reading clinic.

Summary of Findings

Reading Achievement--Comprehension

The post clinic evaluation of reading comprehension test scores indicated that 24 of the 25 subjects made improvement. Seventeen students were reading at grade level; 15 students were reading at their reading expectancy level. The follow-up test scores indicated a sharp decline in improvement. Only 10 subjects were reading at grade level and seven reading at their reading expectancy level. The scores of two students could not be accurately interpreted on the test scales.

Reading Achievement--Vocabulary

The post-clinic evaluation of reading vocabulary skills indicated that 22 of the 25 subjects made improvement. Nineteen students were reading at grade level; and 17 students were reading at reading expectancy level; one student remained at the same level for pre and post-clinic evaluation; and one student showed serious regression. The follow-up test scores indicated a sharp decline in improvement. Only six students demonstrated reading vocabulary skills at grade level; and three at reading expectancy level.

Reading Achievement--Spelling

The post-clinic evaluation of spelling achievement scores indicated that 24 of the 25 subjects made improvement. Fourteen subjects were reading at grade-level and 14 at their reading expectancy level. The follow-up test scores indicated a very serious decline in improvement. Only four subjects demonstrated spelling skills at grade level and two demonstrated spelling skills at reading expectancy level.

Attitude of Students and Parents Toward

Students' Reading Ability

More than half of the parents taking part in the study indicated they felt that their child was reading at grade level while the follow-up test scores showed 11 per cent reading at grade level. However, supporting the parental view of the over estimation of the reading level of the subjects were the facts that 81 per cent of the subjects are passing in subjects required for college-bound students and 60 per cent of subjects are able to complete their homework without assistance. Most of the subjects indicated that their homework required reading.

The opinions of the subjects and parents differed considerably on the amount of time used by the subjects for independent reading. Whereas, 45 per cent of the subjects indicated that they were interested in reading and 12 per cent indicated that they read for pleasure some of the time, 72 per cent of the parents indicated that the subjects spent little time reading for pleasure. Thirty-six per cent of the subjects indicated that they read well enough to pursue the career of their choice, and according to present academic grades these students could be successful.

The data also revealed that 24 per cent of the subjects would enroll in another reading course if they had the opportunity as compared with 12 per cent presently enrolled in a reading course at school. Twenty-eight indicated that they would not enroll in another reading course, yet 58 per cent indicated that they needed additional help in reading to study for the career they wanted to make a life profession.

Self-Concept of Subjects and Parents

The California Personality Test data revealed that 80 per cent of the subjects scored below the 50th percentile on the total personal adjustment section as compared with 50 per cent of the parents. The "Self Reliance" subtest was the only one on which more subjects rated above the 50th percentile. On the "Social Adjustment" subtest, 68 per cent of the parents rated above the 50th percentile as compared with 20 per cent of the subjects. On the "Social Standards," "Social Skills," "Anti-Social Tendencies," and the "School Relations" subtests 84 per cent of the subjects rated below the 50th percentile.

Conclusion

Following are the conclusions that resulted from the study:

1. Most of the subjects in the study made improvement in reading achievement on the post-clinic evaluation; however, the follow-up evaluation showed a serious loss of reading skills when compared with the subject's grade level.
2. Most subjects are overachieving academically, according to the reading levels measured by the follow-up test scores. Most of these students reported average and above grades in courses required for

college-bound students.

3. Many of the parents overestimated the subject's reading level. Probably contributing to this inflated rating was the fact that these subjects are successful in getting school assignments without assistance and most of the subjects are making good grades, and one parent commented that although her son was making very good grades, she knew he was not reading at grade level and she felt the quality of education today was quite inferior.

4. The majority of subjects do very little independent reading. A majority of the parents feel the subjects spend very little time with reading activities; however, they also feel that the subjects read with understanding, and that although the attitude of the subjects toward reading improved during the time of clinic instruction, they are not sure that this favorable attitude continued after the subject left the clinic.

5. Most of the subjects listed careers that will involve reading with understanding and the majority feel they read well enough to prepare for their career choice. The majority are not interested in reading at the present time.

6. Most of the subjects have very poor self-concepts, however, this does not seem to interfere with the subject's academic performance. There was little relationship between the self-concept of the subject and parent; however, the fact that 84 per cent of the subjects were male and mothers made up 96 per cent of the parent representation, might account for this difference.

7. The majority of subjects have received no further instruction in reading since leaving the clinic; although many parents feel the subject does not receive satisfactory help at school.

8. Most of the subjects felt that the clinic experience was worthwhile; yet, half of this group said they would not enroll in another reading class. The parents agreed unanimously that the clinic experience was worthwhile and that the subjects appeared to enjoy the experience during their enrollment period. Since 92 per cent of the subjects were in elementary school at the time of clinic instruction, it could be that maturity is influencing the present negative attitude. Also, students enrolled in special reading classes at school are considered slow learners by their peers and some of their teachers.

9. More of the parents listed (1) personal attention received by the child; (2) improving child's confidence in himself and in his ability to read with understanding; and (3) developing better reading habits as the best liked services offered by the Clinic.

10. More of the parents listed (1) discontinuing instruction before child's reading level reaches his grade level; and (2) limiting the number of sessions that a child may attend as the most frequent objections to clinic service. A number of parents could not recall anything they disliked about the service.

11. The parents unanimously agreed that they would send another child to the clinic for instruction. Other parents contacted by telephone who were unable to take part in the study were also complimentary of the instruction offered by the Clinic.

12. More of the parents listed (1) more counseling of parents about how to help the child with reading problems at home; (2) follow-up classes for former clinic subjects; (3) a program for developmental readers; and (4) testing children so they could receive help earlier as additional services they would like to see offered by the Clinic.

Recommendations

In view of the findings resulting from this study, the following recommendations are made:

On the assumption that continuing support would enable former clinic subjects to continue to show progress in reading after clinic instruction ends, it is recommended that the Clinic develop a program to provide such services. The results of this study also point up the need for counseling with parents about the role they could play at home to provide subjects with appropriate supportive help.

Since the classroom seems to provide the greatest challenge for using reading skills, it is recommended that the clinician work with classroom teachers to implement a program of continuing support in the classroom.

Although the number of subjects by grade level who participated in this study was too small to suggest a relationship between early remediation and remedial success, the fact that the majority of these subjects enjoyed the experience during the time they attended the Clinic, and now dislike the idea of returning for help seems to suggest the need for more remedial programs on the elementary level. It is therefore recommended that wide-scale screening of elementary school students for reading problems be conducted and corrective or remedial

reading instruction be provided at the earliest possible time.

It is further recommended that the cooperation of the school librarian and counselor be enlisted to encourage better reading habits and wider reading interests.

Additional research is encouraged to determine the variables contributing to reading success. Although the self-concept did not seem to affect the academic achievement of the subjects in this study, special attention needs to be given to the self-concept because of the wide reputation it has won as a variable in any kind of achievement.

Central State University Reading Clinic is providing a valuable service to clinic subjects in the form of clinic instruction and related services. It is recommended that this program be expanded to be of more service to the community as a whole.

Theoretical Implications

The conclusion suggested by this study is that students enrolled in the reading program at the Central State University Reading Clinic do show marked improvement at the end of the instructional period. According to the test results reported during the follow-up study, however, this improvement does not continue after the students leave the clinic. There is no evidence that the continuing support needed by these students is provided by the classroom teachers or by the parents. This points up the need for a program of continuing support that would involve the classroom teachers, the parents and the reading clinician.

Because of her professional background and experience, the reading clinician could provide the leadership for setting up such a program. A council could be formed of teachers and parents of these students

who would meet regularly to evaluate the program and implement suggestions for continued improvement in reading and reading related skills. The reading clinician could also be responsible for training teachers and parents how best to help these students make a successful adjustment to the classroom, how to continue to show improvement in reading skills, and how to develop better independent reading habits and interests. The reading clinician, assisted by the classroom teacher, would also evaluate the students' progress periodically by administering reading tests and conducting interviews with parents, other teachers, and the students involved.

It would be the responsibility of the classroom teachers to implement the suggestions made by the reading clinician in her classroom; to provide an atmosphere in the classroom that was conducive to learning; and to provide experiences that would insure success of the former clinic students.

It would be the responsibility of the parents to become actively involved in the learning program of their children. They could serve as tutors, teacher aids, or in other capacities that would help them understand the problems of their children and at the same time free the teacher to spend more time working with students. At home, the parents would provide a supportive attitude and follow the suggestions passed on by the reading clinician and teachers to aid the child.

A program of continuing support in reading should continue as long as there are students enrolled in remedial reading classes. This kind of program seems necessary if remedial reading instruction is to be effective.

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APPENDIX A

PARENT RESPONSES

PARENT RESPONSES

1. "transportation is a problem for us this week but we will do our best."
2. "this just happens to be our week-end out of town."
3. "_____ will be away attending Scout Camp."
4. "_____ will be away attending Scout Camp."
5. "_____ will be out of town attending Scout Camp."
6. "illness in the family."
7. "illness in the family."
8. "family crisis."
9. "_____ no longer lives at home."
10. "_____ has a job after school and on week-ends."
11. "_____ works on two jobs and his schedule is too busy."
12. "will be in Colorado for skiing holiday. Contact me later."
13. "_____ doesn't want anyone to know he attended a reading clinic but he still needs help with reading."
14. "_____ has his own car and I doubt that he would take the time, but if there is anything I can do, I will be happy to cooperate."
15. "will be out of town for a real estate meeting."
16. "we would like to cooperate but you caught us at a bad time."
17. "I will talk with _____ and let him decide."
18. "_____ is away at college."
19. "I can't promise you definitely, but will try."
20. "if we can crowd it in our schedule."
21. "in the process of moving."
22. "if I can remember, I forgot the first date."
23. "we're having company that week-end."
24. "not for two full hours."

APPENDIX B

INSTRUMENTS

QUESTIONNAIRE TO BE ANSWERED BY PARENTS

Your response to the following statements will help us to make a better evaluation of our reading services.

No answer is right. No answer is wrong. Simply mark the column which best represents your opinion about the statement.

Answer questions according to the following scale:

(S) Strongly agree

(A) Agree

(U) Uncertain

(D) Disagree

(SD) Strongly disagree

1. _____ 's school work is satisfactory.
2. _____ 's grades improved after he left the Reading Clinic.
3. _____ enjoys school.
4. _____ is involved in extra-curricular activities.
5. _____ spends much of his leisure time reading.
6. _____ reads with enough understanding to get his homework without assistance.
7. _____ 's attitude toward reading improved after he left the Clinic.
8. _____ has received satisfactory help in reading at his school.

	S	A	U	D	SD
1. _____ 's school work is satisfactory.					
2. _____ 's grades improved after he left the Reading Clinic.					
3. _____ enjoys school.					
4. _____ is involved in extra-curricular activities.					
5. _____ spends much of his leisure time reading.					
6. _____ reads with enough understanding to get his homework without assistance.					
7. _____ 's attitude toward reading improved after he left the Clinic.					
8. _____ has received satisfactory help in reading at his school.					

Part 2

1. What is _____ 's favorite subject? _____
2. What is _____ 's least favorite subject? _____
3. What grade, if any, did _____ repeat?
4. How would you rate _____ 's reading at this time?
At Grade Level ___ Below Grade Level ___ Above Grade Level ___

5. What did you like most about _____ 's experiences at the Reading Clinic?

6. What did you like least about _____ 's experiences at the Reading Clinic?

7. What additional services would you like to see offered by the Reading Clinic?

8. Would you send another child to the Reading Clinic if he/she needed help with reading? Yes _____ No _____. If the answer is no, please give your reasons.

9. In what areas do you think _____ has improved most since he/she received help at the Reading Clinic?

_____	Vocabulary	_____	Rate
_____	Comprehension	_____	Interest
_____	Spelling	_____	Inde- pendent Reading

10. Comments: _____

Name of Parent _____

In what grade are you presently enrolled? 8 9 10 11 12 13

(Circle One)

What is your average grade in English? _____

What is your average grade in math? _____

What is your average grade in social studies? _____

What kind of work do you plan to pursue as an adult? _____

Do you have a class in reading at your school? _____

If so, are you presently enrolled? _____

APPENDIX C

COVER LETTERS

February 27, 1974

Dear

We are conducting a follow-up study of students who attended Central State University Reading Clinic during the years 1967 through 1969. Since _____ participated in our clinic program during this period, we are hopeful that you will help us in carrying out this study.

First, I would like for you and _____ to answer some questions and/or complete a questionnaire. The questions will include information about your experiences at the reading clinic, other help received to improve reading skills, and _____ 's attitude toward reading. I would also like for _____ to take a reading test. If you will plan to spend two hours with us, that will allow ample time to complete all inquiries, and it will give me time to answer any questions that you might like to ask concerning the study. I can assure you that all information will be strictly confidential.

With the help of concerned parents like you, we are hopeful of gathering information that will help us to plan more effective help for other children with reading problems. Therefore, we would be extremely grateful for your cooperation.

Please fill out the enclosed form and return it by March 11. A self-addressed envelope is enclosed for your convenience.

Very truly yours,

(s) Cavannah M. Clark, Instructor
Reading Department
Central State University

_____ I am willing to assist with the study.

_____ I am not willing to assist with the study.

I will be willing to bring _____ to the Reading Clinic
at Central State University on (Check one date):

_____ March 22, 1974 at 5:00 p.m.

_____ March 23, 1974 at 10:30 a.m.

_____ I would prefer to arrange a testing period at my home.

The most convenient time to call for an appointment
to test _____ would be

_____ In the morning (before noon)

_____ In the afternoon (between 1:00 p.m. and 5:00 p.m.)

_____ In the evening (after 7:00 p.m.)

Name of Parent _____

Client's Name _____

(Please return the upper portion of this sheet only)

If you have further questions you may call Central State University
Reading Clinic: 341-2980, Extension 2711.

Mrs. Cavannah M. Clark, Instructor
Reading Department
Central State University

I will bring _____ to the Central State University Reading
Clinic on March _____, 1974 at _____. Room 201, Education Building.

March 14, 1974

Dear Friends:

This letter is a reminder of the follow-up study of students who attended the Central State University Reading Clinic during the years 1967 through 1969. Since the students selected to participate in this study attended the clinic approximately five years earlier, this is a most appropriate time for a re-evaluation of reading skills, habits, and attitude toward reading in general. We can assure you that all information will be kept strictly confidential, and only if you are interested will you receive a copy of your test results upon completion of this study.

If it is at all possible, please arrange to be present on Friday, March 22, at 5:00 p.m. or Saturday, March 23, at 10:00 a.m. in room 201, Old North (the building with the clock on the tower). By cooperating with this study you will play a major role in helping to provide more effective services in reading instruction for future students.

Thanks very much for your cooperation.

Yours truly,

(s) (Mrs.) Cavannah M. Clark, Instructor
Reading Department
Central State University

April 2, 1974

Dear Parents:

We are conducting a follow-up study of students who attended Central State University Reading Clinic before or during 1972. The purpose of this study is (1) to find out if there are any changes in the student's reading performance and attitude toward reading since leaving the clinic, and (2) to see how parents and students would rate services received at the reading clinic. We would be extremely grateful if you would cooperate with us.

We have reserved the dates April 19 and 20 for this study, and this is the procedure we have planned. We would like for one of the student's parents to accompany him/her to the campus on Friday, April 19 at 5:00 p.m. or Saturday, April 20 at 10:00 a.m. (whichever time is more convenient). Report to room 201 in Old North (the building with the clock on the tower). Students will be administered a reading test and asked to fill out a questionnaire and/or inventory concerning the information mentioned above. This will take about an hour and one-half. Parents will be asked to fill out a questionnaire which will not take more than 20 minutes.

We feel sure that you will cooperate with us, however, our most pressing concern is that you might forget the date. So we have enclosed a reminder for your convenience. Please fill in the blank spaces and place it where you can refer to it when and if needed.

May we assure you that all information will be kept confidential. We are only hopeful that the information received will help us to plan

more effective services for students who want to improve their reading skills. We are asking your cooperation because your previous contact with us make you experts in this respect. We would also be happy to mail you a report of your child's test scores as measured during this study. These scores could prove helpful to you in several respects, especially when planning reading activities.

We are counting on your support, so please cooperate with us.

Yours truly,

(s) (Mrs.) Cavannah M. Clark, Instructor
 Reading Department
 Central State University
 Edmond, Oklahoma

A Reminder

_____ and I have an appointment to participate in a Follow-Up Study at Central State University, Old North, Room 201 on

_____ Friday, April 19, at 5:00 p.m.

_____ Saturday, April 20, at 10:00 a.m.

(Check your preference)

If you have further questions you may refer them to the Reading Clinic, CSU, 341-2980, Extension 2711. Dr. Bette H. Roberts, Chairman, Reading Department of Mrs. Maxine Reynolds, Secretary, will answer your questions. Or you may contact me on weekends if you would like: Mrs. Cavannah M. Clark, 3328 North Sherman, Oklahoma City, Telephone: 427-0794. Anytime is convenient for me to talk with you.

VITA

Cavannah M. Clark

Candidate for the Degree of

Doctor of Education

Thesis: A FOLLOW-UP STUDY OF SELECTED SUBJECTS WHO ATTENDED THE
CENTRAL STATE UNIVERSITY READING CLINIC

Major Field: Secondary Education

Biographical:

Personal Data: Born in Watonga, Oklahoma, September 6, 1924, the
daughter of Reuben and Sybil Mewborn.

Education: Graduated from Booker T. Washington High School,
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English from Langston, Oklahoma in 1943; received the Master
of Education (Ed.M) degree in Secondary Education from
University of Oklahoma in 1958; received the Master's degree
in Education (M. Ed) as a Reading Specialist from University
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of Doctor of Education at Oklahoma State University in
July, 1974.

Professional Experience: English Teacher, Douglass High School,
Crescent, Oklahoma, 1945; English Teacher-Librarian, Booker
T. Washington High School, El Reno, Oklahoma, 1947-1955;
Librarian, Douglass High School, Lawton, Oklahoma 1957-1959;
English Teacher, Douglass High School, Oklahoma City,
Oklahoma, 1959-1969; Helping Teacher, Oklahoma City Public
Schools, 1969-1970; Language Arts and Reading Instructor,
Central State University, Edmond, Oklahoma, 1970 to present.