1969

The Case Study Approach in Remedial Reading

Marlyn L. Willardson

Central Washington University

Follow this and additional works at: https://digitalcommons.cwu.edu/etd

Part of the Disability and Equity in Education Commons, Educational Assessment, Evaluation, and Research Commons, Educational Methods Commons, and the Educational Psychology Commons

Recommended Citation


https://digitalcommons.cwu.edu/etd/1223

This Thesis is brought to you for free and open access by the Master's Theses at ScholarWorks@CWU. It has been accepted for inclusion in All Master's Theses by an authorized administrator of ScholarWorks@CWU. For more information, please contact scholarworks@cwu.edu.
THE CASE STUDY APPROACH
IN REMEDIAL READING

A Thesis
Presented to
the Graduate Faculty
Central Washington State College

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

by
Marlyn L. Willardson
July, 1969
APPROVED FOR THE GRADUATE FACULTY

__________________________________
Azella L. Taylor, COMMITTEE CHAIRMAN

__________________________________
Doris E. Jakubek

__________________________________
John E. Davis
Who reads to bring about an end however desirable? Are there not some pursuits that we practice because they are good in themselves, and some pleasures that are final? I have sometimes dreamt, at least, that when the Day of Judgment dawns and the great conquerors and lawyers and statesmen come to receive their rewards—the Almighty will turn to Peter and will say, not without a certain envy when He sees us coming with our books under our arms, "Look, these need no reward. We have nothing to give them here. They have loved reading."

Virginia Woolf in *How Should One Read a Book*, as quoted in *The Literature Sampler* (11:1).
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. THE PROBLEM AND DEFINITIONS OF TERMS</strong></td>
<td></td>
</tr>
<tr>
<td>USED</td>
<td>1</td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td>3</td>
</tr>
<tr>
<td>Significance of the Study</td>
<td>5</td>
</tr>
<tr>
<td>Limitations of the Study</td>
<td>6</td>
</tr>
<tr>
<td>Definitions of Terms</td>
<td>6</td>
</tr>
<tr>
<td>Organization of the Remainder of the Thesis</td>
<td>8</td>
</tr>
<tr>
<td><strong>II. REVIEW OF THE LITERATURE</strong></td>
<td>10</td>
</tr>
<tr>
<td>The Validity of the Case Study Technique in Reading and in Research</td>
<td>10</td>
</tr>
<tr>
<td>Procedures for Conducting a Case Study</td>
<td>12</td>
</tr>
<tr>
<td>Recent Research in College Reading</td>
<td>15</td>
</tr>
<tr>
<td><strong>III. METHODS AND MATERIALS UTILIZED IN THE STUDY</strong></td>
<td>18</td>
</tr>
<tr>
<td>The Standard Achievement Test as a Diagnostic Tool</td>
<td>18</td>
</tr>
<tr>
<td>Individual Conferences with the Student</td>
<td>19</td>
</tr>
<tr>
<td><strong>IV. CASE STUDY</strong></td>
<td>22</td>
</tr>
<tr>
<td>Background Information</td>
<td>22</td>
</tr>
<tr>
<td>CHAPTER</td>
<td>PAGE</td>
</tr>
<tr>
<td>------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Testing information</td>
<td>22</td>
</tr>
<tr>
<td>Health information</td>
<td>23</td>
</tr>
<tr>
<td>Family background</td>
<td>24</td>
</tr>
<tr>
<td>School history</td>
<td>25</td>
</tr>
<tr>
<td>Diagnosis</td>
<td>29</td>
</tr>
<tr>
<td>Analytic diagnosis</td>
<td>29</td>
</tr>
<tr>
<td>Factors related to reading disability</td>
<td>32</td>
</tr>
<tr>
<td>Affective factors</td>
<td>32</td>
</tr>
<tr>
<td>Cognitive factors</td>
<td>35</td>
</tr>
<tr>
<td>Psychomotor factors</td>
<td>36</td>
</tr>
<tr>
<td>Summary of diagnosis</td>
<td>36</td>
</tr>
<tr>
<td>Apparent causes of the reading disability</td>
<td>39</td>
</tr>
<tr>
<td>Suggested Remedial Methods and Materials</td>
<td>42</td>
</tr>
<tr>
<td>Remediation</td>
<td>48</td>
</tr>
<tr>
<td>Results of Remediation</td>
<td>51</td>
</tr>
<tr>
<td>Evaluation of the Case Study Technique</td>
<td>56</td>
</tr>
<tr>
<td>V. SUMMARY, CONCLUSIONS, RECOMMENDATIONS</td>
<td>63</td>
</tr>
<tr>
<td>Summary</td>
<td>63</td>
</tr>
<tr>
<td>Conclusions</td>
<td>64</td>
</tr>
<tr>
<td>Recommendations</td>
<td>73</td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td>79</td>
</tr>
</tbody>
</table>
CHAPTER I

THE PROBLEM AND DEFINITIONS OF TERMS USED

For many years, educators in the elementary schools have recognized the fact that disability in reading may block the path to success in school:

Reading is the basic subject in the elementary school. Ability to read not only marks the difference between the literate and the illiterate person; it is also an absolutely necessary basis for other subjects in the curriculum. To be sure, in the earliest grades a child may compensate for a deficiency in reading by accurate listening and a good verbal memory, but the time comes when progress in all academic subjects very nearly ceases unless he can read. It is therefore essential that teachers should understand the nature of the reading process, in order that they may give the greatest possible aid to pupils in the mastery of the fundamental educational tool—the ability to read (2:3).

Educators in the secondary schools also realize that reading deficiencies block the path to success in content subjects, but they have often tended to blame the elementary teachers for not preparing the students adequately for the reading tasks required at the secondary level (16:3). Harris states that children need guidance in learning how to adapt their general reading skills to the specific requirements of these special kinds of reading matter (5:88).

For many years, college personnel have assumed that students entering their institutions came with the
ability to read. However, many studies indicate that students do not read as well as they could if they were given proper instruction. Many authorities have recommended that reading instruction should become part of the college program. Harris states that . . . specific provisions for speeding up reading seem desirable, through high school and at least the first year of college (5:538). Patterson says,

    ... for many years university authorities believed that the teaching of reading as a communication skill, should be limited to the elementary and high schools. Reading courses are being offered by more and more institutions as the need for reading improvement becomes more evident (14:27).

Since success in reading is one of the main factors which determine whether or not a student will realize his potential ability, ways must be devised to help each individual read as well as he possibly can.

    Strang says that:

    ... under any concept of general education teachers are confronted with the problem of retardation in reading ... a few individuals are so extremely immature in their reading interests and habits that they can be aided only by intensive clinical study and therapy (17:307).

With this fact in mind, it becomes necessary to provide better clinical methods for treating remedial disorders. The case study has been one technique developed to help diagnose the problems of the remedial reader.
I. STATEMENT OF THE PROBLEM

A case study of one student who failed to pass the reading portion of the teacher education test at Central Washington State College was the investigation of this paper. The purpose of this study was to present the case study as a technique in diagnosing the reading disabilities of the individual and using the diagnosis as the basis for prescription and implementation of corrective procedures. This investigation was also conducted to serve as a single depth study upon which future case studies at the college level could be based. The need for this type of approach in educational research was indicated by Navarra:

The intention is to illustrate a method of study which provides clues and leads to further investigative action. That is, the process by which a particular child learns will provide insights concerning how other children learn. This suggestion is made with the full understanding that any child will be different from other children. The information procured, however, will provide a point of comparison with other children studied in this way (12:2).

Van Dalen has also observed that:

The expansive, exploratory nature of a case study may give one insights that may lead to the formulation of fruitful hypotheses, for knowledge that a particular condition exists in a unique instance suggests factors to look for in other cases. But a generalization drawn from a single case . . . cannot be applied to all cases in a given population. If a generalization is drawn from an adequate number of representative cases, however, it can be (19:199).
This study made use of nomothetic knowledge in an idiographic study. Findings based on research into the nature, causes, diagnosis, and prescription of remedial reading disorders were applied to one individual. Evaluation of the study was based on the reading growth, self-confidence, and interest in reading both before and after the remedial program was administered. Success of the program was based on the following criteria:

1. The results of pretests and posttests of reading rate, comprehension and vocabulary. For this purpose, two tests were administered: (a) The Nelson-Denny Reading Test, forms A and B; (b) The Diagnostic Reading Tests, forms A and B.

2. Periodic tests of rate and comprehension. For this purpose, the SRA Rate Builders were used.

3. The student's willingness to read voluntarily or for enjoyment. The results of this change in attitude was determined by content analysis as outlined by Strang.

The study of movement in a series of verbatim interviews can be made more scientific by making a content analysis, charging changes in the number of comments the client volunteers, the attitudes which he states or which can be inferred, and the kind of responses he makes to certain teaching techniques (18:394).
II. SIGNIFICANCE OF THE STUDY

The ability to read plays such a large part in the students' success or failure in college, that it is necessary for the reading skills of college students to be developed as fully as possible. Since so many students seem to require clinical or individual help with their reading disorders, it is necessary that more effective methods be developed to apply general knowledge of reading problems to the individual. Harrison has said that . . . many studies have been done involving large numbers of children, but it is difficult to find descriptive studies involving a limited number of children, the procedures used to help the child, and the results obtained (6:3).

The author was able to locate several descriptive case studies which dealt with the reading disorders of children at the elementary level, but he was unable to find any studies which probed in depth into the reading problems confronting the college student. It was decided to undertake an in-depth case study at the college level because this technique has proven effective at the elementary level but has not been used extensively at the college level.
III. LIMITATIONS OF THE STUDY

This study was not intended to outline a comprehensive course in reading for the correction of all remedial disorders at the college level. A depth study was made on only one individual so no generalizations or conclusions should be drawn to include other remedial cases with similar problems. The subject received remediation for a period of nine weeks, so the time factor had a limiting effect on the validity of the study.

IV. DEFINITIONS OF TERMS

Ability

The ability or capacity of an individual to perform a given act.

Achievement Test

An instrument for measuring the standardized level of ability or performance reached in any particular field.

Diagnosis

The identification of a reading disability on the basis of observed characteristics.
Idiographic Study

An attempt to understand the behavior and attitudes of the individual without attempting to generalize these findings to other persons or groups (15:289).

Nomothetic Study

An attempt to develop principles or theories which relate to large numbers of persons.

Case Study

A relatively detailed description and analysis of a single person.

Remedial Reader

A student who, for various reasons, is working at least one grade level or more below his potential ability in reading.

Fixation

Pauses made by the eye to read a certain portion of a printed line.

Regression

A backward movement of the eyes (ending in a fixation) to take in certain words or phrases missed during the first reading.
Span of Recognition

The number of printed symbols that can be taken in and interpreted at a single fixation (20:28).

Return Sweep

Movement of the eyes from the end of one line to the beginning of the next while reading.

Saccadic Movements

A series of alternating pauses and quick jerky movements of the eyes (5:511).

Subvocalization

Movement of the tongue, throat, and vocal cords while reading. The reader hears himself pronounce each word as he reads silently (5:519).

V. ORGANIZATION OF THE REMAINDER OF THE THESIS

Chapter II presents research findings concerning the validity of the case study approach, the procedures used for conducting a case study, and the results of recent research in the area of college reading.

Chapter III focuses upon the methods and materials that were used in a reading improvement class conducted at Central Washington State College during the Spring Quarter, 1969.
Chapter IV presents a comprehensive case study of the diagnosis, prescription, and remediation of a student who was enrolled in the class.

Chapter V contains the conclusions drawn from the results of the case study as well as recommendations for further research.
A thorough background of information is essential to a successful case study. The background investigation of this problem included the following areas:

1. The validity of the case study technique as a remedial technique and as a research tool.
2. The major procedures involved in conducting a case study.
3. The findings of recent research in the area of college reading.

I. THE VALIDITY OF THE CASE STUDY TECHNIQUE IN READING AND IN RESEARCH

The purpose of the case study is two-fold. The first and most obvious is to benefit the person under study. In clinical work, the benefits of the case study accrue primarily to the patient (15:289). The second purpose of the case study is its usefulness as a research tool. Sax has pointed out four main uses of the case study to the investigator: (1) The case study probes deeper into individual differences than the survey technique, so it can detect variables to a given problem that may go undetected in a study of larger numbers of persons;
(2) The case study offers a unique situation in which to test hypotheses; (3) The case study can point out gaps in knowledge or furnish new insights into problems; (4) The case study can show how theoretical knowledge can be used in concrete examples (15:289-90). Van Dalen has also found two additional uses for the case study: (1) A case study can show some of the factors or variables that are relevant to a situation that an investigator wishes to study; (2) The discovery of a negative piece of information may suggest that a hypothesis needs to be modified (19:199).

The emphasis of the case study is directed toward the individual rather than toward the group and therefore concentrates on a thorough study of one person rather than a superficial study of many people. This factor makes the case study more qualitative in nature than the survey technique (19:199).

It has been shown that the case study and the survey both have certain disadvantages when used alone. However, when they are used together, and the findings are coordinated, the disadvantages tend to cancel each other out. The result is an effective piece of research (1:82). Van Dalen and Sax see the relationships between the case study and the survey as being complimentary
and reciprocal. Young, as quoted in Van Dalen, states that: the most meaningful numerical studies in social science are those which are linked with exhaustive case studies (19:199).

Strang has pointed out how the case study is a particularly important tool in reading.

In the case study an attempt is made to synthesize information from various sources. This approach is especially appropriate in reading cases because reading represents a complex interplay of the many-sided aspects of growth. The skillfully conducted case study reveals a constellation of conditions out of which reading difficulty has developed (17:340).

Della-Piana has observed that the intensive case study is especially useful

... for a reading disability case which has resisted normal growth in regular class instruction and in special individual instruction ... expensive time-consuming diagnosis procedures are recommended, particularly for those students not responding to regular classroom instruction or individualized classroom corrective treatment based on informal diagnosis (3:3).

II. PROCEDURES FOR CONDUCTING A CASE STUDY

One of the first steps in conducting a case study is to select those cases which typify the major dimensions of the problem. The search is not for a random sample from some specified population, but for a case that is a relatively pure example of the phenomenon under investigation (15:290).

The subject described in this study was selected from a group of students who failed to pass the reading portion of the teacher education tests.
The next step was to gather data which was used in the diagnosis. Some of the sources of data included interviews and the results of reading tests.

Leland says that therapy and diagnosis are intermingled in a case study and emphasized the following approach in a citation by Strang:

1. Discovering symptomatic behavior by observing the individual in his efforts to learn, with informal notes, if possible, on his performance.

2. Analyzing and interpreting the information gained from such observation, together with that from other sources such as tests, family, school and personal histories, physical examination.

3. Teaching on the basis of conclusions which seemed warranted by the above—diagnostic teaching, if you will—remembering that the diagnosis is tentative (17:341).

Strang also stresses the need for the individual to know the nature of his problem to help him overcome it. She feels that the student's strengths rather than his weaknesses should be emphasized. She suggests that:

Further reassurance may be given by explaining the development of his reading deficiency... an optimistic view of the problem may be further reinforced by authentic information about other cases as serious as his which have been discovered and corrected (17:343).

The procedures for this study will follow closely a study made by Leuenberger which was cited by Whitney. Leuenberger's aim was:
To determine just what could be accomplished in a relatively short time by use of proper psychological methods with a child of normal intelligence, retarded several years in reading. Procedures carried through in this piece of research were: (a) determine the home and school history; (b) determine objectively the child's present status; (c) diagnose the subject's reading difficulties; (d) determine the causes of the child's reading deficiencies; (e) select, evaluate, and apply remedial measures; (f) measure the results of the teaching; and (g) report the study (21:167).

Kolson described a reading clinic at the University of Pittsburgh which includes university students as its clients. The procedures for remediation are described below:

Here a complete analysis is made of each referral. Detailed investigation of the educational, sociological, emotional, psychological, speech, and medical aspects of the referrals is made by student clinicians under close supervision. A tentative diagnosis is made and the patient receives recommendations for therapy . . . progress is checked constantly and diagnostic analysis continues for the term of remediation (8:120).

Otto stated that the depth of each study varies according to the complexity of the reading problem of each individual. He said that:

Diagnosis should proceed as long as the diagnostic findings have clear implications for understanding and treating disability; but it is as indefensible to overcomplicate and overdiagnose a simple case by rigidly adhering to established procedures as it is to stop short when further diagnosis is needed (13:79).
III. RECENT RESEARCH IN COLLEGE READING

A review of the current research in reading at the college level revealed that little attention has been paid to the individual needs of students enrolled in reading classes. Furthermore, most of these studies seemed repetitious and were not adding any new information to improve the quality of instruction in college reading classes. This finding confirmed a statement by Heilman:

On a national scale we seem to be repeating the same studies over and over without appreciably improving study design or involving adequate controls. It seems we are becoming extremely tolerant of weakness in research design, vagueness about actual procedures carried out, and generalizations which go beyond what the reported data will support (7:215).

One of Heilman's main criticisms of present studies is that no attempt is made to diagnose the reading difficulties of college students enrolling in reading courses. While standardized tests are usually administered in these classes, he claims that test results have not been used to help design a program for the student.

The point is that if one carefully studies the literature on college-adult reading and the practices, goals, and reported results which are described, he will find that in a vast number of cases our use of standardized tests is nothing more than an educational ritual. There is no question but that in a
large percent of the programs test results are not used for the purpose of adapting or building instructional procedures to fit the individual needs of students taking the course. Furthermore, the widespread administration of standardized tests has not resulted in any appreciable modification or changes in instruction in college-adult reading programs—at least reports of such changes or modifications cannot be found (7:207).

Heilman also says that:

. . . we need a very careful diagnosis of each individual who enrolls in college or adult programs and that we need this careful diagnosis so that we can use it to design or build reading programs which fit the specific needs of enrollees (7:206).

Heilman says that most programs are preoccupied with rate, vocabulary, and study skills. He claims that it would be unfair for the researchers to say they actually diagnose the reading deficiencies of each individual in the class unless it can be assumed that all the needs of students could be met by these few skills (7:208). In conclusion, Heilman says that:

. . . if we do not use diagnosis as the basis for developing individualized adult instruction, we should not accumulate a body of literature which intimates that we do (7:216).

The background investigation into this problem has uncovered two weaknesses that seem inherent in many of the studies conducted thus far in reading at the college level: (1) There is a vagueness about the actual procedures carried out in the classroom; (2) Little attempt has been made to diagnose the problems of students enrolled in reading improvement courses.
The present study concentrated on an investigation into the causes of the reading problems of one student in the class and the diagnostic and prescriptive procedures that were carried out to help her overcome her reading difficulties.
CHAPTER III
METHODS AND MATERIALS UTILIZED IN THE STUDY

The purpose of this chapter is to present a description of the methods and materials that were used in the diagnosis of the subject's reading disabilities.

I. THE STANDARD ACHIEVEMENT TEST AS A DIAGNOSTIC TOOL

A standard achievement test is not intended to diagnose reading difficulties, but it can have certain diagnostic characteristics. At the survey level, it serves as the foundation upon which subsequent diagnosis is based, and helps locate pupils who may be in need of more specific and intensive diagnosis.

The standardized achievement tests that were used in this class were the Nelson-Denny Reading Test and the Survey Section of the Diagnostic Reading Tests. Measurements made by these tests include rate of reading, story comprehension, vocabulary, and paragraph comprehension.

There are some types of disabilities that can be recognized by analyzing the results of scores in various sections of these tests. The context reader, for example, tends to score higher on tests of paragraph or story comprehension than on tests of vocabulary or word
recognition. This is due to the fact that there are more clues to meaning in connected material. Context readers also tend to score higher on tests to find the main idea rather than on questions which ask for strict attention to details. Their reading is often quite rapid but inaccurate.

Word-by-word readers usually score higher on vocabulary or sentence reading tests than they do on tests of paragraph or story meaning. They can answer questions which ask for factual recall, but often have trouble answering questions which are implied or not directly stated by the author.

Many students with severe reading disabilities score poorly on all sections of the test and need training which is designed to improve all of the areas in which they are weak. Further diagnosis would be needed to determine in which area to begin remediation (5:180-182).

II. INDIVIDUAL CONFERENCES WITH THE STUDENT

This portion of the diagnostic measures was another means of evaluating student progress and determining student needs. The instructor decided to tape these conferences rather than to take notes while they were in progress. This allowed the conference to proceed
without interruption. The instructor could then play back the tapes and take careful notes of the proceedings at a later date.

The instructor and the student examined the results of comprehension and vocabulary exercises completed by the student and the types of errors that were made. From the results of these exercises, and the specific needs of the student, a sequence of instruction was developed. For instance, if it were found that the student had missed several questions that called for strict attention to qualifying words such as many, some, all, or none, exercises were given to help him become aware of the importance of these words in a sentence. In the case of an error of this type an exercise such as the one found in *Breaking the Reading Barrier* might be given. This type of exercise asks the student to answer "true" or "false" to such questions as "July is always a summer month," "Societies are always made up of human beings," "Toys which are not indestructible are never broken" (4:11-12).

If the student were having trouble with comprehension or with determining the implied meaning of an author, he may be referred to the Reading for Understanding Kit by Science Research Associates. If slow reading speed were considered to be the main obstacle blocking
the student's reading achievement, he would be assigned to one of the machines such as the Craig Reader or the Controlled Reader.
CHAPTER IV

CASE STUDY

I. BACKGROUND INFORMATION

Age _21_  Sex _F_  Class _Senior_

L. graduated from high school with a cumulative average of 2.45. She graduated in the lower one-half of her class and was placed as number 83 out of 187. The results of her Washington Pre-College test were not available in the counseling office. She attained a low grade point average in junior college and had difficulty being accepted at Central Washington State College.

Testing Information

The Science Research Associates Achievement Test administered in high school produced the following percentile scores.

<table>
<thead>
<tr>
<th>SUBJECT</th>
<th>SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Usage</td>
<td>72</td>
</tr>
<tr>
<td>Mathematics Usage</td>
<td>64</td>
</tr>
<tr>
<td>Social Studies Reading</td>
<td>19</td>
</tr>
<tr>
<td>Natural Science Reading</td>
<td>02</td>
</tr>
<tr>
<td>Word Usage</td>
<td>26</td>
</tr>
<tr>
<td>Total Composite</td>
<td>27</td>
</tr>
<tr>
<td>Selection Score</td>
<td>59</td>
</tr>
</tbody>
</table>
Other Test Data:

<table>
<thead>
<tr>
<th>Test</th>
<th>Date</th>
<th>Score</th>
<th>Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.T.E.D.</td>
<td>1959</td>
<td>Comp.</td>
<td>61</td>
</tr>
<tr>
<td>P.M.A.</td>
<td>1959</td>
<td>I.Q.</td>
<td>96</td>
</tr>
</tbody>
</table>

Health Information

L. recalled having had such childhood diseases as mumps, measles, and chicken pox, but said that she never had anything which would be considered "serious" or which would warrant hospitalization. Attendance records from elementary and high school were not available, but the subject said that she "never missed much school," and that her attendance had been "regular." She recalled that nothing had ever caused her to be absent from school for a duration of more than two or three days in succession. She has always considered herself to be physically healthy and enjoys outdoor sports such as swimming, skiing, and tennis. She said that all of her hearing tests in school indicated that she had no auditory defects. She discovered that she needed glasses after she started college and found that she could not focus on distant objects. The author has never seen her wear her glasses and she admitted that she did not like to wear them. She said, "If my eyes get tired, I will wear them sometimes,"
but she added that she normally wears them only for
driving. The doctor told her that it was not necessary
for her to wear them while reading.

Family Background

L. is one of six children. The father is employed
as a welder and the mother was trained as a dental tech­
nician. She defined the family income as "adequate" but
added that it was necessary for her to earn most of her
spending money in high school by holding a part-time job.
She was also required to finance a major portion of her
college expenses.

Her older sister is now a teacher and one of her
brothers is studying under a scholarship. L. received
a scholarship her first year of college, but her grades
were low and she did not apply for it the following year.
She stated that she had received the scholarship because
of financial need rather than for academic ability.

When asked if her family enjoyed reading, she
replied that they "don't read books. Dad reads the
Reader's Digest, but the family has always been based on
outdoor things." She said her sister never read much as
a child but does now "because she is a teacher."

When asked if her parents ever worried about her
grades, she replied that they "never have." She added,
"they never made me study if I didn't want to." However, her mother took an interest in her schoolwork and helped her with her mathematics problems.

Her father did not encourage her to go to college. She said it was her mother who inspired the children to continue their educations and referred to her mother as "the bright one in the family." Her mother also encouraged her to apply for the scholarship. She added, however, that her main reason for going to college was because "everyone else was going and I didn't know what else to do."

School History

L. could not remember ever having been taught reading. However, she remembered that in the third grade she read more books than anyone in the class because she liked her teacher. Her reading decreased after the third grade and she said that she hasn't read much since that time.

She liked all of her elementary teachers and said that she "looked up to them and praised them." In high school, she liked all of her physical education teachers but said that none of the other teachers really took an interest in her. L. expressed the opinion that very few college teachers are really "out to help the
student." She recalled one college teacher who referred to her work as "creative." This teacher always had something good to say about her work. This gave her an incentive to work harder in order to live up to his expectations.

She stated that she has the ability to perform well in school when she applies herself or becomes interested in a subject. Her grades in elementary school through the seventh grade were mostly A's and B's. After that time, her grades dropped to B's and C's. Because of her high school grades, she regarded herself as an "ordinary" student. She expressed the opinion that many of the students who received all "A" grades in high school "were cheaters anyway," and she didn't want to have to cheat to get through high school.

She couldn't remember which subjects she liked or disliked in elementary school, but recalls that physical education was her favorite class in high school. Her worst subjects were mathematics and history and she recalls having a feeling of being under a great deal of pressure in these classes. She said that her problem in history was not in any way related to her lack of reading ability because "there was no reading necessary in high school." At the college level, history and biology were
the two subjects which she disliked the most. The reasons she gave were that "history requires a lot of reading and essay questions and biology has too many technical terms to learn." She received a B- in a biology course but said the teacher "pampered her along." In spite of this, she did not like the course and still dislikes biology.

Because L. enjoyed physical education so much in high school, she decided to major in it when she started college. At junior college, she had a "discouraging experience" with one of her physical education instructors and decided to change her major. Later she took a course in home economics and was so impressed with the teacher's enthusiasm for the subject that she decided to major in it.

Her favorite classes are those in which she can sense a relaxed atmosphere and a feeling of not being threatened. Education and psychology courses are regarded as her favorites because of a lack of pressure and also because she is often allowed to select her own topic for term papers. L. is particularly happy about one education class this quarter because she is writing a paper which will be very useful to her when she begins teaching. She said she enjoys writing papers much more
when they have a personal meaning for her and puts much more work into them.

L. failed both the reading and the English portions of the teacher education tests. After the tests, she thought she had failed the mathematics section and passed in reading. She was quite surprised to discover that it was the other way around. She said she was under more pressure taking these tests than any others she had ever taken in her life because "so much depended upon them." She indicated that she "sort of froze up" when taking them.

When asked why she decided to become a teacher, she said that she had misgivings about it and thought, "Gee, I don't know if I can be a teacher or not because I'm not that smart, but I really like people, especially young people. I used to teach swimming and felt a relationship inside me toward junior high and high school children. I especially like high school children; there is just something about the kids."

She said she thought the person sitting next to her in class "is not better than I am," and "if he can do it, why can't I do it?" She referred to one class in which a term paper was due by a certain date. Some of the "smarter" students didn't have their papers finished and were asking for more time in which to finish it
before the due date. She was quite proud of herself because she had managed to finish it before the due date.

L. said she could take word-for-word notes in college lecture classes, but feels that this is a bad practice and would like to be able to write down only the important ideas conveyed by the instructor. She has also developed the habit of noting unfamiliar words in lectures and looking up their meanings after class. She would like to be able to memorize material more readily and said this would help her achieve greater success in college.

L. said that she doesn't feel there is much value in a college degree and said she has "just run through the courses." She expressed the opinion that she will probably learn more when she begins teaching than she did in college.

II. DIAGNOSIS

Analytic Diagnosis

The results of L.'s achievement test results would indicate that she read well below average in high school. Her scores of seventy-two and sixty-four in English usage and mathematics usage respectively would
seem to indicate that she performed slightly above average in these areas. Her I.Q. score on the P.M.A. which was administered ten years ago would seem to indicate that she is capable of average or near average work.

During the first two weeks of class, the Nelson-Denny and the Survey Section of the SRA Diagnostic Reading Tests were administered to the class. The results of those tests are recorded below:

<table>
<thead>
<tr>
<th>Nelson Denny</th>
<th>Raw Score</th>
<th>Percentile Rank</th>
<th>Grade Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocabulary</td>
<td>26</td>
<td>03</td>
<td>11.9</td>
</tr>
<tr>
<td>Comprehension</td>
<td>26</td>
<td>04</td>
<td>9.3</td>
</tr>
<tr>
<td>Total</td>
<td>52</td>
<td>02</td>
<td>10.4</td>
</tr>
<tr>
<td>Reading Rate</td>
<td>238</td>
<td>27</td>
<td>11.2</td>
</tr>
</tbody>
</table>

L. scored very low in the vocabulary and comprehension sections of the Nelson-Denny test. She received a percentile score of 02 as compared to the norms for college seniors. In terms of grade equivalent, she attained a score which could be expected of an average high school sophomore. Her reading speed was equivalent to that of the average high school junior.
Her low score on the vocabulary and comprehension tests cannot be attributed solely to her poor reading speed as the following chart demonstrates:

<table>
<thead>
<tr>
<th></th>
<th>Possible Responses</th>
<th>Number Attempted</th>
<th>Number Correct</th>
<th>Number Incorrect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocabulary</td>
<td>100</td>
<td>59</td>
<td>26</td>
<td>33</td>
</tr>
<tr>
<td>Comprehension</td>
<td>36</td>
<td>28</td>
<td>13</td>
<td>15</td>
</tr>
</tbody>
</table>

L. completed fifty-nine out of one hundred vocabulary items. Of the fifty-nine items to which she responded, she answered only twenty-six correctly. She completed twenty-eight of the thirty-six possible responses on the comprehension section. Of the twenty-eight items to which she responded, only thirteen of them were answered correctly. She did not skip any items on either the vocabulary or the comprehension sections, but answered each one before proceeding to the next.

L. recorded a reading speed of 195 w.p.m. on the Diagnostic Reading Test and answered thirteen out of twenty comprehension questions on the first section. Of the thirteen questions that she did answer, five were correct. Her comprehension score for the entire section was 25 percent. She seemed rather nervous about taking the rest of the test, so the examiner decided not to have her complete the next two sections. It is doubtful whether
her score would have been much higher had she been given unlimited time in which to finish, because she said that she had a great deal of difficulty concentrating on the reading material and the comprehension questions.

Factors Relating to Reading Disability

The author decided to categorize L.'s reading disabilities into the three domains of learning suggested by Krathwohl (9:6-8). Classification in these three areas were used to help isolate the disabilities as well as aid in designing an effective prescriptive program.

Affective factors. L. has read virtually no books for pleasure in her life and says she is "not the type who will sit down and read a book." Other things in life seem much more important to her than reading. Some of her comments were: "I never really thought about reading before. I never really thought it was important, but I can see now how important it is." She thinks a teacher should be "well-read" and said that she would start reading more when she graduates from college and becomes a teacher.

When asked if she ever read books for pleasure, she replied, "I never read novels. I was going to read Lord of the Flies and Catcher in the Rye, but I didn't
get to them." She said she "should" read more, but has great difficulty forcing herself to read when it is not required of her in a class. She said she feels badly because she has a friend who reads "all of the time" and is always recommending books for her to read. Her husband reads much more than she does and she said, "I get annoyed at him sometimes because he's always busy reading something like his Newsweek." She expressed the opinion that some people "just read naturally" and said that she had a natural talent for things other than reading.

Occasionally she will browse in the library and said she can find more this way than by looking in the card catalog. In most cases, the type of book she selects is in the area of home economics because she is more comfortable reading about something in which she has a background. Often she likes to read a newspaper, but said that she just skims it.

L. expressed concern that she never had a "bookshelf" as a child and said she felt it was important for children to have books of their own. She will read a book if she buys it but will hardly ever read a book that someone has loaned her. During her first year of college, her parents bought her books and "it didn't mean
"But when I had to start buying my own books, it was different." This quarter she was required to buy some books for one of her education classes, but was not required to read them for a test. She read them simply because she "had paid good money for them." It is sometimes necessary for her to sell textbooks after a class in order "to buy groceries," but she tries to keep all of her home economics and education books because "they will be useful when I begin teaching."

L. knows that she has always been a slow reader and took a speed reading course at junior college. It was her opinion that the class helped her more in the area of study skills than in developing her reading efficiency. She said, however, that many of the techniques learned in the class were quite helpful to her.

After L. had failed the reading portion of the teacher education test for the second time, she was required to enroll in the present class in order to continue in the teacher education program. She said she felt badly about having been required to take the class and said that she had to "psych" herself to take it. However, she said she didn't want to take it merely to make up for the teacher education test, but to "do it for myself." She said that when she entered the class she wanted to improve her reading and not just "get
through it" as she does in many of her other classes.

At first L. appeared to be somewhat uneasy about being in the class and was afraid to try anything for fear of failure. She became friends with two of the other students in the class and realized that she was no worse in reading than they were. She became open about her reading deficiency with other members of the class and discussed ways in which she might be able to improve.

**Cognitive Factors.** L. can often answer comprehension questions which call for reading at the literal level, but is often unable to select the correct answers to questions which ask for interpretation or analysis of what she has read. For example, she can often answer questions on the SRA Rate Builders, such as Red 10, Lab IV a, which asks for recall of factual information but seldom provides a correct response to questions which ask for implied meanings or main ideas of the selection she has read. Her comprehension is generally poor as indicated by her percentile score of 04 on the Nelson-Denny Reading Test. She has difficulty with word meaning in isolation or in context and her vocabulary is weak as indicated by her percentile score of 03.
Psychomotor factors. The psychomotor aspects of the subject's reading disabilities were tested informally using the "Book Method" suggested by Harris (5:515). It was found that she has poor ocular motor control which is characterized by subvocalization and the habit of making numerous fixations and regressions while reading. For example she made an average of six fixations per line and fourteen regressions while reading one page. Her return sweep is not smooth and she often has difficulty locating the beginning of the line below the one she has just read.

Summary of Diagnosis

1. L. often expresses concern about her ability to succeed. If she feels she has a chance of success in a competitive situation, she will try harder. However, she seldom feels that she has a chance to do much more than average work.

2. L. constantly evaluates her work by comparing it to the work of others. She is quite pleased when the quality of her work equals or exceeds that of others.

3. L. is more "teacher oriented" than "subject oriented" in her academic endeavors. For example, she read in the third grade because she liked her teacher and not because she liked reading. When she was no
longer with this teacher, her reading ceased. This attitude has carried over into her college work. She had decided to major in physical education but decided to change her major after a disagreement with one of the teachers. Her decision to major in home economics was influenced by a teacher whom she liked in one of her classes.

4. L. has never been interested in reading and appears only to be concerned now because she feels it is necessary for a teacher to be "well-read." She will read voluntarily in areas of particular interest to her such as home economics or physical education. She also enjoys reading books that could be classified as "romantic" and books about child care and family life.

5. L. is aware of the fact that she does not read voluntarily and is envious of her friends who enjoy reading.

6. Reading was not one of the activities around which her family life was centered.

7. L. expresses concern about her ability to become a teacher.

8. L. said that she does not get much out of many of her college classes.
9. L. stated that she did not like to work under pressure and prefers a setting in which she can feel relaxed. She also prefers to discuss her successes rather than her failures.

10. L.'s I.Q. score of 96 which was recorded in 1959 would seem to indicate that she is capable of average or near average work.

11. L. does not like to do poorly in front of others.

12. During conferences with the subject, she often displayed a pessimistic attitude toward her reading ability as well as toward her academic ability in general. One indication of her lack of self-confidence was her statement that she was not really certain whether or not she could become a teacher.

13. From statements by the subject, it is apparent that she does not value reading for its intrinsic worth, but for the status it will give her if she can read. Her statement that "teachers should be well-read" serves to illustrate this point.

14. L. often makes excuses for her failings by dismissing them as the fault of others. This is illustrated by such statements as "reading was not required in high school" or by the fact that she did not have a
bookshelf as a child. She has not yet been able to face her problems and decide what she can do to overcome them.

15. The subject received a low score on all sections of the Nelson-Denny Reading Test. Her grade level equivalents were 11.9 in vocabulary, 9.3 in comprehension, and 11.2 in rate.

Apparent Causes of the Reading Disability

L.'s attitude toward her reading disabilities appears to be one of the major obstacles blocking her path to success in reading. It will be difficult for her to achieve much success in reading until she can face up to her disabilities. Although she has stated several times that she would like to improve her reading skills, she becomes defensive when discussing her disabilities. The following is a list of reasons she has offered to explain her disinclination to read:

1. She did not have a bookshelf as a child.
2. Home life was based on "outdoor things" instead of reading.
3. She said, "There was no reading necessary in high school."
4. Some people read "naturally." She has a natural talent for things other than reading.
5. She will read more when she becomes a teacher.

6. She will read a book she buys but will seldom read a book that is loaned to her.

It can be noted that the first four reasons are beyond her control and she rationalizes in order to place the blame elsewhere. The first three of these reasons are used to explain her past failure in reading but suggest that she could read better if conditions had been different. Reason four seems inconsistent because it suggests that the situation is still beyond her control and is a fact to which she must be resigned. Reason five again suggests that she may have some power over the situation and could become a reader at some time in the future. However, she is satisfied to wait until a later time to do something about it. She said that her sister never read much as a child but does now "because she is a teacher." She may be trying to convince herself that this will happen to her when she begins teaching.

It has been noted that she does not like to do poorly in front of others, and this seems to be substantiated by reason six. The fact that she will read a book if she buys it herself, but will not read a book
that is loaned to her may hinge on this fact. If she reads a book someone has loaned her, she may be afraid she will be asked questions about it after she has read it. She may feel threatened or feel she is being judged if someone asks her opinion of a book.

She constantly compares her work with the work of others and uses the accomplishments of others as a standard by which she judges her own work. She is pleased when her work equals or exceeds that of others, but feels both threatened and envious when it does not. When she becomes too threatened or envious, she rationalizes to excuse herself if her work is not of the same quality as that of others.

On the basis of the rationalizations listed above as well as other statements made by the subject, it appears that little can be done about her reading disabilities until she admits to herself that they are not due to the fault of others and that she can do something about them. Only until she has a sincere desire to overcome these problems can she experience much success. Among the issues she will have to face are:

1. Is she convinced that she can improve her reading ability or is she resigned to the fact that she will never enjoy reading or be able to improve her skills?
2. Does she view reading as an end in itself or as a means to some other end? For example, does she view reading as a necessary learning tool or does she only want to improve her reading so she will impress others?

3. Can she face up to the fact that it is she and not others who are responsible for her reading problems?

4. Can she set her own standards for her reading level, or are her standards merely reflections of standards set by others?

III. SUGGESTED REMEDIAL METHODS AND MATERIALS

On the basis of the subject's attitude about her ability to perform in reading, one of the initial remedial steps should be to demonstrate to her that she has the ability to improve her reading skills. Many authorities in reading feel that one of the most effective means of demonstrating success in reading is through the use of progress records which clearly illustrate skill improvement.

The subject has stated that she exerts more effort in situations in which she is certain of achieving success. Remedial instruction should capitalize on this
and she should be provided with exercises with which she can achieve success. Otto has stated the importance of this motivational technique in remedial reading:

Very often disabled learners are convinced that they are "dumb" and that even their best efforts are not good enough to merit praise or any sense of personal accomplishment. Normally, they have had much bitter experience with not succeeding that only the sweet taste of success will overcome (13:61).

Harris has said that failing in reading is often worse than failing in such things as spelling or art because the poor reader often concludes that he is generally stupid (5:279).

Interviews with the subject indicated that one of the areas about which she was anxious was in comprehension. Success in this area can be demonstrated by having the student read an article and answer comprehension questions about it. The student and instructor can go over the article to see where the student made errors and discuss ways in which these mistakes could have been avoided. The instructor could then give the student another article in which she is given reading guide questions or is asked to read for some specific purpose. After the student has finished the comprehension questions on this article, the student and instructor can go over this exercise to see if progress has been made in the area of comprehension. After the initial ability to
succeed has been demonstrated, the instructor and the student could keep a chart of comprehension scores throughout the remedial period to note progress in this area. Other areas in which success could be charted include speed, vocabulary, and ability to read progressively more difficult material.

When she has demonstrated to herself that she has the ability to improve her reading skills, it will indicate to her that she need not be resigned to the present level of accomplishment. This realization should also indicate to her that the power to overcome her reading difficulties lies within herself and that the fault for these difficulties should not be attributed to others.

As she begins to build confidence in her ability to succeed in reading, the excuses she has used to rationalize her reading problems should diminish and be replaced with more positive attitudes toward her ability. Otto states that:

... teaching is therapy, too, and often the most effective therapy is the success experienced by a pupil when he reaches a worthwhile goal. Remedial teachers often see emotional problems diminish or vanish when a pupil is warmly accepted in spite of his learning disability and helped, slowly but surely, to overcome his learning problem (13:25).
It was also mentioned that the subject often compares her work to the work of others and is pleased when she can perform as well or better than others. The technique that could be employed in this situation would be to have her compare her work with that of the other members of the class. She could also discuss her reading problems with them and may discover that many of her problems are no worse than theirs. This situation could also help her realize that if other members of the class are making an honest effort to improve their reading skills, there is no reason why she couldn't make an attempt to do the same thing.

Strang was quoted earlier in this paper as saying that an effective technique is to tell the student about actual situations in which people had reading disabilities as serious as their own and show them how they were able to overcome these problems. Demonstrating to the subject that these problems have been shared and overcome by many before her should help her realize that she can achieve success in reading if she is willing to exert the necessary effort.

L.'s reading tastes are quite limited at the present time and the Literature Sampler was suggested to help her gain a wider variety of reading interests. Class
discussion of books that the instructor or other students in the class have read may suggest a book or a type of book that she may want to read. In view of the fact that she is reluctant to read an entire book at the present time, it is recommended that she be given short, interesting articles that could be read in one class period. She should be allowed to select her own reading materials.

She functions better in a relaxed classroom setting so it is recommended that she not be pressured to do her work. However, she should be encouraged in her work and stress should be placed on areas in which she is improving rather than on areas in which she needs additional work.

Certain parts of the SRA Reading Laboratory are suggested for helping develop her comprehension skills. The section of the Power Builders that asks questions such as "What conclusions did you draw? Did you get the point? Evaluate what you read" should be used. The Rate Builders are also suggested because they consist of shorter reading selections. After each selection, the reader is asked ten comprehension questions. Two of these questions ask for implied meaning or for what can be inferred from reading the article. The R.F.U. kit
by Science Research Associates is recommended for developing critical reading skills. On these exercises, the reader must read a selection carefully in order to supply a logical answer to the missing word at the end of the selection.

Exercises in paragraph meaning or exercises to find the main idea of a paragraph are suggested for developing comprehension skills. Exercises such as those found on pp. 46-49 in *Breaking the Reading Barrier* would be of benefit. They ask the student to write the main idea of each paragraph as he reads it. This exercise also has the student "diagram" the paragraph according to the placement of the topic sentence.

Speed of interpretation exercises are useful to help the student think of some idea such as "anything that suggests how one might earn a living," and follow this idea on several items to see which ones would fit into this category.

Saccadic exercises are suggested to help develop a smooth rhythm of reading and a more accurate return sweep. Work with the Scanner, Craig Reader, Iowa Films, and Controlled Reader would also aid in developing a smooth rhythm of reading. As she gains speed with these devices, they would also require her to move her eyes
down the print at a rate at which she could not subvocalize. Harris (5:519) suggests that adults should be told that they are subvocalizing and suggests that this will, in many cases, reduce the problem once the reader becomes aware of the fact that he is doing it.

IV. REMEDIATION

At the beginning of each class session, the subject was given checks of comprehension using the SRA Rate Builders, Laboratory IVa. After each exercise, the instructor made an effort to go over each incorrect response with the subject to help her determine why she had missed it. The subject scored progressively higher on these comprehension tests each week and appeared to be pleased with herself for this gain. The reading level of each of these exercises was advanced from Red 10 Level at the beginning of the course to Tan 19 by the end of the course, so the student was also gaining in comprehension while reading increasingly more difficult material.

L. was unaware of the eye movements necessary for good reading. A discussion of the proper eye movements followed by saccadic exercises helped her develop the proper ocular motor control needed for reading. L.
was unaware of the fact that she subvocalized while reading and was given exercises which dealt with speed of perception to reduce this problem. These exercises demonstrated to her that she could reduce her fixation time, reduce subvocalization, and this motivated her to begin work with the Iowa Reading Films and the Craig Reader. She stated that these exercises greatly increased her ability to concentrate while reading. She stated that she preferred the Craig Reader because the "stories aren't as long" as those in the Iowa Film series.

She was also encouraged to work with Exercises 4-12 in the MN set of the controlled reader because of her weakness in vocabulary and comprehension. On some of these exercises, she skimmed the article, was introduced to new vocabulary, answered general comprehension questions, read the article with the controlled reader, and then answered more specific comprehension questions. She said that introduction to new vocabulary before reading with the controlled reader was quite helpful. She found that she was able to read with greater speed and comprehension when asked to read for a specific purpose such as "read to find out what happens to the fishing fleet." This type of exercise also increased her ability to concentrate more fully on her reading.
After working with the machines, she was introduced to the Reading for Understanding materials. She completed cards 54-87 in the Junior Edition of this series. She referred to this material as very interesting and challenging. When she first started in R.F.U., she found that she had to read each paragraph two or three times to supply the correct response. After working with this material, she found that she only needed to read many paragraphs once in order to supply the correct responses. She attributed this to the fact that the mistakes she had made on previous exercises gave her insights into why she had made them and what things she was doing incorrectly. She said that the R.F.U. kit helped her comprehend reading material more readily. She said, "Once I missed something, I could go back and see exactly why I missed it." She indicated that it helped her pay attention to her reading and gave her insights into how to avoid these types of mistakes in the future.

The next step in remediation involved work with the Literature Sampler. She was able to choose articles that were of particular interest to her. She enjoyed the short articles because she could finish them quickly. The discussion exercises which followed were helpful because she was able to understand how to interpret ideas
that were presented in the stories. She felt the Literature Sampler helped her become interested in different kinds of reading material that she may never have read. For instance, she indicated that she enjoyed some of the articles in the mystery and humor sections and expressed a desire to read some of the book versions of the condensations she had read in class. One book she especially indicated a desire to read was Rebecca by Daphne Du Maurier.

V. RESULTS OF REMEDIATION

The subject made gains on all sections of the Nelson-Denny Reading Test and the Diagnostic Reading Test as determined by pretest and posttest results. Her largest gain in terms of grade level was in comprehension in which she progressed from 9.3 to 12.8 for a gain of 3.5 years. Her largest percentile gain was in rate in which she progressed from twenty-seven to ninety-three for a gain of sixty-six percentile points. Her reading speed was 238 w.p.m. on the pretest and 403 w.p.m. on the posttest. This resulted in a gain of 165 w.p.m.

While these gains would seem to indicate that the subject improved many of her reading skills during the remedial period, the author is concerned about whether any of these gains are permanent or merely
temporary. Under the present manner in which reading classes are scheduled at this college, there will be no way to determine an answer to this question.

The author was also concerned about the subject's change in attitude toward reading before and after the remedial period. When the subject entered the class, she had read virtually no books for pleasure in her life. Toward the end of the remedial period, she expressed a desire to read for pleasure this summer. At her request, the author recommended several books which he felt she would enjoy reading.

It is possible that she may have an honest desire to read and she may in fact read for pleasure this summer. However, it may also be possible that she was trying to convince herself or the author that she did feel more positive toward reading and more confident about her desire to read for pleasure. The proof of this change in attitude could only be ascertained by determining if she did, in fact, read for pleasure this summer.

The subject stated that she wished there were more time in class. She was not completely confident in her reading ability and felt she needed more work. This suggestion could have been made because it is
possible that her friends will now expect her to read books after having completed this class. This may put her in a potentially threatening situation if she still does not feel confident in her ability to cope with various kinds of reading material.

During the last conference with L., she expressed a desire to read for pleasure this summer. She said that she would not be attending the summer session and would have free time in which to read. The instructor recommended three books which he felt would be of interest to her. She said that she was going to read one of them that weekend. She also suggested that the instructor write to her during the summer and recommend more books for her to read. It is hoped through the summer correspondence that she might be kept interested in reading for pleasure.
## Nelson-Denny Results

<table>
<thead>
<tr>
<th></th>
<th>PRETEST</th>
<th>POSTTEST</th>
<th>GAIN</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vocabulary</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Raw Score</td>
<td>26</td>
<td>34</td>
<td>8</td>
</tr>
<tr>
<td>Percentile</td>
<td>03</td>
<td>13</td>
<td>10</td>
</tr>
<tr>
<td>Grade Equivalent</td>
<td>11.9</td>
<td>12.7</td>
<td>0.8</td>
</tr>
<tr>
<td><strong>Comprehension</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Raw Score</td>
<td>26</td>
<td>40</td>
<td>14</td>
</tr>
<tr>
<td>Percentile</td>
<td>04</td>
<td>25</td>
<td>21</td>
</tr>
<tr>
<td>Grade Equivalent</td>
<td>9.3</td>
<td>12.8</td>
<td>3.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Raw Score</td>
<td>52</td>
<td>74</td>
<td>22</td>
</tr>
<tr>
<td>Percentile</td>
<td>02</td>
<td>16</td>
<td>14</td>
</tr>
<tr>
<td>Grade Equivalent</td>
<td>10.4</td>
<td>12.8</td>
<td>2.4</td>
</tr>
<tr>
<td><strong>Rate</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Raw Score</td>
<td>238</td>
<td>403</td>
<td>165</td>
</tr>
<tr>
<td>Percentile</td>
<td>27</td>
<td>93</td>
<td>66</td>
</tr>
<tr>
<td>Grade Equivalent</td>
<td>11.2</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

### Diagnostic Reading Test Results

<table>
<thead>
<tr>
<th></th>
<th>PRETEST</th>
<th>POSTTEST</th>
<th>GAIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehension Percent</td>
<td>25</td>
<td>70</td>
<td>45</td>
</tr>
<tr>
<td>Rate</td>
<td>195</td>
<td>325</td>
<td>130</td>
</tr>
</tbody>
</table>
Periodic Comprehension Checks

<table>
<thead>
<tr>
<th>Test</th>
<th>Date</th>
<th>Score (In Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red 10</td>
<td>4/22</td>
<td>60</td>
</tr>
<tr>
<td>Blue 15</td>
<td>4/22</td>
<td>50</td>
</tr>
<tr>
<td>Blue 16</td>
<td>4/24</td>
<td>60</td>
</tr>
<tr>
<td>Blue 17</td>
<td>4/24</td>
<td>50</td>
</tr>
<tr>
<td>Red 9</td>
<td>4/28</td>
<td>50</td>
</tr>
<tr>
<td>Red 14</td>
<td>4/28</td>
<td>50</td>
</tr>
<tr>
<td>Tan 1</td>
<td>5/1</td>
<td>90</td>
</tr>
<tr>
<td>Tan 4</td>
<td>5/6</td>
<td>70</td>
</tr>
<tr>
<td>Tan 6</td>
<td>5/6</td>
<td>90</td>
</tr>
<tr>
<td>Tan 12</td>
<td>5/8</td>
<td>100</td>
</tr>
<tr>
<td>Tan 14</td>
<td>5/8</td>
<td>100</td>
</tr>
<tr>
<td>Tan 19</td>
<td>5/13</td>
<td>80</td>
</tr>
</tbody>
</table>
VI. EVALUATION OF THE CASE STUDY TECHNIQUE

It was pointed out earlier that the two main functions of the case study were to benefit the client and to serve as a research tool. This study was not directly concerned with the gains made by the subject, but rather to demonstrate how the case study could provide insights into the learning problems faced by college students. Therefore, the following discussion will concentrate on the insights derived from this study concerning the possible ramifications of the case study technique.

The subject of this study often stated that very few of her instructors seemed to take an interest in her problems. She stated that the interviews were valuable because she had the feeling that someone was interested in her reading problems and was trying to help her overcome them. Probably the most important consideration in these interviews was that the client had assurance that they were strictly confidential and that her name would not be used on any reports. Three possible methods of collecting data were to take notes while the interview was in progress, take notes after the interview, or to tape record the interview. The
latter method was chosen because the entire interview could be played back at a later time. It is possible that taking notes while the interview was in progress could have distracted the client and may have prevented her from revealing many things which she considered too personal. Taking notes after the interview was not chosen because some important points could have been omitted.

One of the most important functions of the case study is to isolate the specific factors which are blocking the student's success in reading. Remedial instruction based on this diagnosis can then be geared specifically to the needs of the individual. Specific instruction is obviously superior to the "shotgun" approach of exposing the student to a little bit of everything. Time seems to be of the essence when dealing with a remedial reader and the student may soon become discouraged unless instruction is geared specifically to his needs and to his feeling of success and progress. Therefore, it is suggested that the case study be used to alleviate some of the "hit and miss" teaching that could discourage disabled readers.

It would appear that an intensive study of all students in a college reading class would be an unrealistic
situation because the amount of time an instructor would have to spend with each student would be prohibitive. The value, then, of the case study does not appear to be its applicability to the classroom setting but rather for the insights it could provide concerning the typical reading problems facing college students. The case study at the college level should perhaps be left in the clinical setting where it is possible to spend more time with the individual. The knowledge gained from case studies could then be used to help design programs for the diagnostic teaching of reading at the college level.

It is conceivable that many insights about reading can accrue to the researcher conducting a case study. For example, the researcher can learn to organize material about a child which may give clues to the nature of his reading deficiency. These clues may also suggest ways in which these deficiencies can be overcome. On the basis of this observation, it is possible that classroom teachers could benefit by making case studies of some of the remedial readers in their classes. While it may be true that many classroom teachers are not qualified to make intensive psychological diagnoses of their students, it is also true that any person qualified to
teach should also be qualified to find out as much about their students as they can and base instruction on this information. It is obvious that time limitations would prohibit the teacher from making intensive case studies on all of the students in the class, so it is recommended that those selected for study should be only the most retarded youngsters or specific cases that warrant more intensive study for clues as to possible reasons for "reading blocks." This would help provide specific instruction and aid in setting the best climate for those in the class who need it most and also may provide the teacher with insights about reading which could be used to help the other students in the class. For example, the teacher usually has a great deal of information about each of her students. Two of the main sources of information are the objective information found in the cumulative folders and the teacher's observations of the student in his attempts to learn. This information may be of little value to the teacher unless it can be organized in such a way that it aids in designing a meaningful sequence of instruction for the child. This suggests that another valuable tool the teacher could acquire by learning case study techniques would be how to organize available information about a student.
If a teacher felt uneasy about attempting this type of study alone, a reading consultant could be called in to provide the necessary assistance. It is suggested that this may be one way to provide better reading instruction for students in the elementary and secondary schools.

One complaint of the case study technique by many statisticians is that the population in the sample is so limited that no generalizations can be made from the results. Therefore, the tendency in educational research has been to conduct less intensive studies on a larger number of persons and to base generalizations on the results of these studies. It is possible that many important causal factors could go unnoticed because of the superficial nature of these studies. It is therefore suggested that generalizations could be made if case studies were conducted on a representative sample of students. It is acknowledged that intensive case studies of as many students as are usually included in survey studies would be much more time consuming, but it is suggested that the results obtained from repeated case studies would ultimately be of more value if the results were coordinated.
The case study technique as a research tool has been criticized because the personality of the researcher and the rapport that he establishes with the client are crucial to the outcome of the study. Many would say that this situation tends to make the study lose its objectivity to a point where success cannot be attributed to any particular methods or materials. This factor may be at once the strength and weakness of the case study technique. However, it could also be said that the results of any teaching situation is influenced by the personality of the instructor. The following statement by Rogers which was quoted from Otto may serve to illustrate this point:

As I think back over a number of teachers who have facilitated my own learning, it seems to me each one has this quality of being a real person. I wonder if your memory is the same. If so, perhaps it is less important that a teacher cover the allotted amount of curriculum, or use the most approved audiovisual devices, than that he be congruent, real, in his relations with his students (13:360).

On the basis of this observation, it may be possible that the interaction of personalities in the teaching situation and how it affects learning is more important than any methods or materials used in instruction. The clinician works on a much closer basis with the client during a case study than does a researcher conducting a study of larger
numbers of students. This suggests that the clinician would be in a much better position to describe the techniques he used to establish rapport with the individual and what factors seemed to help the client improve his attitude about reading. The insights derived from this type of study could be used to suggest ways in which the classroom teacher could establish better rapport with students and improve student attitude toward reading.

In conclusion, it seems that the case study can help prevent the client from experiencing continued failure in reading as well as help provide insights which may lead to more meaningful instruction for all students. If the case study can help prevent failure either by the student or by the teacher, it seems that the following observation by Marksheffel can justify this approach in research:

The difference between success and failure is great. And no one realizes how great that difference is until he experiences it (10:71).
CHAPTER V
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

I. SUMMARY

This was a case study of one student who twice failed the reading portion of the teacher education tests administered at Central Washington State College. The study was conducted during the Spring Quarter, 1969, and was nine weeks in duration. The focus of this paper was on the diagnosis, prescription, and remediation of the subject involved in the study. The purpose of this investigation was to present the case study as a research tool in remedial reading at the college level.

The subject was given pretests and posttests to determine if any gains in reading achievement could be noted during the remedial period. Interviews were used in this study for two purposes: (1) to aid in the diagnosis of the subject's reading disabilities; (2) to help determine whether or not the subject's attitude toward reading changed during the remedial period.

Research was conducted to establish the validity of the case study approach in remedial reading and to determine the procedures used in carrying out a case study. A review of the literature related to reading at
the college level revealed that little attention is paid to the individual needs of the students enrolled in these classes.

II. CONCLUSIONS

It was apparent from this study that disability in reading could not be attributed solely to lack of cognitive or psychomotor skills, but was also directly related to attitudinal factors. Years of failure in reading could tend to substitute actual causal factors for rationalization about the disability and ultimately to a feeling of resignation. It would seem that resignation is one of the most serious responses to prolonged frustration in reading. This could be a situation in which the individual no longer hopes for anything, makes no decisions, and may simply wait for something to happen. It is possible that the student does not even know that this condition exists.

It is conceivable that a student in this situation may go through a screening process in which each new piece of information that appears to be the least bit threatening will be avoided. It may be that these students have come to view learning as an "all or nothing" situation and are hesitant to "give themselves away" by attempting
to learn a little at a time. This would have a detrimental effect upon reading instruction because of its sequential nature. In this situation, it would seem necessary to avoid exposing the student to a threatening situation and to demonstrate to him that success in reading is achieved by a sequential acquisition of skills. A catalyst for learning may be provided if the student can experience success in an area associated with one of his most important values. For example, if the student considered comprehension to be the most important factor in reading, he should be given exercises in this area. If the student can overcome the resignation to his reading disabilities by demonstrating to himself that he can succeed, he may cast off the rationalizations and face the real causal factors. When a student can do this, it seems that success in reading can become a reality.

Evidence has been presented in this paper that reading is a function of the whole personality. Physical handicaps and mental abilities may be of no more importance in reading disabilities than emotional and personal adjustment. Therefore, it is conceivable that the objectives of reading classes should be stated in terms of the total growth of the individual rather than being directed only toward the improvement of reading skills.
Many studies have indicated that some individuals can have emotional problems and still be superior readers while others with no emotional difficulties can fail in reading. However, these questions are relevant and point to a need for further research: Are emotional problems characteristic of retarded readers? If emotional insecurity is a causal factor in reading disability, can it be attributed to a specific emotional difficulty or can any type of emotional imbalance cause disability? Can early childhood experiences affect later reading achievement or provide the basis for feelings about reading which are manifested as an adult? It seems that some of these questions could only be answered through repeated case studies.

The subject's attitude toward reading as well as the fact that she has read virtually no books for pleasure in her life may be one of the most significant aspects of her reading disability. An analogy could be drawn between learning to read and learning to play the piano. A child's coordination, hearing, and intelligence could be tested and found to be conducive to learning to play the piano. However, the child may never learn to play because of disinterest or unwillingness to practice the necessary skills. The same could be said of reading. If
the student is either disinterested in reading or refuses to read, it seems likely that he could never become a superior reader. In fact, it may be possible that a person who never read books could be retarded in reading. This suggests that specific diagnosis should attempt to discover why the student is not interested in reading. An attempt should be made at the same time to determine the specific nonreading interests which would serve as a foundation upon which to develop reading interests.

It may be possible that one of the reasons that students do not enjoy reading when they enter college is that they may never have had the opportunity of reading books that they wanted to read. It is possible that they have read so many assigned books that they have never been able to choose a book for themselves. It is possible that bibliotherapy could be used to help develop reading interests and tastes of students who have been unable to derive pleasure from reading.

One incident that demonstrates interest as a factor in reading was demonstrated by two tests of comprehension that were given by the instructor one evening in class. The first quiz was lower in reading difficulty than the second, but the subject was English law and how it has
influenced American law. The average comprehension on this quiz for the class was 50 percent. The second article was an excerpt on motivation from *The Hidden Persuaders* by Vance Packard. Although this article was a higher reading level, the average comprehension for the class on this quiz was 90 percent. The students all stated that they scored much higher on the second test because it had captured their interest much more than the first article. The second article was concerned about the motivating factors that cause a housewife to fill her shopping cart when she enters a supermarket and it is suggested that experiential background is another possible reason why the students received higher scores on the second quiz. Every student has probably gone shopping in a supermarket and been enticed by the products, but probably very few have taken much interest in law. This observation seems to indicate that more difficult material which relates to the student's background and interests may be read with greater comprehension than easier material that he does not find interesting. This could indicate two criteria that could be used when selecting textbooks for students.

This study also seems to indicate that the ability to read can be viewed as a status symbol in a
college setting. Motivation to read because of the status it will bring is not as desirable as an intrinsic desire to improve reading skills, and may have a negative effect if status is the only motivation. For example, if a student enters a reading class only to be able to read as well as his friends, and does not accomplish this goal, he may become disappointed in his ability and be discouraged at any further efforts at reading improvement. This observation would tend to support the statement made earlier that time was of the essence when dealing with a remedial reader. If specific instruction were given to a student who viewed reading as a status symbol, he may be able to demonstrate to himself that he could succeed in reading before he became discouraged. This may help him substitute real goals for artificial goals in his attempts to improve his reading ability.

It was mentioned earlier that secondary teachers have often tended to blame the elementary teachers for not preparing students for the reading tasks required at the secondary level. It is apparent that something more constructive needs to be done to help secondary students who are unable to meet the reading demands of their classes. It is possible that no child could possibly learn all he needs to know about reading during the first
six years of his education. In fact, many educators view learning to read as a life-long process. It is therefore suggested that high schools and colleges initiate instruction which would insure continued growth in reading for their students. There seem to be two approaches at the secondary and college level and perhaps both could be used.

The first approach would be specific reading instruction by a specialist and the other would be reading instruction by teachers in the content fields. Both approaches would seem desirable for use by most institutions. The value of preparing the student to read materials in the content fields can be illustrated by the observations of a student in the author's reading class.

This student reported that she received a failing grade in one of her history classes in high school. She stated that she hated the book and literally had to force herself to read and memorize the materials. She was required to take another history class the following semester and said that she dreaded even thinking about it. This time, however, she read her text with enthusiasm and even read voluntarily from supplementary books suggested by the teacher.
Why had she done this? The reason she offered was that the teacher was not only enthusiastic about his subject, but he prepared the students for the reading material they would encounter in their texts. This was accomplished by discussing concepts they would encounter as well as stimulating them to read to answer questions that could be answered by the reading assignment. This example seems to demonstrate the value of not only capturing the student's interest in the subject, but of preparing him for the reading tasks which he will encounter. This observation seems to indicate that a student's need for reading instruction cannot be met completely by the time he leaves elementary school.

It is possible that no one is more aware of the reading problems of college students than the students themselves. Many students who were not in the investigator's reading class came to him to explain reading difficulties they were encountering in some of their classes and asked for suggestions of how they could overcome these difficulties. It would be interesting to conduct a study to determine the percentage of college students that are trying to learn subject matter from books that are beyond their instructional levels of reading or experiential background.
It was also noted by the investigator that very few of the students in the speed reading class which he taught managed to read all of the material assigned to them in their other college classes. Fewer still indicated that they ever read any material that was not assigned. In most cases, "lack of time" was used as an excuse. It appears that this excuse may have been justified because many of the students read so slowly that they could not complete all of their college reading assignments, let alone find time for any extra reading. Many of the students indicated that the only circumstances under which they would read a book is if it were assigned to them.

It appears that one of the goals of college is to produce independent learners who will continue to read after they leave college. It seems apparent that college is not doing this for many students. Some of the questions left unanswered by this study are: What are some factors that encourage some students to read widely while others do little or no reading which is either assigned or unassigned? What kinds of reading material encourages student reading? What kinds of reading material discourage student reading? What are some things college instructors can do in their classes to encourage student reading?
III. RECOMMENDATIONS

The results of this study would seem to indicate that the case study technique can provide insights into the reading problems faced by college students. It seems that the value of this type of study would be multiplied through replication and coordination of results. Each study conducted should be patterned after one model so the coordinated results could be combined with more validity. It is recommended that case studies be conducted on a representative sample of college students. The results of this type of research could be used to formulate hypotheses or arrive at generalizations about some of the reading problems faced by college students.

This study also seems to indicate that insights into the teaching of reading can also accrue to the researcher. In view of this, it would be desirable to consider a practicum in remedial reading at the college level in which the graduate students involved would conduct case studies on college students. Each graduate student could then discuss his case with other members of the class and similar patterns of reading disability could be analyzed. This would furnish each student with
information about his case as well as provide him with information about other cases. The students could also discuss which remedial methods seemed to be most effective in helping students overcome their reading disabilities. This type of class would provide a service to the college as well as furnish practical experience to the graduate students.

It would also be desirable to conduct this type of study in conjunction with the counseling service or the psychology department. For example, graduate students in psychology could conduct case studies on each of these students and combine their results with the findings of the graduate students in reading. This would not only provide more information about each subject, but it would give graduate students in each department experience in coordinating their findings with the findings of specialists in another field.

One function of the speed reading class offered at Central is to serve a "salvaging" function for students who have been unable to pass the reading portion of the teacher education tests. Under the present structure, the student is not required to repeat this test if the instructor awards a passing grade in the course.
At the present time, instructors attempt to construct tests that are of about the same difficulty as the teacher education tests in order to determine which students should be awarded a passing grade. The most objective criterion for determining admittance into the teacher education program would be to require the student to pass the teacher education test upon completion of the course. Instructors for this class change frequently, and each instructor more than likely has a different set of criteria for determining successful completion of the course. It is therefore recommended that the student be required to retake the teacher education test to insure more standardized admittance requirements. This procedure would also furnish the student with feedback as to whether or not his reading skills had improved during the remedial period.

It was demonstrated in this study that objective and subjective information about the student's past achievement could be used to help design a prescriptive program in reading for the student. Some information about the student which would have been valuable in designing a program was not obtainable, and other information that the author was able to secure was difficult to obtain. It is therefore recommended that access to information be made more readily available to instructors.
The subject of this study complained that she received no college credits in this class. Therefore, she carried a full college load in addition to her responsibilities in this class. It is possible that such a situation is prohibitive to a student who may already have academic difficulty. It is therefore suggested that consideration be given to the possibility of either awarding academic credit for completion of this course or of requiring a student with a low grade point average to take a reduced load while enrolled in non-credit courses.

The subject of this study was a senior in college before she was required to take this course. It is suggested that it may have been more helpful for the student to have taken the class earlier in her college career. The student could then have applied the skills acquired in this class for more of her college classes. It is therefore suggested that the screening process for determining which students will be required to take the class should be made earlier.

It became apparent in this study that attitude toward reading was an important factor in a student's success. It is possible that the individual conference was not the best way or at least not the only way to
determine causal factors relating to the student's reading problems and his attitudes toward these problems.

It was noted by the instructor that the students in the class became quite open to one another about their reading problems. The students discovered that many of them had the same problems in reading and had been experiencing the same frustrations about these problems.

Group processes techniques, or "sensitivity sessions" as they are sometimes called, are used as therapeutic techniques for persons with similar problems such as those found in prisons or mental institutions. The use of this technique has helped many of these people gain insights into their problems, their attitudes toward these problems, and has helped them discover ways in which they might be able to overcome them. This technique has also come into vogue for so-called normal persons in order to have the participant discover more about himself and how others view him. This is demonstrated by the fact that two three-credit courses in this process are currently being offered at Central.

On the basis of observations of the reactions of the students in the class to the reading problems of one another, and the possibilities that the group processes technique offers as a tool in self-appraisal,
it is suggested that research be conducted to explore the possibility of this technique for use with students who are found to have reading disabilities. This suggestion is made with the understanding that success in reading is not only concerned with skill development, but is also deeply concerned with the student's attitude toward himself and his reading problems.
BIBLIOGRAPHY


