A STUDY TO EXAMINE INDIVIDUAL FAILURE AT THE ELEMENTARY LEVEL IN A SMALL TEXAS COMMUNITY, AND TO DETERMINE, IF POSSIBLE, THE RELATIVE IMPORTANCE OF EMOTIONAL DISTURBANCE AND OTHER FACTORS AS CAUSES OF SUCH FAILURE

APPROVED:

[Signature]
Major Professor

[Signature]
Minor Professor

[Signature]
Director of the School of Education

[Signature]
Dean of the Graduate School
A STUDY TO EXAMINE INDIVIDUAL FAILURE AT THE ELEMENTARY LEVEL IN A SMALL TEXAS COMMUNITY, AND TO DETERMINE, IF POSSIBLE, THE RELATIVE IMPORTANCE OF EMOTIONAL DISTURBANCE AND OTHER FACTORS AS CAUSES OF SUCH FAILURES

THESIS

Presented to the Graduate Council of the North Texas State College in Partial Fulfillment of the Requirements

For the Degree of

MASTER OF ARTS

By

Alta Edwards Browning, B. A.
Saint Jo, Texas
August, 1949
TABLE OF CONTENTS

LIST OF TABLES ........................................ iv

Chapter

I. INTRODUCTION ........................................ 1

Statement of the Problem
Definition of Terms
Importance of the Problem
Scope of the Study
Related Literature, Studies and Experimentation
Procedure
Summary

II. THE CAUSES OF FAILURE IN ELEMENTARY SCHOOL--
GENERAL AND SPECIFIC .......................... 21

Specific Application of the General Causes
 to the Failing Elementary Pupils
Physical Causes of Failure
Visual Defects
Visual Case Histories
Auditory Defects
Auditory Case Histories
Speech Defects
Speech Case Histories
Poor Health
Case Histories of Children with Poor Health
Mental Causes of Failure
(Emotional Causes of Failure)
Other Causes of Failure
General Observations Upon and Summary of
Specific Causes of Failure in the Above
Thirty-one Case Histories

III. CONCLUSIONS, EVALUATIONS, RECOMMENDATIONS
AND SUMMARY . .................................. 97

Evaluations
Recommendations
Summary

BIBLIOGRAPHY ........................................ 105
## LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Statistical Data Upon 31 Failing Pupils</td>
<td>24</td>
</tr>
<tr>
<td>in the Elementary School, 1948-1949</td>
<td></td>
</tr>
<tr>
<td>2. Evaluation of the Causes of Failure in the Elementary School,</td>
<td>98</td>
</tr>
<tr>
<td>1948-1949</td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER I

INTRODUCTION

The obvious results of failure in school are apparent to the most superficial observer, be he educator or layman. "The financial loss implied in grade repetition has often been pointed out...."¹ Much more serious are the hidden consequences of failure. "It is impossible to estimate the wastage of material and human resources which results from education's ignorance of the consequence of its efforts."² The waste of time, the expenditure of unrewarded energy, the diminution of interest, the social, psychological and emotional maladjustments resulting from scholastic failures are dangers, both potential and real to the fabric of our democratic society in which proper education must play a vital and compelling role. Students of educational administration, methodology and psychology have marked as one of their primary objectives the isolation and elimination

¹ A. A. Sutherland, "Factors Causing Maladjustment of Schools to Individuals," Adapting the Schools to Individual Differences, Twenty-Fourth Yearbook of the National Society for the Study of Education, Part II, p. 25.

of such failure. From these facts arises the statement of the problem of this study.

Statement of the Problem

The purpose of this study is to examine individual cases of failure at the elementary level in a small Texas community and to determine, if possible, the relative importance of emotional disturbance and other factors as causes of such failure.

In short, the purpose of this study was to examine the complete number of failures for the school year, 1948-1949, in the elementary school of a small Texas town in an effort to determine the relative weight of emotional maladjustment and other factors as causes of such failures; and, if possible, to advance suggested remedies for such failures.

Definition of Terms

The wording of the statement of the problem is self-explanatory. The only terms requiring elaboration, perhaps, are the terms "failures" and "emotional disturbance."

"Failure" or educational retardation may, according to Baker, take two forms. The first and usually accepted meaning is that the child fails to progress from grade to

---

3 Harry J. Baker, Introduction to Exceptional Children, p. 426.
grade in accordance with his or her chronological age. The child fails, at the end of a school term, to be promoted from one grade to the next grade. The second meaning is that, though the child is promoted along with his age group, he has not accomplished the same amount of work as his more successful fellows; he has not achieved the minimum standard requisite to promotion but because of the policy of the school or for other reasons is, nevertheless, advanced to the next succeeding level. In this survey, the first or stereotyped meaning of the term is employed, because the second (and possibly sounder interpretation) was impossible of application under the conditions of this study. That is, the term "failures" includes only those elementary school students who failed to be promoted to the next succeeding level at the end of a nine-month's school term.

The term "emotional disturbance" is more difficult of adequate definition because of the many factors it includes. Perhaps as good a definition as any, though somewhat oversimplified, is that of Zachry and Lighty who imply that by emotional disturbance is meant those conflicts of feeling which have arisen in the adjustment of the individual's impulses to the requirements of his society.)

4 Caroline B. Zachry and Margaret Lighty, Emotion and Conduct in Adolescence, p. 5.
Importance of the Problem

The consequences of failure or retardation in the elementary schools are varied and distressing.

For the school, aside from the financial loss accompanying repetition, there arise the problems of over-crowded school rooms, nervous and emotional strain upon child, parent and teacher, additional demands upon the time of, and occasionally a sense of frustration and despair on the part of the teacher plus the various difficulties which the failure of the individual student may impose upon the school administrator.

Upon the child, failure may have far-reaching and undesirable results. The loss of interest in school work, the tendency to abandon all educational pursuits, the developing emotional conflicts, the feeling of shame and embarrassment, the problem of the over-aged and larger failing child among smaller and younger children, the development of the idea of social unfitness and other emotional, psychological, financial and physical maladjustments—these and other manifestations are potential and unwelcome concomitants of the problem of failure.

Upon the community, failure of the child may also have an undesirable impact. The sum result of such failure can be the development of the social misfit, the idle, the malcontent, the ne'er-do-well, the diseased and the criminal. Failure may be, in short, a breeding ground of community social evil.
That any child who has the capacity and ability to make the proper adjustments is entitled to mental and physical health and the access to the proper educational facilities is part of the basic philosophy of democracy. It should be equally part of the philosophy of democracy that the school offer to the child the best possible opportunity of making such adjustments and of having complete and proper access to the correct educational methods and procedures. Failure with its potentially evil consequences is evidence that either the child or the parent or the school or society in general or a combination of these has failed, in the individual instance of this particular failure at least, to accept the responsibilities and carry into effect to its best degree the meaning of that democratic philosophy.

It is obvious that before such failures can be eliminated or decreased, their causes should be isolated so that proper remedial treatment may be applied. An investigation of such causes, even though it be on the localized level of one small Texas community may, therefore, be of some importance in providing data and conclusions for comparisons with other similar or different situations. If the causes of failure of one elementary group can be ascertained, they may, at least, serve as a basis for comparison with other failing groups, and, thus, in this study lies the possibility of findings of some importance.
Scope of the Study

This study includes: (1) a survey of the literature and experimentation in the field of scholastic failure; (2) a determination from such literature and study of the possible causes of scholastic failure; (3) the application of such general causes of failure to the failing students in the elementary school for the school year, 1948-1949; (4) a consideration, where possible, of the individual failing students with typical case studies; (5) the presentation of certain evaluations, recommendations and conclusions.

The study is limited to elementary school failures, first, because of the accessibility of data upon such failures and, second, because of the undeniable importance of elementary school achievement in the pattern of successful education. In connection with the second cause, the theory may be advanced that in elementary school often is laid the basis for future successful achievement and that as success in elementary school is disproportionately important, so is failure in elementary school disproportionately evil."

"Generally one year of retardation in young children is as serious as two years in later grades", says Baker. Harrison adds that no more valuable and important function exists than that of guiding the child through what is called "The Initial

---

5 Baker, op. cit., p. 426.
Stage of Learning" and that the percentage of pupils who do not successfully manage that initial stage is appalling.

This survey, therefore, because of the importance of training in the elementary grades is limited to an examination of such failures where complete data was available, that is, to the elementary school for the school year, 1948-1949.

Related Literature, Studies and Experimentation

The causes and results of failure among pupils have occasioned much study and experimentation among educators, but the literature on the subject is not as exhaustive as might be presumed and the definitive work on the subject is yet to be written. There are, however, a number of useful and stimulating investigations and explorations in the field.

Though not directly related to the subject of this survey, the Thirty-Fifth Yearbook, Part I, of the National Society for the Study of Education, entitled The Grouping of Pupils, contains much valuable information concerning the slow, the dull, the retarded and the repeating pupil. The findings revealed in this study were the following:
a. Shorter promotion intervals have little value as a

6 M. Lucille Harrison, Reading Readiness, p. 1.

means of reducing retardation and failure;\(^8\) b. that there is little valid distinction often between groups separated into the categories of "bright," "average," and "dull,";\(^9\) c. that reading ability of pupils in a single grade may extend through as much as an eight-grade variation;\(^10\) d. that the age of pupils in the first grade ranges from the chronological ages of four years to nine years;\(^11\) e. that in one survey the percentages of over-age pupils were 22, 40, and 44 for grades one, three and five, respectively, and that in another such survey made in the City of Minneapolis such percentages ranged from 24.7 to 39.4;\(^12\) f. the somewhat encouraging report that the percentage of pupil failures were decreasing, ranging from about 20 per cent in the first grade to around 3 per cent in the eighth grade and that in a survey of thirty-five Northern Illinois school districts 48 per cent of the pupils in the fifth grade had records of repetition in schools providing for semi-annual promotion and that only 15 per cent of the pupils in the fifth grade of these schools

---


\(^9\)Ibid., p. 20 quoting F. P. Graves, "Evaluation of Achievement."

\(^10\)Ibid.

\(^11\)Ibid., quoting C. D. Strayer and others.

\(^12\)Ibid., quoting Strayer's Holyoke Survey and the Public School Research Records of the City of Minneapolis, Minnesota.
which provided for annual promotion had similar records;\textsuperscript{13} g. that the judging of the individual's place in groups by his average achievement or intelligence tests is open to criticism;\textsuperscript{14} h. that each of the criteria for grouping: physical development, intelligence, achievement, motivation, social factors, special abilities and interests and special disabilities has its advantages and weaknesses, and that some of these criteria overlap;\textsuperscript{15} i. that as late as 1932, of 317 elementary courses of study analyzed only 66, or 21\%, made provisions for individual differences among pupils;\textsuperscript{16} j. that rigid curriculum differentiation hampers adjustments to individual differences.\textsuperscript{17}

Another comprehensive survey in the field was that made in 1931 by the Department of Superintendence of the National


Education Association. This survey reports the responses of more than five hundred superintendents to questionnaires on the problems of (among other things) failure. Low mentality and over-age pupils were primary objects of concern to these school administrators. Among the methods of attempting to remedy such situations were the resort to the possibly unsatisfactory and certainly incomplete method of semi-annual promotion and the segregation and individual treatment of slow-learning pupils. The administrators also suggested as bases for promotion: achievement, teacher judgment, mental ability, size, health, attendance, chronological age, personality and other criteria.  

Individual studies of and comments upon pupil maladjustment abound. Thom, for example, points out that parents are more concerned with their children's inability to keep pace with their fellows in school work than with any other evidence of maladjustment. He refers to the study of 322 adolescents sent to a psychiatrist by schools, physicians and parents for help with some problem. Of these 322 cases, difficulty with school work constituted the major

---


20 Douglas A. Thom, Normal Youth and Its Everday Problems, pp. 151-152.
reason for consultation in 117 cases—such difficulty forming by far the largest factor for causing such consultations."

Only twenty-four of these 117 cases were possessed of physical handicaps to which their school difficulties might be attributed. There were two epileptics, five children with physiological defects, and in seventeen cases there was great deviation from normal intellectual capacity. The answer to the other cases lay elsewhere.

Parents who are quite indifferent to their children's manners and morals, who are totally ignorant of the children's emotional satisfactions and dissatisfactions, and who look upon shyness, jealousy, cruelty and various other undesirable personality traits as mere phases of development to be passed through and outgrown, rise up in indignation when their children do not receive their promotions at school at the proper time. (Failure in school is to most parents synonymous with mental deficiency which they feel casts an unfavorable reflection on them, while teachers are usually afraid that failure will be blamed on poor teaching.) The child's reaction, on the other hand, varies according to the attitude of those with whom he comes in contact and later on depends upon his own insight and his own understanding why he has failed."

Thom says that in Massachusetts (a state which may or may not be regarded as typical), the State Department of Education shows that in 1930 there were 551 special classes for children three or more years retarded in mental development and over 8000 children attending these classes. (Among the causes of poor school work, Thom lists, in addition to

\[ \text{Ibid.}, \text{p. 152.} \] \[ \text{Ibid.} \]
intellectual inferiority, inadequate preparation, lack of motivation or interest and, particularly, emotional handicaps—to which he ascribes much of the fault for failure.\(^{23}\)

Blanchard,\(^{24}\) in a preliminary report on the examination of 73 cases of reading disability, says that poor reading was characterized in 30 per cent of the cases by poor visual discrimination for words and in 24 per cent of the cases by poor auditory discrimination for phonetics. The investigation showed that such difficulties as reversals in letters, or sequence, change in handedness and confusion of orientation were not prominently present; emotional reactions of anxiety and inadequacy were exhibited by one-seventh of the children; while intellectual handicaps were not a factor, for only 12 per cent of the children had intelligence quotients below 90, and 31 per cent had intelligence quotients between 110 and 140. (Blanchard concludes that emotional disturbances may interfere with the efficient functioning of the complex learning process.)

On the other hand, Baker\(^{25}\) says that slow pupils have mental ages and intelligence quotients generally below these

\(^{23}\)Ibid., pp. 153-181.


of average pupils in that the median IQ of slow groups is approximately 83, or five-sixths that of normal mental growth. Baker says that he was unable to determine whether personality and social traits had any effect upon educational retardation.26 In a survey of sixty-five educationally deficient pupils he found, however, that more than one-half of these pupils had poor personalities according to their teachers. He found, furthermore, that the parents of these children were cooperative with the schools and the teachers in only twenty-five per cent of the cases despite the fact that at least one-third of the pupils came from homes which might be classified economically as "superior" or "very superior," while only one-fourth might be classified economically as "poor."27 Nor did Baker find that mental inferiority was a prime factor in causing failure. The median IQ for the sixty-five pupils examined in his Detroit test was 92—or within the range of normal intelligence.28 Baker believes that a possible remedy for failures is the employment of special teachers. He lists three experiments using special teachers in Detroit, several in Grand Rapids, Michigan, the Chicago experiment and, indirectly, the Harvard Growth Study by Dearborn and the studies of gifted children made by Terme


27 Ibid.

and by Sumption. The Detroit experiment, at least, was successful, Baker concludes, because of those pupils examined who had suffered retardation at the elementary level, nearly one-half, after receiving specialized instruction, reached the twelfth grade or college.

Despite his investigations of the subject, Baker believes that the motivating reasons behind failure have not yet been completely revealed, saying that "the causes of educational retardation are not too evident." He lists the usual causes of failure, however, as: (1) mental inferiority; (2) mild physical handicaps; (3) severe physical handicaps such as visual, orthopedic, speech, auditory, vitality and other physical defects; (4) mental and psychotic causes—the encephalitic, the prepsychotic, and the mildly psychopathic; and (5) emotional and personality causes such as behavior, disciplinary and adjustment problems.

Gates in an investigation somewhat similar to that of Baker's found that of thirty-five failing children, the failures being based on reading deficiency and social maladjustment, the basis of the failures might be construed as social, psychiatric and emotional. In the thirty-five cases of failure, Gates found thirty-three cases of submissiveness and twenty-six evidences of withdrawal reactions. Eighteen

---

29 Ibid., p. 434.  
30 Ibid., pp. 434-437.  
31 Ibid., pp. 430-431.  
32 Ibid., pp. 430-432.
of these children were anti-social, fourteen truants and ten
were under nervous tension.\footnote{A. I. Gates, "Failures in Reading and Social Adjustment," Journal, National Association of Education, XXVII (1936), 205.}

Psychological breakdown was often advanced as a primary
cause of failure in earlier studies. As reported by Bronner,\footnote{A. Bronner, The Psychology of Special Abilites and Disabilities.} Cattell, Brueckner and Melby,\footnote{L. S. Brueckner and E. O. Melby, Diagnostic and Remedial Teaching.} in their reference to elementary school failures and efforts to diagnose and remedy such failures, list the causes of failure as: (1) mental; (2) physical; (3) pedagogical; (4) emotional; (5) volitional; (6) social; and (7) moral.

Storm and Smith\footnote{Grace E. Storm and Nila B. Smith, Reading Activities in the Primary Grades, p. 351.} contend that failures in the primary grades are due almost wholly to deficiencies in reading and list the causes of such deficiencies as: (1) defective vision; (2) lack of interest and attention; (3) a narrow span of recognition; (4) over-emphasis on phonics and analytical drill; (5) over-emphasis on correctional reading; (6) over-emphasis on reading large sentence or paragraph units in the beginning; (7) lack of training in the recognition of thought
units; (8) lack of encouragement in depending on the context in efforts to recognize unfamiliar words; (9) interruption in training; (10) lack of materials and methods.

Cole\textsuperscript{37} who agrees with Stormand Smith that reading is the basic elementary subject, says that poor reading is caused by: (1) incorrect eye movements; (2) poor vocalization; and (3) word-for-word reading.

Hildreth\textsuperscript{38} is less specific in her development of the causes of failure and is more disturbed by the consequences. Hildreth says that the study of routine lessons beyond the capacity of the student to learn is inappropriate and a cause of failure and that the unfortunate child has again to repeat this valueless and painful routine, fastening "habits of failure and a spirit of discontent and rebellion" at great expense to the child and the taxpayer.

In a survey of failing college students in four Michigan colleges, Heaton and Weedon\textsuperscript{39} list as the causes of such failure reading inability. Secondary causes, they add, include; (1) poor study habits and skills; (2) insufficient preparatory work; (3) the problem of finance and outside

\textsuperscript{37} Luella Cole, \textit{The Improvement of Reading}, pp. 3, 69-85.

\textsuperscript{38} Gertrude Hildreth, \textit{Learning the Three R's}, p. 267.

\textsuperscript{39} Kenneth L. Heaton and Vivian Weedon, \textit{The Failing Student}, pp. 1-279.
work; (4) the lack of vocational motivation; (5) poor physical health; and (6) personal and social factors.

Heck specifically and definitely suggests the causes of failure as they occur to him, outlining them as follows:

1. Failure due to the child
   a. Lack of mental ability
   b. Incurable physical defects

2. Failure due to the teacher
   a. Poor methods of teaching
   b. Inadequate motivation of pupils
   c. Unjustifiably high standards

3. Failure due to the school
   a. Large classes
   b. Improper control of the social and athletic activities of the school
   c. Inadequate attendance service

4. Failures due to out-of-school environment
   a. Factors within the neighborhood and the home
   b. Attitude of the parents

In addition to the literature and studies suggested above, periodical articles on the subject are numerous and sometimes useful. Among the more pertinent of such articles are

---

40 Arch O. Heck, Administration of Pupil Personnel, p. 366.

From the above brief consideration of the related literature in the field, it may be seen that each educator and educational expert has his individual idea of the causes and results of educational failure, retardation and repetition of grades. From the literature, studies and experiments, a summary of causes may be tabulated, evaluated and applied to a local situation. Such is the procedure to be followed in the next chapter of this study.

Complete citation to these articles will be found in the bibliography.
Procedure

The procedure of this study has been as follows: (1) to examine the literature, studies and experimentation upon the subject of scholastic failure in order to evolve a definite set of criteria for application to a local situation; (2) to determine the number of failures among the students enrolled in the Elementary School for the school year, 1948-49; (3) to discover and present the data and typical case histories of the failing students. By data is meant the chronological ages, IQ's, mental ages, school experiences, failed subjects and the like; (4) to determine the basis upon which the teachers failed to promote the subjects of this investigation; (5) to determine, where possible, the specific causes of such failure. (In the determination of such causes, school records, teachers, pupils, and parents were consulted and interviewed for the purpose of collecting data and arriving at some conclusion upon socio-economic and emotional factors and background); (6) to evaluate the causes of such failures; and (7) to form certain conclusions and advance suggested remedies and recommendations.

Summary

In this chapter there has been suggested: (1) a statement of the problem of this thesis; (2) a definition of certain terms; (3) the importance and scope of the study; (4) a survey of related literature and experimentation; and
(5) an outline of the procedure to be used. A localized application of the above generalizations follows.
CHAPTER II

THE CAUSES OF FAILURE IN ELEMENTARY SCHOOL--
GENERAL AND SPECIFIC

In the Elementary School (grades one to six) of the 230 pupils enrolled for the school year, 1948-1949, 31 or 13.5 per cent failed. Though complete statistics on the subject are lacking, it may be surmised that this percentage of failures is neither excessive nor unusually low. The tragedy of the situation lies not in the fact that Elementary School exceeded or failed to meet the average in the number of failures, but in the fact that failures do exist.

What causes such failures? As was suggested in the brief survey of the literature in the field presented in Chapter One, such causes as listed and described by educational authorities are almost as numerous and as variegated as are those authorities. There exists, of course, much unanimity as to the basic and general reasons for failure, though the specific weight and importance of each basic cause differs among the investigators and students in the field.

Arbitrarily, (and for the purpose of convenience in discussion), the general causes of failure in the elementary grades may be synthesized and tabulated as follows:

21
I. Physical handicaps
   A. Visual defects
   B. Auditory defects
   C. Speech defects
   D. Nutritional lacks
   E. Illness or poor health

II. Mental deficiencies
   A. Low intelligence quotients and mental ages
   B. Lack of mental readiness and too rapid advancement
   C. Insufficient preparatory background
   D. Other mental factors

III. Emotional factors
   A. The effect of physical and mental handicaps upon emotional development
   B. Improper discipline
   C. Psychological maladjustment
   D. Social maladjustment
   E. Other emotional factors

IV. Other causes of failure
   A. Poor teaching
   B. Improper equipment
   C. Inadequate curriculum
   D. Inadequate length of school term
   E. Absenteeism
   F. Inadequate motivation
   G. Unreasonably high standards
   H. Large classes
   I. Improper school emphasis (on athletics, social affairs, etc.)
J. Inadequate socio-economic background
K. Lack of preparedness

V. Various combinations of the above causes of failure. ¹

Specific Application of the General Causes to the Failing Elementary Pupils

In the Elementary School for the scholastic year, 1948-1949, there were enrolled 268 pupils at the beginning of the school year in September. Of these pupils, 38 withdrew or left the community, leaving a base total of 230 students enrolled in grades one through six. Of these 230 pupils, as has been stated previously, 31 or 13.5 per cent failed. These 31 failing pupils constitute the subjects of this investigation. In Table 1, pages 24-29, the available statistical data concerning each of these failing pupils is presented. This data, together with other information about the pupils, information which does not lend itself economically to presentation in tabular form, will be interpreted. From such information, specific conclusions upon the specific causes of failure will be drawn.

¹It must be emphasized that many of these "failures" are not failures at all, but are symptoms of failure. The dividing line between fundamental cause and symptom, however, is a problem for the trained psychologist. In this study a synthesis of the usually advanced causes only can be given. For an excellent discussion of this topic, see William H. Burton, The Guidance of Learning Activities, pp. 449-478.
### TABLE 1

STATISTICAL DATA UPON 31 FAILING PUPILS IN THE ELEMENTARY SCHOOL, 1948-1949

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>8-0</td>
<td>7-3</td>
<td>91</td>
<td>1 yr.</td>
<td>20/30</td>
<td>20/40</td>
<td>Earaches</td>
<td>No def.</td>
<td>59.0</td>
<td>48.0</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>6-10</td>
<td>6-11</td>
<td>102</td>
<td>0</td>
<td>20/20</td>
<td>20/20</td>
<td>No def.</td>
<td>No def.</td>
<td>48.1</td>
<td>49.9</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>7-8</td>
<td>5-3</td>
<td>68</td>
<td>1 yr.</td>
<td>20/30</td>
<td>20/50</td>
<td>No def.</td>
<td>No def.</td>
<td>40.2</td>
<td>45.7</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>8-1</td>
<td>5-5</td>
<td>67</td>
<td>0</td>
<td>20/20</td>
<td>20/30</td>
<td>No def.</td>
<td>Defective</td>
<td>57.1</td>
<td>50.2</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>10-4</td>
<td>5-8</td>
<td>55</td>
<td>3 yrs</td>
<td>20/40</td>
<td>20/30</td>
<td>No def.</td>
<td>Mute</td>
<td>53.5</td>
<td>43.2</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>8-2</td>
<td>4-7</td>
<td>56</td>
<td>2 yrs</td>
<td>20/20</td>
<td>20/30</td>
<td>No def.</td>
<td>No def.</td>
<td>67.1</td>
<td>51.5</td>
</tr>
<tr>
<td>7</td>
<td>2</td>
<td>8-2</td>
<td>8-1</td>
<td>99</td>
<td>1 yr.</td>
<td>20/20</td>
<td>20/20</td>
<td>No def.</td>
<td>No def.</td>
<td>60.3</td>
<td>50.1</td>
</tr>
</tbody>
</table>

1. As of September, 1948.
2. Based on Kuhlman-Anderson tests.
3. Based on the Snellen E Chart.
4. Based on teacher observation and the Cole test.
5. Based on teacher observation and the Cole test.
6. After Olson.
<table>
<thead>
<tr>
<th>No.</th>
<th>Grade</th>
<th>C.A.</th>
<th>A.A.</th>
<th>I.Q.</th>
<th>School Experience</th>
<th>Vision L.Eye</th>
<th>Vision R.Eye</th>
<th>Hearing</th>
<th>Speech</th>
<th>Height</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>2</td>
<td>7-4</td>
<td>6-10</td>
<td>93</td>
<td>1 yr.</td>
<td>20/30</td>
<td>20/20</td>
<td>No def.</td>
<td>No def.</td>
<td>50.1</td>
<td>46.2</td>
</tr>
<tr>
<td>9</td>
<td>2</td>
<td>7-7</td>
<td>7-7</td>
<td>100</td>
<td>2 yrs</td>
<td>20/30</td>
<td>20/30</td>
<td>Defective</td>
<td>No def.</td>
<td>53.1</td>
<td>48.2</td>
</tr>
<tr>
<td>10</td>
<td>2</td>
<td>8-5</td>
<td>7-7</td>
<td>90</td>
<td>2 yrs</td>
<td>20/30</td>
<td>20/40</td>
<td>Earaches</td>
<td>No def.</td>
<td>49.1</td>
<td>48.1</td>
</tr>
<tr>
<td>11</td>
<td>2</td>
<td>8-6</td>
<td>6-3</td>
<td>74</td>
<td>2 yrs</td>
<td>20/30</td>
<td>20/20</td>
<td>No def.</td>
<td>No def.</td>
<td>51.2</td>
<td>49.3</td>
</tr>
<tr>
<td>12</td>
<td>2</td>
<td>9-10</td>
<td>7-11</td>
<td>80</td>
<td>3 yrs</td>
<td>20/30</td>
<td>20/20</td>
<td>No def.</td>
<td>No def.</td>
<td>56.4</td>
<td>51.2</td>
</tr>
<tr>
<td>13</td>
<td>2</td>
<td>7-7</td>
<td>6-11</td>
<td>91</td>
<td>1 yr.</td>
<td>20/30</td>
<td>20/20</td>
<td>No def.</td>
<td>No def.</td>
<td>50.1</td>
<td>48.0</td>
</tr>
<tr>
<td>14</td>
<td>3</td>
<td>10-9</td>
<td>9-5</td>
<td>38</td>
<td>5 yrs</td>
<td>20/20</td>
<td>20/20</td>
<td>Poor</td>
<td>No def.</td>
<td>50.2</td>
<td>59.1</td>
</tr>
<tr>
<td>15</td>
<td>3</td>
<td>10-7</td>
<td>9-1</td>
<td>86</td>
<td>4 yrs</td>
<td>20/50</td>
<td>20/60</td>
<td>Poor</td>
<td>No def.</td>
<td>77.2</td>
<td>55.1</td>
</tr>
<tr>
<td>16</td>
<td>3</td>
<td>11-1</td>
<td>6-6</td>
<td>59</td>
<td>5 yrs</td>
<td>20/40</td>
<td>20/30</td>
<td>No def.</td>
<td>No def.</td>
<td>60.0</td>
<td>47.1</td>
</tr>
<tr>
<td>17</td>
<td>4</td>
<td>11-8</td>
<td>9-8</td>
<td>81</td>
<td>3 yrs</td>
<td>20/40</td>
<td>20/30</td>
<td>Poor</td>
<td>No def.</td>
<td>63.1</td>
<td>54.2</td>
</tr>
<tr>
<td>18</td>
<td>4</td>
<td>9-9</td>
<td>8-2</td>
<td>84</td>
<td>3 yrs</td>
<td>20/20</td>
<td>20/20</td>
<td>No def.</td>
<td>No def.</td>
<td>63.1</td>
<td>54.3</td>
</tr>
<tr>
<td>19</td>
<td>4</td>
<td>11-6</td>
<td>8-3</td>
<td>72</td>
<td>4 yrs</td>
<td>20/40</td>
<td>20/40</td>
<td>No def.</td>
<td>No def.</td>
<td>73.3</td>
<td>59.2</td>
</tr>
<tr>
<td>No.</td>
<td>Grade</td>
<td>C.A.</td>
<td>M.A.</td>
<td>I.Q.</td>
<td>School Experience</td>
<td>Vision L.Eye</td>
<td>Vision R.Eye</td>
<td>Hearing</td>
<td>Speech</td>
<td>Weight</td>
<td>Height</td>
</tr>
<tr>
<td>-----</td>
<td>-------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------------------</td>
<td>-------------</td>
<td>-------------</td>
<td>---------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>20</td>
<td>4</td>
<td>9-4</td>
<td>8-1</td>
<td>87</td>
<td>3 yrs.</td>
<td>20/30</td>
<td>20/20</td>
<td>No def.</td>
<td>No def.</td>
<td>70.2</td>
<td>62.1</td>
</tr>
<tr>
<td>21</td>
<td>5</td>
<td>12-7</td>
<td>8-9</td>
<td>70</td>
<td>6 yrs.</td>
<td>20/40</td>
<td>20/40</td>
<td>Poor</td>
<td>No def.</td>
<td>80.1</td>
<td>58.1</td>
</tr>
<tr>
<td>22</td>
<td>5</td>
<td>12-1</td>
<td>8-7</td>
<td>71</td>
<td>6 yrs.</td>
<td>20/20</td>
<td>20/20</td>
<td>No def.</td>
<td>No def.</td>
<td>80.2</td>
<td>57.9</td>
</tr>
<tr>
<td>23</td>
<td>5</td>
<td>11-11</td>
<td>9-5</td>
<td>79</td>
<td>5 yrs.</td>
<td>20/40</td>
<td>20/40</td>
<td>No def.</td>
<td>No def.</td>
<td>100.2</td>
<td>62.2</td>
</tr>
<tr>
<td>24</td>
<td>5</td>
<td>11-2</td>
<td>10-1</td>
<td>91</td>
<td>5 yrs.</td>
<td>20/20</td>
<td>20/20</td>
<td>No def.</td>
<td>Stam-mered</td>
<td>101.4</td>
<td>57.3</td>
</tr>
<tr>
<td>25</td>
<td>5</td>
<td>14-3</td>
<td>9-6</td>
<td>67</td>
<td>7 yrs.</td>
<td>20/30</td>
<td>20-50</td>
<td>No def.</td>
<td>No def.</td>
<td>75.1</td>
<td>58.1</td>
</tr>
<tr>
<td>26</td>
<td>6</td>
<td>11-7</td>
<td>11-0</td>
<td>95</td>
<td>5 yrs.</td>
<td>20/20</td>
<td>20/20</td>
<td>No def.</td>
<td>No def.</td>
<td>119.1</td>
<td>59.2</td>
</tr>
<tr>
<td>27</td>
<td>6</td>
<td>12-2</td>
<td>11-0</td>
<td>98</td>
<td>6 yrs.</td>
<td>20/60</td>
<td>20/40</td>
<td>No def.</td>
<td>No def.</td>
<td>99.5</td>
<td>56.3</td>
</tr>
<tr>
<td>28</td>
<td>6</td>
<td>12-4</td>
<td>11-6</td>
<td>93</td>
<td>6 yrs.</td>
<td>20/20</td>
<td>20/20</td>
<td>No def.</td>
<td>No def.</td>
<td>89.1</td>
<td>58.5</td>
</tr>
<tr>
<td>29</td>
<td>6</td>
<td>13-4</td>
<td>8-1</td>
<td>61</td>
<td>7 yrs.</td>
<td>20/50</td>
<td>20/60</td>
<td>No def.</td>
<td>No def.</td>
<td>87.3</td>
<td>57.5</td>
</tr>
<tr>
<td>30</td>
<td>6</td>
<td>14-6</td>
<td>10-7</td>
<td>73</td>
<td>8 yrs.</td>
<td>20/30</td>
<td>20/30</td>
<td>No def.</td>
<td>No def.</td>
<td>130.2</td>
<td>67.1</td>
</tr>
<tr>
<td>31</td>
<td>6</td>
<td>13-8</td>
<td>10-6</td>
<td>77</td>
<td>7 yrs.</td>
<td>20/40</td>
<td>20/60</td>
<td>No def.</td>
<td>No def.</td>
<td>95.5</td>
<td>60.8</td>
</tr>
</tbody>
</table>
TABLE 1--Continued


<table>
<thead>
<tr>
<th>No.</th>
<th>Absences</th>
<th>Health</th>
<th>Socio-Eco. Background</th>
<th>Primary Cause of Failure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>14</td>
<td>Good except for colds</td>
<td>Poor</td>
<td>Visual handicaps; Auditory handicaps</td>
</tr>
<tr>
<td>2</td>
<td>7</td>
<td>Poor</td>
<td>Poor</td>
<td>Socio-eco. background; Emotional maladjustment</td>
</tr>
<tr>
<td>3</td>
<td>9</td>
<td>Poor</td>
<td>Poor</td>
<td>Visual handicaps; Mental handicaps</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>Average</td>
<td>Above Average</td>
<td>Speech; mental handicaps</td>
</tr>
<tr>
<td>5</td>
<td>17</td>
<td>Poor</td>
<td>Poor</td>
<td>Speech; mental handicaps; Visual handicaps; Socio-eco. background</td>
</tr>
<tr>
<td>6</td>
<td>19</td>
<td>Average</td>
<td>Poor</td>
<td>Mental handicaps; Absences</td>
</tr>
<tr>
<td>7</td>
<td>9</td>
<td>Good</td>
<td>Poor</td>
<td>Socio-eco. background; Emotional maladjustment</td>
</tr>
<tr>
<td>8</td>
<td>12</td>
<td>Average</td>
<td>Average</td>
<td>Emotional maladjustments</td>
</tr>
<tr>
<td>9</td>
<td>10</td>
<td>Average</td>
<td>Average</td>
<td>Visual handicaps; Auditory handicaps</td>
</tr>
</tbody>
</table>

7 From school records.
8 From consultation with the local physician, teachers and parents.
9 From conferences with teachers, interviews with children, parents and neighbors.
10 Conclusions drawn from all available data.
<table>
<thead>
<tr>
<th>No.</th>
<th>Absences</th>
<th>Health</th>
<th>Socio-Eco. Background</th>
<th>Primary Cause of Failure</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>14</td>
<td>Poor</td>
<td>Average</td>
<td>Visual handicaps; auditory handicaps</td>
</tr>
<tr>
<td>11</td>
<td>35</td>
<td>Poor</td>
<td>Poor</td>
<td>Mental; absences; Emotional adjustments</td>
</tr>
<tr>
<td>12</td>
<td>26</td>
<td>Poor</td>
<td>Poor</td>
<td>Absences; Emotional adjustments</td>
</tr>
<tr>
<td>13</td>
<td>15</td>
<td>Poor</td>
<td>Poor</td>
<td>Health and nutritional lacks; emotional lacks</td>
</tr>
<tr>
<td>14</td>
<td>24</td>
<td>Very poor</td>
<td>Poor</td>
<td>Auditory; nutritional and health; absences</td>
</tr>
<tr>
<td>15</td>
<td>12</td>
<td>Very poor</td>
<td>Poor</td>
<td>Visual handicaps; Auditory; health</td>
</tr>
<tr>
<td>16</td>
<td>2</td>
<td>Poor</td>
<td>Poor</td>
<td>Visual handicaps; Mental; socio-eco. background; emotional lacks</td>
</tr>
<tr>
<td>17</td>
<td>0</td>
<td>Poor</td>
<td>Average</td>
<td>Visual handicaps; auditory; Nutritional and health; Socio-eco. background</td>
</tr>
<tr>
<td>18</td>
<td>13</td>
<td>Good</td>
<td>Poor</td>
<td>Socio-economic background</td>
</tr>
<tr>
<td>19</td>
<td>20</td>
<td>Average</td>
<td>Average</td>
<td>Visual handicaps; Mental; absences</td>
</tr>
<tr>
<td>20</td>
<td>0</td>
<td>Average</td>
<td>Poor</td>
<td>Nutritional and health; Socio-economic background</td>
</tr>
<tr>
<td>No.</td>
<td>Absences</td>
<td>Health</td>
<td>Socio-Eco. Background</td>
<td>Primary Cause of Failure</td>
</tr>
<tr>
<td>-----</td>
<td>----------</td>
<td>--------</td>
<td>-----------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>21</td>
<td>11</td>
<td>Poor</td>
<td>Poor</td>
<td>Visual handicaps; auditory; mental; socio-eco. background</td>
</tr>
<tr>
<td>22</td>
<td>8</td>
<td>Average</td>
<td>Poor</td>
<td>Mental deficiency; Socio-economic lacks</td>
</tr>
<tr>
<td>23</td>
<td>10</td>
<td>Average</td>
<td>Average</td>
<td>Visual handicaps; Mental lacks</td>
</tr>
<tr>
<td>24</td>
<td>20</td>
<td>Poor</td>
<td>Poor</td>
<td>Absences and speech deficiencies</td>
</tr>
<tr>
<td>25</td>
<td>2</td>
<td>Poor</td>
<td>Poor</td>
<td>Visual handicaps; Mental lacks; Socio-eco. background</td>
</tr>
<tr>
<td>26</td>
<td>2</td>
<td>Good</td>
<td>Average</td>
<td>Emotional Maladjustment</td>
</tr>
<tr>
<td>27</td>
<td>2</td>
<td>Good</td>
<td>Poor</td>
<td>Visual handicaps</td>
</tr>
<tr>
<td>28</td>
<td>12</td>
<td>Very Poor</td>
<td>Poor</td>
<td>Health and nutritional lacks</td>
</tr>
<tr>
<td>29</td>
<td>19</td>
<td>Poor</td>
<td>Poor</td>
<td>Visual handicaps; Mental; absences</td>
</tr>
<tr>
<td>30</td>
<td>0</td>
<td>Good</td>
<td>Poor</td>
<td>Mental lacks; Socio-eco. background</td>
</tr>
<tr>
<td>31</td>
<td>20</td>
<td>Poor</td>
<td>Poor</td>
<td>Visual handicaps; Mental; absences</td>
</tr>
</tbody>
</table>
Arbitrarily to assign to any one cause the failure of a pupil is neither scientific nor exact. Often, in fact usually, a combination of factors enters into the pupil's inability, refusal or neglect to do his work.\(^2\) It may be possible, however, through specific examination and application of individual cases, to determine at least the predominant cause or combination of causes of failure in those individual instances and thus to arrive at a general and sound conclusion. Such is the purpose indicated in this study.

Physical Causes of Failure

As indicated above, the physical causes of failure may be summarized or catalogued as: (1) Visual handicaps; (2) Auditory defects; (3) Speech inequalities; (4) Nutritional lacks; and (5) Ill health. An examination of each of these causes may lay some definite predicate as a basis for determining the incidence of failure in elementary school.

Visual Defects

The inability to see plainly, or the presence of visual defects, is a factor in failure to read well. Reading is a basic subject in elementary school. "Of all the physical factors discussed we recognize vision and hearing as those which most directly and vitally affect the reading process," says

Harrison.\textsuperscript{3} That many pupils fail to make satisfactory progress in school is due primarily to visual and other physical defects, say Brueckner and Melby, adding that the vision of many pupils ". . . may be so far below normal that they cannot see the printed pages clearly or read the work written on the blackboard."\textsuperscript{4} Baker agrees that

\ldots Seeing, or the sense of vision, is one of the most vital functions of the human body. As in the case of general good health, it is taken for granted, but one is overwhelmed by misfortune when it is lost. It has been estimated that 85 per cent of the impressions come through the eyes.\textsuperscript{5}

The determination or definition of visual deficiency presents some difficulty. Obviously, the child who cannot see well has some visual deficiency. The most elementary and by no means complete method of testing for the existence of such deficiency is the Snellen E chart. Though other and more comprehensive data such as the information to be derived from the Betts Telobinocular tests and, preferably, from examination by a skilled ophthalmologist might have offered more complete

\textsuperscript{3} Lucille M. Harrison, \textit{Reading Readiness}, p. 27.

\textsuperscript{4} Leo J. Brueckner and Ernest O. Melby, \textit{Diagnostic and Remedial Reading}, p. 6.

\textsuperscript{5} Harry J. Baker, \textit{Introduction to Exceptional Children}, p. 27.
information, this investigation was pursued in a rural community where no such advanced testing devices were available.

Using the Snellen E chart, therefore, the popular definition of satisfactory vision is 20/20 vision in each eye. That is, the child sees at twenty feet that which he normally is supposed to see at twenty feet. If the child has less than 20/70 vision, he is almost blind and does not fall within the category of this study. Therefore, following Lee and Vincent, the child with defective vision is classified as having vision better than 20/70 but not as good as 20/20.6

What was the extent of such faulty vision among the failing pupils who are the subjects of this survey?

Of the 31 failing pupils, 20 had less than 20/20 vision in the right eye; 15 had defective vision in both eyes; 22 had defective vision in either one or the other eye, and only 8 or 25.8 per cent had 20/20 vision in both eyes.

This data, apparent by the most elementary testing and including none of the deficiencies which might have been revealed by more advanced skills and devices, is indicative of the fact that visual deficiency is a primary factor in failure in elementary school.

6

More specific case history examination of individual failing students bears further attestation to the fact that correct vision plays a primary role upon the stage of learning.

Visual Case Histories

Case Number One.


Symptomatic behavior

1. Social

(a) Is shy and retiring. Likes to play alone.

(b) Refuses to participate in games requiring much use of the eyes. Likes "Blind Man's Buff."

(c) Wants darkest part of the room for her seat.

2. Physical

(a) Squints.

(b) Has red and inflamed eyes.

(c) Can recognize no pictures on wall or blackboard.

3. Educational

(a) Grade status at the end of the year, 1.0.

(b) Unable to read any words.

(c) Continues to refuse to participate in class learning or social activities.
4. Other information

She is the oldest of three children. Her father, in the army, was unavailable for consultation. Her mother, who had been through the fourth grade, is in poor health. She said she noticed her "squintin' 'round the house and guessed she'd have to get her some glasses soon as her husband's allotment come in." The allotment apparently had not arrived by the end of the school year.

Diagnosis

Her mentality is low, the IQ of 68 placing her on the borderline of the moron classification. It is probable, however, that the low mental age is the direct result of poor vision. She cannot see words. Obviously, she could not learn to read with the usual material. The poor socio-economic conditions do not tend to remedy her visual difficulties. Though other factors play a part, her primary surface difficulty is poor vision.

Case Number Two


Symptomatic behavior

1. Social

(a) Has tendency to bully the other children in his grade. Is stronger than the other children and attempts to dominate them.
(b) Is superior at games requiring strength, and poor at those requiring manual and visual skill.

(c) Despite his size and strength, he is often "chosen" among the last for softball games because, as the other boys phrase it, "he couldn't hit the side of a house or catch a cold." This failure was attributed more to visual than to muscular deficiency, since he wrestled well and could run rapidly.

2. Physical

(a) Rubs his eyes frequently.

(b) Suffers with inflamed eyes often.

(c) Tries hard to read, but confuses words, mispronounces words, and incorrectly supplies words.

(d) Failed the simple Cole auditory test. Often asks his teacher to repeat words and questions.

(e) Is above average in weight and height.

3. Educational

(a) Had a grade status at end of year of 3.4.

(b) Can count well and do simple sums orally much better than on paper.

(c) Had to be coaxed to take achievement and other tests, saying that they hurt his eyes.

(d) Is repeating the third grade.

4. Other information

His family are itinerant farmers who move frequently. His twelve absences were due to family requirements that he help with the farm work. His parents had only an elementary school education. They seemed to take little interest in visual difficulties, saying vaguely that they "guessed they'd see" when the subject was brought to their attention.
Diagnosis

The 20/50; 20/60 vision is, of course, a definite indicator of visual troubles. Other factors, such as the inflamed eyes, are also indicative of visual difficulties. Though his socio-economic background is poor, his absences frequent and his hearing bad, with an IQ of 86 placing him in the "dull" classification, his trouble is primarily visual. The other factors, too, are important.

Case Number Three


Symptomatic behavior

1. Social

(a) Is subject to temper tantrums, his parents report. These were not manifest at school.

(b) Likes to play "hide and seek" and hunt out dark places.

(c) Likes to play with little girls.

2. Physical

(a) Is average in height, but below average in weight.

(b) Has repeated sties.
(c) Has muscular imbalance, eyes occasionally cross.
(d) Vision blurred.

3. Educational
(a) Had a grade status at end of year of 3.6.
(b) Does not belong in the fourth grade.
(c) Can read few words.
(d) Fails to recognize pictures accurately. Described picture of bird's nest on the blackboard as "a squirrel."
(e) Is poor in all subjects, but especially poor in reading.

4. Other information

He is the oldest of three children, is the son of high school graduates who seem to be interested in him—but not to the extent of providing him with glasses. They said that he had lost or broken three pairs and would have to learn to get along without them until he could learn to use them satisfactorily. They said that except for his carelessness he was a good child. His absences were due to a long visit he had made to other parts of the state.

Diagnosis

This is another case primarily of visual difficulty. His 20 absences did not, of course, help him to pass his school work. His IQ, 72, placed him in the very dull category. The IQ, however, may have been attributable in part to the fact that he saw with such difficulty. No other apparent factors explain his failures.

Case Number Four

Male. Chronological Age, (September, 1948), 12.7. Mental Age, 8.9. IQ, 70. Grade 5. School experience, six years.

Symptomatic behavior

1. Social

(a) Is surly, a lone wolf.

(b) Is irritable and ungracious both toward his classmates and toward his teacher.

(c) Smokes cigarettes and chews tobacco.

(d) Is unskilled at games such as ball and running games.

2. Physical

(a) Holds his body tensely and screws up his face when trying to read or to see something.

(b) Complains that the light hurt his eyes.

(c) Continually shields his eyes with his hand.

(d) Has difficulty in hearing. Complains of earaches.

(e) Suffers frequently from colds.

(f) Is underweight and underheight.

(g) Complains of frequent dizziness.

3. Educational

(a) Is the beginning of seventh year in school, but is beginning the fifth grade.

(b) Had grade status at end of the year of 3.6.

(c) Is poor in all subjects, especially reading.
4. Other information

He is the oldest of three children. His social and economic background are wretched. He lives in a hovel. His parents, practically illiterate, manifest little or no interest in him.

Diagnosis

His repeated failures in school were attributable to a number of factors—he was hard of hearing; his nutritional and health conditions were poor; his economic background was bad; his parents were uninterested. Any one of these factors was enough to cause failure. Aligned with his unquestionably defective vision, the phenomenon lies not in his failure, but in the fact that he should have progressed as far as the fourth grade.

Case Number Five


Symptomatic behavior

1. Social

(a) Is bored and uninterested in her surroundings.

(b) Is apparently an introvert. Lives in a dream world.

(c) Is uncommunicative with the other children. Unfriendly except with one girl.
2. Physical
   (a) Frowns and makes brows frequently.
   (b) Stumbles. Is awkward and clumsy.
   (c) Bends very close to her desk to do her work.
   (d) Is above average in weight and in height.
   (e) Seems to be in good health.

3. Educational
   (a) Grade status at end of the year is 4.9.
   (b) Reads poorly.
   (c) Could recognize few words and no individual letters.
   (d) Transfers words.
   (e) Cannot describe pictures.

4. Other information
   She is the eldest of two children. Both father and mother have been to college, though neither graduated. Home conditions are good. The parents are interested. They promised to supply her with visual aids and did so, just two weeks before the end of the school term. Results from her glasses have not yet been ascertained.

Diagnosis

Poor mentality, resulting perhaps from poor vision.

Glasses should remedy the defect. Better work is to be expected from her next year.

Case Number Six.

Vision, left eye, 20/30; right eye, 20/50. No hearing or speech defects. Height and weight, much below average.


Symptomatic behavior

1. Social
   (a) Is quiet, retiring, "mouselike."
   (b) Shuns companionship of the group. Occasionally plays with one or two little boys.
   (c) Refuses to play such games as cards, or to engage in any other activity which requires much use of the eyes.

2. Physical
   (a) Is cross-eyed.
   (b) Is apparently astigmatic.
   (c) Blinks constantly.
   (d) Thrusts head forward awkwardly when looking at objects.
   (e) Usually has inflamed eyes.
   (f) Is underweight and underheight.

3. Educational
   (a) Had a grade status at end of year of 3.8.
   (b) Is his eighth year in school.
   (c) Reads poorly.
   (d) Apparently has little memory.

4. Other information
   His parents are dead. He, the fourth of five children, lives with an elderly lady for whom he works. His home life is poor. The guardian upon being interviewed was either uncomprehending or uninterested. She said the boy was "trifling" and that he failed his school work because he was lazy. Advocated corporal punishment.
Diagnosis

Again here are present a number of factors which lead to failure—low mentality, poor nutrition, poor socio-economic background. Again, apparently, however, the fundamental factor in his failure is poor vision. It is difficult for the pupil to study when the pupil cannot see.

Case Number Seven


Symptomatic behavior

1. Social

(a) Is aggressive, dominating.

(b) Was belligerent in that he engaged in three fist fights during the year, thrashing about and striking out blindly. In all three encounters, he was worsted.

(c) Is awkward at games.

(d) Though often irritable in class, he is liked by other children on the schoolground.

2. Physical

(a) Is myopic.

(b) Has poor fusion
(c) Calls "H" an "N". Calls "R" an "M". Calls "P" an "R".

(d) Complains of dizziness and headaches.

(e) Health apparently good except for eye trouble.

3. Educational

(a) At end of year, had grade status of 6.1.

(b) Tried hard in school, except for his irritability, but could not seem to understand his work.

(c) Often confused images, pictures, numbers and assignments.

4. Other information.

He is the second child in a family of five children. His father is an oilfield worker. Neither father nor mother had graduated from high school. Both claimed that he was using eye trouble as an excuse for failure. They said he did not need glasses.

Diagnosis

His IQ of 98 placed him in the mental average group.

Health, speech, hearing and nutrition were good. Vision was poor. Visual deficiency may be a chief cause of his failure.

Case Number Eight

Symptomatic behavior

1. Social
   (a) Makes peculiar noises with mouth.
   (b) Plays ball poorly.
   (c) Is liked by the other children.
   (d) Is laughed at by the other children because of his clumsy antics and mistakes.

2. Physical
   (a) Is underweight and underheight.
   (b) Has inflamed eyes frequently.
   (c) Suffers from mucus in eyes.
   (d) Holds book almost to his nose.
   (e) Has colds frequently.

3. Educational
   (a) Asks repeatedly silly questions of the teacher.
   (b) Wants to repeat the same assignment continually.
   (c) Confuses images and sounds.
   (d) Had a grade status at end of year of 6.2.

4. Other information

He is the third of nine children. His parents have an elementary school education. The house is untidily kept. The economic conditions are poor. No books could be seen anywhere in the house. The father reported that he had tried to run away from home "and join the Navy, but I soon knocked that foolishness out of him."

Diagnosis

This is another case of the effects of poor health, poor surroundings and low mentality accentuated by poor vision.
Case Number Nine

Female. Chronological Age, (September, 1948), 13.8.

Symptomatic behavior

1. Social

(a) Says that she wants to be a school leader.

(b) Talks continually to her teacher.

(c) Asks if people would think she was ugly if she had to wear glasses.

(d) Wants to know continually if she is going to be promoted.

2. Physical

(a) Is myopic.

(b) Has difficulty in distinguishing letters and numerals.

(c) Has watery, "rheumy" eyes.

(d) Called picture of a bowl of fruit on the wall, "a basket of little yellow chickens."

(e) Is underweight and underheight.

(f) Suffers frequently from colds.

(g) Was absent frequently because of illness.

3. Educational

(a) Had a grade status at the end of the year of 4.8.

(b) Has just finished her seventh year in school.
(c) Tried hard apparently to do her work and seemed interested in it.

(d) Said that images, words and numbers were blurred.

4. Other information

She had one older brother and three sisters. Her father was a tenant farmer; her mother was uneducated. The home was clean and neatly kept, but poverty-stricken. The mother said that she knew that the child needed glasses, but that she just did not have the money for them or for an eye examination.

Diagnosis

Her IQ was low; she was undernourished, subject to frequent minor illnesses and absent often. These were causes of failure. Again, however, it may be observed that the symptoms of visual difficulty were too great to be ignored, and, at the same time, too obvious for the teacher to expect of her adequate school work. With poor vision together with her other handicaps, her scholastic success was indeed questionable.

There were other cases of visual deficiency revealed by this survey but not as extreme as those suggested in the case histories above. They were, nevertheless, at least partly responsible for the failure of other children whose case histories are yet to be considered.

Auditory Defects

The determination of defective hearing without proper testing or examination is difficult. The distinctions among
the deaf, the hard-of-hearing, and the normal are pointed out by Elwood A. Stevenson:

A deaf person—though many times, say six cases out of ten, possessed of sound perception—is one who does not react understandingly to spoken language. A hard-of-hearing person is one who reacts to spoken language understandingly, provided the source is brought within his hearing range, either through a loud voice, through amplification of sound, or through some other mechanical device. A deaf person may have 20 per cent of sound perception, but nevertheless he does not understandingly hear spoken language. A hard-of-hearing person may have only 5 per cent of hearing, yet nevertheless he hears understandingly.7

When the pupil cannot hear well, his learning processes are often impaired. Cole continues:

Defective hearing interferes with learning to read because a pupil does not get a clear sound of the words as the teacher pronounces them. In fact, defective hearing has operated before he ever entered school to produce an abnormally small vocabulary.8

Since audiometers and other more formal and expert methods of diagnosing auditory defects were unavailable for the purposes of investigation, a simple test suggested by Cole was used. As the child listened to the teacher's oral pronunciation of ten simple six-word sentences, he was required to repeat each sentence as soon as it was uttered. Failure on more than five sentences implied the presence of

---

7 Quoted in Baker, *op. cit.*, p. 91.
auditory defects. Further evidence of auditory deficiency was compiled from teacher observation of the symptoms of such deficiency.

Of the 31 failing students in the elementary school, 7 or 22.6 per cent showed some auditory deficiency. In only three of these cases, however, were there marked symptoms of such difficulty. These cases will be considered in detail.

Auditory Case Histories

Case Number One


**Symptomatic behavior**

1. Social

(a) Prefers a make-believe, solitary play to any group activity.

(b) Remains on the outskirts of the group, and copies his activity from the group.

(c) Seeks protection from the teacher by hovering near her when boys play "Cowboys and Indians" or any other active game. Calls such sport "rough".

(d) Rejects any overtures from group leaders to draw him into group.
2. Physical
   (a) Holds mouth open much of the time.
   (b) Whines in class when his ear hurts.
   (c) Puts his head down on his desk frequently and refuses to sit up.

3. Educational
   (a) Grade status at the end of the year, 1.2.
   (b) Ability to participate in most inferior group in reading, hand craft, etc., almost non-existent.
   (c) Oral work lacking in coherency and lucidity.

4. Other information

   He has a feeling of inferiority which was probably increased by his more successful brother who does passing work. He had a sister who was also a failing student. The family had a poor economic status, the father being an illiterate farm helper.

**Diagnosis**

Although his IQ was barely within the range of the average fifty per cent of school children, his physical handicap made him seem much more stupid than his IQ indicated. Because of this maladjustment, exposure to learning in school had profited him little. Frequent pain associated with earache caused him to be almost completely unable to learn. If his auditory deficiency could be corrected, he would have a fair chance of doing acceptable work.

**Case Number Two**

Male. Chronological Age, (September, 1948), 7.7. Mental Age, 7.7. IQ, 100. Grade 2. School experience, one

Symptomatic behavior

1. Social

(a) Suspects his classmates of making fun of him.

(b) Brings stories to the teacher that other children do not like him.

(c) Fabricates situations in which he is heroic but persecuted.

(d) Refuses to play in large group, but could occasionally be persuaded to participate in small group play.

2. Physical

(a) Does not answer when asked a question in class until question has been repeated several times.

(b) Has formed the habit of saying "What?" even when the question is loud enough and the child is near enough to hear the teacher.

(c) Complains of noises in his head. Declares at times that there is a fly inside his head, buzzing about and keeping him from working.

(d) Has very poor and peculiar posture.

3. Educational

(a) Is exceedingly inaccurate in all schoolwork. Chooses the wrong color in art work. Mispronounces his words. Mumbles entire sentences which he speaks in one breath.

(b) Works very slowly and with long spans of in-action. Seems to ignore teacher's suggestion that he work steadily after two or three half-hearted attempts.
(c) Seldom shows interest in a class project. Says instead that he doesn't like it, and is audibly critical of the work of children who excel him in the project.

4. Other information

He is the older of two children of an oil field worker with a fair salary, would have, if it were not for his physical maladjustment, a fair chance for educational advancement. The father says that he believes the child's troubles are imaginary. The mother promises to take him to a specialist if he does not show improvement soon.

Diagnosis

With an IQ well within the range of average, and with a Mental Age comparable to his Chronological Age, he would not likely have difficulty with his school work if it were not for defective hearing. His vision, although not perfect, does not seem to hinder the learning process markedly. Just how much of his auditory difficulty is mental is impossible to determine, but his posture, his requests for question repetition, and his complaints of buzzing noises are real enough to indicate that his primary physical difficulty is auditory.

Case Number Three

Female. Chronological Age, (September, 1948), 8.5.
Symptomatic behavior

1. Social

(a) Is exceedingly timid. Afraid of older classmates with the exception of one motherly older girl who feels sorry for small, unhappy children and who often spends much time with them on the playground.

(b) Wants to remain in the room during recess and lunch periods. Says the loud noises of the older children playing baseball, football and basketball "hurts my head."

(c) Is reluctant to participate in organized games.

2. Physical

(a) Has matter in her ears much of the time. This condition is aggravated by the filth of ears and of the rest of her body.

(b) Breathes through her mouth. Has adenoids, and frequent sore throats. Says that she had scarlet fever when she was four.

(c) Cups her hand over her ear and leans forward occasionally in order to hear better, but most of the time her attention wanders, and she is uninterested in classroom procedures.

3. Educational

(a) Recites in halting, monotonous voice.

(b) Frequently changes teacher's question and responds with an answer unsuited to the query.

(c) Fails almost completely to comprehend what is happening in the classroom much of the time.

(d) Often refuses to recite, ignoring the situation by gazing stolidly out of the window.

4. Other information

She arouses pity on the part of most of the other children. She is fourth in a family of seven children. Her father has no steady occupation, but
does odd jobs here and there. Her mother's health is so poor she doesn't pay much attention to any of her brood. Living conditions in their three-roomed house are almost intolerable.

**Diagnosis**

Being even in another environment and with the running, mattering ears cured, she would have a hard time adjusting herself to happy living. In the present circumstances, her case is almost hopeless. The ear difficulty may have serious consequences, resulting even in an early death. She is a derelict of a social system which ought to give more medical attention to such grave maladies of children.

**Speech Defects**

Speech difficulties are almost impossible to define accurately because they arise from so many sources, are of so many kinds and degrees, and have so many attendant by-products. In general, defective speech is based on: (1) physiological abnormalities or obstructions; (2) psychological maladjustments; and improper therapy used for the correction of errors. 9

Pintner, Eisenson, and Stanton offer the following general definition of speech difficulties:

---

Speech may be considered defective when it is not easily audible and intelligible to the listener. Speech is defective if it is vocally or visibly unpleasant or labored in production. Finally, speech is defective if it is inappropriate to the individual in regard to his mental and chronological age, sex, and physical development. ¹⁰

Terman and Almack believe that the intelligence of pupils defective in speech is not below the norm, but that these pupils are likely to fail in classwork and to become retarded because of the stupid social attitude toward their difficulty. Public reaction to defective speech is described in the following words:

... On the playground the child encounters jests, badinage, and sometimes ridicule. In the shop and on the street grown men amuse themselves at his expense. The victim's whole existence is poisoned. The more sensitive comes to prefer silence to ridicule. He retires into himself, and as a result often becomes ill-tempered, hypochondriac, suspicious of others, or disagreeable. Lifelong moral suffering and permanent defects of character may be the issue. If the speech does not become normal, the vocational outlook is altogether unpromising. Even marriage, on terms of social equality, is made difficult. ¹¹

Wallin points out a definite correlation between low intelligence and speech defects; Sirkin and Lyons, in an examination of institutionalized mental defectives, found


that only one-third of these mental defectives spoke normally; while Kennedy discovered that the lower on the mental scale her investigations proceeded, the more speech defectives were encountered.

There are, of course, many methods of detecting speech deficiency, ranging from a mere tabulation of those individuals so apparently abnormal that even the most superficial observation can recognize them to the most intricate medical and psychological diagnosis. In this survey, the following device was used as a basis for recording speech maladjustments: The teacher asked the child to imitate the sound of each consonant in the alphabet except "c" and "q" plus the combinations of "th", "sh", "ch", "ng", "kl", and "gr" sounds. Failure to imitate correctly at least fifteen of these sounds was considered evidence of some speech defect.

Of the 31 failing pupils in this Elementary School, three of these pupils failed to pass the above simple test.

---


13 L. Kennedy, Studies in the Speech of the Feebleminded, p. 32.

Only two of them, however, gave indication of such marked abnormality that the speech difficulty was considered paramount as a cause of failure. These two cases or 0.65 percent of the failing pupils will be considered from the standpoint of case history.

Speech Case Histories

Case Number One.


Symptomatic behavior

1. Social

(a) Desires the approval of the group with his whole mind and heart. Is cooperative in every possible way.

(b) Seems to feel no sense of inferiority because of his marked speech defect, even when he suffers a temporary stoppage in speech.

(c) Is very active in running about the schoolyard, yelling and waving his arms, but does not seem to have the intelligence to participate in any organized form of play, even make-believe.

(d) Is liked by the children in a pitying sort of way. His classmates seem to realize that he is not their equal mentally, and have, for the most part, assumed a protective role toward him, looking upon him as they might regard a pet dog.
2. Physical

(a) Is above the average in physical appearance except for a blank, squinting expression around the eyes and mouth.

(b) Refuses to remain in his chair at his own table much of the time, and is allowed much personal freedom by the teacher.

(c) Wants to spend as much time out-of-doors as possible, but accepts indoor restrictions with good grace.

3. Educational

(a) Does not respond to the stimulus of new knowledge in any way which can be detected by teacher or pupils.

(b) Giggles aimlessly when encouraged to participate in classroom activities, and is apparently satisfied that he has done all that is expected of him.

(c) Alternates between long silences and uncontrolled vocal and meaningless noises, but readily accepts teacher's suggestions that he "build a block house", and attempts at once, (usually fruitlessly) to do so.

(d) Made little or no progress in any of his work during the entire school year.

4. Other Information

This was his first year in school. His parents are well above average in intelligence and in achievement. They are high school graduates. They seem to refuse to face reality as far as he is concerned in their refusal to place him in a special school. He is the oldest among four children. The other children are well above average in intelligence and do well in their school work. The fact that both parents work outside the home, and that the child is left with inferior home supervision does not contribute to his well-being or to his improvement.
Diagnosis

He has no place in the free public schools. Although he does not present a discipline problem at present, it is likely that eventually he will be unable to conform to the standards of his group. His defective speech approaches complete unintelligibility. If he does not receive special training, he may well become a complete social misfit.

Case Number Two


Symptomatic behavior

1. Social

(a) Alternates between extreme effort to overcome speech defect and extreme despondency over condition.

(b) Likes boys much better than girls. If unsupervised on the playground, she will at once be found on the sidelines of a boys' baseball or football game.

(c) Admires the male of the species so openly that such abject worship would make her immensely popular if it were not for the speech defect which impairs her prestige with the more intelligent of her male associates.
2. Physical

(a) Spends much time and thought in personal adornment. Hides behind geography book to powder her nose and paint her cheeks and lips, and even her eyebrows with heavy, cheap eyebrow pencil.

(b) When called upon to recite, makes tremendous effort at first, but stuttering and stammering soon causes such confusion that she stops speaking completely, and either flounces about in her seat defiantly, tossing her head, or is embarrassed to the extent of covering her face by putting her head on the desk.

(c) When volunteering information, begins speaking in high-pitched rapid syllables, becomes involved in syllabic difficulties, and usually does not try to complete narrative.

3. Educational

(a) With an IQ barely within the average classification, and with the additional hindrance of speech difficulty, made very little progress. Did acceptable work in art, in which she is most interested, and in music, if she happened to enjoy the type of song presented.

(b) In reading, spelling, language arts, and social studies, she failed almost completely.

4. Other information

She is the third child in a large family of seven children. The father is janitor for group of primitive Baptists, and also drives a dilapidated delivery truck, neither of which activities is lucrative to the extent of supporting his large family adequately. The mother "takes in" ironing.

Diagnosis

She needs a great deal of training in corrective speech under the supervision of trained and skilled teachers. Part of her difficulty is emotional, based on lack of security at home.
Nutritional Lacks

The lack of sufficient nourishment and the existence of improper dietary standards are regarded by some authorities as a definite factor in poor work, mental or physical. Terman and Almack state:

Of all factors concerned, however, we have reason to believe that the nature and the quantity of food are the most important. Adequate nutrition is the necessary foundation of healthy growth, and the lack of it the most productive cause of low vitality. . . . There is hardly a defect found among school children which is not in greater or less degree produced by malnutrition. In this category we may include even eye-strain, dental defects, spinal curvature and nervousness, as well as the infectious diseases.15

Baker stresses the prevalence of nutritional lacks in the following words:

. . . . Whenever any one gives malnutrition a superficial thought the impression prevails that American children are generally well fed, happy, and in good physical condition in this land of plenty. Nothing is actually farther from the truth. . . . Malnourishment becomes one of the greatest challenges to child care, to proper education, and to hygienic and economic conditions.16

The White House Conference report17 indicated that there were an estimated 6,000,000 malnourished children in this country.

15 Terman and Almack, op. cit., pp. 46-47.
17 White House Conference, Special Education: The Handicapped and the Gifted, p. 6.
Brueckner and Melby point out that pupils who are undernourished are unable to make the sustained drive which is necessary for successful schoolroom performance.\footnote{18} Harrison adds: "The nutrition of the child should be especially guarded as a factor in his physical well being, for it is in the early years especially that malnutrition makes for inefficiency in the organism."\footnote{19} Although nutritional lacks did contribute to failure among the pupils under consideration, insufficient nourishment has not been cited as the primary cause of failure. Case studies will therefore not be considered here, but it will be noted that poor nutrition is a factor in the emotional disturbances later to be discussed in this study.

**Poor Health**

It is impossible to determine with accuracy to what extent poor health is attributable to mental and emotional causes. The individual possessing poor health, even if he has reached maturity, is frequently unable to make a definite diagnosis of his condition in terms of the relative importance of physical, mental, and emotional factors which contribute to his feeling of illness. Physicians, psychologists and teachers

\footnote{18}{Brueckner and Melby, \textit{op. cit.}, p. 6.}
\footnote{19}{Harrison, \textit{op. cit.}, pp. 20-21.}
are frequently mistaken in the cause of illness. Certainly, then, it is unreasonable to expect the child in the elementary school to recognize his own symptoms correctly in the three categories.

The chief symptom of poor health is, in general, lowered vitality. Baker describes children whose physical buoyancy does not measure up to the norm in the following words:

   Lowered vitality characterizes an important group of exceptional children. There has been a tendency to use the very unacceptable term "delicate" in describing these children; that of "lowered vitality" is generally more acceptable. Even the term "lowered" does not completely describe them, since there is hope that such conditions are temporary and "lowered" might imply permanency.20

Of the 31 children who failed in this Elementary School and who constitute the material for this study, two of them or 0.65 per cent had such poor health that their failure was largely attributed to that factor. Their case histories will be considered.

Case Histories of Children with Poor Health

Case Number One.


Height, above average. Health, very poor. Socio-economic background, poor.

Symptomatic behavior

1. Social

(a) Reacts to all situations in a dispirited fashion.

(b) Refuses to go out on the playground if temperature is below sixty degrees. Shivers and says he is cold.

(c) Does not possess the physical energy to take any part in organized play.

(d) Finds the warmest, most secluded corner of the schoolyard, usually in a remote turn in the building, and huddles, shivering and unhappy.

(e) Is not antagonistic or envious, merely oblivious to her classmates.

2. Physical

(a) Has no appetite. Usually does not bring a lunch to school. When teacher's insistence does persuade her to bring a lunch, she does not want to eat it.

(b) Wishes to sit close enough to the stove to touch it. Always wears a sweater or coat in the schoolroom.

(c) Has very poor posture, slumping in her seat or sprawling in the aisle.

3. Educational

(a) Does not listen to assignments, and frequently does not know what the other members of the class are doing.

(b) Has no confidence in her ability to participate in class activities.
(c) Most frequently answers, "I don't know," without considering the question or making any attempt to answer.

4. Other information

She is a sister of a failing pupil in the first grade. Her family background and socio-economic status is very poor. Her parents take little interest in their children, other than providing them with a minimum of physical necessities.

Diagnosis

This child, under the best physical conditions, would have difficulty in keeping up with her classmates in achievement. With an IQ a little below the minimum in the "average" classification, and with the additional handicap of two failures to pass, she sorely needs abundant health. Instead of health, she possesses all indications of greatly lowered vitality. Although no evidence of specific disease has been discovered, the child is anemic, undernourished, and physically unable to work. The outstanding cause of her failure is apparently "poor health".

Case Number Two

Symptomatic behavior

1. Social

(a) Becomes emotionally upset at the slightest variation in normal routine.

(b) Is filled with imaginary fears, such as fear that a small wind will become a cyclone, or a slight illness will result in sudden death.

(c) Tells her classmates, if and when they will listen, of her many aches and pains—some of them very real, but many of them completely imaginary.

2. Physical

(a) Sits with shoulders humped and chest slumped in.

(b) Is tall and skinny and extremely awkward.

(c) Shows extreme nervous condition by a twitching of the left eye when she is under any stress.

(d) Has a hacking cough.

3. Educational

(a) Likes social studies but has no ability to retain information for more than a few days.

(b) Has no background of knowledge in arithmetic. The only acceptable work she does is when she copies.

4. Other information

Is oldest in a family of five children. Both parents work outside the home, and she is expected to care for the younger children, ranging from nine years to seven months, after school. Much housework is also expected of her. The girl does not seem to be physically lazy, but life is just too much for her.

Diagnosis

She should be permitted to have a normal childhood. Overwork, poor health, no recreation, no fun, little hope
for the future have all combined to pervert her outlook in life and to force her into channels of the potential hypochondriac. The severe press of obtaining the minimum essentials of life for a large family has partly fallen upon her frail shoulders. Another environment might work wonders for the child. The care of an excellent physician might do still more.

The Mental Causes of Failure

As has been shown in the outline of the mental causes of failure, the mental factors of primary importance as a reason for retardation are: (1) Low intelligence quotients and mental ages; (2) Lack of mental readiness and too rapid advancement; (3) Insufficient preparatory background; and (4) Other mental factors.

Two of the 31 pupils in the Elementary School failed primarily because of low Intelligence Quotients, and Mental Ages which were below the norm for their grade and age equivalents. A brief analysis of the effect of low Intelligence Quotients will therefore be made.

Before low Intelligence Quotients can be surveyed intelligently, it is necessary to attempt to define intelligence itself.

... Binet defined intelligence as the ability to take and maintain a definite direction, as adaptability to new situations, and as ability to criticize one's own acts. Woodworth had a somewhat similar concept in retentivity, or the ability to use facts and activities
already acquired, by ready adaptability to novel situations, by curiosity, interest in, and desire to know about things, and by persistence, or the trait of sticking to what is begun. In these fields of practical applications, Thorndike proposed three areas of intelligence: the first is abstract, or the ability to understand and manage ideas and symbols. . . . ; the second is mechanical intelligence or the ability to learn, understand, and manage things and mechanisms; and third is social intelligence or the ability to manage people, and act wisely in human relations. 21

Children who are unable to reach and maintain the norm of their age and grade levels are judged to be mentally dull, and the various testing programs devised to test their mental alertness have confirmed these judgments. The problem of what to do with these mentally inferior children has not yet satisfactorily been solved.

The most practical suggestions for our present plant, economic and personnel limitations in the rural elementary school seem to be: (1) a modification of the course of study to meet the needs of the slow-learning; and (2) special methods of teaching which will not be above the levels of intelligence of the slow-learning group.

Case Histories of Pupils with Mental Defects

Case Number One

Female. Chronological Age, (September, 1948), 8.2.
Mental Age, 4.7. IQ, 56. Grade 1. School experience, two years. Vision, left eye, 20/20; right eye, 20/30. Hearing,


**Symptomatic behavior**

1. Social

   (a) Seems to have no comprehension of the objectives and procedures of organized play. When she is supposed to "drop the handkerchief" or to choose which side she wants in "London Bridge" she stares uncomprehendingly.

   (b) Has a little rag doll which is her constant companion on the playground and in the classroom. Talks to the doll in a meaningless jabber.

2. Physical

   (a) Has a very small head with eyebrows low and close together.

   (b) Ears do not seem to fit on head at the normal place. They are very peculiarly shaped.

   (c) Has formed a habit of sticking her tongue out at unexpected moments.

3. Educational

   (a) Plays with her rag doll all of the time.

   (b) At the end of her second year in the first grade, her Mental Age was still 4.7.

   (c) Took no part in classroom activity. Showed absolutely no interest in any subject.

4. Other information

   She is the third child in a family of four. Her father is a tenant farmer and her mother works in the field with him. The children are left alone in the house much of the summer. Both parents seem decided in the slow-learning or dull category. The mother is obese. The father has a speech defect. The family is very poor.
Diagnosis

Her failure may be due to her low Intelligence Quotient. She has given no indication in any way of being capable of doing scholastic work in a course of study adapted to normal children. She should be placed in a special school where she will have some opportunity to prepare herself for the kind of existence which she is capable of living satisfactorily for herself and for others.

Case Number Two


Symptomatic behavior

1. Social

   (a) Wants to show superiority but is totally unable to do so.

   (b) "Picks on" the smallest and the most timid first grade boys who are afraid of him.

   (c) Shows a desire to hurt or to frighten other children.

2. Physical

   (a) Is much smaller than the average eleven year old boy.

   (b) Has very bad teeth, close together and irregular.
(c) Has a mean-looking expression on his face.
(d) Ejectorates frequently.

3. Educational
(a) Writes almost illegibly.
(b) Cannot spell a single word, but writes meaningless letters during a spelling dictation lesson.
(c) Arithmetical computation averages low first grade.
(d) Makes meaningless circles in art class. Puts a dot in the center of each circle.

4. Other information
He is the youngest of three children. He lives with his sister who takes little interest in him in any way. She seems actively to dislike him, claiming that she once caught him twisting her own infant's arm. He comes from the lowest social and economic strata in the community.

Diagnosis
He is in need of special teaching in a school equipped to handle maladjusted children. With his low intelligence and social behavior, he is a potential delinquent. He should receive expert individual guidance.

Emotional Causes of Failure

Emotional causes of failure will be considered under five general headings presented above in the chapter outline, namely: (1) the effect of physical and mental handicaps upon emotional development; (2) improper discipline; (3) psychological maladjustment; (4) social maladjustment; and (5) other emotional factors.
The divisions of emotional inadequacy according to Burton include insecurity, maladjustments to persons, situations, requirements, complexes, phobias, presence of escape mechanisms and immaturity.\textsuperscript{22} (Obviously, using these acceptable emotional criteria, every failing child fails, in part at least, because of emotional disturbance.)

Terman and Almack point out the correlation between physical, mental, and emotional maladjustments in the following statement:

For years mental disorders have been considered as in two large groups, designated as "organic" and "functional". In the first group, it is possible to demonstrate pathological changes in the brain and nervous tissue which can account for mental disease. . . .

Physicians, and in fact most biologists, are very cautious about accepting the hypothesis implied in the functional point of view that the mind is to any extent independent of the nervous system, or that real mental disorders can exist without nervous lesions. They believe there can be no abnormality of function without a corresponding abnormality of structure. While everyone has been willing to accept this fundamental law so far as it is related to other organs of the body, many hesitate to accept it when applied to the nervous system and the mind.\textsuperscript{23}

Baker believes that mental and emotional disturbances, in some instances, have a physical basis, but that, in other instances, these maladjustments have an etiology solely neurological or psychogenic.\textsuperscript{24} Cotton offers the theory that while

\textsuperscript{22} Burton, op. cit., p. 462.
\textsuperscript{23} Terman and Almack, op. cit., p. 292.
\textsuperscript{24} Baker, op. cit., pp. 318-319.
the primary lesion may not occur in the brain itself, the anatomical lesions of other organs of the body frequently change the metabolism, contaminating the blood with abnormal products which in turn disturb the chemical exchanges and nutrition of the cells of the brain. Thus a physical basis for emotional disturbances is demonstrated.

Wile makes the point that physical causes may have various emotional effects upon various individuals. In the following statement, he lists some of them:

... Myopia may cause fatigue, an ocular tic, nystagmus headaches, truancy, tantrums, or depression. Corporal punishment may bring about abject fear and submissiveness, or aggressive disputation, flight from home, murder, or suicide. A fracture of the skull may be responsible for school failure, irritability, wanderlust, or epilepsy. The lack of an allowance may give rise to disobedience, theft, or slavish devotion to restitude and an early desire to enter a vocation. Lack of adjustment in school may result in indifference, carelessness, failure, tantrums, truancy, or theft. Calling a child names may cause irritability, pugnacity, disobedience, self-isolation, flight from home or school, a sense of inferiority, or a neurosis.

Nervousness is a general term denoting emotional maladjustment and covering "not one disorder but a whole cohort."

Physically, the symptoms are varied, extending from extreme listlessness to extreme excitability. Mentally, the range

---

27 Terman and Almack, op. cit., p. 300.
includes both the slow-learning and the precocious. Emotionally, the field extends from morbid introversion to a state of exhibitionism with Narcissus indications. The most serious manifestations of nervous disorders border on prepsychotic, psychopathic and even neurotic conditions.

The lack of sympathetic understanding on the part of parents and teachers finds its origin in inadequate or incorrect information concerning the nature, diagnosis and treatment of nervous disorders, and in improper discipline. The results are psychological, social and other emotional disturbances which may disastrously affect the entire future life of the child. Nervousness is properly considered as an effect rather than a cause of emotional disturbance.

Case Histories of Pupils with Emotional Disturbances

Case Number One


Symptomatic behavior

1. Social

(a) Is afraid of the teacher and of most of the other pupils.

(b) Cries or hides face when the supervisor or the principal comes into the room.
(c) Is afraid of dogs. Suffered a mild case of hysteria when a strange dog barked at him on the schoolground.

(d) Plays very infrequently with the other children.

2. Physical

(a) Tires very easily.

(b) Stutters when he becomes excited.

(c) Cannot sit still for more than two minutes.

3. Educational

(a) Was unable to read more than seven words at the end of the year.

(b) Had made little or no adjustment to the procedures of classroom activity.

(c) Had made no progress in computation. At times he could add simple numbers but at other times he failed to achieve a single correct answer.

4. Other information

He is the second child in a family of five children. The parents are very poor. Both of them work long hours and have little energy or time to give to their children. He probably feels insecure and neglected.

Diagnosis

This pupil has fairly good health and normal intelligence. His difficulty is probably emotional. He is subject to abnormal fears and is constantly haunted by a sense of dread of any and everything. If his nervous instability can be removed, he will probably lead a useful life in a vocation not requiring great mental ability.

Case Number Two:


Symptomatic behavior

1. Social

(a) Possesses a very unstable personality, at times morose and sullen, and at other times extremely vivacious, bordering on foolishness.

(b) Is occasionally very demonstrative on the schoolground, running about waving his arms and yelling.

(c) Prefers games which are exciting and competitive.

2. Physical

(a) Possesses overmobility of facial muscles.

(b) Moves spasmodically.

3. Educational

(a) Reads rapidly, but substitutes words to such an extent that the meaning of the context is lost.

(b) Imitates actions and recitations of other children.

(c) Repeats almost word for word an incident told first by another pupil, acting as if he had thought of the story, or as if the incident had happened to him.

4. Other information

He seems emotionally unable to make an adequate adjustment to reality. His feelings are unstable and unpredictable. He lives in a world of his own making where he is the undisputed hero. He is the fourth child in a family of five. His parents are uneducated and well below the average socially and economically. Neighbors report that they quarrel violently.
Diagnosis

His chief difficulty is emotional tension. He should be provided with a peaceful and serene home background, free from temper tantrums on the part of his parents and older brothers and sisters.

Case Number Three


Symptomatic behavior

1. Social

(a) Expects to have her way about everything.

(b) Wants to be "It" in every game and feels abused when she is refused.

(c) Brags on herself, her family and her possessions to the other children.

(d) Is very unpopular.

3. Educational

(a) Does not listen to what the teacher is saying.

(b) Pouts and denies that she is inattentive.

(c) Has a ready excuse for her failures.

(d) Showed little or no improvement at the end of the year.
4. Other information

She is an only child and is clearly the recipient of too much attention at home. Her parents make many sacrifices to give her, as they term it, "everything her little heart desires."

Diagnosis

She must learn that she cannot have everything she wants, that her parents cannot accept responsibilities for her, and that she must begin to do a little work if she is going to pass. As far as can be observed, there is nothing intrinsically wrong with her, either physically or mentally. She has failed because at this early age she has been taught by her parents that nothing is too good for her.

Case Number Four


Symptomatic behavior

1. Social

(a) Is involved in her own religious imaginings to the extent that she considers herself apart from the group.
(b) Alternately bores and fascinates the other girls with stories of "visions" and "voices". (These stories are not original. They are acquired at testimonial meetings of her religious group.)

(c) Refuses to participate in organized play, terming it "worldly".

2. Physical

(a) Has frequent headaches.

(b) Goes without noon meal frequently. Says she is fasting.

(c) Gazes off into space for long periods.

3. Educational

(a) Refuses frequently to read, saying that she cannot see the page.

(b) Hears "voices" frequently when she does not want to participate in classwork.

(c) Cries when teacher insists that she attempt to solve arithmetic additions or subtractions.

4. Other information

Her entire family, eleven children and a father and mother, belong to a fundamental religious group whose meetings are extremely emotional, involving speaking in unknown tongues, trances and fits of ecstatic communion. She may be aroused emotionally to such an extent that she finds it impossible to resume normal activities at school.

**Diagnosis**

With her low IQ, frequent absences and poor health generally, she would have difficulty in meeting the usual requirements of the traditional school curriculum. Her religious experience complicates the case.
Case Number Five


Symptomatic behavior

1. Social

(a) Gives definite indications of kleptomania. Pencils, crayolas, trinkets belonging to others are frequently found in her desk, or near her chair.

(b) Denies knowledge of how she acquired them when they are discovered.

(c) Lies upon the slightest provocation.

2. Physical

(a) Has peculiar mannerisms, such as twisting the hair, a belt or her skirt-button.

(b) Complains of dizziness.

(c) Says she sees black spots before her eyes.

3. Educational

(a) Possesses little or no curiosity.

(b) Is completely indifferent to the project under construction or discussion.

(c) Is a very poor reader.

(d) Makes little attempt to do manual work.
4. Other information

She is seventh in a family of nine children. Her father is a tenant farmer, and has much difficulty in supporting his family. Part of her stealing can be attributed to her own lacks and needs, although she seems to steal indiscriminately, whether she finds a need for the object or not.

Diagnosis

If she could be persuaded to take an active part in normal activities—in drawing, hand crafts, physical activities, and music—and if she had a more satisfactory home environment, much of her emotional maladjustment would probably disappear.

Case Number Six


Symptomatic behavior

1. Social

(a) Kants to "show off" before the girls.

(b) Dislikes boys' games, and often has to be sent away from group of girls.

(c) Teases girls.

2. Physical

(a) Asks to "be excused" frequently.

(b) Slouches and sprawls in his seat.
3. Educational.
   (a) Writes jerkily and almost illegibly.
   (b) Is sullen and uncooperative upon failure to recite.
   (c) Averages approximately a high-first grade achievement rating in all of his school subjects.

4. Other information
   His parents are very strict with him. He is an only child, born when both parents were well past their middle years. His environment is prim—almost ascetic.

**Diagnosis**

His behavior may indicate the presence of Freudian tendencies. He should receive individual guidance in supervised play.

**Case Number Seven**


**Symptomatic behavior**

1. Social
   (a) Boasts of his physical strength, his ability, his possessions at every opportunity.
   (b) Invents the most impossible situations in which he is the hero.
(c) Bullies the younger or the smaller children.
(d) Is careful not to "pick on" a boy his size.

2. Physical
(a) Dresses flashily and rather eccentrically.
(b) Talks too much in loud, coarse voice.
(c) Laughs when there is nothing at which to laugh.
(d) Has adenoids and bad tonsils.

3. Educational
(a) Cheats on examinations and copies daily work if he can.
(b) Does failing work in every subject except arithmetic in which he makes A's.

4. Other information.
He is plainly ashamed of his parents and the other members of his family. Failed to introduce or claim his mother upon the one occasion of her visiting the school. The mother was poorly dressed, dirty, and unattractive. The boy’s father is a day laborer on the county roads. His two sisters and two brothers are very unattractive.

Diagnosis
He is suffering from feelings of inferiority. His braggadocio, boasting, lying and cheating may be attempts to cover his feeling of weakness. He is able to do sixth grade work, but he spends all of his time and effort trying to evade work in subjects which he does not like. He needs a feeling of security, and the genuine affection and confidence of someone whom he respects to cause him to respect himself.
Other Causes of Failure

Poor teaching may be a primary cause of pupil failure. Upon the nature and quality of teaching offered the failing pupils of this study, no conclusion will be offered, however, because of the insufficient opportunity of observing and evaluating that teaching.

Improper equipment may have been a primary cause of failure among the pupils herein considered. This school suffered from lack of complete equipment. For example, completely satisfactory devices for measuring visual and auditory deficiencies were not available.

The length of the school term was the standard nine-months' term, so it was, perhaps, not a primary cause of failure. The curriculum offered was the usual and approved curriculum which is used in Texas schools. Whether that curriculum is in itself a cause of failure is a question which is not answered by this study. (The frequency of absenteeism as shown by the fact that nineteen of the thirty-one pupils had absence records of more than two weeks and that eight of the pupils had absence records of more than a month supplies some support for the belief that absenteeism, at least in the cases of these specific individuals, was a handicap. It may be logical to assume that the child who rarely attends school suffers (with the possible exception of obtaining parental or other instruction) such paucity of
instruction that he will not be capable of doing his work satisfactorily. Absenteeism among this group of failures was frequent.

The subject of inadequate motivation includes and implies so many factors, physical, mental, emotional, and the like, that it is impossible within the limits of this study adequately to consider all of them. It has been shown, however, that in spite of various appeals to motivate interest such as additional help, rewards, honors, praise, and, upon rare occasions, direct commands, a few of the failures remained absolutely untouched, and uninterested in their school activities.

The school administrators and the teachers, and, as far as is known through interviews, the parents, did not demand unreasonably high standards. Classes were not unusually large. There was little improper school emphasis. That is, the school emphasized teaching, for example, rather than social or athletic activities or other such distracting influences. Provision was made for a well-rounded educational program. Athletics and social events, for example, had their place but they were not emphasized to the neglect of scholastic activities.

(The socio-economic background and the degree of parental interest were decided factors in student failures.) Of the failures, 23 or 74.2 per cent of the children came from homes which could definitely be classified as poor. None of
the failing pupils came from homes which might be classified as superior in regard to economic or educational status.

Lack of preparedness played a role in failure, perhaps, though teachers of the upper grades reported that they allowed sufficient time for adequate review. Whether such review was properly administered is a question which cannot be answered in this study.

Under miscellaneous causes of failure in the Elementary School, six cases are included. Four of these failures have been judged due largely to poor socio-economic background; one failure was due largely to absences; and one failure seemed to have no cause of more significance than the other reasons for failure. The diagnosis includes a combination of all the causes.

Case Histories of Miscellaneous Causes of Failure

Case Number One


Symptomatic behavior

1. Social

(a) Has difficulty in making friends with his classmates.
(b) Is the victim of teasing and practical jokes.
(c) Is never invited to parties and other activities given by individual pupils.

2. Physical
(a) Is always very dirty.
(b) Wears his shabby clothes untidily.
(c) Goes barefooted most of the winter.

3. Educational
(a) Has no confidence in his mental ability.
(b) Is afraid to try because the children make fun of him.
(c) Reads poorly.
(d) Spells and writes poorly.
(e) Uses wretched English.

4. Other information

His father has no regular work, and does not seem to desire steady employment. The family of six children and mother and father are called "shiftless" by the more fortunate citizens.

**Diagnosis**

Inferior socio-economic position is a principal cause of his failure in school. Increased prestige in school would be of great benefit to him, but it is very difficult for the teacher to motivate interest in the filthy, self-effacing urchin. Enough money for the maintenance of a decent standard of living might work wonders in his case.

**Case Number Two**

Male. Chronological Age, (September, 1948), 9.4.
Mental Age, 8.1. IQ, 87. Grade 4. School experience,
three years. Vision, left eye, 20/30; right eye, 20/20. No hearing or speech defects. Absences, 0. Weight and height, above average. Health, average. Socio-economic background, poor.

Symptomatic behavior

1. Social

(a) Has a "chip on his shoulder".

(b) Is constantly looking for a fight and frequently finds one.

(c) Pretends that he enjoys being a social misfit.

2. Physical

(a) Possesses unusual strength and frequently tries to "show off" by lifting enormous stacks of books, etc.

(b) Has poor posture with huge, bulky, bent shoulders.

(c) Is always hungry.

(d) Excels in athletics.

3. Educational

(a) Shows no interest in school work except science.

(b) Cannot read well enough to "make sense" when he reads aloud.

(c) Is very poor in arithmetic.

4. Other information

He is a child of great physical energy. In spite of a low IQ, he might do acceptable work in school because of his superior energy.
Diagnosis

His poverty does not seem to upset him as much as does his inferior social status in the community. If he were accepted as a good fellow within his own circle of boys and girls, it is probable that he would no longer be a failing student.

Case Number Three


Symptomatic behavior

1. Social

(a) Maintains that nobody likes him.
(b) Says teacher "has it in for him".
(c) Tells tales of the beatings administered by his parents.

2. Physical

(a) Behaves listlessly and dispiritedly.
(b) Exaggerates despondency by saying his eyes hurt or his ears ache or his stomach is upset.
(c) Claims that he does not feel like studying.

3. Educational

(a) Says he cannot understand the teacher's explanations.
(b) Volunteers the information frequently that he is "dumb" and cannot learn.

(c) Makes little or no effort to accomplish anything.

4. Other information.

His father drinks. He has been in jail several times. Many of the children in the higher grades of the elementary school "look down on" the family. The lack of prestige of the family apparently disturbs him to the extent that he has no heart to do his best, in school or anywhere else.

Diagnosis

Inferior social position may be the root of his failure. A sober father with a steady job and a homelife which is normal—to say nothing of the security which a living wage would provide economically seems to be a solution of his problem.

Case Number Four

Hearing and speech, no defects. Absences, 0. Weight and height, above average. Health, Good. Socio-economic background, poor.

Symptomatic behavior

1. Social

(a) Wishes very much to associate with older boys and girls, but meets with little success.
(b) Dresses so poorly that he is obviously ashamed of his appearance.

(c) Never has any money to spend on small things—school pictures, school supplies, etc.

2. Physical

(a) Is too large to feel happy playing with sixth graders.

(b) Slumps over when he walks.

3. Educational

(a) Tries very hard to please the teacher.

(b) Always hands in home work, but it is rarely correct.

(c) Does not have much time to prepare school work since he cleans the school building after school.

4. Other information

He has four brothers and five sisters, one of whom has been married and divorced and who is at home with her three children. The father runs a delivery truck. He is the oldest child with the exception of the married sister. Every cent he makes goes to buy enough food to keep the family from starving.

Diagnosis

He needs more money. With money he could have enough time to prepare his lessons, have a little leisure and a little cash to spend socially. The socio-economic problem is paramount in his maladjustment.

Case Number Five

Female. Chronological Age, (September, 1948), 8.6. Mental Age, 6.3. IQ, 74. Grade 2. School experience,
two years. Vision, left eye, 20/20; right eye, 20/20. 
Hearing and speech, no defects. Absences 35. Weight and 
height, below average. Health, poor. Socio-economic 
background, poor.

Symptomatic behavior

1. Social

(a) Is so quiet that her presence is almost com-
pletely unobserved among the other children.

(b) Has no special friends of either sex.

(c) Seems to dread recess and lunch hours. Asks 
the teacher to permit her to remain indoors.

2. Physical

(a) Is dull and listless.

(b) Says she is tired all the time.

(c) Slumps in her seat.

3. Educational

(a) Is absent so much that she seems perplexed 
at classroom activity.

(b) Cannot read fluently.

(c) Knows almost no arithmetic.

4. Other information

Her parents say they don't care whether she comes 
to school or not. "They never had no educashun 
and they always done ok."

Diagnosis

She needs to attend school regularly. She would have 
an opportunity to be exposed to learning to the extent that 
she would at least know what was happening in the classroom.
She would have a chance to know the children better and thus make friends with them.

Case Number Six


Symptomatic behavior

1. Social

(a) Is disliked and feared by the small children.
(b) Tries desperately to be one of them.
(c) Cries when group consistently rejects him.
(d) Dislikes his teacher.

2. Physical

(a) Is skinny and anaemic.
(b) Wants to stay outside of the room.
(c) Asks to be excused often.
(d) Has poor coordination.

3. Educational

(a) Cannot read.
(b) Cannot spell.
(c) Has made no progress.
4. Other information

His socio-economic background is poor. He lives in a two-roomed ill-kept house. His parents are illiterate. His weight and height are far below normal. His IQ of 55 places him in the category of the very dull.

Diagnosis:

He should be placed in a special school equipped with teachers who are trained to understand his needs and to help him. In the public school system of a small town Texas school, he arouses only pity of the humanitarian and contempt of the thoughtless. His difficulties are so numerous that there is no hope of correcting them without highly specialized instruction.

General Observations Upon and Summary of Specific Causes of Failure in the Above Thirty-One Case Histories

In the beginning of this chapter, causes of failure were arbitrarily classified as physical, mental, emotional and other causes. Physical handicaps included visual, auditory, speech, nutritional and health defects. Mental deficiencies included lack of mental readiness, low intelligence quotients, insufficient preparatory background and other mental drawbacks. Emotional factors, which are definitely among the prime causes of failure, included the effects of physical and mental handicaps upon emotional
development, improper discipline, psychological maladjustment, social maladjustment, and other emotional factors.) Other causes of failure included poor teaching, improper equipment, inadequate curriculum, length of school term, absenteeism, inadequate motivation, unreasonably high standards, large classes, improper school emphasis, poor socio-economic background, lack of preparedness, and various combinations of all the above factors.

It must be emphasized again that many of these causes so-called are not causes but symptoms of failure. That is, for example, did the child fail because he stuttered or did he stutter because he had, in the past, failed? It may be observed, however, with some justice, that cause and symptom are so inexorably interwoven that it is impossible to separate them, and the bold assertion may be made that the elimination of one might tend to diminish the deleterious effects of the other. Here, for example, is a child with poor eyesight. Is that eyesight a cause or a symptom of failure? It is not known. It may be presumed, however, that the provision of proper eye aids will improve the child's chances of success in school, thus alleviating the difficulty, whether it be a cause or a symptom. That, however, is a speculation without the province of this thesis and should bear much further investigation.
It also must be emphasized that no lay investigator can place his finger on any one of the causes of failure listed above and assert dogmatically and with complete scientific authority, that it is the only cause of failure. As has been suggested by Burton and many others, failure is usually a combination of many factors. For the purpose of convenience in presentation only, the thirty-one failures considered above were, where possible, ascribed to one specific cause. It was pointed out repeatedly, however, that the cause was accompanied by many other factors and that the cause listed as the cause of failure was only the most apparent and pronounced factor in the lack of the child's success.

With the above reservations and limitations as a prelude, then, the following summary of the causes of failure as specifically applied to the thirty-one case histories is presented:

Physical causes of failure. 16 pupils or 51.6 per cent
Mental causes of failure. 2 pupils or 0.65 per cent
Emotional causes of failure. 7 pupils or 22.6 per cent
Other causes of failure. 6 pupils or 19.3 per cent

Thus it will be seen that, if the above statistics are taken at face value, by far the most prevalent cause of

28 Burton, op. cit., p. 449.
failure in the elementary school surveyed was physical deficiency, followed by emotional factors and miscellaneous causes, with low mentality playing a scarcely perceptible role in the tragic drama of failure.

Further classifying the causes of failure, it will be observed that the following data were found:

Physical causes of failure

Visual defects. . . . 9 pupils or 29.0 per cent
Auditory defects. . . . 3 pupils or 0.97 per cent
Speech defects. . . . 2 pupils or 0.65 per cent
Health defects. . . . 2 pupils or 0.65 per cent

Mental causes of failure

Low intelligence quotients . . 2 pupils or 0.65 per cent

Emotional causes of failure

All emotional factors combined. . . . . . . . . . . . . . . . 7 pupils or 22.6 per cent

Other causes of failure

Poor social and economic background . . . . . . . . . . 4 pupils or 12.9 per cent
Excessive absence. . . . . . . . 1 pupil or 0.03 per cent
Impossible of classification . 1 pupil or 0.03 per cent

Thus, of all the causes of failure, visual handicaps were the most frequent with a percentage of 29.0, followed closely by a combination of the emotional factors with a percentage of 22.6.

It will also be noted that the investigation was not adequate to determine causes of failure arising from poor
teaching, inadequate equipment, unsound curriculum, improper length of school term, lack of motivation, unreasonably high standards, excessive class and improper emphasis. This is an accurate observation and yet, as with the data summarized above, it, paradoxically, is not accurate. The inconsistency of this summary, together with some reservations and recommendations, will be presented in the chapter to follow, the concluding chapter of this study.
CHAPTER III

CONCLUSIONS, EVALUATION, RECOMMENDATIONS AND SUMMARY

Conclusions

It is proposed in this chapter to evaluate, summarize, and make recommendations in connection with this study.

In this study thirty-one failing elementary school pupils were examined in an attempt to determine, if possible, the causes of their failure. With the exception of the limitations imposed by the lack of availability of some scientific testing and diagnostic equipment and assistance, it may be asserted that these children were observed comprehensively and specifically from viewpoints suggested by the leading authorities in the field of pupil failure. The pupils' vital data, mentality, school progress, visual, auditory, speech, height, weight, nutritional and health characteristics were examined, determined and tabulated. Their emotional reactions were considered (not scientifically but from the layman's standpoint) thoroughly through observation, conversation, interview and study. Other school factors such as socio-economic background, curriculum, absenteeism and teacher standards were analyzed and criticized. Certain causes of the failure were summarized in the preceding chapter of this study. Yet these conclusions, which are as reliable and as valid as conscientious observation, study and
analysis could perhaps produce, are by no means completely accurate—a statement which leads to certain evaluations.

Evaluations

For the purpose of clarity in evaluation and analysis the surface causes of failure as determined through this study may be restated:

<table>
<thead>
<tr>
<th>Cause</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Causes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visual</td>
<td>9</td>
<td>29.0</td>
</tr>
<tr>
<td>Auditory</td>
<td>3</td>
<td>0.97</td>
</tr>
<tr>
<td>Speech</td>
<td>2</td>
<td>0.65</td>
</tr>
<tr>
<td>Health</td>
<td>2</td>
<td>0.65</td>
</tr>
<tr>
<td>Mental Causes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Intelligence Quotients</td>
<td>2</td>
<td>0.65</td>
</tr>
<tr>
<td>Emotional Causes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All emotional causes</td>
<td>7</td>
<td>22.6</td>
</tr>
<tr>
<td>Other Causes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor socio-economic</td>
<td>4</td>
<td>12.9</td>
</tr>
<tr>
<td>background</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excessive absences</td>
<td>1</td>
<td>3.23</td>
</tr>
<tr>
<td>Impossible of classifi-</td>
<td>1</td>
<td>3.23</td>
</tr>
<tr>
<td>cation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If children were like rocks, they could be dropped into convenient little buckets such as those listed above, smoothed, polished and perfected. Fortunately, such is not the case. Therefore, though the causes of failure as applied above are correct, they by no means give the entire picture. In an effort to make the picture more complete, the following data, obtained from Table I may be of some assistance.

---

See pages 4-9.
Though nine of the thirty-one failing children were listed as visually defective, twenty-two or 70.97 per cent showed evidence, ranging from slight to material, of visual imperfection.

Though three children were classified as auditory defectives, seven or 23.58 per cent showed such evidence.

Though only two children were classified as speech defectives, two as health defectives and none as nutritional defectives, at least four of the children manifested some difficulty in speech. Health and nutritional deficiencies were almost impossible of analysis. It may be pointed out, however, that fifteen of the children were below the average in height, and sixteen in weight, thus giving considerable weight to the assumption that nutritional and health handicaps very probably existed.

Though only two of the children were classified as failing because of insufficient mentality, yet six or 19.3 of the children had IQ's from 80 to 90, thus placing them in the dull classification, and twelve or 38.7 per cent had IQ's of below 80, and were therefore very dull or worse than very dull mentally. Thus a total of eighteen or 58.9 per cent of the children upon testing showed evidence of being below the average mentally. Here again, however, the warning must be made that such low mentality might very possibly be a symptom rather than a cause. If, for example, a hearing defective had that defect removed or ameliorated, there
is much reason to assume that his mental age would increase. Obviously, if the child cannot hear or see or has both defects, his learning processes are seriously impaired, an impairment which may readily be evidenced in the raw scores of intelligence and achievement tests.

Again, though only seven of the pupils were classified as failing because of emotional disturbances, there is much evidence to warrant the assumption that all thirty-one of them possessed unstable emotional traits. As Burton so pertinently points out, emotional complexities eventuating from any one or a combination of emotional factors, harsh and authoritarian discipline, over-protection, failure to participate in the child's interests, failure to give security, broken homes, exposure to prejudice, economic and other stresses and strains, exist and give definite impetus to the movement of the tragedy of failure.\(^{30}\) It is impossible to measure exactly, for example, the effects of a poor home life, filth, severe punishment, and the like upon the emotional development of the child or the effects that they have upon his success or failure in school. Yet, unquestionably, such effects may be tremendous, so much so that the thesis may be advanced that the emotional factor is one of the most important causes, if not indeed the most important cause, of failure.

\(^{30}\) Burton, op. cit., p. 460.
Though only four of the children were listed as failing because of poor socio-economic background, twenty-three or 74.2 per cent of the children come from homes which might definitely be classified as poor, while none come from homes which may be regarded as superior. The strain of economic difficulties, poor parental care and supervision, improper surroundings, family difficulties, all have some effect upon the formative mind of the child and may well inhibit his possibilities of success.

Though only one of the children was classified as failing because of excessive absences, twenty-three or 74.2 per cent were absent from school more than five days. Such absenteeism is, of course, not conducive to successful class-work.

Though none of the failures were classified as due to poor teaching, improper school equipment, inadequate curriculum and other non-child, non-parent factors, such refusal to shift at least part of the blame to the school is, perhaps, begging the question. The teachers in the school system under study were conscientious, hard-working, experienced and trained. Yet the financial support of Texas school systems has, in the past at least, been characterized as inadequate. The ancient rural colloquialism, "You get what you pay for," is applicable to education and to teachers as well as to other phases of society. The same statement is true
of other school factors. Though the patrons of the system received educational services equivalent and perhaps superior to the financial support accorded, lack of such organization and support had its effect upon failures. If, for example, school organization and finance had permitted, special classes in line with the most advanced educational practices for these exceptional children would, in all probability, have decreased the incidence of failure. If the school curriculum were better adjusted to the needs of the child, greater improvement in the learning process might be anticipated.

Finally, this democratic society of ours must not regard itself as perfect, must justifiably have pointed at it the finger of condemnation as long as any one child in the United States, to say nothing of the thirty-one in one small elementary school under survey, fails because he does not have correct visual, auditory, nutritional, speech, mental, emotional or any other diagnosis, examination and assistance. In these cases of failure examined in this survey, the blame rests not upon the shoulders of these six to twelve year old children. The guilt is society's.

Recommendations

Obvious are the recommendations that better examination, diagnostic, clinical and scientific assistance be supplied in our schools.
In the field of research, such subjects as a comparison of failures in elementary and in high schools, a comparison of failures among rural, village and urban schools will suggest themselves. A survey similar to this one based upon a far greater number of subjects would be of value. A survey of remedies for the failures herein enunciated would be of practical value. In short, any factor of failure in the educational system is a fit field of investigation.

Summary

This study has been an attempt to determine the causes of failure in the cases of thirty-one elementary school students, grades one to six, in this Elementary School for the year, 1948-1949. In the study, the problem was stated, defined and delimited. The sources of data were given and leading educational thought on the subject of pupil failure was reviewed. Causes of failure were listed as physical, mental, emotional and other causes. The thirty-one failures were analyzed through the presentation of statistical data upon and case histories of each individual failure. An attempt was made in each case to determine the primary causes of such failure. Observations, evaluations and conclusions upon such causes were advanced. Finally certain recommendations both generally in the field of failure and specifically in the field of research upon failure were suggested.
The failure of the individual to meet with the demands imposed upon him by society, even though it be in the relatively microscopic world of the elementary school, is a failure fraught with significance to that individual and to society. It is to be hoped that such failure is diminished until it has become extinct. In such extinction the profession of education will have performed another valuable service for the child and for America.
BIBLIOGRAPHY

Books


Hanson, M. Lucile, Reading Readiness, Boston, The Houghton Mifflin Company, 1939.


Hildreth, Gertrude, Learning the Three R's, Nashville, Educational Publishers, Inc., 1938.


Storm, Grace E., and Smith, Nila B., Reading Activities in the Primary Grades, Boston, Ginn and Company, 1938.


Reports


Articles

Blanchard, Phyllis, "Reading Disabilities in Relation to Maladjustments, Mental Hygiene, XVII (October, 1923), 722-788.


Gates, A. I., "Failures in Reading and Social Adjustment", Journal of the National Association of Education, LVIII (1936), 201-205.
Hooker, G. C., "Did the Pupil Fail?", Educational Method, XII (March, 1933), 367-68.


Lafferty, J. H., "When Has the Pupil Failed?", Nation's Schools, XX (December, 1937), 25-26.


Raup, E. Bruce, "Some Philosophical Aspects of Grouping", Childhood Education, XVIII (June, 1930), 290-297.
