AN INVESTIGATION OF CERTAIN FACTORS
RELATED TO SUCCESS IN
PRIMARY READING

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CHAPTER I

INTRODUCTION AND STATEMENT OF PROBLEM

NATURE OF THE STUDY

One of the most significant trends in primary education is identified with an interest in factors related to progress in primary reading. So eminent an authority as Gates,\(^1\) while admitting that research leading to the discovery of the basal skills in reading has been distinguished and fundamental, deplores the fact that there is a serious lag in discovering the best ways to guide pupils in acquiring the good and avoiding the bad techniques.

THE PROBLEM

The purpose of this study is to summarize a few significant causative factors as a basis for a projected course of prevention, as well as a limited number of remedial suggestions, related to problems in beginning reading. From this investigation it is hoped that deductions may be made which will bear some significant relationship to outcomes in an actual school situation and will initiate new types of research.

"Reading has long been considered the heart of the curriculum."\(^2\)

The importance of its mastery because of its intimate relation to the other school subjects was pointed out by The National Committee on Reading.\(^3\) That the child's introduction to reading is of fundamental importance will not be questioned. Yet Gates makes the statement, "Failures in the primary grades are almost wholly due to reading deficiencies."\(^4\) To substantiate his statement, he cites an investigation by Percival,\(^5\) who found that reading was responsible for approximately 99 per cent of all the failures in the first grade school level. Hahn\(^6\) estimates the number of failures in first grade classes, due to reading deficiencies, to be from twenty to thirty per cent. Similar investigations furnish additional evidence that failures in beginning reading are startling in number.


\(^5\) Loc. cit.

The teacher is probably the most important single factor in the learning situation. However, a recent study\(^7\) indicates that reading instruction is thought to be strongest on the lowest levels of the school system. The results of this study are shown in Figure 1.

While the findings of this one investigation cannot be interpreted as absolving the primary teacher from all responsibility for the condition which exists, it is an indication that there are other factors involved in the situation which should be located.

One direction in which research and experimentation has been extended is in reference to the intricate processes of the reading skill. "Children are entitled to a successful beginning in their school work" and this angle of the problem merits further consideration. The major problem, then, is to teach children to read satisfactorily in the first place, thereby avoiding the destructive results of frustration and thwarting.\(^9\)

ORGANIZATION INTO CHAPTERS

Therefore, in order to attack the problem with any degree of success, the basic causes of reading deficiencies must be located. The material presented in Chapters II and III should not only aid in planning a program of prevention, the major objective in this study, but should

\(^7\) Research Division of the National Education Association, op. cit., p. 308.

\(^8\) Hahn, op. cit., p. xvii.

Figur 1.

Grades in which Reading Instruction is Thought by Supervisors to be Strongest; Least Satisfactory - Based on Questionnaire Replies from 100 Supervisors of Reading in School Systems Where Outstanding Results in Reading Are Being Achieved.
also help to determine corrective procedures, the minor problem to be surveyed.

The next chapters include an analysis of data, obtained from an actual school situation, followed by a limited number of case studies. This concrete material is included, not with the purpose of testing out certain theories, but with the thought that other angles may be revealed which will stimulate further research.

A summary of corrective measures undertaken, with suggestions for additional steps toward improvement, concludes this study.

CERTAIN RELATED STUDIES

There is an abundance of literature relative to the factors involved in the reading process. Many investigations have been made to discover effective techniques in presenting the reading skills, as well as fruitful procedures for correcting reading disabilities in general. A number of these studies, which contain suggestions applicable to the primary level, will be reviewed briefly.

Studies related to problems in primary reading. One of the most outstanding investigations of the factors determining success and failure in beginning reading was conducted by Gates and Bond. Four large classes were observed and tested. They were also rated on characteristics alleged to be involved in "reading readiness." The ten children who were lagging behind were taken in hand and taught according to a program

adjusted to their particular needs. Therefore, their satisfactory progress furnished a strong argument for teaching the child rather than the subject.

Durrell,11 in a more general study, also emphasizes individual differences as a significant factor in developing the reading skill. He indicates how they may be discovered in the classroom and offers suggestions for making provision for them.

There is a distinct tendency to evaluate the kindergarten's contribution toward the preparation of the child for first grade reading. Clowes12 brings out the fact that the kindergarten, among other things, can develop concepts through association with the printed symbol, which will aid in the prevention of reading difficulties.

Merriam13 presents a plan whereby reading is taught incidentally through the play motive. He draws the conclusion that the building up of right attitudes toward reading, through a wholesome teacher-child relationship, goes farther in securing good results than strenuous drill on the mechanics of the skill.

Waters,14 in an attempt to find what specific experiences were needed in the kindergarten to prepare for Grade 1, examined fifty of our best primers and first readers. Her next step was to endeavor to

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supply the lack by developing meanings of symbols used through appropriate activities.

Morphett and Washburne\textsuperscript{15} conducted experiments in the Winnetka Schools in which reading progress was measured by means of definite steps. As a result, the conclusion is drawn that failure and discouragement may be decreased by postponing instruction in reading until the child has a mental age of six and one-half years.

A similar study was made by Jennie L. Thompson.\textsuperscript{16} This writer compared the achievements of two groups, one allowed to enter school six months later than the other. This experiment is in line with the deduction of the Winnetka people that children profit from raising the age required for entrance.

A more recent investigation, by Boney and Agnew,\textsuperscript{17} demonstrates the fact that postponed reading is economical from the standpoint of teacher time and energy.

An exceptionally good summary of the factors basic to reading readiness is included in an article by Adams. This author points out how reading readiness may prevent failures and reduce the need for remedial measures. Specific preventive suggestions for common types of reading deficiencies are listed.


\textsuperscript{17} C. De Witt Boney and Kate Agnew, "Periods of Awakening in Reading Readiness," \textit{The Elementary English Review}, 14:183-87, May, 1937.

Strickland\textsuperscript{19} writes of the contribution of the kindergarten to the elementary school. She emphasizes the fact that its function in the development of the individual child is generally recognized but its value in laying the basis for the school subjects, particularly reading, is overlooked.

\textbf{METHOD OF PROCEDEURE}

The method of procedure will be to organize available data, which is pertinent to the problem, under three heads, namely:

1. What are two significant factors in the prevention of difficulties in beginning reading, and what are their implications as determined by agreement among authorities?

2. What are the specific factors which differentiate two distinct types of remedial cases, and what remedial methods have been arrived at through scientific experimentation and classroom practices?

3. In the light of these findings, what problems still challenge us for a solution?

4. What relationship exists between these findings and some outcomes of an actual school situation?

CHAPTER II

CERTAIN FACTORS RELATED TO PREVENTION

In this chapter, it is proposed to investigate those factors which it is claimed largely determine success in learning to read. According to Betts,¹ the consensus of opinion among authorities in this field, is that reading difficulties can be prevented. He emphasizes two factors as outstanding in a program for prevention: (1) readiness for reading and, (2) first teaching. These will be discussed in the order named.

"Reading readiness' may be conceived not as readiness for reading instruction, but as a readiness for the child to engage in the reading act."² That is, through a series of stages in the child's development, he reaches a state of readiness, a condition accompanied by temporary word consciousness in reading. Hildreth³ expresses the opinion that a fundamental change in primary reading instruction is indicated by the increased interest shown by teachers in this phase of the reading problem.

She quotes Rousseau's statement, "The most important thing in education

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is to lose time not to gain it," the apparent inference being that premature teaching only thwarts later progress.

This same authority stimulates our thinking by emphasizing another point, which is significant in this discussion. To quote, "Readiness for reading is, in part, a function of how reading is to be taught."

Harrison, writing in much the same vein, declares that readiness for certain habits or "arrivals" as one writer expressed it, appears at widely varying ages, preceded by adequate development. She charges school administrators with disregarding the criteria relative to growth which should precede reading instruction, by arbitrarily allowing children to enter first grade at the chronological age of six years.

This author's classification of the reading readiness factors falls under three types of development; namely, intellectual, physical, and personal. She concludes that adequate mental age is of major importance. She makes the statement that success will not be probable before a mental age of six years is reached and thinks it is safer to place the age at six years and six months.

Other generalized factors which also rank high as determinants of reading progress are good vision, good hearing, emotional stability, and adjustment to the school situation. The ability to do abstract thinking and to relate the abstractions to definite modes of response, are correlates of mental growth but may be increased by broadening experiences.

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4 Loc. cit.
5 Ibid.
Three abilities, prerequisite for success in reading and including memory span, visual memory, and perceptual discriminations, may be fostered by training.

Wright\(^7\) has made a unique contribution to education through her "non-reading program." Her original plan was to conduct an experiment over a period of two years with two evenly balanced groups. One was to have been given the regular reading program from its entrance, while with the other group social studies were to receive the major emphasis. While she was unable to bring the experiment to its fruition, she states the plan was continued long enough to afford convincing proof that it had value.

As evidence that there are arguments for postponing reading from the standpoint of school hygiene, Wright quotes from a report of the British Association for the Advancement of Science:

> At the age when school life begins, the visual apparatus is still immature...The intricate coordinating mechanism, which later will enable the eyes, brain, and hand to work together with minute precision, is awaiting development by training...In short, the whole visual apparatus is still unfinished, and is therefore more liable than at a later age to injury by over use.\(^8\)

Zirbes, in discussing the change of standards in relation to beginning reading, observes, "We now tend to teach children rather than


\(^8\) Loc. cit.
to teach reading." She also emphasizes the economy of effort which results when we postpone teaching the A-B-C's to babies who should be playing. In this connection, she states that research studies furnish proof that a curve of reading growth, reflecting a gradual, meaningful start, rises more slowly but passes traditional norms for second and third grades. 10

National committees have also recognized the importance of planning a program of prevention in relation to beginning reading. The Committee of the National Society for the Study of Education in its report on reading, 11 stresses six prerequisites to reading, as follows:

1. Wide experience related to children's interests preparing them to understand material on their level.

2. Reasonable facility in the use of ideas to enable them to speak and think clearly about the content of their reading.

3. Sufficient command of English to enable pupils to speak easily, to anticipate meanings, and to read fluently.

4. A relatively wide speaking vocabulary enabling them to associate quickly, meanings with symbols, both singly and in groups.


10 Ibid., pp. 2, 5.

5. Accuracy in enunciation and pronunciation which insures the formation of right habits.

6. A genuine desire to read, which aids in interpretation and provides motivation.

The "Reading Readiness Committee"\(^\text{12}\) of the International Kindergarten Union also points out six factors as significant in building up adequate skills and attitudes for the new experience of reading. Many points of similarity may be noted between this list and the previous one.

1. A background of experience.

2. A mental age of at least six years and a chronological age of from five and one-half to seven years.

3. Good health, adequate vision and hearing, good coordination, and no organic defects.

4. Emotional factors, stability, responsiveness, and freedom from a feeling of inferiority.

5. Social adjustments, appreciation, cooperation, and respect for rights of others, are outstanding items in this list.

6. Expression and interpretation of symbols, through language, dramatics, literature, and fine and industrial arts.

The Department of Superintendence\(^\text{13}\) in 1931 compiled the results of a questionnaire reporting the subject of greatest difficulty, causes


\(^{13}\) The Department of Superintendence of the National Education Association, Ninth Year Book. (Washington, D. C.: The National Education Association, 1931), pp. 81-86.
for failure in that subject, and also which grade has the highest mortality. The findings show there are more failures in first grade and reading is found to be most difficult. Four hundred ninety-three school systems sent replies. The causes for failure include, in a negative form, many of the same factors already discussed. They are:

1. Inability, too young to comprehend.
2. Physical and social immaturity.
3. Lack of background of experience and vocabulary—lack of reading readiness.
4. Inability of some first grade children to adjust to school-room conditions.
5. Physical condition due to illness and physical handicaps.

External factors to be discussed later are not included.

An analysis of the three lists shows many points of agreement. Three factors are found to be common to all three reports; namely, (1) background of experience, (2) desire to participate in reading activities; and, (3) language expression sufficient to give meaning to printed symbols.

Two committees also include these factors: (1) mental maturity, (2) a sound body, (3) ability to adjust to the school situation, and (4) emotional stability.

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14 Supra, pp. 12, 13, 14.
15 Supra, pp. 13, 14.
One committee lists ability in fine and industrial arts. The possession of this ability helps to tie up the school with the home and furnishes motivation for learning to read. A definite mental age of six years is thought to be necessary while a chronological age of from five years, six months to seven years is deemed desirable.

"At the present state of our knowledge reading readiness appears to depend upon (1) mental age, (2) physiological age, (3) personality factors, (4) language factors, (5) special skills, interests and information."17

If the goal of education is to develop citizenship it would seem the major emphasis should be placed on personality traits, attitudes and appreciations. Only in this way can we be assured our future citizens will be intelligently adjusted to the community in which they find themselves.

As has been indicated, readiness for reading alone will not insure satisfactory progress in learning to read.18 Although mental age has been mentioned as a significant factor in readiness for reading,

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16 Supra, p. 13.
18 Temple, op. cit., p. 3.
Stone makes the point that many reading disability cases have normal or superior intelligence. To bear out his statement he compiled some significant data, taken from a report by Monroe. Table I gives the results of this study.

Forces outside the child, then, affect the learning process. These may be summed up under the second factor in a program of prevention, first teaching, which Betts defines as the "initiation of the learner into new skills, information or attitudes." This definition, by implication, suggests certain objective influences which affect progress in reading, the method, the materials, and the teacher.

A significant part of a program of prevention, as recognized by a number of authorities, is the administration of activities in terms of individual needs. Mass teaching is a frequent cause of reading disability. "Flexible reading groups from which children may move without making it over obvious" will go far in meeting individual problems. A broad aim, which includes not only the fixing of the symbol, but its interpretation and enrichment through a building up of meaningful


20 Betts, op. cit., p. 16.

### TABLE I

DISTRIBUTION OF 165 PROBLEM CASES IN READING WITH RESPECT TO INTELLIGENCE QUOTIENT

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<th>I. Q.</th>
<th>Number of Cases</th>
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<td>140-149</td>
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<tr>
<td>130-139</td>
<td>5</td>
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<td>120-129</td>
<td>11</td>
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<td>110-119</td>
<td>20</td>
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<td>100-109</td>
<td>37</td>
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<tr>
<td>90-99</td>
<td>44</td>
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<td>80-89</td>
<td>32</td>
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<tr>
<td>70-79</td>
<td>4</td>
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<tr>
<td>60-69</td>
<td>1</td>
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</table>

Total 165

Read table thus: In the group whose range of intelligence was from 140-149, as denoted by the I. Q., there was only one case.

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22 Stone, loc. cit.
concepts, must have for its basis the experience of each learner. The last aspect is a unifying purpose to help the child to apply what he has read to every day situations. This can only be accomplished by personal, not mass direction.

Being able to locate a child's difficulty at its inception is one of the surest ways of preventing serious trouble later. Gates quotes Durrell in this connection, as follows: "Every problem in the field of reading relates to that of providing for individual differences." He observes further that Durrell urges scientific study of methods of detecting individual differences, the use of self-directing methods and other means of administering to individual needs. Gates also asserts that it is his belief that four out of every five deficiencies in reading result from failure to recognize each pupil's troubles as they crop out from day to day. New skills should not be introduced until those on the preceding level have been mastered. His concluding statement is a direct challenge to the primary teacher. He says, in part, that the teacher who does not know quite fully what the pupil's abilities and difficulties are at any time, is a teacher who will have handicapped pupils.

Whatever method is used, it cannot be divorced from materials of reading. The separation of a skill from its normal function should be avoided as far as possible. Not only should there be a quantity of

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material on each level but it must appeal to the interests and maturity of the learner. Every teacher must meet her pupils where she finds them and carry them on from there. It is her job to discover the different stages of reading development represented by small groups or individual pupils. A child will have no desire to make reading a part of his own experience if he is out of his depth.26

There is a dearth of materials that meet the need of the pre-primer period of reading. Betts27 cites a study made of fourteen pre-primers in which very little overlapping of vocabulary was found. But this fact need not be a source of discouragement to the teacher of primary reading. The primary pupil is genuinely interested in material he helps prepare about his own experiences. The accounts of activities he helps initiate provide some of the most satisfactory units of reading content. Annette Bennett28 emphasizes developing meaningfulness of words by pictures and lantern slides and correlating vocabulary development with all the activities in which the child is vitally interested. The limitations and dangers of this type of material, relative to the difficult and extensive vocabulary involved, have been pointed out.29 This criticism

27 Betts, op. cit., p. 200.
29 Stone, op. cit., p. 199.
does not appear to be a valid one for two reasons. In the first place, the primary teacher's chief concern is to make of reading a thought-getting process. She is less concerned with mastery of vocabulary at this stage. In the second place, when it becomes essential that a vocabulary be built up, motivation will become a more significant factor than repetition. The basic principle of vocabulary development is effectiveness of presentation. Seeing his own stories in print, the child unconsciously senses the social values inherent in reading.

Dr. Gray 30 points out a real danger, however, in the emphasis which has been placed on the need for an abundance of material, which is in line with our thinking. He feels we may have laid too much stress on the quantity of reading done and too little emphasis on the quality of the product. To borrow his own apt expression, the teacher must "follow through" until the significance of what is read is brought home.

Angelo Patri 31 makes a valuable comment on reference to teaching reading in the highest sense, from the very beginning. To quote:

"Whether the process of learning to read is the scourge of infancy, as Rousseau termed it in his day, or an interesting and delightful

20 Primary Activities, loc. cit.

31 Feature article in The Kansas City Star, September 15, 1938.
adventure, depends largely on how it is taught," which brings us to the most significant external force, the teacher. She is the chief factor in success in a reading program. As Betts so tersely expresses it, "The teacher is the key to the situation." The depth of her understanding, the clarity of her vision and the degree of her ability—these factors determine teacher-child relationship affecting the scale of values in first teaching. "Reading today is expected to influence behavior, to modify personality, to increase social understanding, to be a vital factor in every child's process of growing up."34

32 Research Division of the National Education Association, op. cit., p. 275.

33 Betts, op. cit., p. 248.

34 Primary Activities, loc. cit.
CHAPTER III

CERTAIN FACTORS RELATED TO CORRECTION

Although Durrell\(^1\) holds out the possibility that we may sometime be wise enough to make every child's approach to reading a happy and effective one, the remedial aspects of reading still demand our careful evaluation. This chapter discusses briefly certain aspects of the remedial program, distinguishes between the types of disability cases, and attempts to present the views of two schools of thought on corrective procedures.

Certain steps are preliminary to the mapping out of a remedial program. Both subjective and objective means are essential by way of appraisal.

'Among the objective methods are tests, both intelligence and achievement, examination of physical factors and school records. The educational tests may include both standardized measures and informal estimates. Many excellent tests, falling under the first classification, are on the market and it is not necessary to enumerate them in this discussion. If these are not available, it is not a matter for regret, as much valuable material relative to a child's special weakness, may be obtained through measures prepared by the teacher, who has certain possible deficiencies in mind.

The subjective means will include observation, case histories

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and interviews. Reading readiness charts present detailed information in an organized shape. Various forms of questionnaires have been prepared, to be filled out by those most familiar with the pupil's weakness, and in a position to make valuable contributions to aid in diagnostic procedures. In many cases, the data obtained in this way throw light on the emotional or social aspects of the problem, of which the reading difficulty is only an outgrowth. Betts\(^2\) sounds a timely warning by emphasizing the fact that no one pattern can be set up for the analysis of all reading difficulties.

The object of the total analysis is two-fold: (1) To determine the type of the reading difficulty, and, (2) to aid in the selection of effective techniques for remediying the disability.

The cases of reading disability fall into two classes, the subnormal in intelligence, and the group whose handicap seems to grow directly out of the reading situation. The first group will probably make progress, dependent upon the ability, at the age of six and one-half years, provided external factors are controlled. "The child of low intelligence,...differs chiefly from the average by being slower in learning."\(^3\) The best single generalization to make for this type is that he should have more abundant material, and a greater variety of methods than is provided for the normal pupil. He learns effectively by a


program similar to that adapted to the average child, except that he needs more of it. 4

An individual of the second class will be likely to profit from attention directed to specific difficulties. However, these are not the items of chief significance to the teacher, but only phases of the larger problem, and not something to make the child unduly concerned about. The factors referred to may include a limited sight vocabulary, absence of basic techniques for unlocking words, or material unsuited to interests and maturity of the learner.

A child, whose reading problem grows out of the reading situation, will probably test higher where language ability is not of primary importance. 5 In this connection Marion Monroe uses the educational profile, which is illustrated in Figure 2. 6

Two distinct trends are revealed through a study of remedial procedures. One is to employ a specific method in all disability cases, the other is to take into account individual differences in the selection of a method or methods. Advocates of the first plan include some eminent

4 Ibid., p. 204.

5 Betts, op. cit., pp. 1, 2.

<table>
<thead>
<tr>
<th>Grade</th>
<th>CA</th>
<th>MA</th>
<th>Arithmetic</th>
<th>Spelling</th>
<th>Reading Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>-10</td>
<td>15-6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-9</td>
<td>14-6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-8</td>
<td>13-6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-7</td>
<td>12-6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-6</td>
<td>11-6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-5</td>
<td>10-6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-4</td>
<td>9-6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-3</td>
<td>8-6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-2</td>
<td>7-6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-1</td>
<td>6-6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 24.

An Educational Profile: A Case Study in Remedial Reading

The chart was made by plotting the child's grade scores derived from the tests on the age-grade scale.

C.A. - Chronological Age
MA. - Mental Age.
O. - Oral Reading
0. - Comprehension
W.A. - Word Analysis
W.D. - Word Discrimination
authorities. Fernard and Keller\(^8\) report success with the tracing method in teaching word recognition. Monroe,\(^9\) as well as Gillingham and Stillman, used with remarkable success a combination of the tracing and phonetic procedures. They give it as their opinion, based on experience, that specific language cases will always have difficulty with language subjects. This fact, they conclude, should be recognized early and their education planned accordingly.\(^10\) Orton, to whose school of thought the writers just referred to belong, goes so far as to say the "look and say" method may even be a cause of disability in the case of "stereosymbolia," or severe reading deficiency.\(^11\)

Among those who would employ the methods adapted to the particular interest of the learner is Gates. He gives two arguments for his stand. In the first place, he points out what he considers a common error in referring to extreme cases of disability in reading. He contends that the assumption seems to be, among those who would follow one special technique in remedial work, that these special cases are alike. As a matter of fact, his experience has been that they are radically different.

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8 Betts, pp. cit., pp. 265-68.

9 Ibid., pp. 268-271.


Therefore he believes individual differences are of paramount importance as determinants of what methods to employ in each particular case. In the second place, another fact to be weighed carefully is that teachers differ in the degree of success with which they employ various techniques. Teachers are people and have specialized abilities which makes teaching skill a significant factor in any remedial program. A method with which Gates has achieved admirable results is the visual attack in word recognition. His success in teaching deaf mutes, by this method, offers convincing proof of its efficacy, in his opinion. However, he makes it very clear that all methods have limitations and he subscribes to an analytical approach.  

The tendency to use a diversity of attack is also illustrated in the work of Gray. He gives descriptions of several case studies and outlines the various procedures which were employed after an analysis of the difficulties. 


CHAPTER IV

PRESENTATION OF FINDINGS

The previous chapters present many theories, based on both experience and research, related to the problems in the initial stages of reading. It is the purpose of this chapter to present some objective data and opinions of teachers, in a selected school system, as to the problems involved in teaching reading, in their particular situations.

The data secured through this investigation point to certain possible conclusions and certain factors, irreducible to measurement, which appear to have affected the results.

The subjects for this study are a representative cross-section of the pupils in the first three grades of the Emporia Public Schools. The first grades were given the Monroe Reading Aptitude Test. The second and third were given the Stone Grover Classification Test for Beginners in Reading, at the end of kindergarten, and the Progressive Achievement Test, Form B, Primary Battery, in May, 1939. This is the only basis for selection. Owing to uncontrollable factors, common to normal classroom conditions, the number is not large. This limitation in cases precludes any possibility that the findings will have statistical reliability, but they may have clinical value. The purpose of this investigation is to discover the degree of relationship, which certain reading readiness test scores bear to success in primary reading.

ANALYSIS OF PROMOTION STATISTICS

On the following pages the test results are tabulated, and comparisons are made, using tables which are self-explanatory. The first study
uses, as the basis for investigation, the results of the Monroe Reading Aptitude Test and teachers' judgments of the reading ability of first grade pupils.

**MONROE'S FINDINGS ON THE MONROE READING APTITUDE TESTS**

Monroe found that cases, which she studied, fell into the following intervals, in terms of percentiles, using achievement in reading as the basis for distribution. These findings are taken from the manual of her reading aptitude test.

<table>
<thead>
<tr>
<th>Monroe's Scale</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>80 - 100</td>
<td>Superior readers</td>
</tr>
<tr>
<td>60 - 80</td>
<td>Superior, average readers, with few exceptions</td>
</tr>
<tr>
<td>40 - 60</td>
<td>Unpredictable, influenced by personal factors or teaching skill</td>
</tr>
<tr>
<td>20 - 40</td>
<td>Poor readers, with some exceptions</td>
</tr>
<tr>
<td>0 - 20</td>
<td>Poorest readers, without exception</td>
</tr>
</tbody>
</table>

**FINDINGS OF PRESENT STUDY OF MONROE'S READING APTITUDE TESTS,**

**AS A PREDICTIVE MEASURE**

In Table II the percents group themselves roughly in agreement with Monroe's investigation.

There are no cases in the two highest intervals which fall into the classification. There are no cases in the lowest interval classified as a G or E student.

The greatest variability is found in the last two intervals, where the highest percentage of cases is found in the middle groups, rather than in the classifications of the two lowest letters.

In the two highest intervals a few poor readers are found which bears out Monroe's statement that we may find exceptions, though the trend
**TABLE II**

**COMPARISON OF PERCENTILE RANK OF CHILDREN OF GRADE ONE ON THE MONROE READING APTITUDE TEST WITH TEACHERS’ RATING OF THEIR ACHIEVEMENT**

<table>
<thead>
<tr>
<th>Monroe’s Reading Aptitude Test Scale</th>
<th>Teachers’ Marks*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>P</td>
</tr>
<tr>
<td></td>
<td>No. of Cases %</td>
</tr>
<tr>
<td>80-89</td>
<td>1 13</td>
</tr>
<tr>
<td>60-79</td>
<td>2 5</td>
</tr>
<tr>
<td>40-59</td>
<td>1 3</td>
</tr>
<tr>
<td>20-39</td>
<td>3 11</td>
</tr>
<tr>
<td>0-19</td>
<td>1 17</td>
</tr>
</tbody>
</table>

No. of Cases, 122.

Read table thus: In the group whose scores fell between 80-89 on the Monroe Reading Aptitude Test, 3 or 37% received a grade of G; 2 or 25%, a grade of F; etc.

*Suggestive Key to Letter Values Used on School Records (There are no arbitrary divisions, no marks are given on children's reports to parents.)*

- E - Superior
- G - Satisfactory
- F - Inferior
- M - Average
- P - Unsatisfactory
- I - Inferior
is for only average and superior readers to be grouped in these ranges.

Reading the table down, we find the highest percentage of E readers in the upper percentiles, and the highest percentage of E readers in the lowest percentile.

The middle intervals are marked by fluctuations but approximate roughly a normal distribution.

The letters represent the teachers' judgments as to the reading ability of the different pupils. The results of informal tests and subjective bases for rating entered into the judgments, in the majority of cases. In one group, additional measures were employed. See Table IX on page 44 for additional details.

COMPARISONS BETWEEN THE STONE-GROVER CLASSIFICATION TEST
AND THREE CRITERIA OF ACHIEVEMENT FOR GRADES II AND III

The next comparisons tabulated are between the Stone-Grover Classification Test scores and three criteria of achievement for Grades II and III. These standards include teachers' ratings of reading ability, total scores on the Progressive Achievement Test, and total scores on the reading section of this same test.

STONE-GROVER'S PREDICTIONS ON THE STONE-GROVER
CLASSIFICATION TEST FOR BEGINNERS IN READING

Stone-Grover make the following predictions in their manual accompanying the tests.

The pupils who make scores of forty or above on the test, will probably experience no difficulty.
The pupils who make scores in the neighborhood of thirty to forty, will probably make normal progress.

The pupils who make scores in the neighborhood of twenty-five or less comprise the unpredictable or "danger" group. Their progress will depend on several factors.

STONE-GROVER CLASSIFICATION TEST
VERSUS TEACHERS' JUDGMENTS

In Table III, approximately one-seventh of the cases fall in the two highest intervals of the Stone-Grover Classification Scale with slightly less than 66 2/3% of these in the two highest letter groupings.

In the two lowest intervals on the Stone-Grover Classification Scale, are found more than one-third of the cases with more than one-half of them listed in the two highest letter classifications. This is not in line with what one would expect.

Approximately one-half of the cases fall into the middle interval of the Stone-Grover Classification Scale, but in the scale of teachers' marks, the highest percentage of cases falls into the two highest letter classifications.

Very little agreement is shown, since the largest number of \( E \)'s fall in the middle interval of the Stone-Grover Classification range.

In Table IV, page 34, slightly more than 63 1/3% of the cases, whose scores fall into the two highest intervals on the Stone-Grover Classification Scale, fall into the two highest letter groupings.

Practically the same number of cases fall into the two lowest intervals on the Stone-Grover Classification Scale as were found in the
### TABLE III

**RANK OF CHILDREN IN GRADE II ON THE STONE-GROVER CLASSIFICATION TEST COMPARED WITH TEACHERS' RATINGS OF THEIR ACHIEVEMENT**

<table>
<thead>
<tr>
<th>Stone-Grover Reading Test Scale</th>
<th>Teachers' Marks*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
</tr>
<tr>
<td><strong>No. of Cases</strong></td>
<td><strong>No. of Cases</strong></td>
</tr>
<tr>
<td>50-59</td>
<td>1</td>
</tr>
<tr>
<td>40-49</td>
<td>1</td>
</tr>
<tr>
<td>30-39</td>
<td>3</td>
</tr>
<tr>
<td>20-29</td>
<td>7</td>
</tr>
<tr>
<td>10-19</td>
<td>2</td>
</tr>
</tbody>
</table>

No. of Cases, 76

---

Read table thus: In the group whose scores fell between 50-59, on the Stone-Grover Classification Test, 1 or 50% received a grade of E; no one received a grade of G; 1 or 50% received a grade of M.

*The teachers' marks were governed to a greater or less degree by the same factors indicated in the explanation for Table II. The scores in Table V were taken into account in some cases.*
TABLE IV

RANK OF CHILDREN IN GRADE III ON THE STONE-GROVER READING READINESS TEST COMPARED WITH TEACHERS' RATINGS OF THEIR ACHIEVEMENT

<table>
<thead>
<tr>
<th>Stone-Grover Reading Readiness Test Scale</th>
<th>Teachers' Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
</tr>
<tr>
<td></td>
<td>No. of Cases</td>
</tr>
<tr>
<td>50-59</td>
<td>1</td>
</tr>
<tr>
<td>40-49</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>3</td>
</tr>
<tr>
<td>30-39</td>
<td>1</td>
</tr>
<tr>
<td>20-29</td>
<td>3</td>
</tr>
<tr>
<td>10-19</td>
<td>1</td>
</tr>
</tbody>
</table>

No. of Cases, 68

Read table thus: In the group whose scores fell between 50-69, 1 or 100% received a grade of E.
two highest intervals of this same scale, but two-thirds of them are grouped in the two highest letter classifications.

The remainder of the cases are distributed in the middle interval on the Stone-Grover Classification Scale, with only one case falling below the middle letter grouping.

PROGRESSIVE ACHIEVEMENT TEST VERSUS
STONE-GROVER CLASSIFICATION TEST

The Progressive Achievement Test, Primary Battery, was given to Grades II and III of the Emporia Public Schools. Their scores on the basic elements of the test ranked in the following order:

1. Reading
2. Language
3. Arithmetic Reasoning
4. Arithmetic Fundamentals

There were no grade medians below the standard medians, 2.6 for second grade, and 3.8 for third grade.

Inasmuch as language ability is intimately tied up with reading ability, and it is a generally accepted fact that there is a positive correlation between problem solving and achievement in reading, it appears worthwhile to determine what agreement exists between the total score on the Progressive Achievement Test and the scores on the Stone-Grover Classification Test.

Another determining factor which entered into this decision was the fact the authors of the Progressive Achievement Test point out certain
indicators, relative to reading ability, which the Arithmetic Reasoning section will tend to reveal.

For example, the test indicates whether a child can read about and understand the vocabulary of money.

The test also includes ten items which are indicators of the pupil's ability to identify words related to number and time.

The reasoning problems involve wide reading range from one-step problems through the two-step problems and deal with sharing, averaging, and budgeting.

It appears true also that a test more than four-fifths of which involves reading, should be a more reliable indicator of the pupil's ability to "carry over" the techniques learned in a normal reading situation than a strictly reading test. That is, this test should quite definitely determine whether reading has been taught as a tool or as a subject.

There was also the possibility that the Stone-Grover Classification Test scores compared with the combined reading scores of the Progressive Achievement Test would produce findings of some value as predictive measures.

The plan adopted was to compare both sets of totals, the total score and the reading score with the Stone-Grover Classification Test scores.

Two forms of comparison are shown, one in Tables V-VIII which follow, the other in the chart of correlations which appears on page 46.

Submitting the two forms makes it possible to view the situation
from two different angles. Durrell reports that, for practical
purposes, prediction tables which show the effect of percentile or
decile positions on reading achievement are to be preferred to general
statements of correlation.

GRADE PLACEMENT ON PROGRESSIVE ACHIEVEMENT TEST

VERSUS STONE-GROVER CLASSIFICATION TEST

Examining Table V, the two cases which appear in the highest
interval of the Stone-Grover Classification Scale do not fall where one
would expect them to on the achievement scale.

About 7% of the cases fall in the two highest intervals on the
Stone-Grover Classification range and are scattered over the Progressive
Achievement grade placements, with the largest number falling in the
middle classification.

Approximately 33 1/3% of all the cases fall into the two lowest
intervals of the Stone-Grover Classification Scale and are distributed
in the three lowest ranges on the Progressive Achievement grade placement
scale.

About 50% of the cases fall into the middle interval of the Stone-
Grover Classification Scale and show a tendency to group in the middle
and next to the last ranges of the Progressive Achievement scale of
total scores.

1 D. D. Durrell, "Research Problems in Reading in the Elementary
School." The Elementary English Review, April, 1936, p. 149.
Table V

Comparison of Rank of Children in Grade Two on the Stone-Grover Classification Test with Their Grade Placement on the Progressive Achievement Test

<table>
<thead>
<tr>
<th>Stone-Grover Reading Readiness Scale</th>
<th>Progressive Achievement Test Grade Placement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.00-2.74</td>
</tr>
<tr>
<td>No. of Cases</td>
<td>% of Cases</td>
</tr>
<tr>
<td>50-59</td>
<td>2</td>
</tr>
<tr>
<td>40-49</td>
<td>2</td>
</tr>
<tr>
<td>30-39</td>
<td>4</td>
</tr>
<tr>
<td>20-29</td>
<td>4</td>
</tr>
<tr>
<td>10-19</td>
<td>2</td>
</tr>
</tbody>
</table>

No. of Cases, 76

Read table thus: In the group whose scores fell between 50-59, no one received a grade placement in the intervals 2.00-2.74 or 2.75-3.49. 2 or 100% received a grade placement in the interval between 5.00-5.74.
In Table VI, slightly less than 25% of the cases fall in the two highest intervals on the Stone-Grover Classification Scale but approximately 67 2/3% are found in the two highest grade placement ranges.

Less than 25% of the cases fall in the two lowest intervals on the Stone-Grover Classification Scale, but all except one case fall in the middle and next to the highest ranges on the Progressive Achievement grade placement scale, which is contrary to expectations.

The remainder of the cases are grouped in the middle interval on the Stone-Grover Classification Scale and all except one of them fall into the middle and next to the highest classification on the Progressive Achievement grade placement range.

READING SCORES ON PROGRESSIVE ACHIEVEMENT TEST
VERSUS STONE-GROVER CLASSIFICATION TEST

An analysis of Table VII on page 41 reveals about 7% of the scores falling in the two highest intervals of the Stone-Grover Classification Scale. About two-thirds of these cases appear in the upper half of the reading achievement ranges of the Progressive Achievement Test.

Slightly more than 33 1/3% fall into the two lowest intervals of the Stone-Grover Classification Scale, with about 50% of the cases grouped in the upper half of the reading achievement ranges of the Progressive Achievement Test.

About one-half of the scores fall into the middle interval of the Stone-Grover Classification Scale with, by far, the highest percentage in the upper ranges of the reading achievement scale.
TABLE VI

COMPARISON OF RANK OF CHILDREN IN GRADE THREE ON THE STONE-GROVER CLASSIFICATION TEST WITH THEIR GRADE PLACEMENT ON THE PROGRESSIVE ACHIEVEMENT TEST

<table>
<thead>
<tr>
<th>Stone-Grover Reading Readiness Test Scale</th>
<th>Progressive Achievement Test Grade Placement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.00-2.74</td>
</tr>
<tr>
<td>Number of Cases</td>
<td>%</td>
</tr>
<tr>
<td>50-59</td>
<td>1</td>
</tr>
<tr>
<td>40-49</td>
<td>4</td>
</tr>
<tr>
<td>30-39</td>
<td>14</td>
</tr>
<tr>
<td>20-29</td>
<td>2</td>
</tr>
<tr>
<td>10-19</td>
<td>2</td>
</tr>
</tbody>
</table>

No. of Cases, 56

Read table thus: In the group whose scores fell between 50-59, 1 or 100% received a grade placement falling in the interval 5.00-5.74; no one received a grade placement in the other intervals.
TABLE VII

COMPARISON OF RANK OF CHILDREN IN GRADE TWO
ON THE STONE-GROVER READING READINESS TEST
WITH THEIR READING SCORES ON THE READING SECTION OF THE
PROGRESSIVE ACHIEVEMENT TEST

<table>
<thead>
<tr>
<th>Stone-Grover Reading Readiness Test Scale</th>
<th>Progressive Achievement Reading Section Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>36-44</td>
</tr>
<tr>
<td>No. of Cases %</td>
<td></td>
</tr>
<tr>
<td>50-59</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>11</td>
</tr>
<tr>
<td>40-49</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>8</td>
</tr>
<tr>
<td>30-39</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>5</td>
</tr>
<tr>
<td>20-29</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>5</td>
</tr>
<tr>
<td>10-19</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>22</td>
</tr>
</tbody>
</table>

No. of Cases, 76

Read table thus: In the group whose scores fall between 50-59, 2 or 100% received a score falling in the interval 72-80. No one received a score in the other intervals.
Table VIII shows that about 25% of the cases fall into the two highest intervals on the Stone-Grover Classification Scale with the highest proportion of these cases in the two highest ranges, for reading achievement on the Progressive Achievement Test.

Less than 25% of the cases fall into the two lowest intervals of the Stone-Grover Classification Scale, but they are grouped in the two highest ranges of the reading scores in the Progressive Achievement Test.

More than one-half of the cases fall into the middle interval on the Stone-Grover Classification Scale, but they are not grouped largely in the middle range of the Progressive Achievement reading scores as one might expect.

COMPARISON BY CORRELATIONS

The correlation between Monroe's Reading Aptitude Test and teachers' marks in reading, as presented in Table IX, page 41, is of value although the index of predictive efficiency is only approximately ten per cent better than sheer guess. 2

The remainder of the results are of no statistical significance. The fact that higher correlations were established between the Stone-Grover Classification Test and the Progressive Achievement Test totals than were found between the last two measures is thought-provoking.

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### TABLE VIII

**Comparison of Rank of Children in Grade Three on the Stone-Grover Reading Readiness Test with Their Reading Scores on the Progressive Achievement Test**

<table>
<thead>
<tr>
<th>Stone-Grover Reading Readiness Test Scale</th>
<th>Progressive Achievement Reading Section Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>45-58</td>
</tr>
<tr>
<td>No. of Cases</td>
<td>% of Cases</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>50-59</td>
<td>1</td>
</tr>
<tr>
<td>40-49</td>
<td>2</td>
</tr>
<tr>
<td>30-39</td>
<td>1</td>
</tr>
<tr>
<td>20-29</td>
<td>1</td>
</tr>
<tr>
<td>10-19</td>
<td>2</td>
</tr>
</tbody>
</table>

*No. of Cases, 50*

Read table thus: In the group whose scores fall between 50-59, 1 or 100% received a score falling in the interval 72-80; none received a score in the other intervals.*
## TABLE IX

**COEFFICIENT OF CORRELATION BETWEEN EACH OF THE MEASURES OF PREDICTION AND MEASURES OF ACHIEVEMENT**

<table>
<thead>
<tr>
<th>Measures Compared</th>
<th>Coefficient of Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Grade I</td>
</tr>
<tr>
<td>Monroe Reading Aptitude Tests versus Teachers' Marks in Reading</td>
<td>.45 ± .048</td>
</tr>
<tr>
<td>Stone-Grover Reading Readiness Tests versus Teachers' Marks in Reading</td>
<td>.164 ± .074</td>
</tr>
<tr>
<td>Stone-Grover Reading Readiness Tests versus Prog. Ach. Scores</td>
<td>.316 ± .069</td>
</tr>
<tr>
<td>Stone-Grover Reading Readiness Tests versus Prog. Ach. Scores in Reading</td>
<td>.164 ± .076</td>
</tr>
</tbody>
</table>

Read table thus: The correlation between the Monroe Reading Aptitude Test and teachers' marks in reading is .45 ± .048.
The correlation given in Table X between Monroe's Reading Aptitude Test and teachers' marks in reading is of some significance, considering the small number of cases involved.

The correlation between Monroe's Reading Aptitude Test and Gates Primary Reading Test is of no significance.

The correlation between mental age and teachers' marks is of some value, the index of predictive efficiency being about 14% better than sheer guess.

The correlation between mental age and Gates Primary Reading Test is of somewhat more significance than the last relationship established, as can readily be inferred by comparison of the two correlations.

The correlation between the intelligence quotient and teachers' marks has slightly more significance than the correlation between mental age and Gates Primary Reading Test.

The correlation between the intelligence quotient and the Gates Primary Reading Test is of some significance, the index of efficiency being approximately 12% better than sheer guess.

The items on Table XI, page 47, were compiled from the responses to a questionnaire included in the appendix. This was sent to all first grade teachers in the Emporia Public Schools and given to certain other primary teachers who indicated they had data bearing on the writer's problem, which appeared to have value.

The points selected for the table seemed to be most pertinent to the subject of reading readiness.
### TABLE X

**CORRELATIONS BETWEEN THREE PREDICTIVE FACTORS AND TWO CRITERION MEASURES FOR ONE FIRST GRADE, INCLUDING 26 PUPILS**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Teachers’ Marks</th>
<th>Gates Primary Reading Test Average Scores on Types I and II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monroe’s Reading Aptitude Tests</td>
<td>.377 .115</td>
<td>.153 .129</td>
</tr>
<tr>
<td>Mental Age</td>
<td>.513 .096</td>
<td>.531 .094</td>
</tr>
<tr>
<td>Intelligence Quotient</td>
<td>.542 .092</td>
<td>.472 .101</td>
</tr>
</tbody>
</table>

Read table thus: The correlation between Monroe’s Reading Aptitude Test and teachers’ marks is .377 .115.
**TABLE XI**

PUPIL'S RATING CHART LISTING CAUSES OF READING DIFFICULTY FOR 42 FIRST GRADE PUPILS IN THE DIFFERENT BUILDINGS

<table>
<thead>
<tr>
<th>Cause</th>
<th>No. times checked</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental Immaturity</td>
<td>23</td>
</tr>
<tr>
<td>Physical Defects</td>
<td>12</td>
</tr>
<tr>
<td>Speech Handicap</td>
<td>16</td>
</tr>
<tr>
<td>Makes Poor Adjustment</td>
<td>23</td>
</tr>
<tr>
<td>Lacks Social Experience</td>
<td>36</td>
</tr>
<tr>
<td>Not Emotionally Well Balanced</td>
<td>22</td>
</tr>
<tr>
<td>Shows withdrawal tendencies, dependent, shy, fearful, dreamy</td>
<td>25</td>
</tr>
<tr>
<td>Lacks General Information</td>
<td>37</td>
</tr>
<tr>
<td>Language Ability Below Average</td>
<td>37</td>
</tr>
<tr>
<td>Economic Status Below Average</td>
<td>28</td>
</tr>
<tr>
<td>Lacks Cultural Background</td>
<td>37</td>
</tr>
<tr>
<td>Lack of Interest in Reading on Entrance to School</td>
<td>23</td>
</tr>
<tr>
<td>Effort Made to Change Handedness</td>
<td>2</td>
</tr>
</tbody>
</table>
It seems significant that deficiencies in language ability, general information, social experience, and cultural background, which bear a close relationship to each other, rank highest in number of checks against them. The first three factors can be fostered by the school and indirectly, the last one can be improved somewhat. The lack of these factors may account in a measure for lack of interest in reading on entrance to school.

The fact that the inability to adjust and a tendency to withdraw rank in about the same order as negative factors in the reading problem, also suggests a relationship. There is only one factor of all those listed, mental immaturity, which depends on maturation.

The small number of checks against physical defects indicates that the school health program is functioning.

Low mentality was omitted from the list of factors because there were no psychological data available for a number of cases. A wholly subjective rating would be of questionable value in an investigation of this type. The chief concern of this study is with the factors which can be developed.

SUMMARY OF FINDINGS

A relationship has been found between the Monroe Reading Aptitude Test and marks in reading for the entire number of first grade children included in the study. While the coefficient of correlation .45 2.048 is not as significant as Monroe would lead us to expect, in the light of her findings, it is positive and possesses statistical significance to a slight degree.
The result of the writer's investigation compares favorably with a study made by Dean, in which a coefficient of .41 ± .04 was obtained by establishing the relationship between reading achievement in first grade and the Monroe Reading Aptitude Test.

Gates's conclusion reached as the result of a testing program is that the predictive value of a test varies with the teaching method. As a rule, the highest correlations are given by tests which measure abilities emphasized in the particular learning situation.

This possibility, as well as various emotional traits and social maladjustments, together with irregular school attendance, may account for the lack of a highly significant relationship between predicted performance and subsequent achievement.

The relationships established between the Stone-Grover Classification Test and the various measures vary. In the first place, it must be taken into consideration that tests of greatest predictive value are, as a rule, measures of early reading achievement.

Since the Stone-Grover Classification Test measures only the ability to observe word forms and to see likenesses and differences in words, its predictive value would seem to be quite limited.

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3 Charles D. Dean, "Predicting First Grade Reading Achievement," The Elementary School Journal, 39:509-516, April, 1939.


Since a higher correlation was found between the Stone-Grover Classification Test and the total score on the Progressive Achievement Test than between the Stone-Grover Classification Test and the reading totals on the Progressive Achievement Test, it appears a point has been gained to prove the soundness of the argument, previously advanced, in this connection. Reading seems to have been taught as a tool rather than as a subject and the techniques learned in the reading situation were evidently applied in the various phases of the test involving reading.

The comparison between various reading readiness factors and the measure, success in reading, for one first grade room, yielded some results that tend to stimulate our thinking. While the correlation between Monroe's Reading Aptitude Test and teachers' marks is not high, considering the percentage of cases available, it has value. Moreover, the coefficient is more than double that between the Monroe Reading Aptitude Test and Gates Primary Test, given in Table IX, page 44. The results obtained in this situation would seem to indicate that an investigation on a larger scale would prove to be of higher predictive value.

It is seldom one sees a relationship worked out between "reading readiness" at entrance to first grade and achievement beyond first grade level. It seemed pertinent to make such a study because in general, the pupils who are ready to read at the time of first teaching should show consistent improvement in this skill, and in the subject matter involving reading, if reading has been taught in terms of individual needs. The findings are not in agreement with this line of reasoning.
Since the Stone-Grover Classification Test measures only the ability to observe word forms and to see likenesses and differences of words, and, therefore, appears not to test all measurable factors of reading readiness, the same comparison using a more comprehensive test of reading readiness, might bring results of greater value.

In the article by Durrell, referred to in this connection, he concedes the difficulty in determining predictability. He cites certain factors such as poor motivation, poor health, absence from school, and lack of provision for individual differences and difficulties in learning, which are only a few of a large number which make prediction difficult.

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6 Durrell, "Research Problems in Reading in the Elementary School," April, 1936, op. cit., p. 149.
CHAPTER V

A PRESENTATION OF CASE HISTORIES

In the foregoing chapters, general factors that operate in the teaching of reading have been emphasized. There are other factors, less tangible, which operate in individual cases and which may determine the measure of success or failure in learning to read.

These studies are offered to illustrate the combination of factors, including both measurable and intangible types, which may constitute a reading problem.

The outline, included in the appendix, was used to direct the study. When the data seemed to be pertinent to the solution of the problem, they were incorporated in the child's history. As will be noted, a much more informal procedure was used than the outline would seem to indicate. The two charts also found in the appendix were used to check on reading difficulties and corrective measures, by teachers who had suggested children in need of remedial work.

The points listed were gathered from many sources, a number having been suggested by those contributing data toward this investigation.

The cases were selected on two bases. First, an effort was made to secure representative types in order to make as valuable as possible the results of this study. The purpose was to help these particular children overcome their defects and locate corrective measures for other handicapped readers.

Second, where more than one type having the same difficulty or lacking in a certain factor was available, the children chosen for the study
were those with whose background the writer was most familiar. Economy of time and effort was the deciding factor in order that more energy could be directed to remedial work and less to diagnosis. While no detailed remedial procedures, in the strictest sense of the term, were carried on, one of the most worthwhile aspects of the study was the personal interest which was developed in each child. The result was a desire to "follow through," as Gray puts it, and an attempt was made to offer helpful suggestions in each case.

Another gratifying angle was the cooperative attitude shown on the part of the parents, or those who were responsible for the child's welfare. Indifference was never met. Solicitude and a keen interest in the child's growth were characteristic of all.

The children, too, without exception, possessed many desirable personality traits which made a reading deficiency appear to be only a minor misfortune, but nevertheless one to be reckoned with, diligently and intelligently.
Case 1  MENTAL IMMATUREY AND PERSONALITY DIFFICULTIES SHOWN BY INSTABILITY AND AN UNSOCIAL ATTITUDE

Identifying Data and Home Background

Dan entered first grade at the age of 6 years, 4 months, coming from a community with no kindergarten facilities. The Detroit First Grade Intelligence Test indicated an I. Q. of 91 and a mental age of 5 years, 9 months. The child is a native Kansan although the parents only recently moved to this place. The father, employee of an oil company as a transport driver, is a typical, genial Irishman while the mother is of Dutch Irish descent. Both parents impressed one as being of average intelligence and probably possess an elementary school education.

The fact of being an only child in itself presents a problem, and Dan’s parents have not succeeded in avoiding some errors which are a natural result of this circumstance. The father is straightforward and firm but as his work takes him out of town, he has little to do with the disciplining of the child. The mother, a sensible woman, is inclined to employ more indirect means and is more easily influenced, perhaps a common short-coming of mothers. The parents have an unusually, fine cooperative attitude and are responsive to suggestions for promoting the boy’s welfare. The limitations in the home of a cultural nature, prevent the building up of a background conducive to reading. The family occupies an apartment and has suffered the inconvenience of four moves in the two years they have lived here. This circumstance works to Dan’s disadvantage in a social way. The father has had regular employment so the economic status is secure although the income does not
allow many luxuries. The mother enjoys the child's companionship and is always ready to help if a definite requirement is made. The mother often reads to Dan and listens to him read from the material available. In all, the parents accept the responsibility of parenthood cheerfully and show no inclination to shirk obligations. While they did not usually attend the P.T.A. meetings, this seemed excusable in view of the fact the father's hours were long and the mother was reluctant to attend alone. Both attended the room picnic and the father, one of the few fathers who came, took pictures of the group and his enjoyment in the play of the children was obvious.

Physical Factors--

The subject is normal in size, of slender build and has no record of vision, hearing, or speech difficulties. He was an instrument baby but the mother thought the only known injury was of no consequence. Dan walked when one year old but was slow about talking. He is extremely excitable and nervous in his movements. The mother suggested the possibility this might be the result of a similar emotional state on her part before Dan's birth. The school nurse agrees that indirectly this would affect the child, leading to a tension in his environment. She also brought out the fact that lack of coordination would be a logical consequence of an abnormal birth. Too, she has pointed out that there are sometimes injuries not revealed except by a careful diagnosis.

The health record contains a history of contagious diseases. There was also a serious case of bronchitis in the spring before entering school in September. This illness was followed by a tonsillectomy and a broken
arm. It is quite probable, as the nurse intimated, that Dan was granted special privileges and permitted to have his own way, to a large extent, during this period. If this is the case, the effects of this laxity have to be combatted now, under a more rigid course of discipline. Dan is right handed and right eyed but he showed a tendency to use his left hand up to an early age. Orton\(^1\) thinks that this fact may be of some significance in reading disability cases. No attempt was made to change handedness, according to the mother. He has regular eating habits, but owing to his father's schedule, may have too heavy a meal at night. Since the mother depends on and enjoys the son's companionship, the bed-time hour may be pushed up to a somewhat later hour than would be advisable for one so high-strung.

School Situation and Educational Background--

Dan has had to learn to play as well as to work with other children. At times he annoys his playmates in a most irresponsible way and without any apparent provocation. He never appears to act maliciously and is always penitent. Thinking there might be a physical cause, his case was referred to the school nurse. After a conference by the nurse with the parents, the family physician was consulted but his examination revealed nothing of significance. A rest was suggested, after school. Although improvement followed, the erratic conduct still continued at longer intervals.

Dan likes to construct things and craves children's companionship. He could not always be depended upon to reach home at a reasonable hour,

a matter of much concern to his mother. He was regular in his school attendance but was greatly handicapped by his lack of kindergarten experience. This was evidenced by his lack of ability to adjust socially, which has been mentioned, and his lack of adaptability to the school situation in general. While he was reported as repeating Mother Goose Rhymes at five years of age and enjoying picture books, an interest in reading was not evident for some months. This attitude followed a definite effort to develop a desire to read through picture and word matching games, recording of experience, stories, and simple reading material with attractive illustrations. Although his growth was not marked enough to insure normal progress, he never lost his enthusiasm for school. The heartening thing about the situation was that the mother appreciated Dan's deficiencies and was able to view the situation objectively. Her remark, at a conference in regard to his progress, "You are a better judge of what he is able to do than I" characterizes her sane and cooperative attitude. This willingness to let Dan grow at his own rate, without undue pressure, contributed not a little to promoting a happy adjustment to the reading situation.

By a happy coincidence, Dan and the writer in whose room he had been enrolled, were together again in a different building. This unusual circumstance made it possible to avoid losing ground. His enjoyment of school was still obvious. His nervousness and instability are still disturbing factors but these upsets occur at longer intervals than formerly.

The most marked defects in his reading were substitutions and transpositions. However, when his attention was called to the left to right coordination, and the necessity to think through the sentence first, he was able to read smoothly and with comprehension. That is, the
vocabulary lack did not seem to be the basis of his trouble.

On the Monroe Reading Aptitude tests he made a score of 36. His high percentile was in motor ability and his low ones in auditory ability and language. His inability to concentrate may account for the auditory deficiency. His reading score on the Detroit Word Recognition Test in January was 12, and in May 25, which is 5 points above the median for a normal group. He made an average of 2.17 on Types I and II of the Gate's Tests at the end of the school term.

Dan "found his singing voice" this year and derived much satisfaction from this accomplishment. The opportunity this afforded to sing at the music festival contributed in no small measure to his social adjustment.

The most gratifying aspect of Dan's case does not have to do with the progress made in the academic work but in the increased ability to "give and take" in group relationships. With increased maturity coupled with a program planned to further definitely his individual development in stability and poise, Dan's personality difficulties should gradually cease to present so serious a problem.
Case 2  MENTAL IMMATURETY, LACK OF DOMINANCE AND SPEECH AND HEARING DEFECTS

Identifying Data and Home Background

Jack was enrolled in first grade in the writer's room after having spent a year and the first part of another semester in another school in the city. He was shy and bewildered for a day or two but this was in part accounted for by the fact that the socio-economic status of the children in the new environment was, on the whole, on a higher level than that of the group from which he had come. Perhaps he sensed a difference in their dress and care-free attitude and observed evidences of other advantages. But they were a democratic little group and soon their casual friendliness put him at his ease and he entered whole-heartedly into the room's activities.

The writer's first contact with the mother came somewhat later when it was necessary to arrange for Jack to attend the circus with someone since his father was working and his mother had a younger child at home. The principal had taken it upon herself to see that all children were provided with tickets whether or not they were able to purchase them. The principal and room teacher agreed to take care of a small group including Jack and the mother accompanied him to the place decided upon. She seemed appreciative of this privilege for Jack and the interest shown in him. Thus relations were established on a friendly basis with the school at the start. The principal had also had as a pupil an older sister, now married, who had made satisfactory progress under her tutelage.

Some time afterwards the writer called at the home and met the father. While both parents, American born, have apparently had very
limited educational opportunities, the father, a W. P. A. foreman, gave
the impression of being possessed of good business sense. The mother
seemed not only to be aware of his superiority in this respect but proud
of the fact. The home was neat and orderly though the call was unannounced.
There were no indications of cultural tastes or advantages. However, the
mother's attitude especially indicated an eagerness for her child to get
along in school. She spoke with pride of the elder daughter and her
successes in high school. It developed in the conversation that the
father's ambition for his son was to make a ball player out of him.
As the boy had already gained a reputation among the older group at
school as a player, Jack was apparently profiting from his father's
instruction. The father had even wanted Jack to be left-handed as he
thought this would further his ends. The fact that the father and son
shared this ambition had made of them "great pals" so the mother said.
She attributed Jack's difficulty with his school work to his late hours
in attending night games in the company of his father. She succeeded in
regulating his recreation so that he would have an early bed time hour
and felt this had contributed greatly to his improved school work.
This apparently was done without any resulting friction in the relation-
ships of the parents. The mother added that the child was a "good eater,"
and liked milk and fruit. He does not care to play alone and is able
to adjust himself to the companionship of younger children in the
neighborhood when a "ball diamond" is not available.

Physical Conditions—

Jack's birth was normal and he walked at one year and talked at
eighteen months. He had his tonsils and adenoids removed when he was five years old. Whooping cough and measles are the only contagious diseases checked in his health record. He is of normal build and looks well nourished. His greatest handicap is a speech defect. This is partially a matter of habit as shown by the efforts to help him emunctate clearly, in watching and imitating the position of lips, tongue, etc. However, this method was only partially successful. The opinion that there is some inherent tendency is borne out by the fact that the mother has a pronounced speech defect. She volunteered the information that this is due to a serious illness affecting her throat and ears. However, a sister of Jack's about three years younger does not say a word yet which raises a question as to the validity of the mother's explanation. There is no question as to her sincerity. No defects of vision are apparent but he has a loss of hearing in his left ear. Jack is right handed as has been indicated and the test for eyedness show him to be definitely left eyed, the ratio being 20-0.

School Situation and Educational History—

Jack's first teacher in grade one attributed his slowness in learning to read principally to immaturity. She described him as "babyish." She also said he was unsocial on the play-ground, not wanting to take turns. She had been highly successful in helping him to overcome this fault because he gave no evidence of it in the new environment. From her explanation, I gathered also that his irritability which his mother attributed to late hours, carried over, at times into the school situation. The nurse attributes his trouble to some extent at least to the poor speech pattern in the home.
The school records show an I. Q. of 94 as a result of the Detroit First Grade Test given April 29, 1938. The Kuhlman Anderson Test administered by the writer January 31, 1939, resulted in an I. Q. of 104, M. A. 7-5, C. A. 7-1. The Monroe Reading Aptitude Test showed a score of 34, the highest possible score being 100. The lowest percentiles are in visual, language, auditory and articulation abilities, falling to 30 or below. His only high score is 70 in motor ability. He enjoys hand work of any description and does his best work in this subject. His score on the Detroit Word Recognition Test on January 27, 1939, was 15 and in May almost double this figure, 28. In Types I and II of the Gates Reading Tests he averaged 2.5. Retraining in reading habits was not necessary and Jack's progress was the result of a responsive attitude and exposure to much material of particular interest appeal.

Conclusions and suggestions--

Jack was handicapped from the beginning by the lack of social experiences of the right sort, due to his mother's inability to make many contacts outside of the home. His hearing defect and the poor speech pattern in the home contributed to his difficulty.

More individual attention to the correction of his speech defect, such as has been attempted on a small scale, will no doubt be very beneficial in giving him a feeling of adequacy. If he continues his interest in reading he will be able to compensate in a measure for his hearing defect. He has a good sight vocabulary, reads with pleasure both to himself and others, and should make satisfactory progress, if the gains already made are retained. The keen interest of the mother in the
boy's problem and her fine spirit of intelligent cooperation, which has been referred to in this account, will go a long way in furthering Jack's progress.
Case 3 A FOREIGN LANGUAGE HANDICAP COUPLED WITH SOCIAL MALADJUSTMENT

Identifying Data and Home Background

Louie was reported to the writer as a child who had failed to make acceptable progress because of his unsocial attitude, the result of an environment in which he heard almost entirely a foreign language and had few opportunities for contacts of a social nature. He is 8 years, 3 months of age, in the 2 A class.

A visit to the home, or rather living quarters, revealed possible reasons for his withdrawing tendencies. The family occupies one section of a brick court, shared by perhaps three or four other Mexican families, located about one half a block from the railroad tracks in the poorer section of the city. The mother died at the birth of this child and he was cared for by an older sister who was in the second grade at the time of the mother's death. Another sister two years younger continued in school through the eighth grade. The older sister married and the responsibility fell on the younger sister, who seems to accept it cheerfully, and with a sort of pride which is refreshing to observe. The other members of the family are the father, another son, nineteen, and a boy, fifteen years of age, in the Junior High School. The daughter confided to the writer, after some gratifying progress had been made in bringing about a friendly attitude, that Tony hoped to go to college. The older boy and father both "work on the section" for the railroad. When the reason for the writer's visit was first explained, a motherly solicitude was shown by the sister and she seemed suspicious and guarded in her conversation. Although the subject, on being summoned from his play, was painfully shy, his eyes were friendly and he did not try to conceal his
interest, although he answered only by a shake of the head or by mono-
syllables and spoke only when addressed.

Not much headway was made on the first visit as the sister kept
returning to hover around her charge. An attempt to give an intelligence
test was abandoned but interest was stimulated in some library books and
it was soon discovered that enthusiasm about airplanes was paramount.
By observation and a drawing out process, Louie disclosed that he had no
toys, few companions of his own age and his sole play interest was in
base-ball. On a second call, the writer found the older sister alone,
and by guiding the conversation made unexpected headway in establishing
friendly relations. That the flowers blooming, making a bright splash
of color in the otherwise dingy surroundings, had been planted by the
sister was disclosed, and other evidences of her love of beauty were
discovered in a casual way. On the third visit, Louie saw the teacher
coming and smiled a warm welcome. A quiet corner out of doors was found
and since there were no interruptions, much progress was made. After
reading parts of several stories Louie in a burst of confidence said,
"I don't like them school books but I like these stories," a statement
which seemed to be of some significance in solving his problem. The
father was never at home but as the daughter said she enjoyed keeping
house and making a home for her father, I inferred he must be appreciative
and that the family was probably well adjusted.

Physical Conditions--

Louie is of slight build but seems sturdy and well nourished. There
is no record of visual or auditory deficiencies and only one contagious
disease, mumps, is checked on the health report. He is right handed and
right eyed. He finds it difficult to enunciate clearly in speaking English. The conversation overheard around the home was always in Spanish. He evidently has the same bed time hour as adults in the home and there is no effort to restrict his habits in this particular. The odors of food cooking revealed the fact that the diet was not adapted to a growing child although as indicated before, he did not appear to be suffering from malnutrition. His first grade teacher spoke of him as always coming to school immaculately clean.

School Situation and Educational History--

Louie’s attendance record is checked as regular. He entered kindergarten in the same school in which he is now enrolled in September, 1935. The Stone Crop Test given in May, 1936, showed a score of 9.

The kindergarten teacher said he was shy, fearful and extremely regressive. She was forced to talk to the older brother to get any information she wished. He was retained for another semester and on the same Reading Readiness Test administered in January, 1937, he secured a score of 36, the Standard Score being 35 and the City Median, 32. He entered the first grade at the beginning of the spring semester and passed into 2-B and had two terms in 2-A. His language development has not kept pace with the language requirements, and his withdrawing tendencies retard his progress in adding to his store of meaningful experiences.

His I. Q. on Kuhlman Anderson Test, second semester, first grade, given in June, 1939, indicated an I. Q. of 30. Though he concentrated well, it was obvious the language factor obstructed his understanding of the test. Since Garth gives 78 as an average I. Q. for immigrant Mexicans,

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this result is in line with norms for his race. "Intelligence tests administered in English to Spanish-speaking children are not valid in the first three grades, and should not be used as a means of comparison between English-speaking and Spanish-speaking children." This conclusion was reached as a result of a testing program among children, 68% of whom were Spanish-speaking pupils. In the progressive Achievement Test of September, 1938, his score was 1.5, 10 points below the standard. His reading vocabulary score and comprehension score were both 1.4 and his language score was 1.5. He was retained in 2-A another semester. His personality difficulties persisted and his ability to work out words independently was low. He had not acquired a basic vocabulary and his reading was marked by confusion and reversals. Remedial measures were used in the way of intensive phonetic drill, emphasis on noting word characteristics and the use of much easy material of especial interest appeal. Two of the books found unusually helpful were "Down the River Road" and "Round About." In May on Form B of the same test given in the fall, he was able to raise his score to 2.3, a gain of 8 points but still 5 points below standard for the grade.

When the writer heard the subject read he seemed sure of nouns and verbs but confused prepositions and abstract words, such as have, will and want.

He read with enjoyment and expression stories about various forms of transportation from easy library books, on perhaps a first grade level. When asked what kind of a book he preferred, he replied instantly, "One about airplanes."

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Conclusions and Suggestions--

Louie is a likeable youngster and evidently would respond well to individual tutoring. He almost forgot his shyness in his eagerness to read. Commendation stimulates him to an unusual degree. Having been thrown so much with adults, has made him too mature in his thinking to enjoy unselected stories on his level.

Material dictated by him along the line of his especial interests would meet his needs admirably. Illustrating these would give him satisfaction and enjoyment and afford a means of experiencing success. Additional material, adapted to his needs and interests, has recently been made available. The Unit Activity Supplementary Series for Book II, contains a group of stories on transportation which undoubtedly would appeal to Louie. Enrollment in a speech improvement group with individual attention on enunciation would establish a feeling of self-confidence.

While many right habits need to be built up, his responsiveness and cooperative attitude indicate he will profit from an adequate understanding and sympathetic attention to his language problem.
Identifying Data and Home Background

Bonnie was enrolled in the Kindergarten at the age of 5 years, 1 month. The mother is of French descent and the father is of Danish Stock. There are two older girls in the family and one younger boy. The mother has insufficient education to aid her in making a living. After being left alone under trying circumstances, she demonstrated her resourcefulness and tenaciousness by managing to bring her family to her old home, here. The boy was then only a baby. The grandmother, a widow, who is regularly employed in a public institution, was the sole support of the family for quite a period. The mother is deeply appreciative and of late has supplemented the grandmother's small income with her own earnings whenever she was able to get work to be done at home. Just recently a small allowance from the widow's fund has augmented their resources. The grandmother has an unusual amount of good sense and backbone which has stood her daughter in good stead. The mother has many good qualities but was naturally emotionally disturbed for some time. In addition, there was much sickness among the children, probably due to their lowered resistance. These facts are pertinent in giving a clear picture of Bonnie's environment on her entrance into school. The regressive traits of timidity and unresponsiveness were most prominent. She cried and begged her mother, not to leave her. The kindergarten teacher was sympathetic and persuaded the mother to gradually spend less time at school. Bonnie would never leave until her mother came for her. Altogether it was a most unhappy situation and difficult to determine just how much firmness to use in helping the child to make the necessary social adjustment.
In one sense Bonnie was a sick child and this intangible factor made her problem a complicated one. In the spring it was decided to retain the subject in kindergarten another year as her growth was so retarded. The Stone Grover Test Score was 8. The mother was cooperative but found it difficult to avoid allowing her sympathy to warp her judgment, when there was a question as to what would best promote the child's welfare.

The progress the coming year was marked by fluctuations, but showed an upward trend in adaptability and responsiveness. The emotional factor continued to be a disturbing one. The readiness test score in January was definitely better but it was agreed additional kindergarten experience would prove beneficial. She was assigned to first grade in May having obtained a score of 44, 14 points above the city median.

On entrance into first grade in the fall she showed more self-confidence, interest and ability to adjust to a new situation but she was yet closely bound to her mother. The teacher induced the mother to gradually delay coming for her so that she would have to walk farther alone each day. Finally the mother stayed at home but planned that the child might see her watching as she walked home by herself.

She changed to another school during the second semester. While Bonnie was still an emotional problem, her attitude was happier and she was shyly appreciative of friendly advances. This brings us to the time when the writer had her first personal contact with the subject, at the beginning of second grade. The teacher wisely insisted that Bonnie was a "big girl" now and did not care to have her older sisters hovering over her, since they had formed the habit of being over-solicitous. The child's
confidence was won and she made a satisfactory adjustment to her new environment. The shyness remains but is not associated with fear and her attitude is much more objective. Her play interests are the usual ones among companions of her own age. The cultural conditions of the neighborhood, as well as the economic status of the home, are above the average. Her social experiences in the community are necessarily restricted because of lack of home advantages.

Physical Condition—

Bonnie is slightly below normal in size and does not give the impression of being too well nourished. She had the usual children’s diseases but scarlet fever, which was contracted in the latter part of first grade, was the only one of a serious nature. At birth, she was normally delivered. She walked at 12 months but was late in talking. Bonnie is right handed and right eyed. The most significant fact in reference to her physical record is the fact she had St. Vitus dance at about six years of age. This was probably the culmination of her emotional disturbance. She has never been a feeding problem and gets sufficient rest. Her tonsils and adenoids have been removed.

School Situation and Educational History—

Bonnie will enter the 3-B class in the fall on condition. Her school record to date follows:

Kindergarten—2 years—1 year in each of two different schools—Conditioned to first grade.

1-B—1 semester—work satisfactory—changed schools.

1-A—1 semester—work not average, conditioned to 2-B

2-B—1 semester—conditioned to 2-A

2-A—1 semester—conditioned to 3-B
Achievement Tests

Progressive--Form B

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading Vocabulary</td>
<td>3.0</td>
</tr>
<tr>
<td>Reading Comprehension</td>
<td>2.5</td>
</tr>
<tr>
<td>Arithmetic Reasoning</td>
<td>3.1</td>
</tr>
<tr>
<td>Arithmetic Fundamentals</td>
<td>2.9</td>
</tr>
<tr>
<td>Language</td>
<td>2.8</td>
</tr>
<tr>
<td>Total</td>
<td>2.8</td>
</tr>
<tr>
<td>Standard Score</td>
<td>2.8</td>
</tr>
</tbody>
</table>

This was a gain of 10 points over her score on Form A given in September, 1938.

Mental Test Scores

Detroit Kindergarten

C. A. 5-10 M. A. 5-6 I. Q. 94

Given September, 1936

Kuhlman Anderson, copyright 1927, much more difficult than the new edition
First Grade, second semester
C. A. 3-5 M. A. 6-2 I. Q. 97

Given April, 1939

The scores on the Stone Grover Reading Readiness Tests have already been referred to indirectly. For convenience they are tabulated below:

<table>
<thead>
<tr>
<th></th>
<th>I. S.</th>
<th>S. S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>May, 1936</td>
<td>8</td>
<td>35</td>
</tr>
<tr>
<td>Jan., 1937</td>
<td>30</td>
<td>32</td>
</tr>
<tr>
<td>April, 1937</td>
<td>44</td>
<td>not given</td>
</tr>
</tbody>
</table>

The following grades were given at the end of the semester, May, 1939:

<table>
<thead>
<tr>
<th>Reading</th>
<th>Spelling</th>
<th>Writing</th>
<th>Numbers</th>
<th>Language</th>
<th>Drawing</th>
<th>Music</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>P E</td>
<td>E M</td>
<td>M G</td>
<td>E</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A special work book in numbers containing a great amount of reading was provided for Bonnie. She was encouraged to do much reading at home.

Some of her favorites were Peter's Family, Nick and Dick, David's Friends and Down the River Road, Books I and II. Reading aloud with the group
was a method used to counteract her tendency to make regressions. A
feeling of success and confidence was built up by allowing her to come
to the first grade to read to and help a small group. She was a member
of a group where few required special help. This worked to her advantage
so that her particular inadequacies in remembering phonics principles,
using contextual clues, and mastering troublesome words were given
individual attention.

The older sisters both had some difficulty in adjusting to the
school situation and meeting its requirements so the competitive element
was never a factor.

Conclusions and Suggestions—

Since Bonnie's chronological age grade was 3.1 or 3 years, 5 months
when the final test was given, it was decided to condition her to 3-B
to prevent a loss of confidence and the possibility of causing the child
to become a social misfit. Although the tests' results are up to standard,
the daily class work was not always satisfactory. There are still fluctua-
tions causing erratic results which make it hard to determine the child's
academic status.

Measured in terms of growth the results have been most gratifying.

The writer had had several contacts with the subject both in
the home, at school and on visits arranged to the writer's home. She
was interested and quietly responsive. In her sight reading she had
difficulty with prepositions, using them interchangeably and abstract words
such as have, then, where.
She was not a word reader, showed an average amount of ability in attacking new words and read with evident eagerness and pleasure.

Since in all probability Bonnie will be in the same school environment in which her difficulties will be taken into account with sympathetic understanding, her chances for success are not to be discounted.

One factor which has contributed to her growth has been the emphasis placed upon her originality in art and a pleasing voice. This sort of appraisal and appreciation will go far to insure her satisfactory progress.
Case 5  MENTAL INMATURITY, POSSIBLE VISUAL DEFECT, COMPLICATION OF FACTORS
Identifying Data and Home Background

Karen is a nervous, bright appearing, amiable youngster of 7 years, 8 months. She was suggested as an interesting study because of her unusual home background and inability to locate definitely the source of her reading difficulty.

When one and one-half years old she was taken by the mother's aunt and uncle and has since lived with them. Karen's family lives in the neighborhood, and consists of a sister in the third grade, a brother in kindergarten and three sisters of pre-school age. The mother has been a cripple since about the end of grade school, but manages remarkably well in spite of this handicap. The older sister is not a nervous type and all the children play together. However, the aunt assumes responsibility for Karen and usually takes her with her when she goes away from home for any reason. She has a clean comfortable modest home with her relatives and both seem to have her welfare very much at heart. There is little evidence of cultural advantages. They have a cow, the child gets plenty of milk and her home situation would indicate a schedule of regular habits would be adhered to. Karen will play quietly with her dolls and a pet kitten but active games are her favorites. She enjoys sharing in little duties and seems fond of her guardians. The parents are American born, the mother attended the city schools here and Karen was born at this place.

Physical Condition--

Karen's teacher has checked malnutrition and lack of coordination on her health record. The aunt wished that milk might be provided for her niece at school in addition to what she receives at home. The school
report also states that Karen is nervous to the point of jumping and jarring. The writer discovered this in administering an intelligence test and also achievement tests. In a conversation with the school nurse a possibility of visual defects was suggested. The nurse added that the older sister suffered from astigmatism and intimated she might also find the same condition obtained with Karen. She thought she might be able to make this diagnosis in her second year. She has had measles and whooping cough apparently with no serious consequences. The subject is right handed and right eyed.

School Situation and Educational History—

Karen's case is unique in that she was a member of a transition group between the kindergarten and first grade. She, with a few others, seemed immature and lacking in the stability necessary for the complex process of reading. "Before We Read" was used with helpful results especially in observing word characteristics and language development. The social adjustment to first grade was also accomplished later with greater ease, in the opinion of the room teacher. However, Karen's adjustment was still not up to average. The aunt was thought to be over-anxious about the child's progress.

Monroe's Reading Aptitude Test given in September, 1938, showed a score of 58 which corresponded with the class median. Her oral performance did not measure up to this predictive work. Her reading is marked by regressions, confusions and omissions. She does her poorest work in reading and excels in music. Karen has ability in interpreting music into rhythmic expression and pictures into imaginary stories. She enjoys fanciful tales and likes to pretend in play. More stability is
is noted by her teacher but she is selfish in the play-house, probably because she plays so much alone. The sister in the third grade, a pleasing youngster, repeated 1-A and the brother in kindergarten has been retained.

A summary of her school record shows:

Kindergarten--2 terms

First Grade--3 terms--Promoted to 2-B, May, 1939, with the following grades:

<table>
<thead>
<tr>
<th>Reading</th>
<th>Language</th>
<th>Music</th>
<th>Drawing</th>
</tr>
</thead>
<tbody>
<tr>
<td>G</td>
<td>G</td>
<td></td>
<td>M</td>
</tr>
</tbody>
</table>

Her school attendance was marked by unusual absence only during her Pre-Primer work.

The results of the tests administered by the writer in June are tabulated below:

Detroit Word Recognition

<table>
<thead>
<tr>
<th>Individual Score</th>
<th>26</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Score for normal group</td>
<td>20</td>
</tr>
</tbody>
</table>

Gates Primary Reading Test

Type I Word Recognition

<table>
<thead>
<tr>
<th>Individual Score</th>
<th>2.27</th>
</tr>
</thead>
<tbody>
<tr>
<td>May have run over time, was interrupted</td>
<td></td>
</tr>
</tbody>
</table>

Type II Sentence Reading

| Individual Score | 2.40 |

Type III Paragraph Reading

| Individual Score | 2.50 |

The subject's interest span is so short and her attention is so easily distracted it is altogether probable the scores would not have been so satisfactory, had the tests been taken with a group where the conditions were less well controlled. However, these results are evidence that the problem is to an undetermined extent an emotional one.
Detroit First Grade Intelligence Test
M. A. 7-7 I. Q. 98
Kuhlman Anderson Intelligence Test for Grade I (Second Semester)
M. A. 7-7 I. Q. 98

On the Monroe's Reading Aptitude Test, this low percentile, 39, is checked against visual ability, 1939, again indicating a possible eye defect.

Karen has had access to much easy and interesting material during the year and methods of attacking words and using word clues have been emphasized. She lacks in ability to apply phonic principles though those have been stressed.

Conclusions and Suggestions--

Karen has been reading at intervals this summer for the writer and reads with enjoyment when she has the undivided attention of her helper. Although she is inclined to transpose, substitute and omit, when left to right orientation and accuracy of thought interpretation is emphasized she responds well and has a cooperative attitude. A maximum of individual help, material selected from pre-primers and primers suited to her personal interests and a "nerve soothing" environment are requisite for success for this child. She seems to possess this in the home, but it may be that her nervous condition is aggravated by the not wholly avoidable regimentation of the school system. Modifying the sight method by a more pronounced phonetic approach might prove helpful in relieving poor visual memory.

The relatives are to be commended and there is no question but that they are trying to the best of their ability to exercise judgment and are overly solicitous for the child's welfare. Yet the fact remains
that the situation is an unnatural one, and the home is one where adult
standards in the logic of things are maintained.

A thorough physical examination, with especial attention to the
discovery of visual defects would seem the first step in the solution
of Karen's problem. The school nurse has suggested she may be able to
arrange for at least the latter, next fall.

As has been indicated, the knowledge gained in testing points quite
definitely to the fact that there are social and emotional factors which
are complicating the actual reading problem. A physical diagnosis
would, at least, help in determining what should be the next step.
Case 6  A COMBINATION OF MENTAL AND PHYSICAL HANDICAPS

Identifying Data and Home Background

Carl's case illustrates the need of taking into account the intimate relationship of the physical and mental factors in diagnosing the reading problem. Of slight build, he impresses one at a casual glance as being under par physically. On closer observation his lack of ruddiness and quick uncertain movements bear out one's first impression. Carl is now 9 years, 9 months of age in the 2-A class and has been in school 5 years including kindergarten. He is a native Kansan, of Irish and Dutch descent. The father is a mechanic; the mother, a sane intelligent woman, was a registered nurse. Carl has a sister 12, and a little brother of pre-school age. The mother is a good manager and there is an atmosphere suggestive of happy relations in their modest, orderly home. The father is regularly employed but the limited income does not permit of many cultural advantages. Both parents are deeply interested in the children's welfare, and the mother seizes the opportunities at hand for wholesome recreation. She has expressed the wish that they lived nearer the parks. The neighborhood is a good one, and Carl plays well with his playmates, but is somewhat high-strung. He likes best to get hold of a hammer and nails and work out his own ideas. The father does not always find his tools where he has placed them, due to Carl's tendencies to construct. Carl lacks in aggressiveness, but has a sense of humor, and a happy objective attitude although rather a casual manner. He is not emotionally upset because of his retardation, much to his mother's disappointment, but looks at it in a rather a matter of fact way, if he is inclined to think
about it, one infers.

Physical Conditions—

Some of the physical factors involved in Carl's problem have been suggested. He got off with a bad start, physically, at the very beginning. While he was not an instrument baby, the birth was premature and the delivery was unusually hard resulting in an arm displacement which was not discovered until the child's evident discomfort made an examination necessary. At this time the doctor suggested that the condition of the left eye indicated trouble. Later the diagnosis was confirmed by the loss of sight in this eye. Not infrequently, possible annoyance, due to the unnatural adjustment the subject was forced to make, was suggested by his behavior. Carl's development has been slow about talking and especially eating. He seemed to lack motor coordination. He is left handed and there are many family tendencies to left handedness. The father is definitely left-handed, and the mother is also in everything except writing. Carl has three left-handed cousins. His sinistrad tendency suggests the possibility that he was normally left eyed—so maybe a victim of mixed laterality because of his misfortune. He has had whooping cough and measles but with no lasting effects. He has been subject to some extent to tonsillitis. Carl has had the diphtheria vaccination. He is encouraged to rest but the mother reports only moderate success. He is a light eater and his eating habits constitute a real problem. He is very fond of sweets, and seems to have a pronounced dislike for many nourishing foods, although he does like fruit.

This unusual array of negative evidence in relation to the health problem convinces one that the physical aspect of Carl's difficulty merits serious consideration.
School Situation and Educational History—

Carl entered kindergarten in the fall of 1934, with a chronological age of 4 years, 11 months, a mental age of 4 years, 7 months and an I.Q. of 93 on the Detroit Kindergarten Test. In April, 1935, on the Detroit First Grade Test, he earned an I.Q. of 97, his mental age being 5 years, 1 month, and his chronological age, 5 years, 7 months. In the kindergarten he was reported as showing many signs of immaturity, as manifested by a short attention span, flightiness and dependency. In addition, he was far from sturdy. It was decided to retain Carl in the kindergarten. He changed schools the next year but had the same kindergarten teacher.

In January, 1936, he made a score of 24 on the Stone Grover Reading Readiness Test, the standard score being 33. Deciding a change might act as a spur and stimulate the subject to increased effort, he was sent to first grade. He failed to make the adjustment to the new situation, either academically or socially, so was retained at the end of the spring term. In September he changed back to the school he formerly attended which was the one in which the writer was located at the time. He still gave many evidences of instability but made average progress in reading. His social adjustment was acceptable. During the next semester he lagged behind because of inability to concentrate either in directed or unsupervised procedures. He showed signs of fatigue quickly which was attributed to his lack of nutrition. A conference with the parents resulted in a decision to retain Carl in the 1-A group although the mother was reluctant to do this. She was amenable to reason, and when the danger was pointed out of over-taxing the youngster, with his resistance so far below par, the mother was convinced.
Owing to a new location, the next year he changed back to the other school that he had attended and made normal progress. In September, 1938, we find him in the 2-A group, in which he remained throughout the year, being promoted in May to 3-B. In September, 1938, his score on the Progressive Achievement Test, Form A, was 2.0, Standard Score 2.5; in May his score on the same test, Form B, was 2.6, Standard Score 2.8, a gain of 6 points during the year.

In September, his scores in reading showed progress, as indicated by the following results:

- Reading Vocabulary: 1.8
- Reading Comprehension: 2.0

In May, the scores were as follows:

- Reading Vocabulary: 2.3
- Reading Comprehension: 3.0

Note that he is above the standard 2.6 in comprehension.

His second grade teacher put her finger on the same factors, mental immaturity and lack of physical vigor to keep pace with the demands of the curriculum, as the causes of his difficulty.

In a conversation with the child this summer, he still maintained that detached attitude toward his problem. It has been especially hard for the mother to adjust herself to his attitude, relative to his unsatisfactory school work, because the sister does superior work. Maurine entered the writer's room with no kindergarten training. She was well balanced emotionally, sturdy in build and well adjusted socially. Maurine had a normal birth, and has never experienced any serious physical anomalies or temporary disturbances.

The remedial work attempted has been in the way of fixing and developing a basic vocabulary, working for accuracy and building up a
background for interpreting material read.

The measures used include methods of developing visual memory, intensive phonetic drill, and broadening background through group activities. The child's interests were satisfied partially through two books, "Down the River Road" and "Round About."

He read eagerly for the writer, with few regressions or repetitions, from books on about the first grade reader level. A few more difficult ones were read smoothly and appreciatively. One, "The Little Farmers," was especially enjoyed.

Conclusions and Suggestions--

Carl's case is no doubt exceptional. One must take into account his limitations, determine his rate of progress, and learn not to expect him to adapt himself to the standard of those better equipped constitutionally.

There is an abundance of material now available in the school libraries which will meet Carl's needs. Encouragement and understanding will further his development more than attention to minor reading difficulties. This fact seems to have been sensed in the handling of his case. His objective attitude, as long as he has a normal desire to succeed, is his greatest asset. The mother's sane, constructive point of view, will contribute most to Carl's satisfactory adjustment.
Case 7  MENTAL IMMATUREY, EMOTIONAL INSTABILITY, AND A CROSS MOTOR PATTERN

Identifying Data and Home Background

Bennie Joe is a colored urchin of small stature and large appealing brown eyes. He is 8 years, 8 months of age. He was promoted to the second grade at the close of the spring term. He was born in Emporia in a home much below the average in economic and cultural advantages. He has three brothers, aged 12, 6, and 3. Also two sisters aged 11 and 1½ years. The parents are intelligent and of unusual refinement, although neither finished high school. The father reads a great deal and both parents are concerned because of Bennie Joe's failure to advance normally. The father, an unskilled laborer, does not have steady employment. There was something almost pathetic about the mother's attempts to make the home neat and attractive. One was impressed with the fact that she had made the most of what was at hand. The family has lived at this place for some time.

The atmosphere of the home seems to be harmonious although not especially a happy one. The economic insecurity may explain the seeming lack which was sensed. The neighbors are practically all people of their own race whose economic status impresses one as being somewhat better than that of the subject's parents. There are very few toys but Bennie Joe has some originality and initiative, perhaps born of necessity, and became quite voluble about the car he had constructed. He made a train for the toy shop, a crude affair but most of the group became keenly interested in the project and wanted to help, so contagious was his enthusiasm. He later took it home and played Santa Claus for his next younger brother. Christmas is by necessity a drab affair in some
of these homes, unless one can develop a pride in making gifts.

Bennie Joe is dependent and emotionally not well balanced. He gives up easily unless he constantly receives kindly encouragement. He is very responsive to commendation.

Physical Conditions--

Bennie Joe's birth was normal. He talked at about 17 months and walked at 1 year. He has no constitutional defects. His eating and sleeping habits are regular. There is no doubt he does not get the proper food and that his vitality is thereby lowered. He was always interested in the school's activities but at times appeared listless and easily irritated. He has a cross motor pattern, being right-handed and left-eyed. There is no record of serious illness.

School Situation and Educational History--

Bennie Joe entered kindergarten in January, 1935. He earned a score of 6 on the Stone Grover Reading Readiness Test in May, the standard score being 36. Because of his regressive tendencies, his emotional instability, and limited background, he was retained in the kindergarten for another year. He developed in self-control and became more tenacious and attentive through opportunities especially created to cultivate these qualities. In January, 1937, the Stone Grover Test was repeated and he brought his score to 25, still ten points below standard. The judgment of the kindergarten teacher was that he would profit more from a new situation, so he was sent to first grade. He still showed definite signs of immaturity. He found difficulty in retaining group directions, but was interested and attentive in supervised periods. He was unduly sensitive and cried easily. He responded to commendations by sticking
to his work until completed, although the quality was usually inferior. Since there had been small increments of growth in maturity and stability, it was decided to let him go on with the group rather than run the risk of lowering his morale through a sense of failure. He continued to make some improvement, but was not able to keep pace with his classmates. He was provided with reading on his own level, and an attempt was made to build up a feeling of success by pointing out to him definite signs of growth, in different phases of his work. He was dissatisfied, unsocial at times, and resentful that his work did not compare favorably with some who were making better progress. It is seldom one finds a child who senses his weaknesses, and is inclined to make this comparison, when the competitive element is not allowed consciously to become a factor.

Sennie Joe was retained in 1-A, and made some progress, but was never able to adjust himself to this arrangement.

His interest was spasmodic, the results of his work erratic, and his study habits, undependable. His sensitivity probably caused his attitude to be determined or affected by the economic insecurity of the home. No doubt, too, the nutrition was not satisfactory many times.

A changed situation and a low achievement in September, 1938, placed him again in 1-A. He had no interest in reading activities at first, but his interest was stimulated partially through many new and attractive books at his own level. In the new situation, no doubt other methods of approach to his problem were used, with moderate success. Next year he will enter the 2-B class.

He has been reading for the writer at intervals this summer. He has made marked growth in ability to concentrate and in independence in attacking new words. His reading is on the whole smooth and shows
appreciation. He read with enjoyment from *Friends, Playfellows, Elson Basic First Reader* and *Little Farmers*. He asked to take the book "Who Am I" home and reported that he had read it to his mother. That he is still emotionally unadjusted was demonstrated when he was taking the Gates Reading Tests. When he reached the difficult parts he could not keep back the tears although he did not cry audibly. When the explanation was made that even third graders wouldn't be able to get all parts correctly, he seemed satisfied and tried to get all possible. His concentration on the Detroit Advanced First Grade Intelligence Test was remarkable.

His progress in reading is indicated by the following scores on tests given by the writer in June, 1938:

<table>
<thead>
<tr>
<th>Test</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detroit Word Recognition Test</td>
<td>25</td>
</tr>
<tr>
<td>Standard Score for Normal Group</td>
<td>20</td>
</tr>
<tr>
<td>Gates Primary Reading Test</td>
<td></td>
</tr>
<tr>
<td>Type I</td>
<td>2.20</td>
</tr>
<tr>
<td>Type II</td>
<td>2.00</td>
</tr>
<tr>
<td>Type III</td>
<td>1.95</td>
</tr>
<tr>
<td>Standard Score for Gates Primary Reading Test</td>
<td>1.9 in May.</td>
</tr>
</tbody>
</table>

On the Advanced Detroit First Grade Intelligence Test also administered by the writer in June, 1938, the results were:

- **M. A. 8-9**
  - (This is 11 points above the average for northern negroes.)

He earned the following grades according to the term report in May, 1938:

- **Reading M**
- **Writing M**
- **Language P**
- **Drawing M**
- **Music C**

The older brother was even more immature than Bennie Joe when he

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*J. B. Stroud, loc. cit.*
entered first grade, although he had spent three terms in kindergarten. He repeated in first grade, also later, but was handicapped by ear trouble. The older sister made satisfactory progress. The other boy of school age made a good adjustment to first grade this last year and his work was superior to Bennie Joe's.

Conclusions and Suggestions--

This history bears out the conviction that the subject's problem is to a large extent emotional. That unpredictable and intangible factors have interfered with his progress is a tenable conclusion. The fact that the little brother has the advantage, as far as achievement is concerned, is not to be disregarded as a disturbing element.

Bennie Joe is making reasonable progress, is unquestionably interested, and is deriving a satisfaction from reading.

If he can be helped to develop a pride in his brother's success, and to a realization that we do not all achieve in the same way, the effect will be wholesome.

That this suggestion may seem abstract is conceded, but the problem has always been one which is not reducible to a concrete analysis. The puzzling factor is clearly subjective, not objective.
Case 8

PHYSICAL HANDICAP AS WELL AS
EMOTIONAL AND SOCIAL MALADJUSTMENT

Identifying Data and Home Background

Fritz, aged 7 years, 10 months, has the intent, slightly bewildered expression characteristic of those who do not hear well. His handicap has developed extremely regressive tendencies, and a negativistic attitude toward reading. He was born in this county, and his parents have resided at this place for some time. Fritz is of German descent. There are five siblings, a sister and two brothers older, and a sister and a brother younger. The younger sister was conditioned to first grade from kindergarten in the spring because of mental immaturity and lack of social adjustment, according to the mother. The older sister has always had more or less difficulty. An unresponsive attitude is the mother's explanation. The other boys of school age are well adjusted and do satisfactory work. The eldest boy has made his home with a rural family for some time, although he attended school and stayed at home this last year. The father has encouraged this arrangement which was made with the cooperation of the county juvenile worker. There has never been any delinquency on the boy's part and economic reasons seem to explain his unusual situation, in which the boy is happy and satisfied. As the reader has no doubt inferred, the economic status is much below average. There is no indication of cultural advantages in the home, and the residents of the neighborhood, as a whole, would be classed as on a similar economic status. The father is employed on a W. P. A. project. He has a reserved manner, but was very appreciative of the interest taken in Fritz. The mother seems inadequate to help solve the problem, which is not to be wondered at, considering the limitations of the environment. An
incident, which may be of some significance in appreciating and appraising the mother's personality, occurred in connection with the out-door presentation of "As You Like It." She remarked, a day or two later, "the children all took cold, but we wanted to see it and did." She too was very eager for any word of encouragement relative to Fritz's progress. This child's opportunities for community experiences or for social development are negligible. He has few toys, and his play interests are practically limited to constructing from odds and ends. He confided to the writer he was making a boat which he expected to use on the lake nearby. There are few children of his own race in the immediate neighborhood.

On the first meeting, after having met him only casually once or twice since he had been a member of the writer's classes, he was extremely shy, refusing to come into the room until coaxed. Although later he seemed friendly and read with a restrained sort of pleasure, on the occasion of the next call, he again "went back into his shell" so to speak.

It was suggested that he go to the writer's home in order that he might select a book, himself. He willingly went but even then, it was some time before the conversation was more than a monologue. When he came back of his own accord, to exchange his book for another, it would seem one hurdle had been surmounted.

Physical Condition---

Fritz's birth was normal. He walked at about two years of age. When he should have been picking up words, he had ear trouble, which undoubtedly has made a difference in his vocabulary. He has had
whooping cough, measles, and mumps, this last year. A test shows definite
dextrad laterality. In the school nurse's check up given in May, 1939,
she states, "Nourishment not good, underweight. Teeth good but has some
malformation of upper dental arch, due to mouth breathing. Is slow in
his dental development. Tonsils and adenoids were removed before he
was four. He was an extreme adenoil case as a baby, and a mouth-breather.
Has had a lot of ear abscesses each winter from babyhood up to the present,
one ear drum will carry permanent impairment. He has some hearing loss,
about 6/ if the audiometer test at that age is to be relied upon. As
I recall testing him with the audiometer, I noticed especially how well
he concentrated on the test. No doubt this ear trouble and hearing loss
dates back to the time when he first began to talk." Such a record
throws no little light on Fritz's problem and points out a point of attack.
School Situation and Educational History——

Fritz entered kindergarten in September, 1936. His score on the
Stone Grover Reading Readiness Test given in April, 1937, was 27;
Standard Score, 35; C. A., 5 years, 9 months. On the Detroit First Grade
Intelligence Test administered in May, 1937, he earned an M. A. of 6-7;
the C. A. was 5-9, giving an I. Q. of 114.

Fritz was assigned to the first grade with others of a low group.
It would seem with his intelligence, he might compensate to a large
measure for his withdrawing tendencies, shyness and embarrassment, and
his physical handicap. However, he showed lack of confidence in himself,
even after definite efforts were repeatedly made to call attention to
his successes. He was extremely negative toward reading and his
whole body became tense if asked to contribute. The nurse remarked
when she had been asked to observe in order to make suggestions, that you could even observe this tension in his toes. His attitude was never resentful or antagonistic, in fact, he seemed happy enough in the school environment with this one exception. If asked to do some unsupervised work in conjunction with reading, he listened intently and always had a neat, unusually attractive product, even though there were reading errors. However, he succeeded better with the silent reading activities than with the oral. Special attention was given to phonetic training, but with negligible results. It is probable that the outcomes of this training would have been more encouraging, had there been sufficient time for individual help in this particular case. The number of others in this group needing special instruction precluded the possibility of more individual attention to his needs. Attempts were made to build up his vocabulary through story-telling, recounting of individual experiences and other methods but he contributed little to these activities. The mother recognized his reading disability, and concurred in the decision to retain Fritz in first grade.

In September, 1938, aged 7 years, 2 months, he was given the Monroe Reading Attitude Test which resulted in a score of 61, 100 being the highest possible score. On this test, he made his lowest percentile in language, 6, and the next lowest in auditory ability, 27. His high percentile was 92, in motor ability.

His last first grade teacher reports Fritz as uninterested in reading activities. She regards him as not well balanced emotionally, dependent, shy, and lacking in social experiences. His persistence is rated as below average. The reading defects checked are transpositions and finger pointing. She attributes his lack of comprehension to a
limited vocabulary and low degree of accuracy. The remedial measures
used were attempts to develop visual memory and intensive phonetic drill.
That these efforts were not especially fruitful is indicated by a grade
of P in reading on the term sheet. His grades in the other subjects were
Writing C, Language M, Drawing C, and Music C.

His attendance has been irregular, missing thirty-six days, which
is a partial explanation of his retardation.

Fritz read for the writer on two or three different occasions since
school closed in May. When allowed to select his stories, he chose books
on the pre-primer level. He also read from the first part of Pots and
Playtimes, a primer, with a minimum of errors. He showed no strain or
tension, seemed eager to read and there were no evidences of fatigue.
He remarked he liked to "skip around" and apparently chose the parts
that he could read with a feeling of success.

On a series of tests given on these visits, Fritz earned the
following scores:

Detroit Word Recognition Test
Individual Score 21
Standard Score for
normal group 20

Gates Primary Reading Tests
Type I Word Recognition 1.85
Type II Sentence Reading 2.20
Type III Paragraph Reading 1.98

Conclusions and Suggestions--

The facts assembled and the observations made lead to the
conclusion that Fritz's physical handicap has had more far-reaching effects
than would result from the hearing defect in itself. From one point of
view, this is of minor importance. The social and especially the emotional
angle is the most serious aspect of the case.

An arrangement whereby Fritz might have more individual attention would accomplish much. A sound phonic basis, combined with a plan for checking vocabulary difficulties, would insure an improvement. Fritz already reads with pleasure on a level in which he meets a minimum of new words.

If he might be kept in a group in which he achieved at least a medium of success, the undesirable personality traits would be modified, and perhaps finally replaced by socially acceptable ones.
Case 9  A MEAGRE BACKGROUND
BOTH PARENTS, MUTES

Identifying Data and Home Background

Nancy is an example of a child who achieved in spite of her handicaps, rather than as a result of her attributes. A study of her case was made because of what might have seemed insurmountable hurdles to one less fortunately equipped by nature. Her achievement is not due primarily to native intelligence, as it is customarily measured, but to an alert mind and an extra amount of stick-to-it-ivness in her make-up.

Nancy, just completing first grade, has lived her six years and eleven months at this place, where the father is employed as a pressman. Both parents are high school graduates of schools for mutes. There is one boy in high-school. The economic status of the family is secure, although the income requires careful budgeting. The home is a modest one with ample space for poultry and garden, as well as a place to play. The choice of this site for a home is an indication of the thrift and level-headedness of the parents. The mother impresses one as having a sane, objective outlook, absorbed in the welfare of her child. The father is an efficient, dependable workman, with a sense of humor to round out a wholesome personality. After all, perhaps, the handicap is not as great as one would judge on first thought. The brother is employed after school hours during the school year, and also in the summer time. This arrangement leaves the little sister many hours with out normal companionship, and almost wholly dependent upon her own resources for amusement. The nearest little neighbor is perhaps a block away, and she and Nancy sometimes play together. However, this fortunate
circumstance, at times, becomes a source of friction, since Nancy has yet
to adjust herself to the fact that people can have many playmates, not
just one. Her little friend is inclined to make contacts easily, and
also has more opportunities for social experiences of which Nancy is
naturally deprived; neither does this child enjoy many cultural advantages.
The bright side of the picture is that the brother is deeply interested
in his sister and utilizes opportunities to help her that he might otherwise
spent for recreation.
Physical Condition--

Nancy's birth was normal, she walked before the average age but
did not learn to talk until much later, between two and three years of
age, through the aid of her brother and interested relatives. The child's
physical build would no doubt be below normal for her age. She appears
to be well nourished, but her mother says she is a light eater.

While Nancy made her lowest scores in visual and auditory abilities,
Marion Monroe states in her Reading Aptitude Test Manual that this may
be due to poor visual and auditory memory rather than to defects of the
sense organs involved. Since the subject was probably bewildered at the
amazing number of adjustments she was expected to make at her entrance
to first grade, and since special efforts have been made to correct
these deficiencies, resulting in improvement, there is no need to
place too much emphasis on these results.

There is no suggestion of a speech defect. Her score on the
Articulation phase of the Monroe Reading Aptitude Test was 92, the
equivalent of 100 in percentile terms, the highest possible. Her
coordination seems to be good and her score on motor ability, 84—
equivalent to 95, in terms of percentile. Her first grade teacher
reports her as above average in rhythmical work with music, as skipping, running, and dancing. She is right-handed and left-eyed.

School History and Educational Background—

Nancy entered kindergarten in September, 1937, passing to first grade at the close of the term. She has experienced some difficulty from the first in making the social adjustment. She has an abnormal craving for companionship, that is, abnormal in the ordinary sense, but perfectly normal in her situation. She is quick to imagine slights and feels if a little friend with whom she had been more or less intimate "pairs off" with someone else, "she does not like me," as Nancy puts it. She is overcoming this maladjustment to a remarkable degree through the efforts of her teachers. Both have enlisted the cooperation of the brother in helping the mother who is also sensitive in this respect, to view the matter more objectively, and to encourage Nancy to cultivate a number of little friends. Her hunger for someone to talk to is shown by her desire to remain after school on one pretext or another. On these occasions, when permission was given, she wanted to chatter constantly. Too, she was adept in seizing upon opportunities to go home with little playmates.

In school she showed much independence, initiative and mental alertness. If a story were being told, an experience related, or a direction given which she did not fully understand, she might ask "what does that word mean?"—referring to any word with which she was not familiar. Or she might request, "please write it down for me; I don't know how to say that to mother, yet." Proof that her retentive ability is above average is furnished by the remark of her first grade teacher, "It was very infrequently she ever asked me to repeat an
explanation or definition. She added words to her vocabulary at a remarkable rate. She continued to ask me much less frequently to write out messages, showing she also was growing in the use of her parent's language." The mother is greatly concerned about the child's advancement and may visit school two or three times a week.

Although Nancy had a limited vocabulary, and lacked the broadening experiences at the end of her kindergarten year, which are a factor in learning to read, it was decided advancement would act as a stimulation to one of her temperament and mental abilities. She was placed in the lowest group and remained there for some time. Her work habits were so superior, her concentration so unusual, and she was so persistent in asking to be placed in the next group that it was arranged for her to read in both sections. She demonstrated her ability to keep up with the next higher group, and later through the same means, gained another point by being permitted to try the work with the highest division while still doing work on the middle level. Teachers are very careful not to make distinctions in naming the groups, or in any other manner which will reveal the status and the teacher's judgment of the various sections. The fact that Nancy recognized this difference is an indication of her mental alertness. She was never able to leave the middle division permanently. She is above average in art work, and was the best leader in band. Nancy went to the piano between stories and played a little melody which was recognized as a school song. When questioned, she said she had never played the piano before but a little friend played on the accordion, and of course the tune was the same on the piano.
In administering the Kuhlman Anderson Intelligence Test for First Grade, Second Semester in June, 1939, she showed remarkable concentration. She earned an I. Q. of 107 and an M. A. of 7.5. This is a gain of 10 points over her I. Q. on the Detroit First Grade Intelligence Test, given in May, 1938. Possibly the results would be even more favorable had the same test been used.

The Gates Primary Tests, Types I, II, and III were also given as well as the Detroit Word Recognition Test. Her progress is shown by the following scores:

<table>
<thead>
<tr>
<th>Gates Primary Tests</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Type I Word Recognition</td>
<td>2.55</td>
</tr>
<tr>
<td>Type II Sentence Reading</td>
<td>5.10</td>
</tr>
<tr>
<td>Type III Paragraph Reading</td>
<td>2.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Detroit Word Recognition Test</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual Score</td>
<td>26</td>
</tr>
<tr>
<td>Standard Score for normal group</td>
<td>20</td>
</tr>
</tbody>
</table>

In these tests she made use of picture and contextual clues and applied phonic principles, intelligently. In only one instance, when she marked pens instead of cent, did she fail to mark a word in which the beginning sound was similar, even though it was not the correct one, and then she said, "Oh, yes, penny." While taking these tests, there was an unavoidable interruption which might easily have distracted her attention, but it failed to do so except for a moment.

She did not recognize the word kitchen even after the test, she did not seem to sense its meaning. She listened carefully when an explanation was made, and different rooms were pointed out. On the next visit she said, "I can name these rooms." She was interested in the flower boxes and asked the name of each flower. It was evident her interest was genuine and she was not just asking questions. She would be silent.
at times, appearing to think over explanations that had been made.

Conclusions and Suggestions—

The history of this child is included to show that although some significant factors may be lacking, if others are present to an unusual degree, these deficiencies may be compensated for and also developed or supplied.

This study shows that Nancy was fairly well socially adjusted at the end of the first grade, and that her pleasure in expressing herself through the spoken word almost went to the extreme. Probably the greatest gains have been made in the broadening of experiences, and growth in language abilities. Many of the impeding factors as to visual and auditory abilities have been partially eliminated through the use of Marion Monroe's suggestions and similar measures worked out by her teacher who in no small degree is helping her to make this unusual adjustment.

Nancy was shown her ability to progress as a result of the ordinary methods of instruction, plus individual attention to her particular needs. A continuation of this program will no doubt result in better than average progress.
Case 10

IDENTIFYING DATA AND HOME BACKGROUND

Peter with a chronological age of 9 years, 9 months, has just completed the third grade. He was born here and is of French and English nationality. His father is employed in a local business concern, and holds a very responsible position. He has a genial personality and is a "good mixer." The mother received no education beyond the high school level, but is intelligent and charming. Both are keenly interested in their son and the mother was inclined to be quite sensitive about the boy's retardation. This attitude in turn influenced Peter's behavior, causing him to develop extremely regressive traits. There is one older boy in Junior High School who has not been handicapped by constitutional difficulties as is the case with Peter and who has made better than average progress in school. This aspect of the case has been a disturbing element from the time of Peter's entrance into first grade. The brother was naturally unable to understand the younger boy's problem, owing to the fact he had experienced so little difficulty in school. From these facts, it will be a mistake to draw the conclusion that the subject gives the impression of being dull and unresponsive. On the contrary, he has not only character but also personality.

Another aspect of the situation, which has complicated this problem, is the economic status of the family, which at about the time the younger child entered school, underwent a change. There had been cultural advantages and a general state of harmony and well-being in the
home. An unfortunate investment and business move brought insecurity with its attendant worries and nervous strain. An additional factor which could have indirectly had an unfavorable effect on the case has to do with the frequent visits of a grandmother who was sincerely interested but possibly over-anxious about the boy's progress. French was heard on the occasion of the paternal grandmother's visits.

At the date of this report the family is back on its former economic status. The father has a regular income, sufficient to provide the family with some luxuries and they own a home in a neighborhood above the average, I presume. Peter would be classed as an introvert type, but he is liked by his playmates, and enjoys the games popular with boys of his age.

The mother is conscientious about regulating the schedule of the home so that regular habits are formed. This was not possible during the time when unfavorable circumstances took the mother away from the home at least part of the time.

The family has a car, takes little trips, and enjoys the social advantages of perhaps the average American family.

Physical Condition--

The subject's size and condition now compares well with norms. His birth was normal. He walked at the age of one year, but was slow in talking and cutting teeth. There are no defects of vision reported, but difficulty with hearing is checked on the health record. He has trouble with hardened wax collecting in his ears, and it is sometimes necessary to go to a specialist at these times.
Peter has had the usual children's diseases, measles, mumps, and chickenpox, as well as a serious case of scarlet fever during the close of his first term in first grade. This illness left him considerably below par for some time.

Peter is left-handed and right-eyed.

There is a speech defect resembling a brogue, which is similar to the father's speech pattern. An accident, dating back to his pre-school days, may or may not have a bearing on the problem. There was a slight head injury but apparently there were no serious after-effects. Treatments were taken for a time.

School Situation and Educational Background—

Peter enrolled in Kindergarten in September, 1954. His kindergarten teacher reported him as mentally immature. He was dependent, lacked initiative, had a short attention span, and also poor motor coordination. His work habits were good, and he was promoted to first grade on condition with an average of M. In the first grade he was interested but not alert. He never left a task until it was completed, and his work was neat, even artistic, although at times it lacked accuracy. This was attributed to his hearing difficulty, since it was felt he did not always get oral directions. However, a special effort was made to gain his attention before giving instructions. He had a rich background of general information, and his contributions were of value. He was never disposed to "just talk" which is not an uncommon fault among primary pupils. He was not a word reader, and his comprehension was good when the material was on his level. His trouble lay in building up a basic vocabulary. He failed to get much from his classmates. Then his
illness further augmented his difficulties. At the close of the year his progress had been highly satisfactory in terms of growth. He had gained in confidence, his attention span was longer, and his attitude was good toward all phases of the program. In the academic work his achievement was below average. Although his enunciation was not distinct, he applied phonetic principles fairly well, and used other clues for unlocking unfamiliar words. His stock of sight words was low, but he had a good store of meanings. In deciding what would be to Peter's best interest, the major problem was to avoid a sense of failure on his part. He had already come to recognize the fact that the two reading groups represented different levels of ability, and he was greatly concerned because he was not in the higher division. The final decision was that his work was not definitely poor enough to warrant a retention. Also, it was thought with his qualities, advancement might act as a stimulation. If he could be in school regularly the chances were he might succeed.

However, his 2-B work was anything but satisfactory. After another term in 2-B, he was promoted to 2-A, but with a grade of F in reading. The same was true of his achievement in 3-B, but he brought his grade in spelling from F in 2-A to a C in the next class.

Peter was always inclined to be tense and artificial in oral reading, and this condition was aggravated. His performance when alone with his mother or his tutor, who was employed for him the following summer, was superior to his group work. That he had developed an attitude of frustration was evidenced by his reply to his tutor when she first
asked him to read to her, "I know I can't, but I'll try." There was a small increment of growth during the period he had special help commensurate with the limited time. Special attention was given to enunciation and reversals. Peter's writing is backward or over-handed.

The last year has been an unusually happy one for Peter. In the first place, the tutor, who had lived in the home, and had an unusual opportunity to sympathetically appraise the situation, helped to bring about a change in the attitude of the mother, and consequently that of the brother toward the subject's problem. The mother continued to encourage the boy but did not try to urge him beyond his ability to achieve without undue effort. In fact, she persuaded him to enter the 3-B class in the fall (he had transferred to another school) so that he would have a "straight promotion"—that is, he would have completed an entire grade's work—at the end of the year. He did this rather reluctantly at first, but became so satisfied in his new situation, and relished so much the taste of success that all regrets were forgotten. His mother thought his improvement might be due partially to head treatments similar to the kind received after the accident.

When his home letter contained a report of excellent in the basic subjects, the work of rehabilitation was complete. In estimating the quality of a pupil's work, each child is considered in relation to his own ability, and Peter's interest kept him working up to the limit of his power to achieve. In the fall he had made a score of 2.8 on the Progressive Achievement Test, 2 points below the standard for 3-B. In May he raised the score to 3.9, a gain of 11 points and 1 point above standard. His scores in reading vocabulary were 3.0 and 3.8. In reading
comprehension he made 2.8 and 3.5. His greatest increment of growth was indicated by the gain in language. He received a score of 2.6 in September, while in May, the score was 4.0. On the Detroit First Grade Intelligence Test, in 1935, Peter received an I. Q. of 116. On the Kuhlman Anderson Test, in 1936, his I. Q. was 95. Experience with both tests has given similar results in the majority of cases—that is, the Kuhlman Anderson scores have been usually lower.

Conclusions and Suggestions—

This case represents a personality type in which the reading difficulty is merely a phase of a more complex problem related to adjustment. It is a case which called for sympathetic understanding and guidance. The reading instruction was of minor importance.

The reading program which has provided Peter with an abundance of material on his level and adapted to his interests will be continued. If he shows the same poise and manifests the same eagerness and ability in reading that he did when invited to read for the first grade, the solution for his problem has been found.
From these investigations one fact stands out which has already been expressed with much force and clarity:

"Learning to read is an individual job. Each child has his own peculiar interests, his own rate of mental development, a particular combination of physical characteristics, and a certain pattern of emotional attitudes. These factors inevitably affect his rate of learning, and his ability to concentrate, cooperate, and carry responsibility. It is necessary, therefore, to provide for much individualization of instruction in primary reading."

More important, even, than learning to read, is the changed attitude which results from the satisfaction that achievement brings, and this makes it less likely that success will be sought in undesirable ways.

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CHAPTER VI

REMEDIAL TREATMENT AND RECOMMENDATIONS

CORRECTIVE MEASURES UNDERTAKEN

Before suggesting further remedial measures, based on data which appear in Chapter IV, it seems wise to review briefly the work which has been done to improve reading in the Emporia Public Schools.

An intensive program which began in September included the following phases:

1. Attention to physical needs of children.
2. Consideration of the social and emotional needs of children, and application of mental hygiene principles to the problem.
3. A testing program.
   Monroe's Reading Aptitude Tests administered to all first grades.
   Progressive Achievement Test administered to grades 2 to 6.
4. Analysis by teachers and children of the various phases of the test and the diagnostic profiles.
5. Grade meetings called for the purpose of studying test results and setting up tentative remedial programs, in terms of materials and techniques, to care for pronounced deficiencies.
6. Meetings of the first grade teachers discussed readiness in relation to visual memory, vocabulary, pronunciation and enunciation.
7. Meetings of second and third grade teachers dealt with phases of readiness applicable to those levels.
8. On May 1, 1939, an alternate form of the Progressive Achievement Test was administered to grades 2 to 6.

In the meantime, solutions were tried out and outcomes were evaluated in terms of individual children as well as groups.

The rankings of the different parts of the test have been referred to. The fact that reading ranks first and the parts which utilize reading, second and third, seems to have some significance, as to the success of the program. There were no grade medians below the standard median, for the primary grades and a large proportion of the scores were distributed well above the standard. Teachers were urged by the
administration to evaluate test results in terms of individual growth. Group comparisons, on the same level, were discouraged.

Another forward step toward the improvement of reading was the expenditure of a generous amount for supplementary readers. The abundance of new material made it possible to provide for individual differences, to a large extent, and to adapt the work to the various levels of ability.

The basis for the reading program was a three-fold plan: (1) to develop interest, (2) to develop good reading habits, and (3) to provide material on each child's level, thereby building up a vocabulary and concept of reading as a thought process.

The easy material was available not only for the beginning pupils, but was used to some extent up through the grades, wherever it met the need of a particular child or group. An interesting aspect of this plan has to do with the method used to persuade a child on the higher grade levels to read material on his own reading level:

See how pre-primer have changed since we were in first grade.

Experiment to see how long it takes to read easy books as compared with books on our own level.

Explore all material available for special studies about birds, animals, etc.

The methods naturally varied with different teachers but the ones given are suggestive of other procedures that were used.

SUGGESTIONS FOR FURTHER IMPROVEMENT

It would be worthwhile to work out ways and means of making an even more extensive use of the generous amount of material provided. This
has possibilities as a building project.

The provision of ample material is only part of the solution of our problem of taking care of individual differences. The time limitation in the ordinary classroom frequently prevents giving the needed help when it will be most productive of results.

A "helping teacher" as an assistant to the elementary grade supervisor, with a regular schedule for each building, might be of value. She could do intensive diagnosis of individual cases, set up a tentative remedial program, and provide materials so that the classroom teacher could accomplish a maximum amount in the time available to her. This teacher should be one who knows children, psychology, and is thoroughly acquainted with teaching problems.

The school system carries on a visual education program which involves the showing of films once a week. This program has stimulated keen interest in reading about various subjects, even as low as first grade. Its continuance with a special effort to foster this interest, in the selection of pictures, should result in rich outcomes.

A speech improvement class for the primary grades would fill a vital need. Many reading difficulties might be avoided and others minimized or eliminated by the provision for such a group.

The health phase of any program is the most significant one, considered in terms of child growth and viewed from any angle. The hearing test by means of the audimeter, is already functioning in an efficient way. This is true, also, for the work done in the special class for pupils handicapped by hearing loss. Many individual cases
have been cared for and the teachers have become "health-conscious" in regard to the pupils in their classrooms. Enlarging this program to include even a greater number of physical handicaps should yield commensurate returns in economy of time and effort. The telobinocular, inasmuch as it tests vision, might prove a valuable addition to our diagnostic material.

Since we are to teach the "whole child," it is essential to cultivate a happy relationship with the home. The plan followed by the kindergarten, whereby the first session is used to become acquainted with the mothers could be adopted by the first grade with profit to both parents and teachers. If a special effort were made to arrange for a repetition of these visits, in small groups, at scheduled intervals, the parents would become more familiar with the teaching procedures, and the philosophy of the school, in respect to child growth. As a result of such a plan, the guidance of the pupil would take on the quality of a cooperative undertaking, and the school's program would be better understood and evaluated.
BIBLIOGRAPHY
BIBLIOGRAPHY

A. BOOKS


A summary of research findings, which emphasizes reading readiness and first teaching as preventive measures.


A manual for kindergarten and primary teachers, which contains an excellent chapter on reading, with especial attention to "reading readiness."


Points out the essential principles underlying the initial stages in learning to read.


Author concedes there are factors which cannot be determined objectively.


Rich in practical suggestions for remedial reading.


Diagnostic procedures and remedial measures are treated in detail.


These authors are disciples of Orton and tend to emphasize his methods with disability cases.

A comprehensive summary of research studies in all fields.


A very complete summary of investigations in the field of reading.


Points out the need for a broad conception of reading with emphasis on meaning.


Emphasis is on meanings. Contains excellent list of supplementary reading material and picture books.


A summary of the points discussed at the conference of the Association for Childhood Education in 1932.


Especially valuable because it is both concise and comprehensive.


Contains an outline for diagnostic work, a remedial program and suggestions for improvement of skill techniques.


Contains a good table indicating relationships understandable by the layman.

Discusses methods as well as results of remedial instruction.


Points out the relation of remedial reading to character building—conclusion based on an experiment in the Washington schools.


This author would use preventive method with cases of "stereophonicia," although he concedes no method has been found of definitely locating these types.


Emphasizes need of organization as preventive measure, in lower grades.


A review and summary of findings, relative to problems in the elementary school.


Suggests methods for improvement of primary reading as well as "reading readiness" factors.


A concise but comprehensive text.


Contains plates and descriptions of the metronoscope and ophthalmograph. The first machine conditions eye-movements, increases eye span. The second records eye-movements.


Reports of two conferences at the Association; program had to do with teacher training and modern trends.

Contains a good summary of "reading readiness" factors.


Discusses various phases of recent trends in reading. Lays particular emphasis on "reading readiness" factors.


An experiment in postponed reading.

B. PERIODICALS


A good summary of the factors basic to reading readiness.

Bennett, Annette, "Teaching 10,000 Children to Read," The Elementary English Review, 15:125-28, April, 1936.

Emphasis was placed on mental hygiene in this remedial program directed by Gates, in New York City.


Maturation is a significant factor in prevention of reading disabilities, according to the author.


Points out close relationship between intangible factors and reading problems.

Cites an experiment in postponed reading and shows such a course to be economical in time and energy.


Experience leads to conviction reading can be taught individually in a group of 30 and virtue of method is ability of teacher to give the needed help.


Reading clinics would not be needed long if developing children rather than subject matter were made the goal, is the substance of this article.

Davidson, Helen P., "A Study of Children at Four Year Mental Age Level," Genetic Psychology Monographs, Nos. 3 and 4, 9:125-279, March, April, 1931.

Conclusion is that proving children can be taught to read at four years mental age level doesn't justify the statement that this is the optimum age educationally and socially.

Dean, Charles D., "Predicting First Grade Reading Achievement," The Elementary School Journal, 39:609-616, April, 1939.

An experiment with different reading readiness tests with varying results.


Dewey deplores emphasis on formal reading at an early age; suggests substitution of activities contributing to social and emotional development.


Points out the importance of learning tool words, not nouns.


Describes a method of building up a sight vocabulary.

Suggests problems related to every field of reading with special emphasis on aspects of primary readings. Excellent.


Author is critical of achievement tests since they do not measure small increments of learning.

Feature article in The Kansas City Star, September 15, 1938.

A very concise description of modern reading procedures.


A summary of the investigations of Lee, Clark, Morphett, Washburne, Deputy, and Latchly.


Gates lists five ways of making reading a more serviceable instrument.


Correlation between tests and reading is found, if teacher emphasizes the abilities included in the test.


Experiments lead to conclusion that statements as to necessary mental age are meaningless.


This article deals with the major factors which make adaptation to individual needs difficult.

"Reading Readiness, A Study of Factors Determining Success and Failure in Reading," Teachers College Record, 37:679-85, May, 1936.

Emphasizes importance of adjusting to individual needs.

Includes a fine summary of recent studies relative to "reading readiness."


Compares background of 66 kindergartners and scores on Gates Primary Reading Tests. Results seem to point to informational background as a desirable factor.


A testing program in a school where a large proportion of the children were Spanish.


Presents a plan for teaching reading incidentally or "reading to learn."


As a result of experiments, concludes chances of discouragement are decreased by postponing reading until mental age of six years, six months is reached.


States it as his opinion that "look and say" method may add to the difficulty of a disability case.


An attempt to institute a scientific reading program.


The values of this method are recognized but author thinks it should supplement, not supplant a systematic plan.


The germ seed of every subject in the elementary school is found in the kindergarten, is the substance of this article.

A report of the Chicago meeting in the summer of 1938. Emphasis was on reading.


Children profit from raising age entrance, is the substance of this article.


"The data are favorable to the reliability, validity and utility of the California test." A study of the language factor.


A study to discover the experiences in the first grade which their basis in the kindergarten.

Wilson, F. T., "Correlations of Vocabulary Knowledge with Other Activities and Traits in Grade 1," The Elementary School Journal, 36:451-57, February, 1937.

Concludes no significant relation exists between vocabulary knowledge and reading or other abilities.


After citing various studies, conclude reading should be postponed until the child is mentally mature.

Woolf, Henriette, "The Relation of Intelligence Test Scores of Kindergarten Children to Their Reading Test Scores in the First Grade," School and Society, 40:150-52, August 4, 1934.

This writer found intelligence test scores not to be good predictive measures of success in reading. Question raised as to validity of investigation.


Defines children's interests in a unique way; points out the fact we must begin where we find the child.
APPENDIX A

POSSIBLE FACTORS INFLUENCING READING PROGRESS

Using the 6 or 8 poorest readers in your group, please check the factors which may have contributed to their unsatisfactory progress in reading.

Name ___________________________ Age ___________________________ Address ___________________________

1. Were there mental limitations due to immaturity? ( )
   Low mentality? ( )

2. Were there physical defects due to vision? ( ), hearing ( ),
   speech handicaps ( ), diseased tonsils ( ), adenoids ( ),
   lack of coordination ( ), malnutrition ( ), other disorders ( ).

3. Was the child's adjustment to the group poor ( ), fair ( ),
   good? ( )

4. Was the child lacking in social experience? Yes ( ) No ( )

5. Was the child well balanced emotionally? Yes ( ) No ( )

6. If not, in point of time, what was the relationship of the emotional disturbance to the reading disability?
   Preceded ( ) Followed ( )

7. Was the child dependent ( ), shy ( ), fearful ( ), dreamy? ( )

8. Did the child have a fund of general information? Yes ( ) No ( )

9. How would you rate his ability in other types of language situations?
   Below average ( ), Average ( ), Above average ( )

10. Did the child enjoy stories? Yes ( ) No ( )

11. Was a foreign language spoken in the home? Yes ( ) No ( )

12. What was the economic status of the home?
    Below average ( ), Average ( ), Above average ( )

13. Was the family life such as would contribute to normal development?
    (I refer to relatives in the home such as grandmother, only child,
    and broken homes.) Yes ( ) No ( )

14. What was the cultural status of the home as evidenced by their regard
    for education, literature in the home, and other cultural advantages?
    Below average ( ), Average ( ), Above average ( )

15. Did the parent's attitude toward the school's procedures and emphasis
    indicate they were satisfied ( ) indifferent ( ) over anxious ( )

16. What was the attendance record? Regular ( ) Irregular ( )

17. Were there conditions which prevented the adaptation of the teaching to
    the varying abilities?
    (Room too large, too many mentally retarded, lack of material)
    Yes ( ) No ( )

18. Did the child show an interest in reading activities on his entrance to
    school? Yes ( ) No ( )

19. Did the child's interest in reading activities increase?
    Yes ( ) No ( )
20. What were the mechanical defects of the child's reading habits?
   Regressions ( ) Substitutions ( ) Reversals ( )
   Transpositions ( ) Omissions ( ) Confusions ( )
   Additions ( ) Vocalization ( ) Finger pointing ( )

21. If the child lacked in comprehension was his trouble due to
   inadequate background ( ), limited vocabulary ( ),
   low degree of accuracy ( ).

22. Has there been any attempt to change handedness?
   Yes ( ) No ( )

23. How would you rate the child's persistence as indicated by his work
   habits?
      Below average ( ) Average ( ) Above average ( )

24. Please indicate here any points overlooked which might better explain
   the reasons for the reading disability.

25. If you have placed special emphasis on any of these remedial measures,
   please indicate.
   Development of visual memory ( )
   Intensive phonetic analysis ( )
   Writing ( )
   Tracing ( )
APPENDIX B

OUTLINE OF CASE STUDY

A. Identifying Data

Name
Address
Date of Report
Date of Birth
Age
Place of Birth
Sex
Race
Nationality
Occupation of Parents

B. Statement of Problem

C. Family and Social Environment

1. Persons in the Home

Approximate Age Education Health Adjustment to Each Other Pertinent Facts
Outstanding Personal Traits or other

Father
Mother
Step Father
Step Mother

Position in Comparative in Reading, Writing, Other Achievements
Ages Family Health Favorable or Favoritism

Siblings

Grand Parents

Favorable effect on subject--direct or indirect
Unfavorable effect on subject--direct or indirect

2. Home Attitudes

a. What are attitudes of persons in the home toward the subject and his problem?
3. Control and Discipline
   a. How managed?
   b. Are persons in agreement as to control?

4. Economic Status of Family
   a. Present Status
      Secure  Economically Propserous
   b. Have there been any marked economic changes?

5. Cultural Status of Family
   How would you rate their regard for education, books, and other cultural advantages?
   Below average  Average  Above average

6. Language Spoken in Home
   What language?________________________ Quality?________________________

7. Neighborhood--General Conditions
   Social?________________________ Cultural?________________________

D. Physical Conditions

1. How do your subject's size and condition compare with norms?

2. General Constitution
   a. Defects of vision_________ hearing_________ speech_________
      Any record of stammering_________ stuttering_________
   b. Infections--condition of teeth_________ nose_________
      throat_________
   c. Glandular disturbances
   d. Neurological findings
   e. Special tests

3. Sex development--any pertinent facts

4. What sicknesses has he had?

5. Handedness________________________ eyedness________________________

6. Has there been any effort to change handedness?
E. Intellectual Development

1. Results of mental tests
2. Any indications of mental superiority
3. Any indications of mental defect

F. Social Development

1. Extent of social experience
2. Kinds of social experience
3. Types of home and community experience

G. Emotional Development

Tantrums  Shyness  Fears  Dependence

Unusual attachment to parents  Over-emotional
Apathetic

H. Educational History

1. School Progress
   a. Age entered school
   b. Acceleration
   c. Retardation
   d. Trend of school marks
   e. Any special difficulties
   f. Any special abilities
   g. Ability in other language situations
   h. Can he carry a tune as well as average

2. Educational Status
   a. Results of reading aptitude tests
      Stone-Grover  Monroe
   b. Results of educational achievement tests

3. School Adjustment
   Conduct  Attitude  Truancy
   Dishonesty  Nervousness  Others
I. Habits and Activities

1. Routine habits—regular or irregular
   (Indicate by R or I)
   Eating  Sleeping  Tasks

2. Plays and Interests
   Social  Solitary

3. Imaginative Tendencies
   Day dreams  Vivid imagination

4. Sex Habits, if any

5. Social Habits
   Leader  Follower
   Plays well with others  Works well with others

6. Community Experiences
   Does he take trips  Go on excursions
   Any other activities

J. School Situation—(Present Status)

1. Attendance
   Regular  Irregular  Many moves

2. Group
   Size  Capability  No. divisions

3. Materials
   a. Texts
   b. Work-books
   c. Additional helps

4. Records
   a. Objective Tests
   b. Individual
5. Intangible Data

a. Attitude of child

(1) Toward teacher
(2) Toward previous teachers
(3) Toward other children

b. Pre-school Experience

(1) Taught to read at home?
(2) If so--age_________Type of instruction_________

c. Teacher's Story of Case

(1) Date of recognition of disability_____________________
(2) Theory of cause of disability_____________________
(3) Methods used_________________________________________
(4) Progress of efforts to remedy situations_____________________
(5) _______________________________________________________

Recommendations for further remedial measures
APPENDIX C

READING HABIT DIAGNOSIS CHART

Please check points indicating undesirable tendencies.

<table>
<thead>
<tr>
<th>HABITS</th>
<th>NAMES OF PUPILS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocalizes</td>
<td></td>
</tr>
<tr>
<td>Points</td>
<td></td>
</tr>
<tr>
<td>Repeats</td>
<td></td>
</tr>
<tr>
<td>Makes additions</td>
<td></td>
</tr>
<tr>
<td>Substitutes</td>
<td></td>
</tr>
<tr>
<td>Omits</td>
<td></td>
</tr>
<tr>
<td>Transposes</td>
<td></td>
</tr>
<tr>
<td>Confuses letters (Indicate as b d p)</td>
<td></td>
</tr>
<tr>
<td>Reverses words (Indicate as was, saw, and, and said)</td>
<td></td>
</tr>
<tr>
<td>Makes poor attack on new words</td>
<td></td>
</tr>
<tr>
<td>Reads word by word</td>
<td></td>
</tr>
<tr>
<td>Spells out</td>
<td></td>
</tr>
<tr>
<td>Inadequate phrasing</td>
<td></td>
</tr>
</tbody>
</table>

| Does he read smoothly but without understanding? | Yes | No |
| Does he show inability to apply phonic principles? | Yes | No |
| Does he read slowly but with understanding? | Yes | No |
| Is he interested in learning to read? | Yes | No |
| Are his study habits good? | Yes | No |
| Is he attentive in group work? | Yes | No |
| Is he able to associate his reading with his own experience? | Yes | No |
| Does he withdraw from reading or show a dislike for it? | Yes | No |
| Does he have auditory ( ) visual ( ) or speech handicaps ( ) | Yes | No |
| Is he left handed? | Yes | No |
| Has there been any attempt to change handedness? | Yes | No |
REMEDIAL MEASURES CHART

Please check points indicating remedial procedures used:

Read slowly
Left to right movement emphasized
Read in word groups, looking carefully at group before reading aloud.
Vertical lines drawn between groups
Called attention to detail of words
Pointed out likenesses and differences
Directed attention to familiar parts
Intensive phonetic drill given
Wrote words
Traced words
Called attention to beginning of word
Called attention to ending of word
Resorted to materials especially appealing to subject
Disregarded formal drill on techniques
Attempted to broaden background through enrichment of experiences, by

excursions ( )
group activities ( )
enlisting help of parents ( )

individual contributions ( )
story telling ( )

Please list books used that have proven especially helpful:

Books
Work Books
Any Others

Please check materials used that have proven especially helpful:

Phrase Cards
Hectographed Material
Any Others