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DIAGNOSIS AND TREATMENT OF READING DISABILITIES

IN THE GUYMON JUNIOR HIGH SCHOOL

DIAGNOSIS AND TREATMENT OF READING DISABILITIES
IN THE GUYMON JUNIOR HIGH SCHOOL

By

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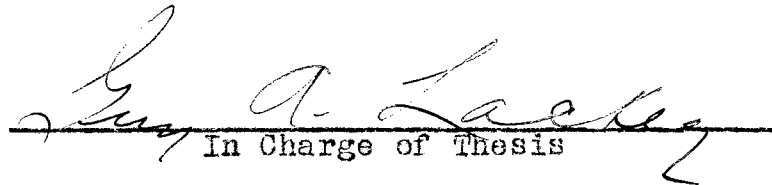
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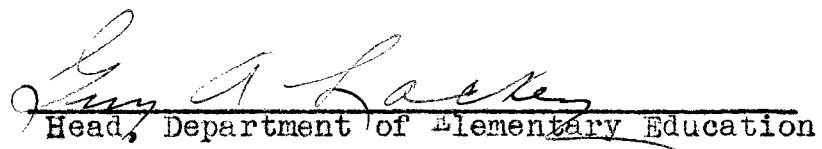
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INTRODUCTION

It is the duty of the public school to educate all of the children who are brought into school and remain under its jurisdiction. The only children not in school are the imbeciles, idiots, physically disabled, and criminally delinquent. The public school must deal with all levels of intelligence not in the above classes. A child that is eight years old and has a mental age of eight is said to have an intelligence quotient of 100, which means that his mental development is normal for his chronological age. But if he is eight years old and has a mental age of six, he has an intelligence quotient of 75, and is below normal. On the other hand, if he is eight years old and has a mental age of ten, his intelligence quotient is 125, which means that he is above normal. This quotient is obtained by dividing the mental age by the chronological age.

Harry J. Baker has adopted the following classification to designate the different levels of mentality:

Class	Range of I. Q.'s
Above average	110-130
Average	90-110
Below Average	70-90
Moron	50-70
Imbecile	25-50
Idiots	0-25

A pupil entering the upper grades in the Guymon schools is given an educational achievement test to determine his grade placement. He is also given a mental test and classified in the high or low section of the grade, according to his mental ability. The children with I. Q.'s between 50 and 85 are put in the low section, as we have no opportunity room. If it is at all possible, every school of any size should have an opportunity room. It would be fine to have a school which provides shop work in wood and metal for the boys and home economics for the girls. In this school there should be no specified level at which a child finishes. When a boy has completed the course in shop work he may be graduated and receive a diploma, regardless of his ability in the fundamental school subjects.

Purpose of the Study.--The purpose of this study is to investigate by detailed case studies to see if mentally sub-average children, who are unable to profit by curriculum constructed for pupils of normal intelligence, can improve their reading if given the proper treatment.

METHODS AND MATERIALS

The cases described are chosen because they are representative of the types the writer has had to deal with in his classroom teaching. All the cases are boys except three. The writer has at the time of this study only 12 cases which were chosen from a group of 15 who were given remedial work. When a child is brought into the room for remedial instruction, investigations are made along several lines. Each pupil in the Guymon school system has a permanent record card on the back of which is kept a record of his performance test. This record card shows the kind of test given, the date, score, chronological age, mental age, and intelligence quotient. All pupils with unsatisfactory performances are watched, and over-age cases with very low intelligence are to be given remedial work. The rest are shifted about to groups of their level. Any teacher may request an investigation of any child she thinks needs attention.

From the permanent record cards, the writer secured the chronological age, the mental age, and the intelligence quotient of each of the cases used in this study. From these, an estimate of each pupil's probable ability to progress could be made.

From the school health records of the Guymon schools, information concerning each child's physical condition was obtained.

A study was made of the child's history to determine his particular difficulties. His school history was secured from his teachers and parents. But more valuable to the investigator were his reactions, as they were observed by the writer. From these reactions the writer soon learned whether the pupil was lazy, anti-social, individualistic, temperamental, timid, regressive, or discouraged.

Each pupil's attitude toward reading and toward school was observed closely as the work was given because attitudes determine effort. When a child is interested and self-confident, he works harder. When he dislikes school or hates his reading, he is resistant.

A study of the child's emotional life was made by observing his daily reactions to various situations and tabulating these for further investigation. A visit to the home revealed some of the causes for undesirable emotional disturbances or some complex he had developed. Many emotional disorders resulting in personality difficulties may grow out of the child's inability to learn to read during the years spent in a regular school. Or perhaps the reading defect grew out of an emotional disturbance. He may resist reading because of his prolonged discouragement, as shown later in this study.

His reading accomplishments were determined by the use of diagnostic materials taken from the classroom teacher, and by informal tests constructed by the writer.

Further examinations were made in some cases, to discover other deterrent factors in the pupil's disability, such as congenital word blindness, lack of visual perception, visual memory, auditory perception, or auditory memory. The audiometer was used in making a record of the results of all tests kept for each pupil. Tests were given at different periods during instruction. From all these tests, the result of remedial instruction as shown in the various tables of this thesis were compiled.

The names of the pupils in this thesis are not their real names. The cases presented in this thesis were all retarded children to the degree of not being able to comprehend the material given to the class to read, and were given remedial instruction by the reading teacher, with the aid of the writer, each evening after school for one hour.

The tests used by the writer in making this study are as follows:

Otis Intelligence Test, Advanced Form V

New Stanford Achievement Test, Form Y

Gates Standardized Silent Reading Test, Revised.

Types I, II, and III.

Gates Paragraph Comprehension Reading Directions,

Type III.

Informal tests were taken from the classroom teacher's set of remedial work to determine what work should be given next.

CASE STUDIES

CASE I

Cyvilla had been in the regular school six years. She had a chronological age of 11, mental age of 8.8, 4'6" in height, and an I. Q. of 80.

She had made no progress in reading and knew only the most common words on the informal test given to children in the room. She was very unhappy.

The informal tests used are based upon the work used in the room from the set 'Classroom Teacher'. The first test consisted of 200 words selected from the reading material used. The next group enlarged this vocabulary by including the new words in the next higher reading material. Another informal test showed just how many words in the lesson Cyvilla recognized and how well she knew their significance, whether she could write the word, when the word was given, or give the meaning of the word.

The results of these informal tests are more helpful in classification than the standard tests, for they show the teacher just where to begin. The standard tests are better for school records.

Each child's vocabulary was kept in order to know what words should come next. Without a record of his vocabulary and his various disabilities, in the form of a case study, details would be forgotten.

Seventy-one pounds is the average weight for an eleven-year-old girl 54 inches tall. Cyvilla weighed 116 pounds. She had good eye sight, and normal hearing, and a slight speech defect that was little more than a lisp. In checking her speech defects it was found that part of her speech trouble was due to bad habit and part due to protruding teeth and a high palate. The defect was manifest in the way she left off the ending of nearly all her words.

Cyvilla was anxious to appear well and had some clever ways of distracting the examiner's attention. Sometimes she would refuse to read, saying, "I know that story by heart," or, perhaps, she would say something funny and pretend to be amused with herself.

She knew the story and was pretending to read, but unless the examiner saw the story or book, she could deceive him. She had been over the story so often she knew it by heart. Her emotional reaction to a situation, in which she had been a failure, had taken the form of nervousness and timidity. She tried to get some attention by silly talk.

She became adjusted quickly to the changes, and was interested in projects used to develop neuro-muscular control and for oral vocabulary building.

She exhibited quite a dislike for reading and would push aside any books given her, with the expression, "Oh, I know that book." She would refuse a different book. When pressed to read, she was very nervous about it. Her hands would shake and the tension was quite evident.

She was ambitious and wanted to do well in school. In addition to her own desire for success, her parents were continually nagging her, to make her do better. Her maladjustment in the regular grade, and among her personal friends, who could do so well and were promoted regularly, had given her a complex. She resented reading because it had caused her so much unhappiness and she had an emotional set against it.

Gates's tests revealed a weakness in visual perception and memory span greater than was indicated by her I. Q. Subsequent learning verified this. Some words exposed 200 times were retained only a short time and had to be re-learned. In the test for making geometrical figures, that were alike, she made such a low score that it was evident she would have trouble in seeing or discriminating words.

In writing, when "st" was given, she wrote "d". Her visual perception for word forms was poor. The work which she disliked, because she had lost interest in it, was laid aside for interesting material. When she had mastered several words, these were combined in sentences, to give her their use in context form and to give her some satisfying experience with her reading.

She liked the "yes" or "no" lessons on this order:

The boy grew to manhood.	<u>yes</u>	no
The girl was angry.	yes	<u>no</u>
The house is red.	yes	<u>no</u>

The roof is blue	<u>yes</u>	no
The sun comes up in the west.	yes	<u>no.</u>
Breakfast is at noon	yes	<u>no</u>

The child underlined the correct answers.

Matching words, printed words with written words and completion exercises were all especially helpful in sharpening her perception, both in capturing her interest and by causing her to give closer attention to the word. The words were taught in one hour practices daily.

In a short time she was able to do the exercises in the fifth grade material.¹ This material is rich in various practices that interest and hold close attention. It provides also a picture dictionary feature helpful to a dull child. The coloring and painting of pictures according to directions provide practice in phrase and sentence comprehension. The material had to be taken away from her several times because it introduced new words so rapidly she could not retain them all. Easy lessons were made and put in a booklet to give more experience and more repetition with the words already learned. The instructor was striving all the time to build reading confidence and joy in successful achievement. Cyvilla was proud of success. It was the first taste of successful reading she had ever experienced. The writer made

¹

Classroom Teacher (Picture Dictionary Study).

sure that Cyvilla had mastered all the words as far as she had gone and that new words were introduced very slowly.

The speech habit of saying only half the word was hard to overcome. It was not a visual defect because the child could see and say all of some words but left off the last consonant on others. In teaching these words Cyvilla was told to say the word as slowly as she could, like a moving picture. She was told to move her hand along the word as she said it very slowly, holding the first sound until it flowed into the next, with no break between sounds and to move her hand along the word so as to come out even with the voice. She could see that her voice stopped while her hand moved on to reach the end. This motor-visual method was helpful, for with it, she had to put the emphasis upon the last sound. The writer could not tell whether it was just a habit or whether there was something wrong with the child's auditory mechanism so that she did not hear the ending of the word. She improved greatly with the tracing-sounding method.

Cyvilla remained an oral reader for three months after cases 2, 3, and 4 had learned silent reading. She preferred the spelling method to any other as a means of attacking new words.

TABLE I
 PROGRESS CHART OF CASE I
 ON GATES SILENT READING TESTS

	Type 1 Raw Score	Type 1 Word Recogni- tion	Type 2 Word, Phrase and Sentence Reading	Type 3 Reading of Directions
Remedial Instruction				
Entrance Test	48	4.80	4.80	4.80
Five months	70	5.20	4.80	4.80
Nine months	93	6.00	5.30	5.30

The line marked "Entrance Test" shows the achievement of Case I on Gates Silent Reading Tests, when remedial instruction was begun. The succeeding rows show the pupil's achievement score at five and nine months respectively. The column headed "Type 1, Raw Score" gives the raw scores on the Gates Silent Reading Tests I, II, and III. The column headed "word recognition" shows the achievement in terms of grade norms. The score of 4.80 indicates the grade achievement at the beginning of the period of instruction. The score 5.20 indicates that at the end of five months of remedial instruction, Case I had completed two tenths of grade five; at the end of nine months, she had completed 5th grade score 6.00. The achievement on tests Type 2 and Type 3 are recorded in terms of grade norms.

Cyvilla's nervousness and babyishness completely disappeared when she learned to read and had confidence in her ability to do so.

CASE II

Tom had been in the sixth grade a year and a half. He had a chronological age of 12.5, mental age 8.8, and I. Q. of 70 plus.

He had made no progress at all and the teacher expressed the opinion that he never would learn to read. He was well built physically, of normal weight, good eyesight, good hearing, and was regular in attendance. He had become a serious discipline problem. His social adjustment was poor, he fought and quarrelled continually, and had severe temper tantrums. His anger was always extreme, his rage clear out of proportion to the stimulus that caused it. He bristled with resentment toward every one that came near him. If another pupil touched him or his eraser at the board, he stormed and threatened to whip him. After his anger was spent, he was pleasant and agreeable until some slight provocation set it off again. His emotional imbalance was not all due to low intelligence; his whole career had been one of chagrin and failure. He was struggling with a conflict of emotion, both at home and at school. He craved recognition and praise very much. He bragged and boasted and made a great show of elation over small successes. When he made a mistake and it was pointed out to him, he went into a rage and threw down his pencil, and if any boy dared to laugh, he would try to knock him over.

His home life was a struggle, for he lived with his old grandparents. They were extremely poor and dependent upon charity. The child never had a nickel to spend, he never had a pet, and very few of his boyish longings were ever satisfied, and so his compensation was¹ of the kind that resulted in bad behavior and bullying. These relieved his pent up feelings and won a type of respect from his playmates. His desire for leadership found some gratification in mischief-making, as well as in fighting.

The writer's aim was to change Tom's attitude toward school and to give him a feeling of satisfaction in school situations. The purpose of this was to give him the kind of environment that would bring out desirable behavior. Scoldings and reproaches did no good. He needed sympathy and understanding and an opportunity to practice social adjustment.

Football and basketball may be used to help children inhibit anti-social tendencies, to control temperamental outbursts, to give them daily training in modes of behavior, practice in good citizenship qualities, and an attitude of friendliness toward school.

Since emotional behavior and personality factors affect reading,² the attack was made upon that phase of the

¹
John B. Morgan, The Psychology of Abnormal People, p. 547.

²
Marion Monroe, Children Who Cannot Read, pp. 100-105.

problem first. Tom enjoyed athletics and other activities of our school and unless he worked peaceably, controlled his temper, respected the rights of others, completed each task and kept it in order, he was not permitted to participate; consequently, his behavior improved and his attitude toward school completely changed.

8 Since he was of the fighting type he became intensely interested in Ab, The Cave Man and in stories of Pioneer life and Indian life.

After he had been given a reading vocabulary of five or six dozen words and taught to read them, the teachers made up stories together of Ab and put them in a booklet. He searched through all of our home room library books for illustrations which he could use by transferring them into his "Ab" book. The writer also supplied a set of pictures of the brown man, his family, pottery, food, and tools. Tom was so interested in these that he wanted them all in his book, and then he wrote stories about them. This activity was carried on for two or three weeks. By that time he had a larger stock of sight words and could use some other rewritten story. The reading was made easy, so it would be successful. The writer used methods of teaching recommended by Gates, for children subject to emotional instability.³

³ Arthur I. Gates, The Improvement of Reading, p. 22.

Tom's dislike for reading was probably due to the year and a half spent in unsuccessful attempts, which caused him great humiliation.

Gates says:⁴

The behavior of these children, especially of those who failed or learned slowly, affords considerable insight into the origin and causes of difficulties in reading. The pupils, whose difficulties were due to ineffective types of reactions to the words, were at the beginning, as highly interested in the game as the others. But repeated failures met their efforts to learn, and their interest began to wane. Soon certain pupils showed every evidence of distaste for the task. One hid behind the piano when the investigator appeared; another refused to try when the task was set, another told her in no uncertain terms what he thought of (that old game). In such cases distaste and half-hearted efforts were added to disadvantageous modes of learning, each magnifying the other. Had such conditions been allowed to continue, the result would doubtless have been in time a serious disability in, and a hatred for reading. Doubtless many disabilities in reading arise in just this way; perhaps some of them originate in the very first lesson.

The writer followed the interest cue and, after he had secured an interest and built up a desire to read, he was able to proceed in the usual way to build a good reading vocabulary and to give Tom a knowledge of phonetic sounds. By the use of plenty of easy reading that would insure success, the hatred for reading was finally overcome.

When brought into the classroom Tom's score was zero in nearly every test, as he knew only a limited number of words and was a poor penman.

⁴

Ibid., pp. 22-23.

Tests were given to Cases I, II, III, and IV when the remedial instruction began, since they were all working together in reading and had very meager vocabularies and very little ability to read, after having completed the first five grades in the regular school work. Tests were again given after five months and nine months. Pupils of low intelligence progress slowly, but should progress up to their capacity. Table II shows that Tom's achievement was below the progress of a normal child, but did fulfill expectancy. He improved with an adjusted curriculum, in a class where he was under no pressure except the stimulating competition of his equals, instead of the chagrin of unfavorable comparison with his superiors. He showed a steady gain in behavior and social adjustment. A child with an I. Q. of 100 would be under an emotional strain if he had to compete with, and be compared with, a group of 110 and 120 I. Q.'s.

Table II shows Tom's progress as measured by the Gates's Silent Reading Tests.

TABLE II
 PROGRESS CHART OF CASE II
 ON GATES SILENT READING TESTS

	Type 1 Raw Score	Type 1 Word Recog- nition	Type 2 'Word, Phrase' and Sentence Reading	Type 3 Reading of Directions
Remedial Instruction				
Entrance Test	40	5.9	2.0	2.0
Five months	45	4.53	2.6	2.6
Nine months	74	5.80	3.8	3.5

The score is low in Reading Direction. An average of the three tests gave him a grade level of 4.36 plus. A lower score in test 3 would naturally be expected because it requires more comprehension for paragraph direction, and these cases are sub-average in intelligence.

In nine months Tom accomplished 1.90 or nearly two grades in Word Recognition; from 2.00, to 3.80 or 1.80 of a grade in paragraph and phrase reading; and was 5 below Grade 4 in Reading Directions.

The improvement in emotional stability, self-control, social adjustment, and temper was more pronounced than his educational achievement. It would be valuable if the improvement in character and personal qualities could be measured.

CASE III

5
 Johnny's record showed his C. A. 12.5; M. A. 9.8; I.Q.

70 plus according to the Otis Intelligence Test on his permanent record card.

Clarence R. Stone makes the following statement:⁶

In cases of children with mentalities below normal the most important cause of reading disability is the practice of exposing children to beginning reading before they have reached the prerequisite maturity. It is now generally recognized a child should have a mental age of six to six and a half years, before he is exposed to systematic reading instruction. Furthermore the typical methods used have been poorly adapted to the child, who is relatively immature mentally.

In an activity-centered school it is possible to make a strong appeal to the natural tendency to action on the part of a child and give to him things to do, that will hold his interest. Feeble-minded children react slightly to external stimuli, but may be reached through body activities using their hands, head, and their whole nature in doing things that enlist all the brain power they have, sensory, perceptive and motor.

Johnny needed more contacts to build up perception and to acquire a larger vocabulary; more experience with people and with things; and a better understanding of the world about him.

Johnny was eager to learn and began slowly to build a reading vocabulary. Any emotion, such as anger, fear, timidity, boredom, uncertainty, hatred of the task, dislike

6

Clarence R. Stone, "Case Studies in Reading and Deductions on Retardation," The Elementary School Journal, Vol. XXIV, No. I, September, 1933.

for school inhibits learning. Every precaution should be taken to minimize self-consciousness, fear, and embarrassment.

When Johnny did start to read, he learned rapidly, but the teaching was slowed down to his rate of learning. Each new step was presented carefully and in such a way as to make the strongest appeal to his personality. In short, the work was centered around the things and subjects he was most interested in.

One feature of Johnny's progress the writer could not account for, was the rate of his achievement when once he had a workable vocabulary and sufficient power to discover new words for himself, when his I. Q. was only 70.

Arrangements were made to give him gland extract and he became more active, and ceased to complain of weariness. He started playing on the grounds with the boys, and it was a great day in school when he had his first fight. The treatments may have helped him mentally as well as physically.

TABLE III
PROGRESS CHART OF CASE III
ON GATES'S SILENT READING TESTS

	Type 1 Raw Score	Type 1 Word Recog- nition	Type 2 Word, Phrase and Sentence Reading	Type 3 Reading of Directions
Remedial Instruction Entrance Test	41	3.65	1.75	1.75
Five months	47	3.85	2.20	1.95
Nine months	61	4.50	2.80	2.30

A low score in Test 3 is characteristic of dull children because Test 3 requires more comprehension than the other tests. The score of 61 indicates the great amount of word study he had. In nine months he had made nearly a grade or completed half of grade 4.

CASE IV

Peggy started at the age of 6 in the Guymon school, and is now in the seventh grade. However, she was considered a failure by every teacher, although she had been promoted after two semesters in a class. Her C. A. was 13-2, M. A. 10-1, and I. Q. 76.

With a mental age of 10-1 she couldn't accomplish much in reading, and repeating grades was next to useless, until she had a little more mental development. She knew only common words, when she started her remedial work.

She had given trouble in discipline and was very babyish and spoiled, probably due to two causes. One was her slow development because low mentality, the other was due to bad home environment. She lived with her grandmother who humored her and encouraged a prolonging of infantile state, by talking to her as if she were a small child. She reacted in a retrogressive way. She affected such a babyish form of speech at times, that she could hardly be understood. She pouted and was disobedient, and was subject to frequent temper tantrums. Her family was in extreme poverty and the child was undernourished. She was in a continual state of emotional disturbance, with failure at school and poverty and worry at home.

Peggy had no physical defects sufficient to retard her progress. Her eyesight was good, but she was left-handed, although she sighted with her right eye. She reversed her numbers, counting from left to right. Peggy was a spontaneous mirror-writer. Her auditory perception was normal. She could tell, with her back turned so she couldn't read the lips, when words were pronounced alike and when they were pronounced differently. On the word test she confused no and on; and saw and was. She rated low on the visual perception of words and also perception of figures.

Instruction was begun, building up a vocabulary of sight words. She had to be trained to hear the sounds of a word slowly spoken, while her hand traced the movement of the sound from the left toward the right.

The motor-visual method of saying the word slowly with the instructor and making her hand come out even at the end with her voice was used. She may not have known it was customary to read from left to right. At all events she did not seem able to discriminate the sequence of the printed words. Monroe⁷ gives an example of the result of reading left in words but right in sentences as follows:

A boy saw a dog on the street.

A yob was a god no eht teerts.

7

Diagnostic Reading Tests. Marion Monroe, Causative Factors in Reading, Defects in Children Who Cannot Read, Chapter V.

Monroe⁸ says if the confusion includes not only the orientation of letters and the sequence of the letters, but also the sequence of words, the problem becomes very difficult.

Cards that had the words in large print were presented and the movement of her hand across the word helped her to get the direction in reading. But the writing was very difficult. She made b face the wrong way, a and the e were also wrong. She made them 300 times in two weeks, carefully supervised, so that she didn't turn them wrong and practice an error. But still, she forgot how it should be done. She finally overcame it by earning pay. She was given a nickel when she could make A ten times right without being watched. The nickel was laid over to her right and when she reached it with her letters faced right, it was hers. The desire became such a forceful inward drive, that she succeeded. She worked for rewards many times, until she formed the right directional habit. When she conquered the A and the E and some easy words, she seemed to have very little trouble. Her trouble in the writing was due to opposite hand and eye dominance.⁹

It took more individual help, more practice with words and more easy reading with Case IV than with Case II,

⁸
Ibid.

⁹
Marion Monroe, Children Who Cannot Read, Chapter V.

although Case IV had a higher I. Q. than Case II. Remedial instruction in reading improved not only her educational achievement, but her emotional and personality problems as well. She became a self-respecting, cooperative, self-controlled citizen of the school room. Her improvement in reading and her success in all of her endeavors brought about a complete change in her behavior, because she enjoyed doing the things, when she could see she was progressing.

TABLE IV

PROGRESS CHART OF CASE IV
ON GATES'S SILENT READING TESTS

Remedial Instruction	Type 1 'Raw Score'	Type 1 'Word Recognition'	Type 2 'Word, Phrase and Sentence Reading'	Type 3 'Reading of Directions'
Entrance Test	48	4.80	3.60	3.20
Five months	74	5.80	3.75	3.45
Nine months	93	6.00	5.00	4.70

It took Case IV one term to make one grade in achievement. With an I. Q. of 76 she did very well. She was probably hindered by the same trouble, that bothered her in the early stages of reading, or she might have done even better.

Cases I, II, III, and IV were sixth and seventh grade pupils.

On the writer's informal test all four of the above cases made high scores. The test consists of 200 cards with words used in the basic text printed in large type.

All of these four cases made perfect scores on the cards and received little rewards. They made two work books, and read from easy library books in nine months. They will need more training in methods of attack on new words and more enrichment of vocabulary, as well as a continuation of phonetic training, to see like elements in words and to make a response to syllables instead of letters.

CASE V

Kenneth was thirteen years old when he was brought in from the 6b which is the lowest group of grade 6. His I. Q. was 75 on the Otis Intelligence Test.

His average score on three different tests gave him a reading grade of 4.80, which means that his achievement was just a little above the middle of 4th grade. He had struggled along in five grades for seven years, and had been promoted each time, when he had been two semesters in each class, whether he was qualified or not.

His fifth grade teacher remarked, "If this boy can be taught to read it will be a feather in your cap." The comment showed that he was considered a hopeless case.

The informal tests showed that his knowledge was too fragmentary to be of any service. He could recognize a few words on every grade level with which he had had experience, but could not read fifth grade material fluently.

His interpretation on letters was fairly good, but he had such a poor stock of sight words that he couldn't read without spelling four and five words in succession. He had been taught by the spelling method.

He was tried out on the alphabet to be sure that he could give the sound equivalent for every letter. Those he lacked were taught him.

By the time he spelled four or five words, with the tremendous effort he had made to get the words, he had completely lost the meaning and could get no pleasure out of reading.

He was right-handed and right-eyed. He was watched to see which eye he used, in pretending he was shooting a gun. A little observation usually sufficed to tell a teacher, experienced with subnormals, many facts about them.

In the writer's room such parts of the test, as were needed to find out where to begin, were used.

The physical examination revealed no sensory defects. Kenneth was undersized, underweight, and showed a tendency toward day dreaming, inattention, and laziness. He disliked school and said he couldn't learn to read. It is the opinion of the writer, that this attitude was his reaction to five years of unsuccessful, unhappy school environment.

He was socially well adjusted and apparently had a naturally happy disposition, but at times he became temperamental, cried easily, and cried too long. These tearful scenes were unduly prolonged and out of proportion to the small stimuli that caused them. Frequently he asked to be excused from class and sat around or refused to play on

the grounds complaining of weakness or weariness. A visit to his home revealed abject poverty. His mother was dead and no one prepared a balanced diet for him. His father gave him bacon, cornbread, coffee, and potatoes or pancakes and syrup to eat. He came to school without breakfast usually, and sometimes went without his lunch as well. He said there was no use to go home at noon, there would be nothing he wanted.

The first thing to do for him was to take care of his physical needs. The noon lunches were secured for him. A few weeks on a good nourishing diet changed his whole disposition. The temperamental behavior ceased and he played with the boys in a happy, give and take way. His laziness and fatigue also disappeared.

Several methods were used to build up his stock of sight words, the "look and see" method, matching words, and different kinds of games. Easy lessons were built out of his individual vocabulary, holding him responsible for every word added to it. The instructor was careful to add no new material, until the pupil had mastered what he had been given. This vocabulary was used over and over in coordinate story building in order to keep out the introduction of new words too rapidly and to give him success and self-confidence in reading. He was given workbooks that were new to him, because he had grown familiar with the stories, and depended on that knowledge instead of making a new attack, as he would have to do on new material.

He was given practice in word, phrase, and sentence selection; in true and false statements; and in matching pictures with phrases, all with highly interesting material.

When Kenneth had a good stock of sight words and had been trained to look for like elements¹⁰ in words, instead of spelling b-a-c-k and t-a-c-k every time, he was able to respond to the three letters as one word ack, and see the words a b-ack and t-ack instead of depending on his ability to respond to each letter separately, his rate of reading improved.

He was taught to look for the common elements¹¹ of words, ack, ock, ate, ight, eat, ed, am, and then such phonograms as tr, pr, er, gr, oh, sh, and the others most commonly used. He was tested frequently to see that he could retain these that had been taught, and if he failed on any, they were retaught.

Formerly, if given the word shouting, he would have slowly spelled it, s-h-o-u-t-i-n-g, and then failed to get it. After training in methods of attack, and having been taught to look for some familiar part of the word he could recognize, he responded to the word shouting in this way "sh-out-ing" and quickly gave the word.

Training in phonics was continued until he knew the sound of each letter. He was also expected to see the

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Arthur I. Gates, New Methods in Primary Reading, Chapters I, II, III, and IV.

¹¹

Ibid.

most common elements and react to them instantly. It took more time at first but was a great aid in independent reading. His reading rate increased to that of an average child at the same level, and his word-by-word-habit, pointing to each word as he figured it out, disappeared along with the spelling habit. He first used the spelling method of attack on new words, but after training, he had a good stock of sight words, and the ability to group words, and see them as phrases instead of word by word. In reading easy material, he was usually able to guess the unrecognized word by context, or by sounding it out. Reading for him had been so long a word struggle, that he had to be trained to look for the meaning and made to realize that reading was a thought-getting process. By asking him to find the one who said, "May I go too?" and by making yes or no exercises on the material or content, he was trained to look for the story.

Kenneth's grade level, when treatment began was 4.8. After six months of remedial teaching his test was 5.51. This gain is large for a boy with an I. Q. of 75, but his retardation was partly due to the existence of gaps in his learning, as well as to the need of vocabulary help.

A test was given March 21, 1938, with the following result:

Word Recognition-----	5.80
Phrase and Sentence Reading----	5.65
Average-----	5.10

CASE VI

Junior was in the Eb, he was considered a non-reader and had been in the lowest section of grade 8. He came to the reading room for remedial instruction. His I.Q. was 101 on the Otis Intelligence Test. His chronological age was 14.5 and his mental age 14.6.

His home life was above the average; his parents were merchants, the mother a capable assistant to the father.

Physically, he was perfectly normal, but had adenoids and bad tonsils, not serious enough to cause his retardation. He was given three Reading Tests and his average reading grade level was 6.80. Gates's Silent Reading Tests 1, 2, and 3 and Monroe's Silent Reading Test Form 2 were used.

His attitude toward reading was one of utter discouragement. His mother said he didn't like to attend school, but she insisted on regular attendance. He said he couldn't "see through it" when asked why he disliked reading. His knowledge was fragmentary. He knew only a few phonetic sounds, and not enough vocabulary to read one lesson in any book outside of the one he had studied.

With a high score of intelligence, he should be able to comprehend spoken, if not printed language, and his enjoyment of books read aloud, at the reading period in school, was sufficient evidence of his ability to comprehend oral reading.

His eyesight was normal according to records kept by the school.

Table V illustrates the way New Stanford Achievement Test records the summary of the analysis of a case, who has been given this test.¹² This summary of the scores of Stanford Tests was worked out for Case VI, to see what could be found, that was not revealed in the informal tests, that would cause such a serious retardation.

With an I. Q. of 101, he would be able to comprehend oral reading, so the cause of disability in reading was not low intelligence.

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The tests and Record Booklet may be secured from the World Book Company, Chicago, Illinois.

TABLE V

SUMMARY OF DIAGNOSIS OF READING
 CASE VI JUNIOR C. A. 14.5 I. Q. 101
 School: Guymon Grade 8B Born June 5, 1924

	Raw Score	Grade Equivalent
A. Intelligence Quotient 101		
1. Stanford Achievement Test		
I. Reading		
1. Paragraph meaning	74	6.00
2. Word meaning	83	7.1
Total reading	79	6.8
3. Spelling	88	7.8
4. Language	85	7.4
5. Literature	88	7.8
6. History and Civics	70	5.7
7. Geography	68	5.5
8. Physiology and Hygiene	76	6.2
9. Arithmetic Reas.	65	5.2
10. Arithmetic Comp.	81	6.8
Total Arithmetic	78	6.4
Total Grade Average		6.8

Junior's reading average on Gates's tests 1, 2, and 3 was 6.8 which is .2 below Grade 7. His score for visual perception is under heading V in Table VI. In perceiving geometrical figures, he was a little above the average. In perceiving words, he fell 21 below the average. For

comparison with the scores of average normals (standard) the writer submits Table VI in which section V is taken from Table V and compared with standard scores to show that there was nothing wrong with Junior's ability.

TABLE VI
COMPARISON OF CASE VI WITH GRADE NORMS

Case VI			
V. Visual Perception	Score	Standard Score	Grade Level
A-1 Perception of figures	183	185	
A-2 Perception of digits	190	191	
A-3 Perception for words	188	208	6.8

In A-3, perception of words, Junior's score was 188 which was exactly his grade level on Tests 1, 2, and 3.

As a result of this analysis, it can be seen there was no reason why this boy couldn't learn, if he were taught to analyze words and to figure them out in a new way. He also needed a more optimistic attitude toward reading, that is, a confidence in his power to accomplish it.

Phonics as a tool had been over-emphasized in his case, but he failed to understand it. When he attempted to say the sounds of each letter and then put them together to form a word, he always came to some letters, for which he couldn't give the sound equivalent, and stopped. Without a vocabulary, his difficulty can readily be seen in this sentence, which he tried to read. We--a man,--. With so

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many unknown words, he could get no help from the context, and he could not sound them nor spell them. With one word out it would be easier, "'We will make a--man,' said Peter," and he could easily get the unrecognized word from the rest of the story. "'We will make a snow man', said Peter," is the completed sentence. The first help for him was help with his vocabulary.

It is the opinion of the writer that his trouble began because of his ability to fool the teacher, and to seem to be reading when he was not. He was bright and learned the story quickly and perhaps retained some of the words for a short time. [He had been promoted without being ready and had failed to get the mechanics of reading. The writer agrees with Edward William Dolch ¹³ in the testing department of the University of Illinois, who said:

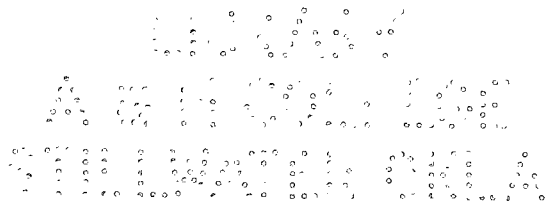
Reading begins with learning sight words. Do they learn these words? The teacher must know. They cannot go on learning new words if the old words are still new to them.

They should never go into the First Reader until the basic words in the primer are instantly recognized. Otherwise there will be greater confusion and discouragement. Many teachers think they can tell how thoroughly the children know them. But the children deceive them by memorizing and skilfully guessing.

A test cannot deceive. The teacher must have a test, that fits her primer work. After Grade I the pupil must have a way of sounding out words. He cannot memorize by sight or distinguish by type. And he must be able to do independent

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Edward William Dolch, Testing Reading, The Elementary School Journal, Vol. XXXIV No. 1, September, 1935.



reading and know how to learn to figure out new words. His first requisite was a good vocabulary of sight words, frequent short periods of practice, and frequent relearning of all forgotten words. A constant check was kept on his mastery of words.

Lip reading methods were used to make him associate the sound of the letter with the letter in a kinesthetic way. He was drilled on sight words until his response was instantaneous.

He was anti-social and very cruel to the other boys, choking, kicking, pulling hair, and fighting without any cause. This overbearing attitude was probably a compensation, because he could not assert himself at home, or it may have been the only pattern of behavior he had ever known.

He was a sixth grade pupil. When instruction began his score was three points below standard Grade II. His average reading level on the Gates Reading Tests 1, 2, and 3 was 1.7 or .3 below Grade II.

His informal tests in reading showed considerable ability in recognition of simple words; especially words that were pronounced, just as they were spelled, with the long sound of the vowel, as see, make, and ride. He could read simple paragraphs and could answer thought questions. His reactions toward reading showed a lack of interest, laziness, and inattention, and for a week the writer was unable to get him interested in any reading. When he could be prevailed upon to make the attempt, he spelled out so

many words, he lost the meaning and spelled out the same word, if it occurred in the next line. His reading was jerky and had a great many eye fixations to the line. He was still in the auditory stage, as he could not comprehend silent reading. He needed help with the mechanics of reading, such as a larger vocabulary of sight words, training in the ability to group words into phrases, more training in short vowel sounds, and practice in blending two consonant sounds together, such as tr, sh, er, ch, gr, and br.

If he failed to recall a word or letter, the shaping of the mouth would suggest the sound. He was shown the movements of his lips in making the sounds of p, n, b, and of the tongue in "land" until that reaction was also instantaneous. All the letters and sounds were learned by lip reading method. The letter h, with its significance was the last learned, and took several relearning experiences.

In the writer's ungraded room, phonics is not taught in the usual way. Disappointment so often followed, when phonics did not carry over into use, that regular methods were abandoned.

The transfer of training with subnormals is so much less than with normals, that phonics, as usually taught, did little good. Subnormal pupils must understand phonics, but not depend on it solely; they must have many

ways of getting new words. If they fail in one attack, they can try another.

Junior's spelling improved, when his association of the symbols with sounds was mastered. His last test was given March 21, 1938, and he made an average on the test of 7.60, a gain of .8 in four months. His progress curve will rise rapidly from now on, as he is very eager to learn and has mastered the mechanics.

His rate will need to be increased through easy reading for interest and to give satisfactory achievement.

CASE VII

Sylvan was twelve years and four months old when the study of his case began. His mental age was 8-6 and his I. Q. 69 on the Otis Intelligence Test.

He came from a home of poverty and conflict. His step-father could not control him, yet punished him severely. The parents quarreled over the boy and could not agree on any kind of discipline. He was a chronic truant and hated school.

He needed to see the common elements of words and to pronounce a syllable as a word, instead of spelling it out letter by letter every time. He failed to see syllables -ing, -ter, -mer as wholes and always spelled them out. He needed a change of attitude toward school before anything could be accomplished. For several weeks, he would take no interest in academic work. The most attractive books brought from the Public Library failed to capture

his interest. Success came through visual education. He saw a film in school on the life of Washington. This was talked over and then a set of very attractive pictures of the life of Washington was brought out with a brief sketch of related history at the bottom of each picture. He wanted the pictures so much, he copied them on transparent paper and colored them. The teacher rewrote the history in easy words and Sylvan made a booklet. The next book made was done by all the pupils and was Christmas stories, poems, some false and true sentences, and easy stories of the life of Christ.

These two books won him over to school life, and improved him very much in discipline. All this time, he had been working with flash cards, phrase cards, and had built up his vocabulary, until he could read with better comprehension. He accepted an easy reader and workbook, and when that was completed he did two other workbooks of higher grade level.

Remedial instruction raised his reading grade from 1.8, October, 1937, to 2.9, the average of three tests given in March, 1938. That was a gain of 1.1 grade in six months. Other results were seen in behavior improvement and less emotional disturbance.

CASE VIII

Joyce was born March 11, 1925 and came to the sixth grade room after five years in the grades. She was given remedial instruction, because she was seriously retarded.

Her speaking vocabulary was inadequate, her sight vocabulary was too limited for comprehensive reading, and her powers of word discrimination had not been developed. She had an I. Q. of 72. A test showed an improvement of 2.2 grades, a reading level now of 6.1. The Lions Club purchased Joyce glasses and she began to improve immediately. We feel Joyce will carry her seventh grade work next year with a little help.

CASES IX, X, XI, XII

These four cases were promoted from the writer's remedial room on January 2, 1938.

When brought into the room they were all considered non-readers because of low intelligence. Not one of them could read sixth grade material with success. All of them were being pushed on to the next grade every two years, and were not accomplishing anything. They were taking the time of the teacher, reducing the efficiency of teaching, and developing unwholesome emotional reactions to an unhappy situation. They were all taught reading in the writer's reading room. The result of this training in the special room is shown in their last tests, given by the supervisor, January 2, 1938.

In every case the conduct was greatly improved by an adjusted school situation.

Cases IX, X, XI, XII were over age and seriously retarded, when we started. They entered at the same time,

as they were found to be over age and in need of remedial reading instruction. All of them had to begin with simple material. All of them had poor vocabularies, and all were struggling with the mechanics of reading. From a reading level somewhere in Grade I, all but Case X, as Table VII shows, were in Grade III when taken for remedial instruction.

TABLE VII
TEST RECORDS OF CASES IX, X, XI, XII

New Standard Achievement Form X	Case IX	Case X	Case XI	Case XII
C. A.	15-3	13-7	15-2	12-8
I. Q.	62	58	63	67
1. Paragraph Meaning	33	27	35	33
2. Word Meaning	45	31	40	29
3. Dictation	32	33	33	24
4. Arith. Reasoning	53	3	42	42
5. Arith. Computation	29	3	37	21
Total Score	192	97	187	149
Average Score	38	18	37	30
Educational Age	9-1	7-2	9-0	8-5
Grade Level	3.4	2.5	3.3	3.0

The table shows the result of a test given January 2, 1938, when they left the writer's school. These pupils were allowed to stay in the regular school too long before

bringing them in for remedial instruction. That is the reason they are over age.

Cases IX, X, XI and XII were given help after school by the regular teacher in the sixth and seventh grades, but it did very little good. We gave them the best remedial instruction we could offer, in the 1937 and 1938 term of school, but it was not enough. None of these cases entered high school. A follow-up on these four cases after they left grade school is given below.

Case IX was employed by a Ford garage for over a year and was considered dependable.

Case X does house work for her mother who works.

Case XI works with his father, who has a laundry.

Case XII works for a grocer.

SUMMARY

All of the cases studied in this paper were misfits in a school designed to "fit" the great average group of children.

They were behavior problems in a situation that discouraged, bored, and embarrassed them, and in addition gave them nothing they could enjoy doing. They were developing psychopathic difficulties by being continually exposed to a sense of failure and chagrin.

All of them failed to learn to read by repeating the grade. They did not need more reading and more spelling but an adaptation of curriculum and technique in teaching to their abilities and needs. All these cases had trouble with the mechanics of reading. All of them learned to read when given improved methods of word mastery. The greatest burden was the vocabulary difficulties. All of them needed to be taught what to look for in word forms and in content.

All these cases illustrated the tendency observed by the writer, in ten years of teaching sub-normals, that remedial instruction in reading, when successful, brings about a change in attitude, helps to reeducate the sullen, the ill tempered, the pessimistic, and the discouraged who have lost their grip and don't care what they do because self-respect is gone.

"Self-respect is the greatest virtue." The loss of it is disastrous to character and personality.

CONCLUSION

As long as the compulsory education law brings the intellectually sub-normal child into the school to be educated it is the duty of the school to provide curricula adjusted to his need. If he cannot learn in the regular grades and the system keeps him there, he is being forcibly deprived of an education of the only kind he can take. It should be the aim of the schools to make self-controlled, self-supporting citizens of this group who are more likely than any other to become anti-social or dependent.

The sub-normal child needs to do things, to work with things. A special school provides the type of objective education he needs, rather than an abstract one. He needs a school situation where he will not need to make so much transfer of training to meet the problems of life. He needs to learn social adjustment, to give and take when working with others, as he must do in life. He needs to feel successful in his undertakings. He will never read for culture but he needs enough for practical use. The cases here have shown that remedial instruction in reading has a tendency to improve not only his educational achievement, but his personality difficulties and his emotional disturbances. The lazy, indifferent, disinterested pupils became more energetic and industrious when success had stimulated interest. Bad behavior disappeared simultaneously with increased scholastic achievement. Self-respect seemed

to help the down hearted and the discouraged to take a new grip on life and make a fresh start. A happy attitude often replaced bitterness, and flighty children became attentive. Nervous reactions almost wholly disappeared in the children who wanted so much to read and had so long failed in their attempts. Behavior was invariably improved because the child learned to like school. Quiet, unfriendly children became more social, feeling themselves successful citizens of the schoolroom community, which was made a small replica of a community situation as far as it was possible to do so.

Other workers¹⁴ with subnormal children report similar improvement in behavior and in emotional reaction. Most of these backward children came from very poor homes where little or nothing was done to develop personality. Their home training was usually a liability instead of an asset. The community in which the extremely poor homes were located was undesirable, adding a social force to the downward trend. The burden of development and of education rests more heavily upon the school when the other factors of home and community fail. The school must adjust its course of study and methods of instruction to meet the needs of the retarded children if they are expected to become self-controlled, self-supporting citizens.

It is the writer's opinion that the place for remedial work in reading is in the first three grades as the smaller

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Marion Monroe, Children Who Cannot Read, p. 176

children respond to treatment much better, and they would not have the embarrassment and difficulty in the upper grades. It is reasonable, if upper grade pupils can improve, that lower grades would do much better.

BIBLIOGRAPHY

Classroom Teacher Set, Classroom Teacher, Chicago,
Illinois.

Cubberly, E. P. Education of Special Classes. Bibliography
in his Introduction to the Study of Education.

Diagnostic Reading Tests, 8, Marion Monroe, Causative
Factors in Reading, Defects in Children Who Cannot Read,
Chapter V.

Edward William Dolch. "Testing Reading," The Elementary
School Journal, Vol. XXXIV No. 1, September, 1933.

Fernald, Grace M. and Helen Keller. "Kinaesthetic Factors
in Developing Word Recognition in Cases of Non-
Readers," Journal of Educational Research, Volume IV,
pp. 355 to 377, December, 1921.

Gates, Arthur I. Interest and Ability in Reading. New York:
Macmillan Company, 1930.

Gates, Arthur I. New Methods in Primary Reading. New York:
Bureau of Publications, Teachers College, Columbia
University, 1928.

Gates, Arthur I. The Improvement of Reading. New York:
Macmillan Company, 1927.

Gray, William Scott. Remedial Cases in Reading, Their
Diagnosis and Treatment. Chicago: The University of
Chicago, 1922.

Gray, William Scott. Summary of Investigations Relating
To Reading. No. 28 Supplementary Educational Monograph.
Chicago: The University of Chicago, 1922.

- Hollingworth, Leta S. "Reading" Special Talents and Defects. Chapter IV. New York: Macmillan Company, 1923.
- Hollingworth, Leta S. The Psychology of Subnormal Children. New York: The Macmillan Company, 1923.
- Monroe, Marion. Children Who Cannot Read. Chicago: University of Chicago Press, 1932. (An analysis of Reading Disabilities and Use of Diagnostic Tests in the Instruction of Retarded Readers.)
- Morgan, John J. B. The Psychology of the Unadjusted School Child. New York: Longmans Green and Company, 1924.
- Morgan, John J. B. The Psychology of Abnormal People. New York: Longmans Green and Company, 1928.
- Ruiselwood, James. Congenital Word Blindness. London England: H. K. Lewis and Company, Ltd., 1917, p. 112.
- Stone, Clarence R. "Case Studies in Reading and Deductions on Retardation." Elementary School Journal, Vol. XXXIV, No. 1.

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