1946

Motivated grouping in grades four, five and six

Hefler, Rachel Arnold

Boston University

http://hdl.handle.net/2144/15868

Boston University
BOSTON UNIVERSITY

SCHOOL OF EDUCATION

Service Paper

MOTIVATED GROUPING IN
GRADES FOUR, FIVE AND SIX

Submitted by

Rachel Arnold Hefler

(B.S. in Ed., Boston University, 1944)

In partial fulfillment of requirements for
the degree of Master of Education

1946

First Reader: Helen B. Sullivan, Associate Professor of
Education

Second Reader: Helen A. Murphy, Assistant Professor of
Education
Sewoye | Pollak on
60 W. Roxter, Arnold Helier
August 30, 1946
27238
DEDICATION

"These are the things I prize
And hold of dearest worth —
And best of all, along the way,
Friendship, and Mirth!"

Henry van Dyke

To the Children of Hardy School,
and to all my other "Children,"
Scattered far and near!
Without your ready response
and eager enthusiasm, both
present and past, this paper
could not have been presented.
Acknowledgments

Associates at Hardy School, who cooperated with me in one phase of the experimentation, and who helped immeasurably in making all the experiments possible.

Dr. Chase, who checked the two units used in the Social Studies and in Literature.

Dr. D. D. Durrell, for his helpful comments and constructive criticisms.

Dr. Kingsley, who checked the various types of approach in Spelling.

Dr. Kvaraceus, who helped in the construction of Teachers' tests to be used in measuring results within the classroom.

Dr. George Makecknie, who approved so wholeheartedly of my term paper in Ed. Sociology that it inspired greater efforts and labors, especially along the lines of "Humor and Intelligence"!

Dr. Helen Murphy, whose demonstrations of clinical methods inspired my associates and myself to emulate her zeal.

Dr. Helen Blair Sullivan, sponsor, counsellor, and friend for the advice, suggestions, and sympathetic "listening" which made this paper possible.

The Supervisory Staff at Wellesley for their helpfulness in furnishing data.

Dr. Worcester Warren, for his inspirational suggestions concerning the three grade level or "Club" plan.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. STATEMENT OF PROBLEM AND TERMS DEFINED</td>
<td>1</td>
</tr>
<tr>
<td>II. RESEARCH IN PREPARATION OF PROBLEM</td>
<td>7</td>
</tr>
<tr>
<td>III. PLAN OF ATTACK AND EVALUATION OF DATA</td>
<td>20</td>
</tr>
<tr>
<td>IV. DETAILED REPORT OF METHODS BY TEACHERS</td>
<td>45</td>
</tr>
<tr>
<td>WHO SPONSORED &quot;CLUB&quot; EXPERIMENT</td>
<td></td>
</tr>
<tr>
<td>V. EXPERIMENTS WITHIN A CLASSROOM</td>
<td>70</td>
</tr>
<tr>
<td>&quot;GROUPS&quot; VERSUS &quot;TEAMS&quot;</td>
<td></td>
</tr>
<tr>
<td>VI. LITERATURE UNIT USED AS MOTIVATION FOR</td>
<td>77</td>
</tr>
<tr>
<td>GROUPS, THREE GRADE LEVELS, WITHIN</td>
<td></td>
</tr>
<tr>
<td>CLASSROOM</td>
<td></td>
</tr>
<tr>
<td>VII. SPELLING IN GRADE FORMATION THREE GRADE</td>
<td>102</td>
</tr>
<tr>
<td>LEVEL IN FIVE (GROUPS) AND FIVE (TEAMS)</td>
<td></td>
</tr>
<tr>
<td>DATA AND EVALUATION</td>
<td></td>
</tr>
<tr>
<td>VIII. STATEMENT OF PROBLEM AND METHODS OF</td>
<td>111</td>
</tr>
<tr>
<td>EVALUATION -- TEAMS VERSUS CLUBS</td>
<td></td>
</tr>
<tr>
<td>IX. SOCIAL SCIENCE UNIT OF WORK FOR &quot;TEAMS&quot;</td>
<td>117</td>
</tr>
</tbody>
</table>

-iv-
TABLE OF CONTENTS (concluded)

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>X. SAMPLE TEACHING UNIT--FISH</td>
<td>155</td>
</tr>
<tr>
<td>XI. LIMITATIONS OF STUDY AND SUGGESTIONS FOR FURTHER RESEARCH</td>
<td>158</td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td>161</td>
</tr>
<tr>
<td>NUMBER</td>
<td>PAGE</td>
</tr>
<tr>
<td>--------</td>
<td>-------</td>
</tr>
<tr>
<td>I. SUPERIOR CLUB &quot;A&quot; PUPILS SPEED SCORES.</td>
<td>27</td>
</tr>
<tr>
<td>II. SUPERIOR CLUB &quot;A&quot; PUPILS COMPREHENSION SCORES.</td>
<td>29</td>
</tr>
<tr>
<td>III. SUPERIOR CLUB &quot;A&quot; PUPILS VOCABULARY SCORES</td>
<td>31</td>
</tr>
<tr>
<td>IV. AVERAGE CLUB &quot;B&quot; PUPILS SPEED SCORES</td>
<td>33</td>
</tr>
<tr>
<td>V. AVERAGE CLUB &quot;B&quot; PUPILS COMPREHENSION SCORES.</td>
<td>35</td>
</tr>
<tr>
<td>VI. AVERAGE CLUB &quot;B&quot; PUPILS VOCABULARY SCORES</td>
<td>37</td>
</tr>
<tr>
<td>VII. RETARDED READERS CLUB &quot;C&quot; PUPILS SPEED SCORES</td>
<td>39</td>
</tr>
<tr>
<td>VIII. RETARDED READERS CLUB &quot;C&quot; PUPILS COMPREHENSION SCORES</td>
<td>41</td>
</tr>
<tr>
<td>IX. RETARDED READERS CLUB &quot;C&quot; PUPILS VOCABULARY SCORES</td>
<td>43</td>
</tr>
</tbody>
</table>
LIST OF TABLES  (concluded)

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>X.</td>
<td></td>
</tr>
<tr>
<td>GATES READING SURVEY TEST GRADES 3-10</td>
<td>71</td>
</tr>
<tr>
<td>SPEED.</td>
<td></td>
</tr>
<tr>
<td>XI.</td>
<td></td>
</tr>
<tr>
<td>GATES READING SURVEY TEST GRADES 3-10</td>
<td>73</td>
</tr>
<tr>
<td>COMPREHENSION.</td>
<td></td>
</tr>
<tr>
<td>XII.</td>
<td></td>
</tr>
<tr>
<td>GATES READING SURVEY TEST GRADES 3-10</td>
<td>75</td>
</tr>
<tr>
<td>VOCABULARY</td>
<td></td>
</tr>
<tr>
<td>XIII.</td>
<td></td>
</tr>
<tr>
<td>STANDARD SPELLING</td>
<td>108-109</td>
</tr>
<tr>
<td>XIV.</td>
<td></td>
</tr>
<tr>
<td>COMPARISON OF STANDARD TEST SCORES</td>
<td>160</td>
</tr>
<tr>
<td>WITH CLASS STANDING</td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER I

STATEMENT OF PROBLEM AND TERMS DEFINED

Motivation has long been used in daily work by good teachers, but the purpose of this study is to ascertain, as accurately as possible, which types of motivation succeed best with pupils of grades four, five and six. Children, nowadays, are grouped within the classroom, it is true,—but would they accomplish more if grade limitations were removed, and the students placed with others at their own reading level? Can these reading groups (of children from grades four, five and six), be motivated by concerted effort on the teachers’ part, by calling the meetings "club meetings", and making games predominate and the remedial reading become incidental learning?

For many years a difference in opinion has existed in regard to the relative achievement of horizontal division of students, (i.e., homogeneous groups at same reading level), and vertical division (i.e., heterogeneous teams as a cross section of the class). The majority of the claims made are based upon trial and error; and individual opinion, rather than experimental evidence, has been presented to support the contentions of either side.
I. The Problem

Statement of the Problem— It is the purpose of this study (1) to compare the achievements in Reading, and in the Skills Subjects, of pupils of grades four, five and six (grades 4-5-6), after a fixed period of time, under specified conditions, by means of standard test scores; (2) to show the relationship between such factors as intelligence, sex, and everyday schooling; and (3) to present student reactions to these situations, as revealed through a questionnaire.

Importance of the Study— "Grouping" (i.e., forming homogeneous groups of pupils), has long been claimed by educators to set the stage for better learning. Such expressions as "Let the child progress at his own rate of speed," "Social grouping," and "Social-age grouping" are frequently heard. However, investigators feel that that grouping of pupils of approximately equal ability means the blind leading the blind,— with no incentive for self-betterment. Team work (i.e., heterogeneous sets of pupils), allows for the development of leadership, responsibility for the less able, and a merging of the individual in the team. It solves the question, "How may we keep the superior pupil busy and happy? " It erases the stigma of being in the "slow" group. It provides motivation for pupils who are nearing adolescence, the "club" age. In this study an attempt has
been made to measure pupils taught in the traditional grade groups, in "Clubs" (of grades four, five and six children combined according to their correct reading level), in the achievement level groups within the given grade room, and in teams, also in the same classroom.

II. Definitions of Terms Used

A. Traditional grade classes are interpreted as meaning all the pupils listed in the grade 4, 5, 6 registers, regardless of ability grouping.

B. The Gates Reading Survey was given in Grades 4, 5, 6; and the "Clubs" (grades 4, 5, and 6) were formed from the reading level ascertained by the Gates Survey, 1945.

C. The achievement level groups were formed by dividing the sixth grade only, into the Superior, Average, and Slow Learning Groups, according to the results of the Gates Reading Survey Test which was given in the fall of 1945. This division was horizontal, and all children were approximately homogeneously grouped.

D. The Teams represented a cross-section of the sixth grade only. The division was vertical; and the team had a superior student as leader, a good student as assistant, two average students and a poor student as a handicap.
This study plans to show the comparison of achievement between "Groups" (horizontal division) and "Teams" (vertical division) in the sixth grade. It also repeats the findings of a remedial reading experiment using "Clubs" in grades 4, 5, 6, at reading levels, rather than in grade placement as shown on the intermediate grade registers.

A. Example I. A comparison of motivated remedial reading groups in grades 4,5,6 at reading levels in "clubs." Reports of Gates Reading Survey, February, 1945, and May, 1945 showing:

(1) Differences in **Speed** of Reading
   (a) Superior Group- boys vs. girls
   (b) Average Group- boys vs. girls
   (c) Retarded Readers boys vs. girls

(2) **Vocabulary** Achievement
   (a) (b) (c)

(3) **Comprehension** Scores
   (a) (b) (c)

B. Example II. Achievement scores in Skills Subjects in a sixth grade class:-

Homogeneous (groups) vs. Heterogeneous (teams)
Horizontal Vertical

(1) Reading for **Speed**
   (a) Groups (boys) vs. teams (boys)
   (b) Groups (girls) vs. teams (girls)
   (c) Groups (all pupils) vs. teams (all pupils)
(2) Reading for Comprehension
   (a)   (b)   (c)
(3) Vocabulary Improvement
   (a)   (b)   (c)
(4) Spelling Achievement
   (a)   (b)   (c)
(5) Arithmetic Achievement
   (a)   (b)   (c)
(6) Science units and Literature units and illustrations.

The tests used in partial completion of the checks on these units are:


3. Iowa Basic Arithmetic Skills Form M, Test D Houghton, Mifflin, Boston, Mass., 1940.

5. **Clapp-Young Arithmetic Test** (Forms A and B)  

6. **Durrell-Sullivan Reading Capacity Test**  
World Book Company, Boston, Mass.

7. **Nelson Silent Reading Test** (Grades 3-9)  
Houghton Mifflin Company, 2 Park Street, Boston 7, Mass.

8. **Compass Survey Tests in Arithmetic**  
Scott Foresman Company, (Advanced Examination, Grades 4-8, Forms A and B)

9. **Otis Quick-Scoring Mental Ability Tests, Beta Test**.  
Form B (for Grades 4-9).

10. **Henmon-Nelson Test of Mental Ability, Form A** (Grades 3-8).  

11. **Clapp-Young English Test, Form A**.  

12. **A Lower Extension of the Inglis Tests of English Vocabulary, Forms X and Y** (Grades 6-10)  
Graduate School of Education, Harvard University  
Ginn and Company, Boston, Mass.
CHAPTER II

RESEARCH IN PREPARATION OF PROBLEM

Joseph Zubin, Ph.D., wrote a thesis on "Some Effects of Incentive" which aroused controversy whenever quoted. His summary states that motivation is a most important factor; and surely, that is not to be disputed. He also stated that group versus group produced a greater increment in speed, than individual versus group activity.

Zubin claims that motivation even plays a part in such highly objective measures as intelligence scores. Sex plays its part in motivation, and boys improve more than girls under the stimulus of incentive. Part of the scores in these tests (used in the Hardy School experiments of 1945-1946) checked sex differences in speed of reading, vocabulary, comprehension, spelling, arithmetic, in an attempt to ascertain the various aspects of education most favorably viewed by boys, contrasted by the increments of girls under the same conditions.

1/ Joseph Zubin, Ph.D., "Some Effects of Incentive" (A Study of Individual Differences in Rivalry), Teachers College, Columbia University Contributions to Education, Number 532, 1932.

-7-
Moede found that the better individuals lowered their speed, while the poorer individuals increased their speed under conditions of rivalry. By separating the superior half of the group, and allowing them to compete among themselves, a distinct increment instead of a decrement resulted. However, the purpose of the Hardy School experiments was to arouse interest, and to increase gains in reading and in the skills subjects by testing, and contrasting, types of motivation and different set-ups: (a) within the school, using the three intermediate grades and (b) within a classroom, using (1) groups as grade levels and (2) teams, a cross-section of the grade.

In "A Study of a Group of Children with Exceptionally High Intelligence Quotients in Situations Partaking of the Nature of Suggestion" which was sponsored by Leta S. Hollingworth, the statement is made that "Children with high I.Q.'s yield to fewer suggestions than the group with low I. Q.'s." This would seem to account for mob psychology; but apparently it would be a subject of concern to the teacher of the children of high I.Q.'s in any new work which she was "suggesting" (even by the faintest innuendo) since the higher the I.Q., the greater the resistance to "situations partaking of the nature of suggestions!" This study purposes to suggest games and lessons of interest,— and to motivate by keeping scores.

2/ Rachel McKnight Simmons, Ph.D., "A Study of a Group of Children with Exceptionally High Intelligence Quotients in Situations Partaking of the Nature of Suggestions," Contributions to Education, No. 788, Teachers College, Columbia University
prominently displayed as "team" scores, to further help being given the lame, the halt and the blind, by those more richly endowed by nature. It is by way of being a challenge to assume the duties of leadership and "bear one another's burdens."

H.B. and G.M. Wilson express this by saying in their introduction, "The proper motivation of school work, not only means increased efficiency in teaching; but it means for the child richer experience, larger personality, and new joy in living." 1 It is the purpose of this study to show work which has been used to motivate and enrich the school experiences of children in large and in small groups-and from every type of home (from the wealthy, down to the homes of poor immigrants). The Science units have been tried out in Rhode Island Public Schools (a large percentage of Italian population) and the same units, with more scientific vocabulary have been presented successfully to girls in private school classes. As to the population of the present so-called "Hardy" Experiment, it is very widely distributed from the rich to the poor, and the parents represent practically all walks in life. It is a fair sampling of a town in a New England community, within twenty miles of Boston.

The conferences frequently held with teachers and pupils seemed to indicate that some sort of substitution was needed

to replace routinized teaching, and subjects pretty well in a rut. As the Wilsons say, "Why not substitute for the formal textbook routine of schoolroom practice, self-imposed tasks which the pupil is vitally interested in successfully completing?" 1/

In searching for directions for building units which would prove to be of vital interest, a lasting value, the "Units of Work and Centers of Interest in the Organization of the Elementary School Curriculum," suggests in "Need for Further Study," that the work of curriculum-making, while it cannot stand still, is being retarded by inadequate data in the following areas: "The fulcra of conflict between values of different groups, and deeper understandings of motivation among groups."

Apparently then, several people, who had worked along the lines of "motivation" and "groups," feel that more work is needed to test different groupings and to check various types of incentive. The question arising at Hardy School was "time allotment," "space," "within the school," or "within the classroom," (in regard to group divisions), should divisions be made by teachers' marks, or by Intelligence Quotients?

Much reading along this line indicated the trend of the times.

Homer B. Reed\(^1\) believes that the average material presented to the children is a waste of time for those who have the abilities of primary pupils and also for those having the abilities of high school students. This would seem to show that every teacher needs material over her grade level and under her grade level, which could be correlated with the material fitting the average grade pupil. Research revealed no material suitable for this experiment which was (1) inexpensive, (2) and fitting the course of study. Much advertising material can be adapted and modified, but since "time" was a factor, that idea was discarded. Reading books are often brought out on different reading levels but money was a factor in ordering complete texts for purposes of experimentation. If, as we hope, exchange of pupils at their own reading levels could be effected, so that grade barriers were temporarily levelled, the promise had been given that no reading books from one grade were to be read in the room of another grade. This promise was kept, but it taxed the ingenuity of the teachers cooperating on the experiment!

The increased emphasis on motivation indicates recognition of the fact that effective learning must be purposeful,

zestful, and vigorous. Listless effort accomplishes no more in learning than it does in other activities.¹ What we hoped to do was to eliminate the apathy and to accentuate the effort; increasing the zeal until actual measurements would prove our belief correct. Research reveals a difference of opinion in withdrawing children from their allotted grade, and placing them elsewhere for better grouping.

Chris de Young ² writes of the advantages for separate groups as presenting opportunity to work to the level of ability. The progress should not be set at a lower tempo than the pupil's ability would permit. He feels that the special class program may well prevent social maladjustments. These youths secure a definite training for leadership along many lines. Opposition says that regular grade children are losers, when the gifted students are withdrawn. His "trend" reads, "The grouping of pupils, and the methodology of instruction, should depend (in the last analysis) upon the specific needs of the exceptional pupil and the available facilities."

"Available facilities" were donations of old magazines, professional and non-professional, old discarded books to be cut into units, and a limp, discarded, dog-eared set of

¹ Homer B. Reed, op. cit., Preface.
Encyclopedias! Moreover, de Young's "trend" seemed to leave the final decision to the principal and teachers.

1/
Reed, on the other hand, says that with grading as it is, the teaching problem is next to impossible. The first step in the solution is regrouping. This does not mean special promotion or demotion from one grade to another; but rather, a regrouping on a basis of common difficulty. Many of the reading difficulties are the consequences of mass instruction. If learning to read is the objective of teaching reading, then seeking content in line with children's interests is psychologically correct. The chief function of interest is to make reading palatable; but after this requirement is met, the other criteria should come into the foreground— that is, after we have learned to read, we should read to learn.

It seemed necessary to the sponsors of the experiment that we evaluate the comparative strength of human drives by research. If, for instance, fun and frolic can motivate children, why not use them? Would games help or hinder?

2/
In People Are Important, the comparative strength of Human Drives are listed thus:

<table>
<thead>
<tr>
<th>Drive</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pleasure</td>
<td>8.6</td>
</tr>
<tr>
<td>Ambition</td>
<td>8.6</td>
</tr>
<tr>
<td>Efficiency</td>
<td>7.3</td>
</tr>
<tr>
<td>Competition</td>
<td>7.3</td>
</tr>
</tbody>
</table>


So it would seem that for the retarded reader "pleasure" could furnish the same drive that "ambition" would furnish to the superior student. Also, reasoning along the same lines, for those who were admittedly inefficient, competition would provide as much impetus as efficiency. Since our premise, at Hardy School, was based on that very assumption it was most comforting to be given this assurance by research!

In the 13th Yearbook, the statement is made that the hygienic classroom is one permeated by a spirit of "camaraderie" friendliness, sympathetic concern and genuine affection. Moreover, a sense of really "belonging" to a group, is another psychological imperative in the creation of an atmosphere of effective, worthwhile learning. We wanted our children (even the "specials") to believe that they were needed by the group and that they had something to give that no one else could give! We felt that there must be ample provision for individual differences, and contributions to the entire group, from each member of the "club", "group", or "team."

Recognizing the school library as an educational tool providing for individual differences, we made provision to bring the books off the shelves and out of closets and on to the library tables in the classroom for ready reference and

1/ "Mental Health in the Classroom," 13th Yearbook, Department of Supervisors and Directors of Instruction of the N.E.A., 1941, p.41.
enjoyment. Lucille F. Fargo says that books should be ready for "intimate, day by day service." She feels that the heart and soul of library work with boys and girls is its voluntary nature: "Make a girl read a book, and she hates it; force her to go to school and she despises school."

The teachers felt that in this experiment, nothing must be forced; no slightest feeling of dictatorship; but instead a zest for competition, a desire to help one's own group, and a feeling of "belonging." Harry E. Tyler defines "living" as a great experience meaning the enjoyment of life. This kind of living is sometimes spoken of as the "abundant life." Living "abundantly" is to be happy; it means enthusiasm and joy. As leaders of youth, we hoped that these units, games, and speed drills, would change the child's attitude in the direction of living more "abundantly." Every child should experience the joy of learning and feel a genuine enthusiasm for the tasks they have chosen.

Before choosing material, a survey was made of the intermediate grades to discover the kinds of stories the children preferred. Approximately one hundred children were registered in grades 4, 5, and 6, and voted for their preference.


The tabulations are as follows: -

1. Adventure 96
2. Sea Stories 90
3. Mystery
   Stories 83
4. Wild West 44
5. Animal 43
6. True Stories 30
7. Fairy Stories 20
8. History " 19
9. The Funnies 10

After conducting the experiment, a similar survey was made, and the votes were cast as follows:

1. Adventure 75
2. Animal or
   Science 70
3. History Stories 65
4. True Stories
   Biographies 50

The other votes were too widely scattered to make any showing, so evidently their reading had crystallized the interests of the children.

Before dividing the children for groupings, within the level of their various abilities, we read and discussed
many books on educational measurements.

Dr. Madsen 1/ had in mind the training of teachers, principals, and supervisors for the elementary grades. He feels that discouragingly little use is made of standardized tests for the improvement of teaching.

Dr. Lewis Terman spoke of the two methods of measurement: (1) subjective, formed by estimates, guesses varying greatly; and (2) objective, formed by applying a definite instrument of measurement, under specified conditions, and care can get approximately perfect measurements of gains and losses.

In the "Comparison of Achievement of Left-Handed Children vs. Right-Handed Children in Grade Five," 2/a carefully compiled series of comparisons were checked and evaluated. The teachers discussed the methods used; and the precision of measurements and evaluations were the topics of intermediate grade meetings, held to discuss our own problems of measurement. The teachers felt that from Miss Jameson's bibliography, The Improvement of Reading by A.I. Gates, 3/ and Children Who Cannot Read by Marion Monroe 4/ would help us most in regard to


2/ Alice N. Jameson, "Comparison of Achievement of Left-Handed vs. Right-Handed Children in Grade Five," Master's Thesis, Boston University, Boston, Mass, 1944.


the reading aspects of the situation. Accordingly these were read and brief summaries discussed at our next meeting.

1/ The Gates" summary was an application of the "mental structure" type of psychological analysis of reading difficulties and Chapters 5, 11 and 12 proved particularly helpful. The teacher reporting on Monroe 2/ was inspired to read further on Remedial Reading and listed helpful material and concrete suggestions.

3/ An attempt was made to see to what an extent we could safely trust our own daily marks as indicative of achievement. A thesis was read and a report was made to our little group of an attempt to ascertain some factors of adjustment revealed by a study of children whose class marks and achievement scores differed greatly. Miss Sobel's decision was in favor of objective tests and her arguments were definitely presented. Since the Gates Reading Survey Tests (Grades 3-9) were used as measurements every February, we felt that we could well make them serve a double purpose. Our decision was confirmed by reading "An Integrated Curriculum in Practice." On page 29 a brief paragraph was headed, "How the Progress of the Groups was Measured." The measurement was made by a

1/ A.I. Gates, op. cit.


3/ Frances S. Sobel, Ph.D., "Teachers' Marks and Objective Tests as Indices of Adjustment," Teachers' College, Columbia University Contributions to Education #674, N.Y., 1936.
comparison of the scores earned by the various groups on the following standardized achievement tests given at the beginning and the completion of the study. 1/

Helen Conway's thesis 2/ found there were no greater gains with higher I. Q.'s in Remedial Reading. We wanted to find whether the retarded readers would gain in Remedial Reading given with a sugar coating.

In answer to the objections of grade six children going to a grade five or a grade four room, read The Principal in the Modern Elementary School. On page 149, Robert Hill Lane says, "First of all, you want to break down those artificial barriers called grades, which so hopelessly compartmentalize the average elementary school." Again, on page 158, he says, "Unify your entire school as completely as possible."

The modern "trend" is away from the Germanic traditional "grades". A three-year level is to become the Americanized substitute. The "Clubs" give the children a prevue of the coming American school plan.


2/ Helen Conway, "A Study of the Relationships Between Amount of Gain under Remedial Instruction and Intelligence as Well as Certain Other Factors," Master's thesis, Boston University, 1943.

CHAPTER III

PLAN OF ATTACK AND EVALUATION OF DATA

These experiments took place in a suburban town about twenty miles from a large metropolitan city. The Remedial Reading Experiment covered Grades 4, 5, and 6 in a small school situated in a delightful once-wooded area. Even though many homes have been built, some beautiful trees remain in almost every yard. A well-known college can easily be seen across some fields and the pond. The college girls often visit our school and occasionally conduct "surveys" for sociology classes.

The children come from well-to-do homes, homes of professional people, skilled mechanics, and from homes "on relief." An excellent sampling of population results; since the grouping by heritage is not homogeneous.

There were 83 children in the "Club" Experiment, otherwise referred to as the "Olympic Games." Grade six had 25 children; 11 boys and 14 girls. Grade five had 26 children, divided into 15 boys and 11 girls. Grade four had 32 pupils; 21 boys and 11 girls. The I.Q.'s ranged from 177 to 55. The Superior Group or "Club", were grade level 6.5 and up. The Middle Group, or "Club" ranged from 5.0 to 6.5. The Retarded Readers, or "Club C" were from grade 5.0 and down.

-20-
Since the town used the Gates Reading Survey for grades three to ten (Vocabulary, Level of Comprehension, Speed, and Accuracy) by Arthur I. Gates, every February in a mid-year test; we decided (after consulting with our Superintendent) that the Gates Test would be best for the purposes of division into reading levels. The average of all three subdivisions of the Reading test was used. The children whose average ranged from grade level 5.0 up to 6.5 were in the "Average", or Middle Group. The Superior Group were grade level 6.5 and "up"; the Inferior or Slow Section were grade equivalent 4.11 and "down." The highest average grade score in the Superior (or "A" Group) was 10.1 (or Grade 10 after one month's work). The highest average in the "Average" (or "B" Group) was 6.4. The lowest average in the "C" Group of Retarded Readers was 5.0. There were five "special pupils" in the Slow Section, or "C" Club; 2 from Grade 6; one from Grade 5, and two from Grade 4. "Special Students" are those marked upon attitude and effort in regular grade subjects, not on scholastic attainment. They have been tested by psychiatrists and the principal has held conferences with the parents before they are definitely marked as "specials."

The sexes were divided in the three Clubs as follows:

Grade 6 --- 5 boys
Grade 5 --- 7 boys
Grade 4 --- 4 boys  (total 16 boys)

Grade 6 --- 7 girls
Grade 5 --- 5 girls
Grade 4 --- 1 girl  (total 13 girls)

Superior Club --- total --- 29 members

Grade 6 --- 4 boys
Grade 5 --- 6 boys
Grade 4 --- 7 boys  (total 17 boys)

Grade 6 --- 6 girls
Grade 5 --- 3 girls
Grade 4 --- 4 girls  (total 13 girls)

Average Club --- total --- 30 members

Grade 6 --- 2 boys
Grade 5 --- 2 boys
Grade 4 --- 10 boys  (total 14 boys)

Grade 6 --- 1 girl
Grade 5 --- 3 girls
Grade 4 --- 6 girls  (total 10 girls)

"C" Club --- total --- 24 members
<table>
<thead>
<tr>
<th></th>
<th>Gains by Sexes</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Superior Club</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Speed</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boys</td>
<td>117</td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>121</td>
<td></td>
</tr>
<tr>
<td><strong>Comprehension</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boys</td>
<td>43</td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>42</td>
<td></td>
</tr>
<tr>
<td><strong>Vocabulary</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boys</td>
<td>84</td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>33</td>
<td></td>
</tr>
</tbody>
</table>

The boys made their greatest gains in **Vocabulary** in the Superior Club ("A's").

Gates Reading Survey Tests were given February 6, 1945, and June 6, 1945.

The Club time allotment was 2 hours per week - one half hour 4 days a week.

<table>
<thead>
<tr>
<th></th>
<th>Gains by Sexes</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average Club</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Speed</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boys</td>
<td>127</td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>91</td>
<td></td>
</tr>
<tr>
<td><strong>Comprehension</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boys</td>
<td>112</td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>102</td>
<td></td>
</tr>
<tr>
<td>Gains by Sexes</td>
<td>Points</td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>--------</td>
<td></td>
</tr>
<tr>
<td><strong>Average Club</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Vocabulary</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Boys</strong></td>
<td>113</td>
<td></td>
</tr>
<tr>
<td><strong>Girls</strong></td>
<td>83</td>
<td></td>
</tr>
</tbody>
</table>

The boys made their greatest gains in (1) Speed and (2) Vocabulary in the Average Club ("B's").

<table>
<thead>
<tr>
<th>Gains by Sexes</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Club &quot;C&quot; (Slow Section)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Speed</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Boys</strong></td>
<td>104</td>
</tr>
<tr>
<td><strong>Girls</strong></td>
<td>82</td>
</tr>
<tr>
<td><strong>Comprehension</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Boys</strong></td>
<td>124</td>
</tr>
<tr>
<td><strong>Girls</strong></td>
<td>40</td>
</tr>
<tr>
<td><strong>Vocabulary</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Boys</strong></td>
<td>70</td>
</tr>
<tr>
<td><strong>Girls</strong></td>
<td>90</td>
</tr>
</tbody>
</table>

The boys made their greatest gains in (1) Comprehension, (2) Speed, in the Retarded Reader Club ("C's").
Over-All Gains

\[
\begin{array}{|l|l|l|}
\hline
\text{A's.} & \text{Boys} & \text{versus} & \text{Girls} \\
\hline
\text{Speed} & 117 & --- & 121 \\
\text{Comprehension} & 43 & --- & 42 \\
\text{Vocabulary} & 84 & --- & 33 \\
\text{BB's.} & \text{Speed} & --- & 91 \\
\text{Comprehension} & 112 & --- & 102 \\
\text{Vocabulary} & 113 & --- & 83 \\
\text{C's.} & \text{Speed} & --- & 82 \\
\text{Comprehension} & 124 & --- & 40 \\
\text{Vocabulary} & 70 & --- & 90 \\
\text{Total Increment} & 894 & 684 \\
\text{Total Enrolled} & 47 & 36 \\
\text{Average Gains (per member)} & 19 & 19 \\
\hline
\end{array}
\]

In the Chapter on Research, quoting from the thesis, "Some Effects of Incentive," Zubin says, "Boys improve more than girls under the stimulus of incentive." Perhaps he really means that first the attitude improves; and then, "Boys gain, period!" The boys were rated by the teachers as more enthusiastic, more cooperative and noisier than the girls during Club periods. They also made more suggestions.

The boys submitted the best designs for the huge club shields (according to the decision of the Art Supervisor) and the boys did all the painting involved when the shields were actually completed. The boys brought in more illustrative
material, and the boys supplied the leaders for all the clubs by unanimous vote. In the daily contests, the winner of first place was nearly always a boy. Until checked by the Gates Survey Retest, it had been assumed that Zubin's statement was absolutely correct; and the evaluation of the final scores was a great surprise to the several teachers involved as sponsors in the experiment. The "intangibles", the "spiritual values", apparently do not get through to make material gains. However, any boys' school would better the morale by a similar experiment. Any public school, with boys predominating, would do well to try this experiment; provided the teachers are all united in wanting to perform the experiment. Any school, with many male retarded readers, could arouse enthusiasm and better the existing morale in the opinion of the teachers who tried the "Hardy Experiment" of "Olympic Games" in 1945.
Table I
SUPERIOR CLUB  "A" PUPILS  SPEED SCORES

<table>
<thead>
<tr>
<th>Names(Girls*)</th>
<th>February 6, 1945</th>
<th>June 6, 1945</th>
</tr>
</thead>
<tbody>
<tr>
<td>---------------</td>
<td>--------------</td>
<td>-------</td>
</tr>
<tr>
<td>1 D--B.A.*</td>
<td>11-4</td>
<td>30</td>
</tr>
<tr>
<td>2 G--S*</td>
<td>11-9</td>
<td>24</td>
</tr>
<tr>
<td>3 G--R</td>
<td>12-8</td>
<td>32</td>
</tr>
<tr>
<td>4 H--R</td>
<td>10-10</td>
<td>44</td>
</tr>
<tr>
<td>5 J--G*</td>
<td>11-4</td>
<td>48</td>
</tr>
<tr>
<td>6 L--C*</td>
<td>11-9</td>
<td>28</td>
</tr>
<tr>
<td>7 M--J</td>
<td>11-9</td>
<td>31</td>
</tr>
<tr>
<td>8 M--K*</td>
<td>11-11</td>
<td>30</td>
</tr>
<tr>
<td>9 P--J</td>
<td>12-11</td>
<td>24</td>
</tr>
<tr>
<td>10 R--L*</td>
<td>11-10</td>
<td>30</td>
</tr>
<tr>
<td>11 S--R</td>
<td>11-10</td>
<td>29</td>
</tr>
<tr>
<td>12 T--A*</td>
<td>11-6</td>
<td>27</td>
</tr>
<tr>
<td>13 B--R*</td>
<td>10-9</td>
<td>47</td>
</tr>
<tr>
<td>14 B-F. Jr.</td>
<td>10-2</td>
<td>54</td>
</tr>
<tr>
<td>15 D-P. Jr.</td>
<td>10-11</td>
<td>64</td>
</tr>
<tr>
<td>16 E--T</td>
<td>10-10</td>
<td>45</td>
</tr>
<tr>
<td>17 M-E.M.*</td>
<td>10-10</td>
<td>64</td>
</tr>
<tr>
<td>18 M--J*</td>
<td>11-1</td>
<td>43</td>
</tr>
<tr>
<td>19 M--G</td>
<td>11-1</td>
<td>40</td>
</tr>
<tr>
<td>20 N--A</td>
<td>10-8</td>
<td>59</td>
</tr>
<tr>
<td>21 T--S*</td>
<td>10-5</td>
<td>51</td>
</tr>
<tr>
<td>22 T--J</td>
<td>9-9</td>
<td>58</td>
</tr>
<tr>
<td>23 T--F*</td>
<td>11-8</td>
<td>38</td>
</tr>
<tr>
<td>24 W--R</td>
<td>10-6</td>
<td>46</td>
</tr>
<tr>
<td>25 B--D</td>
<td>9-7</td>
<td>56</td>
</tr>
<tr>
<td>26 C--P*</td>
<td>10-2</td>
<td>53</td>
</tr>
<tr>
<td>27 D--L*</td>
<td>9-10</td>
<td>46</td>
</tr>
<tr>
<td>28 G--R</td>
<td>10-0</td>
<td>49</td>
</tr>
<tr>
<td>29 O--B</td>
<td>9-11</td>
<td>64</td>
</tr>
</tbody>
</table>

64 is perfect score.

Children 1-12 are Grade Six pupils.

Children 13-24 are in Grade Five register.

Child No. 16 registered a loss of 1 in Raw Score.
### SUPERIOR CLUB "A" PUPILS EVALUATION, SPEED

<table>
<thead>
<tr>
<th>Grade</th>
<th>Actual</th>
<th>Grades</th>
<th>Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Grade Six</strong></td>
<td>Girls</td>
<td>99</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Boys</td>
<td>84</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Net Gain</td>
<td>153 points</td>
<td></td>
</tr>
<tr>
<td><strong>Grade Five</strong></td>
<td>Girls</td>
<td>17</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Boys</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Net Gain</td>
<td>32 points</td>
<td>(loss)</td>
</tr>
<tr>
<td><strong>Grade Four</strong></td>
<td>Girls</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Boys</td>
<td>18</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Net Gain</td>
<td>23 points</td>
<td></td>
</tr>
</tbody>
</table>

#### Superior Club Members

<table>
<thead>
<tr>
<th>Gains</th>
<th>Girls</th>
<th>Grade 6 gained 15.25 points per pupil.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Gains</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boys minus</td>
<td>117</td>
<td>Grade 5 gained 2.58 points per pupil.</td>
</tr>
<tr>
<td>&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total points</td>
<td>237</td>
<td></td>
</tr>
<tr>
<td>gained</td>
<td></td>
<td></td>
</tr>
<tr>
<td>per pupil</td>
<td>8.17</td>
<td></td>
</tr>
</tbody>
</table>

Girls gained 9.3 points per girl.
Boys gained 7.25 points per boy.
<table>
<thead>
<tr>
<th>Names (Girls&quot;)</th>
<th>February 6, 1945</th>
<th>June 6, 1945</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 D--B.A.*</td>
<td>11-4 60 7.0 12-9 11-8 62 7.3 13-0 2 0</td>
<td></td>
</tr>
<tr>
<td>2 G--S*</td>
<td>11-9 65 7.6 13-4 12-1 66 7.8 13-7 1 0</td>
<td></td>
</tr>
<tr>
<td>3 G--R</td>
<td>12-8 59 6.9 12-8 13-0 59 6.9 12-8 0 0</td>
<td></td>
</tr>
<tr>
<td>4 H--R</td>
<td>10-10 75 9.4 15-1 11-2 81 11.0 15-9 6 0</td>
<td></td>
</tr>
<tr>
<td>5 J--G*</td>
<td>11-4 73 9.0 14-9 11-8 73 9.0 14-9 0 0</td>
<td></td>
</tr>
<tr>
<td>6 L--C*</td>
<td>11-9 61 7.2 12-11 12-1 72 8.9 14-3 11 0</td>
<td></td>
</tr>
<tr>
<td>7 M--J</td>
<td>11-9 67 8.0 13-9 12-1 66 7.8 13-7 0 1</td>
<td></td>
</tr>
<tr>
<td>8 M--K*</td>
<td>11-11 60 7.0 12-9 12-3 55 6.2 12-0 0 5</td>
<td></td>
</tr>
<tr>
<td>9 P--J</td>
<td>12-11 57 6.5 12-3 13-3 69 8.3 14-0 12 0</td>
<td></td>
</tr>
<tr>
<td>10 R--L*</td>
<td>11-10 53 6.0 11-10 12-2 66 7.8 13-7 13 0</td>
<td></td>
</tr>
<tr>
<td>11 S--R</td>
<td>11-10 69 8.3 14-0 12-2 69 8.3 14-0 0 0</td>
<td></td>
</tr>
<tr>
<td>12 T--A*</td>
<td>11-6 70 8.5 14-3 11-10 69 8.3 14-0 0 1</td>
<td></td>
</tr>
<tr>
<td>13 B--R*</td>
<td>10-9 66 7.8 13-7 12-10 69 8.3 14-0 3 0</td>
<td></td>
</tr>
<tr>
<td>14 B--F.Jr.</td>
<td>10-2 64 7.5 13-3 10-6 66 7.8 13-7 2 0</td>
<td></td>
</tr>
<tr>
<td>15 B--P.Jr.</td>
<td>10-11 73 9.0 14-9 11-3 74 9.2 14-11 1 0</td>
<td></td>
</tr>
<tr>
<td>16 E--T</td>
<td>10-10 58 6.7 12-5 11-2 58 6.7 12-5 0 0</td>
<td></td>
</tr>
<tr>
<td>17 M--Em*</td>
<td>10-10 71 8.7 14-5 11-2 73 9.0 14-9 2 0</td>
<td></td>
</tr>
<tr>
<td>18 M--J*</td>
<td>11-1 63 7.4 13-1 11-5 64 7.5 13-3 1 0</td>
<td></td>
</tr>
<tr>
<td>19 M--G</td>
<td>11-1 56 6.4 12-2 11-5 58 6.7 12-5 2 0</td>
<td></td>
</tr>
<tr>
<td>20 N--A</td>
<td>10-8 64 7.5 13-3 11-0 66 7.8 13-7 2 0</td>
<td></td>
</tr>
<tr>
<td>21 T--S*</td>
<td>10-5 62 7.3 13-0 10-9 64 7.5 13-3 2 0</td>
<td></td>
</tr>
<tr>
<td>22 T--J</td>
<td>9-9 77 9.7 15-5 10-1 77 9.7 15-5 0 0</td>
<td></td>
</tr>
<tr>
<td>23 T--F*</td>
<td>11-5 74 9.2 14-11 12-0 78 10.0 15-9 4 0</td>
<td></td>
</tr>
<tr>
<td>24 W--H</td>
<td>10-6 58 6.7 12-5 10-10 60 7.0 12-9 2 0</td>
<td></td>
</tr>
<tr>
<td>25 B--D</td>
<td>9-7 55 6.2 12-0 9-11 63 7.4 13-1 8 0</td>
<td></td>
</tr>
<tr>
<td>26 C--P</td>
<td>10-2 65 7.6 13-4 10-6 60 7.0 12-9 0 5</td>
<td></td>
</tr>
<tr>
<td>27 D--L*</td>
<td>9-10 51 5.7 11-6 10-2 60 7.0 12-9 9 0</td>
<td></td>
</tr>
<tr>
<td>28 G--R</td>
<td>10-0 60 7.0 12-9 10-4 62 7.3 13-0 2 0</td>
<td></td>
</tr>
<tr>
<td>29 C--B</td>
<td>9-11 64 7.5 15-3 10-5 76 9.5 15-3 12 0</td>
<td></td>
</tr>
</tbody>
</table>

Children 1-12 are Grade Six pupils.

Children 13-24 are in Grade Five register.

Children 25-29 are Grade Four pupils.
SUPERIOR CLUB "A" PUPILS EVALUATION, COMPREHENSION

<table>
<thead>
<tr>
<th>Grade</th>
<th>Girls</th>
<th>Boys</th>
<th>Total</th>
<th>Net Gain</th>
<th>Gains</th>
<th>Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade Six</td>
<td>27</td>
<td>18</td>
<td>45</td>
<td>38 points</td>
<td>27</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade Five</td>
<td>12</td>
<td>9</td>
<td>21</td>
<td>21 points</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade Four</td>
<td>9</td>
<td>22</td>
<td>31</td>
<td>26 points</td>
<td>9</td>
<td>5</td>
</tr>
</tbody>
</table>

Total

Superior Club Members

| Total Gains (boys) | 49 | Average Gain per Club Member | 3.3 |
| Total Loss (boys)  | 6  | Average Gain (g) | 3.69 |
| Net Gain           | 43 | Average Gain (b) | 3.06 |

(Gains are consistent in Superior Group boys and girls)

Total Gains (girls) 48
Total Losses (girls) 6
Net Gains 42
(\text{Difference in total net gains is negligible})

Grades four and six gained more than grade five. Grade four pupils made the greatest gains in the Superior Club.
### TABLE III

**SUPERIOR CLUB "A" PUPILS VOCABULARY SCORES**

<table>
<thead>
<tr>
<th>Names(Girls*)</th>
<th>February 6, 1945</th>
<th>June 6, 1945</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Raw Gr.</td>
<td></td>
</tr>
<tr>
<td>1 D--BA*</td>
<td>11-4</td>
<td>43</td>
</tr>
<tr>
<td>2 G--S*</td>
<td>11-9</td>
<td>43</td>
</tr>
<tr>
<td>3 G--R</td>
<td>12-8</td>
<td>37</td>
</tr>
<tr>
<td>4 E--R</td>
<td>10-10</td>
<td>72</td>
</tr>
<tr>
<td>5 J--G*</td>
<td>11-4</td>
<td>62</td>
</tr>
<tr>
<td>6 L--G*</td>
<td>11-9</td>
<td>44</td>
</tr>
<tr>
<td>7 M--J</td>
<td>11-9</td>
<td>45</td>
</tr>
<tr>
<td>8 M--K*</td>
<td>11-11</td>
<td>45</td>
</tr>
<tr>
<td>9 P--J</td>
<td>12-11</td>
<td>42</td>
</tr>
<tr>
<td>10 R--L*</td>
<td>11-10</td>
<td>45</td>
</tr>
<tr>
<td>11 S--R</td>
<td>11-10</td>
<td>59</td>
</tr>
<tr>
<td>12 T--A*</td>
<td>11-6</td>
<td>47</td>
</tr>
<tr>
<td>13 B--R*</td>
<td>10-9</td>
<td>43</td>
</tr>
<tr>
<td>14 B--F</td>
<td>10-2</td>
<td>45</td>
</tr>
<tr>
<td>15 D--P, Jr.</td>
<td>10-11</td>
<td>67</td>
</tr>
<tr>
<td>16 E--T</td>
<td>10-10</td>
<td>36</td>
</tr>
<tr>
<td>17 M--EM*</td>
<td>10-10</td>
<td>50</td>
</tr>
<tr>
<td>18 M--J*</td>
<td>11-1</td>
<td>39</td>
</tr>
<tr>
<td>19 M--G</td>
<td>11-1</td>
<td>49</td>
</tr>
<tr>
<td>20 N--A</td>
<td>10-8</td>
<td>37</td>
</tr>
<tr>
<td>21 T--S*</td>
<td>10-5</td>
<td>40</td>
</tr>
<tr>
<td>22 T--J</td>
<td>9-9</td>
<td>63</td>
</tr>
<tr>
<td>23 T--F</td>
<td>11-8</td>
<td>62</td>
</tr>
<tr>
<td>24 W--H</td>
<td>10-6</td>
<td>34</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Raw Gr.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>25 B--D</td>
<td>9-7</td>
<td>40</td>
</tr>
<tr>
<td>26 C--F</td>
<td>10-2</td>
<td>41</td>
</tr>
<tr>
<td>27 D--I*</td>
<td>9-10</td>
<td>46</td>
</tr>
<tr>
<td>28 G--R</td>
<td>10-0</td>
<td>27</td>
</tr>
<tr>
<td>29 O--B</td>
<td>9-11</td>
<td>41</td>
</tr>
</tbody>
</table>

Children 1-12 are Grade Six pupils.

Children 13-24 are Grade Five pupils.

Children 25-29 are Grade Four pupils.
SUPERIOR CLUB "A" PUPILS EVALUATION, VOCABULARY

<table>
<thead>
<tr>
<th>Grade</th>
<th>Girls</th>
<th>Loss</th>
<th>Boys</th>
<th>Total</th>
<th>Net Gain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade Six</td>
<td>18</td>
<td>7</td>
<td>34</td>
<td>52</td>
<td>43 words</td>
</tr>
<tr>
<td>Grade Five</td>
<td>18</td>
<td>0</td>
<td>21</td>
<td>39</td>
<td>31 words</td>
</tr>
<tr>
<td>Grade Four</td>
<td>4</td>
<td>0</td>
<td>39</td>
<td>43</td>
<td>43 words</td>
</tr>
</tbody>
</table>

Total Gains Girls 40 7 Net Gains Girls 33 Average Gain per Club member 4.03 Average Gain(g) 2.75 Average Gain(b) 4.94

Boys gained more than girls in Clubs (Vocabulary)

Grade 4 Superior Pupils made greatest gains in Vocabulary in Clubs.
## TABLE IV

### AVERAGE CLUB "B" PUPILS SPEED SCORES

<table>
<thead>
<tr>
<th>Names (Girls*)</th>
<th>February 6, 1945</th>
<th>June 6, 1945</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Raw Gr.</td>
<td>Raw Gr.</td>
</tr>
<tr>
<td>1 A--J</td>
<td>11-8 20 4.5 10-3</td>
<td>11-10 24 5.2 11-10 4.0</td>
</tr>
<tr>
<td>2 E--R</td>
<td>11-8 23 5.0 10-10</td>
<td>11-11 34 7.5 13-3 11.0</td>
</tr>
<tr>
<td>3 G--J*</td>
<td>12-4 22 4.8 10-7</td>
<td>12-7 29 6.5 12-3 7.0</td>
</tr>
<tr>
<td>4 M--J*</td>
<td>11-1 23 5.0 10-10</td>
<td>11-4 32 7.2 12-11 9.0</td>
</tr>
<tr>
<td>5 McD-D</td>
<td>12-4 24 5.2 11-0</td>
<td>12-8 45 10.6 16-3 21.0</td>
</tr>
<tr>
<td>6 M--J*</td>
<td>12-4 31 7.0 12-9</td>
<td>12-8 39 5.5 14-3 8.0</td>
</tr>
<tr>
<td>7 O'B--J*</td>
<td>12-11 25 5.5 11-4</td>
<td>13-3 31 7.0 12-9 6.0</td>
</tr>
<tr>
<td>8 P--Jo.*</td>
<td>11-10 23 5.0 10-10</td>
<td>12-2 36 7.8 13-7 13.0</td>
</tr>
<tr>
<td>9 P--P*.</td>
<td>11-7 26 5.7 11-6</td>
<td>12-1 39 8.5 14-3 13.0</td>
</tr>
<tr>
<td>10 P-Ja.*</td>
<td>12-0 31 7.0 12-9</td>
<td>12-4 38 8.2 13-11 7.0</td>
</tr>
<tr>
<td>11 C--T</td>
<td>11-6 37 5.6 11-5</td>
<td>12-0 40 6.2 12-0 3.0</td>
</tr>
<tr>
<td>12 E--S</td>
<td>10-6 44 6.8 12-7</td>
<td>11-0 45 6.9 12-8 1.0</td>
</tr>
<tr>
<td>13 H--P*</td>
<td>10-6 34 5.0 10-10</td>
<td>11-0 37 5.6 11-5 3.0</td>
</tr>
<tr>
<td>14 H--J*</td>
<td>10-9 32 4.8 10-7</td>
<td>11-1 38 5.8 11-8 6.0</td>
</tr>
<tr>
<td>15 L--T</td>
<td>10-4 29 4.5 10-3</td>
<td>10-8 30 4.6 10-4 1.0</td>
</tr>
<tr>
<td>16 McC-E*</td>
<td>10-10 31 4.7 10-5</td>
<td>11-2 32 4.8 10-7 1.0</td>
</tr>
<tr>
<td>17 C--R</td>
<td>12-0 39 6.0 11-10</td>
<td>12-4 40 6.2 12-0 1.0</td>
</tr>
<tr>
<td>18 R--Chas.</td>
<td>10-4 30 4.6 10-4</td>
<td>10-8 31 4.7 10-5 1.0</td>
</tr>
<tr>
<td>19 W--S</td>
<td>11-0 33 4.9 10-8</td>
<td>11-4 34 5.0 10-10 1.0</td>
</tr>
<tr>
<td>20 B--W</td>
<td>9-2 43 6.7 12-5</td>
<td>9-6 53 8.0 13-9 10.0</td>
</tr>
<tr>
<td>21 Cr-A* (twins)</td>
<td>9-6 39 6.0 11-0</td>
<td>9-10 43 6.7 12-5 4.0</td>
</tr>
<tr>
<td>22 Cr-S*</td>
<td>9-6 43 6.7 12-5</td>
<td>9-10 56 8.6 14-4 13.0</td>
</tr>
<tr>
<td>23 E--L*</td>
<td>9-7 44 6.8 12-7</td>
<td>9-11 46 7.0 12-9 2.0</td>
</tr>
<tr>
<td>24 G--F</td>
<td>9-10 27 4.9 10-8</td>
<td>10-2 43 6.7 12-5 16.0</td>
</tr>
<tr>
<td>25 J--D*</td>
<td>10-0 39 6.0 11-10</td>
<td>10-4 40 6.2 12-0 1.0</td>
</tr>
<tr>
<td>26 L--J*</td>
<td>9-10 25 4.1 9-9</td>
<td>10-2 31 4.7 10-5 6.0</td>
</tr>
<tr>
<td>27 P--E</td>
<td>10-1 39 6.0 11-10</td>
<td>10-5 53 8.0 13-9 14.0</td>
</tr>
<tr>
<td>28 R--E</td>
<td>9-11 41 6.3 12-1</td>
<td>10-3 46 7.0 12-9 5.0</td>
</tr>
<tr>
<td>29 S--R</td>
<td>9-10 40 6.2 12-0</td>
<td>10-4 50 7.4 13-1 10.0</td>
</tr>
<tr>
<td>30 W--R</td>
<td>10-2 40 6.2 12-0</td>
<td>10-6 60 9.4 15-1 20.0</td>
</tr>
</tbody>
</table>

*Children 1-10 are Grade Six pupils.*

*Children 11-19 are Grade Five pupils.*

*Children 20-30 are Grade Four pupils.*
AVERAGE CLUB "B" PUPILS EVALUATION, SPEED

<table>
<thead>
<tr>
<th>Grade</th>
<th>Girls</th>
<th>Gains</th>
<th>Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Six</td>
<td></td>
<td>56</td>
<td>43</td>
</tr>
<tr>
<td>Boys</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>99</td>
<td></td>
</tr>
<tr>
<td>Five</td>
<td></td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>Boys</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Four</td>
<td></td>
<td>25</td>
<td>76</td>
</tr>
<tr>
<td>Boys</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>101</td>
<td></td>
</tr>
<tr>
<td>Total Gains</td>
<td>Girls</td>
<td>91</td>
<td></td>
</tr>
<tr>
<td>Boys</td>
<td></td>
<td>127</td>
<td></td>
</tr>
<tr>
<td>Total Club Gains</td>
<td></td>
<td>218 points</td>
<td></td>
</tr>
</tbody>
</table>

Average Gain per Club Member 7.26
Average Gain per Girl Member 7.00
Average Gain per Boy Member 7.47 Very consistent gains

Average per membership gains by grades:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Gain per member</th>
</tr>
</thead>
<tbody>
<tr>
<td>Six</td>
<td>9.9</td>
</tr>
<tr>
<td>Five</td>
<td>2.0</td>
</tr>
<tr>
<td>Four</td>
<td>9.18</td>
</tr>
</tbody>
</table>

Club Gains are dependent, to a great extent, upon the enthusiasm of the Club Sponsor.
TABLE V

AVERAGE CLUB "B" PUPILS COMPREHENSION SCORES

<table>
<thead>
<tr>
<th>Names (Girls*)</th>
<th>February 6, 1945</th>
<th>June 6, 1945</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M.A. Sc.</td>
<td>M.A. G. L.</td>
</tr>
<tr>
<td>----------------</td>
<td>-----------------</td>
<td>--------------</td>
</tr>
<tr>
<td>1 A--J</td>
<td>11-8 43 4.9 10-8</td>
<td>11-11 56 6.4 12-2 13 0</td>
</tr>
<tr>
<td>2 E--R</td>
<td>11-8 53 6.0 11-10</td>
<td>11-11 57 6.5 12-3 4 0</td>
</tr>
<tr>
<td>3 G--J*</td>
<td>12-4 46 5.1 10-11</td>
<td>12-7 43 4.9 10-8 0 3</td>
</tr>
<tr>
<td>4 K--J*</td>
<td>11-0 42 4.8 10-7</td>
<td>11-4 48 5.3 11-1 6 0</td>
</tr>
<tr>
<td>5 McD-DJr</td>
<td>12-4 57 6.5 12-3</td>
<td>12-8 73 9.0 14-9 16 0</td>
</tr>
<tr>
<td>6 M--J*</td>
<td>12-4 47 5.2 11-0</td>
<td>12-8 55 6.2 12-0 8 0</td>
</tr>
<tr>
<td>7 O'B-J*</td>
<td>12-11 31 4.0 9-8</td>
<td>13-2 43 4.9 10-8 12 0</td>
</tr>
<tr>
<td>8 P-Jo*</td>
<td>11-10 57 6.5 12-3</td>
<td>12-2 69 8.3 14-0 12 0</td>
</tr>
<tr>
<td>9 P-P*</td>
<td>11-7 57 6.5 12-3</td>
<td>12-0 66 7.8 13-7 9 0</td>
</tr>
<tr>
<td>10 P-Ja*</td>
<td>12-0 55 6.2 12-0</td>
<td>12-4 67 8.0 13-9 12 0</td>
</tr>
<tr>
<td></td>
<td>11-6 58 6.7 12-5</td>
<td>11-10 61 7.2 12-11 3 0</td>
</tr>
<tr>
<td>12 E--S</td>
<td>10-6 56 6.4 12-2</td>
<td>11-10 63 7.4 13-1 7 0</td>
</tr>
<tr>
<td>13 H--F*</td>
<td>10-6 52 5.8 11-8</td>
<td>11-10 60 7.0 12-9 8 0</td>
</tr>
<tr>
<td>14 H--J*</td>
<td>10-9 55 6.2 12-0</td>
<td>11-1 59 6.9 12-8 4 0</td>
</tr>
<tr>
<td>15 L--T</td>
<td>10-4 56 6.4 12-2</td>
<td>10-3 60 7.0 12-9 4 0</td>
</tr>
<tr>
<td>16Mc--E*</td>
<td>10-10 61 7.2 12-11</td>
<td>11-2 64 7.5 13-3 3 0</td>
</tr>
<tr>
<td>17 O--R</td>
<td>12-0 63 7.4 13-1</td>
<td>12-4 63 7.4 13-1 0 0</td>
</tr>
<tr>
<td>18 R--C</td>
<td>10-4 43 4.9 10-8</td>
<td>10-8 52 5.3 11-8 9 0</td>
</tr>
<tr>
<td>19 W--S</td>
<td>11-0 64 7.5 13-3</td>
<td>11-4 64 7.5 13-3 0 0</td>
</tr>
<tr>
<td></td>
<td>20 B--W</td>
<td>9-2 49 5.5 11-4</td>
</tr>
<tr>
<td></td>
<td>11-9 35 4.2 9-10</td>
<td>9-10 38 4.5 10-3 3 0</td>
</tr>
<tr>
<td>21 Cr-A*</td>
<td>(twins)</td>
<td></td>
</tr>
<tr>
<td>22 Cr-S*</td>
<td>9-6 43 4.9 10-8</td>
<td>9-10 51 5.7 11-6 8 0</td>
</tr>
<tr>
<td>23 E--L*</td>
<td>9-7 48 5.3 11-1</td>
<td>9-11 55 6.2 12-0 7 0</td>
</tr>
<tr>
<td>24 G--F</td>
<td>9-10 54 6.1 11-11</td>
<td>10-2 57 6.5 12-3 3 0</td>
</tr>
<tr>
<td>25 J--D</td>
<td>10-0 36 4.3 10-0</td>
<td>10-4 43 4.9 10-8 7 0</td>
</tr>
<tr>
<td>26 L--J*</td>
<td>9-10 53 6.0 11-10</td>
<td>10-2 63 7.4 13-1 10 0</td>
</tr>
<tr>
<td>27 P--E</td>
<td>10-1 43 4.9 10-8</td>
<td>10-5 52 5.8 11-8 9 0</td>
</tr>
<tr>
<td>28 R--E</td>
<td>9-11 32 4.1 9-9</td>
<td>10-3 43 4.9 10-8 9 0</td>
</tr>
<tr>
<td>29 S--R</td>
<td>9-10 27 3.9 9-5</td>
<td>10-4 48 5.3 11-1 21 0</td>
</tr>
<tr>
<td>30 W--R</td>
<td>10-2 57 6.5 12-3</td>
<td>10-6 60 7.0 12-9 3 0</td>
</tr>
</tbody>
</table>

Children 1-10 are Grade Six pupils.

Children 11-19 are Grade Five pupils.

Children 20-30 are Grade Four pupils.
### AVERAGE CLUB "B" PUPILS EVALUATION, COMPREHENSION

<table>
<thead>
<tr>
<th>Grade</th>
<th>Girls</th>
<th>Boys</th>
<th>Total</th>
<th>Net Gain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade Six</td>
<td>59</td>
<td>33</td>
<td>92</td>
<td>89</td>
</tr>
<tr>
<td>Grade Five</td>
<td>15</td>
<td>24</td>
<td>39</td>
<td>39</td>
</tr>
<tr>
<td>Grade Four</td>
<td>28</td>
<td>55</td>
<td>83</td>
<td>83</td>
</tr>
</tbody>
</table>

Total Gain Girls: 102
Total Gain Boys: 112
Total Loss Boys: 3
Net Gain Boys: 109

Average Gain per Club Member: 7.13
Average Gain per Girl Member: 7.84
Average Gain per Boy Member: 6.7

Average per membership gains by grades:
- Grade Six: 9.2 per member
- Grade Five: 4.33 per member
- Grade Four: 7.63 per member

Grade Five was rated by every teacher who had had it through the years as an "excellent" class. They evidently did all they could. Grade Six was regarded as a "very poor" class and so the gain is very apparent, as they had farther to go! Grade Four is another poor class. Eight of the children are psychopathic cases.
# TABLE VI

## AVERAGE CLUB "B" PUPILS VOCABULARY SCORES

<table>
<thead>
<tr>
<th>Names (Girls*)</th>
<th>February 6, 1945</th>
<th>June 6, 1945</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Raw Gr.</td>
<td></td>
</tr>
<tr>
<td>1 A--J</td>
<td>11-8</td>
<td>32 5.6 11-5 11-11 37 6.2 12-0 5 0</td>
</tr>
<tr>
<td>2 E--R</td>
<td>11-8</td>
<td>31 5.5 11-4 11-11 38 6.3 12-1 7 0</td>
</tr>
<tr>
<td>3 C--J</td>
<td>12-4</td>
<td>34 5.9 11-8 12-7 40 6.4 12-2 6 0</td>
</tr>
<tr>
<td>4 K--J*</td>
<td>11-0</td>
<td>35 6.0 11-10 11-4 27 4.9 10-8 0 8</td>
</tr>
<tr>
<td>5 McD-D Jr</td>
<td>12-4</td>
<td>46 7.0 12-9 12-8 55 8.6 14-4 9 0</td>
</tr>
<tr>
<td>6 M--J*</td>
<td>12-4</td>
<td>25 4.7 10-5 12-8 28 5.0 10-10 3 0</td>
</tr>
<tr>
<td>7 O'B-J*</td>
<td>12-11</td>
<td>31 5.5 11-4 13-2 32 5.6 11-5 1 0</td>
</tr>
<tr>
<td>8 P--Jo*</td>
<td>11-10</td>
<td>37 6.2 12-0 12-2 44 6.7 12-5 7 0</td>
</tr>
<tr>
<td>9 P--P*</td>
<td>11-7</td>
<td>26 4.8 10-7 12-0 50 7.8 13-7 24 0</td>
</tr>
<tr>
<td>10 P--Ja*</td>
<td>12-0</td>
<td>26 4.8 10-7 12-4 47 7.2 12-11 21 0</td>
</tr>
<tr>
<td>11 C--T</td>
<td>11-6</td>
<td>31 5.5 11-4 11-10 40 6.4 12-2 9 0</td>
</tr>
<tr>
<td>12 E--S</td>
<td>10-6</td>
<td>33 5.7 11-6 11-10 42 6.4 12-3 9 0</td>
</tr>
<tr>
<td>13 H--P*</td>
<td>10-6</td>
<td>33 5.7 11-6 11-10 33 5.7 11-6 0 0</td>
</tr>
<tr>
<td>14 H--J*</td>
<td>10-9</td>
<td>35 6.0 11-10 11-1 40 6.4 12-2 5 0</td>
</tr>
<tr>
<td>15 L--T</td>
<td>10-4</td>
<td>37 6.2 12-0 10-8 46 7.0 12-9 9 0</td>
</tr>
<tr>
<td>16 McC-E*</td>
<td>10-10</td>
<td>42 6.5 12-3 11-2 50 7.8 13-7 8 0</td>
</tr>
<tr>
<td>17 O--R</td>
<td>12-0</td>
<td>34 5.9 11-8 12-4 37 6.2 12-0 3 0</td>
</tr>
<tr>
<td>18 R--Chas.</td>
<td>10-4</td>
<td>36 6.1 11-11 10-8 36 6.1 11-11 0 0</td>
</tr>
<tr>
<td>19 W--S</td>
<td>11-0</td>
<td>35 6.0 11-10 11-4 37 6.2 12-0 2 0</td>
</tr>
<tr>
<td>20 B--W</td>
<td>9-2</td>
<td>35 6.0 11-10 9-6 40 6.4 12-2 5 0</td>
</tr>
<tr>
<td>21 Cr-A*</td>
<td>9-5</td>
<td>24 4.5 10-3 9-10 27 4.9 10-8 3 0</td>
</tr>
<tr>
<td>(twins)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22 Cr-S*</td>
<td>9-6</td>
<td>32 5.6 11-5 9-10 35 6.0 11-10 3 0</td>
</tr>
<tr>
<td>23 E--L*</td>
<td>9-7</td>
<td>32 5.6 11-5 9-11 34 5.9 11-8 2 0</td>
</tr>
<tr>
<td>24 G--F</td>
<td>9-10</td>
<td>30 4.6 10-4 10-2 31 5.5 11-4 1 0</td>
</tr>
<tr>
<td>25 J--D</td>
<td>10-0</td>
<td>27 4.9 10-8 10-4 28 5.0 10-10 1 0</td>
</tr>
<tr>
<td>26 L--J*</td>
<td>9-10</td>
<td>34 5.9 11-8 10-2 40 6.4 12-2 6 0</td>
</tr>
<tr>
<td>27 P--E</td>
<td>10-1</td>
<td>27 4.9 10-8 10-5 30 4.6 10-4 3 0</td>
</tr>
<tr>
<td>28 R--E</td>
<td>9-11</td>
<td>32 5.6 11-5 10-3 37 6.2 12-0 5 0</td>
</tr>
<tr>
<td>29 S--R</td>
<td>9-10</td>
<td>29 5.2 11-0 10-4 34 5.9 11-8 5 0</td>
</tr>
<tr>
<td>30 W--R</td>
<td>10-2</td>
<td>35 6.0 11-0 10-6 40 6.4 12-2 5 0</td>
</tr>
</tbody>
</table>

Children 1-10 are Grade Six pupils.

Children 11-19 are Grade Five pupils.

Children 20-30 are Grade Four pupils.
### AVERAGE CLUB "B" PUPILS EVALUATION, VOCABULARY

<table>
<thead>
<tr>
<th></th>
<th>Gain</th>
<th>Loss</th>
<th>Net Gain</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Grade Six</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>56</td>
<td>8</td>
<td>48</td>
</tr>
<tr>
<td>Boys</td>
<td>27</td>
<td>0</td>
<td>27</td>
</tr>
<tr>
<td><strong>Grade Five</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>13</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>Boys</td>
<td>32</td>
<td>0</td>
<td>32</td>
</tr>
<tr>
<td><strong>Grade Four</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>14</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>Boys</td>
<td>54</td>
<td>0</td>
<td>54</td>
</tr>
<tr>
<td><strong>Total Gain</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>83</td>
<td>8</td>
<td>75</td>
</tr>
<tr>
<td>Boys</td>
<td>113</td>
<td>0</td>
<td>113</td>
</tr>
</tbody>
</table>

Average gain per club member: 6.26
Average gain per girl member: 5.76 **Very consistent**
Average gain per boy member: 6.64 **gains.**

Average gain per club member by grades:
- **Grade Six**: 7.5 gain by club member
- **Grade Five**: 5.0 gain by club member
- **Grade Four**: 6.8 gain by club member

Grades Six and Four were "poor" students; therefore, the gains made when the children were interested were more noticeable than the gains made by a class always called "good."
### TABLE VII

**RETARDED READERS CLUB "C" PUPILS SPEED SCORES**

<table>
<thead>
<tr>
<th>Names(Girls*)</th>
<th>February 6, 1945</th>
<th>June 6, 1945</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Students** C.A.</td>
<td>Raw Gr. C.A.</td>
<td>Raw Gr. C.A.</td>
</tr>
<tr>
<td>1B**S*</td>
<td>12-6</td>
<td>21</td>
</tr>
<tr>
<td>2MacD**J</td>
<td>13-11</td>
<td>21</td>
</tr>
<tr>
<td>3R--P</td>
<td>12-5</td>
<td>16</td>
</tr>
</tbody>
</table>

| 4 G--R | 11-6 | 27 | 4.3 | 10-0 | 11-10 | 27 | 4.3 | 10-0 | 0 | 0 |
| 5 K--M* | 10-9 | 29 | 4.5 | 10-3 | 11-1 | 29 | 4.5 | 10-3 | 0 | 0 |
| 6McG--M* | 10-7 | 26 | 4.2 | 9-10 | 10-11 | 33 | 4.9 | 10-8 | 7 | 0 |
| 7McG--P | 11-5 | 24 | 4.0 | 9-8 | 11-9 | 28 | 4.4 | 10-1 | 4 | 0 |
| 8S**--B** | 13-3 | 21 | 3.5 | 9-0 | 13-7 | 30 | 4.6 | 10-4 | 9 | 0 |

| 9 A-B|--* | 9-5 | 29 | 4.5 | 10-3 | 9-9 | 34 | 5.0 | 10-10 | 5 | 0 |
| 10 B--M** | 10-0 | 31 | 4.7 | 10-5 | 10-4 | 41 | 6.3 | 12-1 | 10 | 0 |
| 11 B--A | 10-0 | 28 | 4.4 | 10-1 | 10-4 | 49 | 7.3 | 13-0 | 21 | 0 |
| 12 C--D | 10-4 | 18 | 3.1 | 8-7 | 10-8 | 23 | 3.8 | 9-4 | 5 | 0 |
| 13 G--R | 9-6 | 32 | 4.8 | 10-7 | 9-10 | 39 | 6.0 | 11-10 | 7 | 0 |
| 14 D--C* | 10-1 | 23 | 3.8 | 9-4 | 10-5 | 43 | 6.3 | 12-5 | 20 | 0 |
| 15 E--E* | 10-2 | 25 | 4.1 | 9-9 | 10-6 | 25 | 4.1 | 9-9 | 0 | 0 |
| 16 G--J* | 9-4 | 28 | 4.4 | 10-1 | 9-8 | 41 | 6.3 | 12-1 | 13 | 0 |
| 17 M--P* | 9-7 | 30 | 4.6 | 10-4 | 9-11 | 34 | 5.0 | 10-10 | 4 | 0 |
| 18 M**R | 10-4 | 17 | 3.0 | 8-6 | 10-8 | 23 | 3.8 | 9-4 | 6 | 0 |
| 19 F--H | 9-9 | 28 | 4.4 | 10-1 | 10-1 | 34 | 5.0 | 10-10 | 6 | 0 |
| 20 P--J | 10-2 | 26 | 4.2 | 9-10 | 10-6 | 32 | 4.8 | 10-7 | 6 | 0 |
| 21 R--R | 9-8 | 31 | 4.7 | 10-5 | 10-0 | 47 | 7.1 | 12-10 | 16 | 0 |
| 22 S**R | 11-6 | 16 | 2.9 | 8-5 | 11-10 | 14 | 2.6 | 8-4 | 0 | 2 |
| 23 W--H | 10-10 | 16 | 2.9 | 8-5 | 11-2 | 17 | 3.0 | 8-6 | 1 | 0 |
| 24 W--M | 9-3 | 32 | 4.8 | 10-7 | 9-7 | 34 | 5.0 | 5-10 | 2 | 0 |

Pupils 1-3 are registered in Grade Six.

Pupils 4-8 are registered in Grade Five.

Pupils 9-24 are registered in Grade Four.
RETARDED READERS CLUB "C" PUPILS EVALUATION, SPEED

<table>
<thead>
<tr>
<th>Grade</th>
<th>Girls</th>
<th>Boys</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade Six</td>
<td>14</td>
<td>30</td>
<td>44</td>
</tr>
<tr>
<td>Grade Five</td>
<td>16</td>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td>Grade Four</td>
<td>52</td>
<td>70</td>
<td>122</td>
</tr>
</tbody>
</table>

Net Gain Total 120

Total Gains Girls 82
Total Gains Boys 104
Total Loss Boys 2
Net Club Gain 184

Average gain per club member 7.66
Average gain per girl member 8.2
Average gain per boy member 7.42

Average gain per club member by grades:
Grade Six 14.6 gain by club member
Grade Five 4.0 gain by club member
Grade Four 7.5 gain by club member

Special Students** 6.85 (or better than the average gain for regular students in Grade Five)

The Grade Six "Retarded Readers" made most noticeable gains.

N.B. Change of attitude in retarded readers is the happiest factor!
<table>
<thead>
<tr>
<th>Names (Girls*)</th>
<th>February 6, 1945</th>
<th>June 6, 1945</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Special Students</strong></td>
<td><strong>C.A.</strong></td>
<td><strong>Gr.</strong></td>
</tr>
<tr>
<td>1 B<strong>S</strong></td>
<td>12-6</td>
<td>42</td>
</tr>
<tr>
<td>2 MacD**J</td>
<td>13-11</td>
<td>47</td>
</tr>
<tr>
<td>3 R--P</td>
<td>12-5</td>
<td>45</td>
</tr>
<tr>
<td>4 G--R</td>
<td>11-6</td>
<td>38</td>
</tr>
<tr>
<td>5 K--M*</td>
<td>10-9</td>
<td>39</td>
</tr>
<tr>
<td>6 McG-M*</td>
<td>10-7</td>
<td>49</td>
</tr>
<tr>
<td>7 McG-P</td>
<td>11-5</td>
<td>30</td>
</tr>
<tr>
<td>8 S**-B**</td>
<td>13-3</td>
<td>42</td>
</tr>
<tr>
<td>9 A-BA*</td>
<td>9-5</td>
<td>41</td>
</tr>
<tr>
<td>10 B--M*</td>
<td>10-0</td>
<td>28</td>
</tr>
<tr>
<td>11 B--A</td>
<td>10-0</td>
<td>34</td>
</tr>
<tr>
<td>12 C--D</td>
<td>10-4</td>
<td>21</td>
</tr>
<tr>
<td>13 C--R</td>
<td>9-6</td>
<td>30</td>
</tr>
<tr>
<td>14 D--C*</td>
<td>10-1</td>
<td>53</td>
</tr>
<tr>
<td>15 E--E*</td>
<td>10-2</td>
<td>31</td>
</tr>
<tr>
<td>16 G--J*</td>
<td>9-4</td>
<td>43</td>
</tr>
<tr>
<td>17 M--P*</td>
<td>9-7</td>
<td>46</td>
</tr>
<tr>
<td>18 M**R</td>
<td>10-4</td>
<td>0</td>
</tr>
<tr>
<td>19 P--H</td>
<td>9-9</td>
<td>37</td>
</tr>
<tr>
<td>20 P--J</td>
<td>10-2</td>
<td>40</td>
</tr>
<tr>
<td>21 R--R</td>
<td>9-8</td>
<td>28</td>
</tr>
<tr>
<td>22 S**R</td>
<td>11-6</td>
<td>27</td>
</tr>
<tr>
<td>23 W--H</td>
<td>10-10</td>
<td>41</td>
</tr>
<tr>
<td>24 W--M</td>
<td>9-3</td>
<td>33</td>
</tr>
</tbody>
</table>

Pupils 1-3 are registered in Grade Six.
Pupils 4-8 are registered in Grade Five.
Pupils 9-24 are registered in Grade Four.
### Retarded Readers Club "C" Pupils Evaluation, Comprehension

<table>
<thead>
<tr>
<th>Grade</th>
<th>Gains</th>
<th>Loss</th>
<th>Net Gain</th>
<th>Net Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade Six</td>
<td>Girls 2</td>
<td>0</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Boys</td>
<td>8</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade Five</td>
<td>Girls 4</td>
<td>21</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Boys</td>
<td>15</td>
<td>0</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Grade Four</td>
<td>Girls 34</td>
<td>0</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>Boys 101</td>
<td></td>
<td>21</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>Total Gains Girls</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Loss Girls</td>
<td>21</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Gain, Girls</td>
<td>19</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Gain Boys</td>
<td>124</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Loss Boys</td>
<td>21</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Gain, Boys</td>
<td>103</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Average Gain per club member: 6.83
Average Gain per club girl: 5.00
Average Gain per club boy: 11.27

Average gain per club member by grades:
- **Grade Six**: 3.3 net gain per member
- **Grade Five**: -0.04 net loss per member
- **Grade Four**: 6.13 net gain per member

Greatest gains were made in Grade Four with the most retarded readers.
TABLE IX

RETARDED READERS CLUB "C" PUPILS VOCABULARY SCORES

<table>
<thead>
<tr>
<th>Names (Girls*)</th>
<th>February 6, 1945</th>
<th>June 6, 1945</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Students**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 B**S*</td>
<td>12-6</td>
<td>10 3.4 8-10</td>
</tr>
<tr>
<td>2 MacD**J</td>
<td>13-11</td>
<td>15 3.7 9-3</td>
</tr>
<tr>
<td>3 R--P</td>
<td>12-5</td>
<td>40 6.4 12-2</td>
</tr>
<tr>
<td>4 G--R</td>
<td>11-6</td>
<td>23 4.4 10-1</td>
</tr>
<tr>
<td>5 K--M*</td>
<td>10-9</td>
<td>35 6.0 11-10</td>
</tr>
<tr>
<td>6 McG-M*</td>
<td>10-7</td>
<td>19 3.9 9-5</td>
</tr>
<tr>
<td>7 McG-P</td>
<td>11-5</td>
<td>22 4.2 9-10</td>
</tr>
<tr>
<td>8 S*--B**</td>
<td>13-3</td>
<td>30 5.4 11-2</td>
</tr>
</tbody>
</table>

<p>| Pupils 1-3 are registered in Grade Six. |
| Pupils 4-8 are registered in Grade Five. |
| Pupils 9-24 are registered in Grade Four. |</p>
<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>b</td>
<td>c</td>
<td>d</td>
<td>e</td>
<td>f</td>
<td>g</td>
<td>h</td>
</tr>
<tr>
<td>i</td>
<td>j</td>
<td>k</td>
<td>l</td>
<td>m</td>
<td>n</td>
<td>o</td>
<td>p</td>
</tr>
<tr>
<td>q</td>
<td>r</td>
<td>s</td>
<td>t</td>
<td>u</td>
<td>v</td>
<td>w</td>
<td>x</td>
</tr>
<tr>
<td>y</td>
<td>z</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
</tr>
<tr>
<td>G</td>
<td>H</td>
<td>I</td>
<td>J</td>
<td>K</td>
<td>L</td>
<td>M</td>
<td>N</td>
</tr>
<tr>
<td>O</td>
<td>P</td>
<td>Q</td>
<td>R</td>
<td>S</td>
<td>T</td>
<td>U</td>
<td>V</td>
</tr>
<tr>
<td>W</td>
<td>X</td>
<td>Y</td>
<td>Z</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
<td>I</td>
<td>J</td>
<td>K</td>
<td>L</td>
</tr>
<tr>
<td>M</td>
<td>N</td>
<td>O</td>
<td>P</td>
<td>Q</td>
<td>R</td>
<td>S</td>
<td>T</td>
</tr>
<tr>
<td>U</td>
<td>V</td>
<td>W</td>
<td>X</td>
<td>Y</td>
<td>Z</td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
<td>I</td>
<td>J</td>
</tr>
<tr>
<td>K</td>
<td>L</td>
<td>M</td>
<td>N</td>
<td>O</td>
<td>P</td>
<td>Q</td>
<td>R</td>
</tr>
<tr>
<td>S</td>
<td>T</td>
<td>U</td>
<td>V</td>
<td>W</td>
<td>X</td>
<td>Y</td>
<td>Z</td>
</tr>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
</tr>
<tr>
<td>I</td>
<td>J</td>
<td>K</td>
<td>L</td>
<td>M</td>
<td>N</td>
<td>O</td>
<td>P</td>
</tr>
<tr>
<td>Q</td>
<td>R</td>
<td>S</td>
<td>T</td>
<td>U</td>
<td>V</td>
<td>W</td>
<td>X</td>
</tr>
<tr>
<td>Y</td>
<td>Z</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
</tr>
<tr>
<td>G</td>
<td>H</td>
<td>I</td>
<td>J</td>
<td>K</td>
<td>L</td>
<td>M</td>
<td>N</td>
</tr>
<tr>
<td>O</td>
<td>P</td>
<td>Q</td>
<td>R</td>
<td>S</td>
<td>T</td>
<td>U</td>
<td>V</td>
</tr>
<tr>
<td>W</td>
<td>X</td>
<td>Y</td>
<td>Z</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
<td>I</td>
<td>J</td>
<td>K</td>
<td>L</td>
</tr>
<tr>
<td>M</td>
<td>N</td>
<td>O</td>
<td>P</td>
<td>Q</td>
<td>R</td>
<td>S</td>
<td>T</td>
</tr>
<tr>
<td>U</td>
<td>V</td>
<td>W</td>
<td>X</td>
<td>Y</td>
<td>Z</td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
<td>I</td>
<td>J</td>
</tr>
<tr>
<td>K</td>
<td>L</td>
<td>M</td>
<td>N</td>
<td>O</td>
<td>P</td>
<td>Q</td>
<td>R</td>
</tr>
<tr>
<td>S</td>
<td>T</td>
<td>U</td>
<td>V</td>
<td>W</td>
<td>X</td>
<td>Y</td>
<td>Z</td>
</tr>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
</tr>
<tr>
<td>I</td>
<td>J</td>
<td>K</td>
<td>L</td>
<td>M</td>
<td>N</td>
<td>O</td>
<td>P</td>
</tr>
<tr>
<td>Q</td>
<td>R</td>
<td>S</td>
<td>T</td>
<td>U</td>
<td>V</td>
<td>W</td>
<td>X</td>
</tr>
<tr>
<td>Y</td>
<td>Z</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
</tr>
<tr>
<td>G</td>
<td>H</td>
<td>I</td>
<td>J</td>
<td>K</td>
<td>L</td>
<td>M</td>
<td>N</td>
</tr>
<tr>
<td>O</td>
<td>P</td>
<td>Q</td>
<td>R</td>
<td>S</td>
<td>T</td>
<td>U</td>
<td>V</td>
</tr>
<tr>
<td>W</td>
<td>X</td>
<td>Y</td>
<td>Z</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
<td>I</td>
<td>J</td>
<td>K</td>
<td>L</td>
</tr>
</tbody>
</table>
## Retarded Readers Club "C" Pupils Evaluation, Vocabulary

<table>
<thead>
<tr>
<th>Grade</th>
<th></th>
<th>Gains</th>
<th>Loss</th>
<th>Net Gain</th>
<th>Net Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Girls</td>
<td>16</td>
<td>0</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Boys</td>
<td>11</td>
<td>3</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>Grade Six</td>
<td>Girls</td>
<td>38</td>
<td>0</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Boys</td>
<td>3</td>
<td>4</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Grade Five</td>
<td>Girls</td>
<td>36</td>
<td>0</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Boys</td>
<td>56</td>
<td>0</td>
<td>56</td>
<td></td>
</tr>
<tr>
<td>Grade Four</td>
<td>Girls</td>
<td>36</td>
<td>0</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Boys</td>
<td>56</td>
<td>0</td>
<td>56</td>
<td></td>
</tr>
<tr>
<td>Total gain Girls</td>
<td>90</td>
<td>Total gain Boys</td>
<td>70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total loss Girls</td>
<td>0</td>
<td>Total loss Boys</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Gain</td>
<td>90</td>
<td>Net Gain</td>
<td>63</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Average Gain per club member: 6.37
Average Gain per girl member: 9.00
Average Gain per boy member: 4.5

Average gain per club member by grades:
- Grade Six: 8.0 net gain per member
- Grade Five: 7.4 net gain per member
- Grade Four: 5.75 net gain per member

Girls doubled boys' average. Grades Five and Six retarded readers seemed to have greater incentive to improve.
CHAPTER IV

DETAILED REPORT OF METHODS BY TEACHERS WHO SPONSORED "CLUB" EXPERIMENT

It is customary in most cities to give Reading Tests of various sorts. In a small town within a twenty mile radius of Boston, the Gates Reading Survey \(^1\) was given in February, 1945. The ranks were placed on the cumulative records; and copies were on file in the School Department's office. Since ascertaining that the author's own school ranked very low, in comparison with other schools in the same town, remedial measures were planned. After sifting and screening test results, it was obvious which pupils in Grades four, five and six were reading at the various grade levels and who could roughly be designated as "Superior", "Average", or "Retarded" readers. The segregation could easily be accomplished. The desired goal, however, was to remove the stigma of demotion for sixth graders, or the flush of a superiority complex for fourth graders. The idea was evolved of calling the Reading Level Groups by ancient Greek terminology, since all were familiar with the Greek myths and stories. The sixth grade

---

\(^1\) Arthur I. Gates, Gates Reading Survey (Grades 3-10), New York: Bureau of Publications, Teachers' College, Columbia University, 1938.
had made an intensive study of Greece in their Social Science lessons. They were especially enthusiastic about the Spartan mothers' farewell to their warrior sons. "With your shield or on it!" It was voted to use large shields as our "team" emblems and emblazon the names of the victors on the shields. The motto became, "Get on the shield!" The reading groups, completely disguised, to intent, were launched as competing Greek city-states in a series of "Olympic Games!"

In these modern contests, the skills were reading skills; the hurdles were very real struggles to conquer reading difficulties. The colorful shields were five by three feet made in the Art period by the competing teams. They voted on the colors; and the design was chosen in open competition.

Interest surged, and swelled and never ebbed! No one, not even parents, guessed that the entire three intermediate grades had been Demoted or Promoted to reading groups in their own levels.

Motivation was at its maximum— the "Olympic Games" set-up was a "natural." Each Olympic team competed, within its own ability range in similar activities. High scores were recorded on the colorful "Score-boards" (shields). In no way did any pupil, or group, realize that though he was competing in a similar activity, it was always within and on his own ability range.

The game-competitions were short and frequent; to heighten motivation, and with due thought for those with a very short
interest span. The entire team always participated; and activities that would fit the varying abilities on the same team, were selected.

Some days, groups worked on specific skills—vocabulary, speed, comprehension, and spelling, but always to enable them to build up an aggregate power-skill sufficient to enable them to excel over all other teams when the next contest came.

Once a week, a testing "hurdle" activity was given all teams—so that the thread of unity and tournament spirit was revitalized and kept at "fever pitch." The teams gained great momentum because of the enthusiasm engendered by youth working purposefully and happily.

The Superior Group played many games with homonyms, antonyms, and synonyms, using *Improving Your Reading* and *Improvement of Basic Reading Abilities*. Some new games based on the present war, and present-day conditions suitable for improvement of speed, vocabulary, or comprehension were added. Short stories were read, omitting the end, and the logical conclusions were drawn. Paragraphs were read aloud which contained errors; and the "detectives" would stand, and make the corrections. Some dictionary games followed, which were used to aid vocabulary, and to facilitate dictionary


handling with greater speed and accuracy. Much outside reading was done by the Superior Group; and many guessing games about the major characters were played.

Superior Group

In order to save time, you must know how to find a word quickly in your dictionary. Are you going to be a good detective?

Try to open the book as nearly in the middle as possible. What letter do you find there?

Now turn toward the back of the dictionary. What letters do you find at the end of the book?

Open the book somewhere near the front. What letters do you find at the beginning of words near the front of the dictionary?

Then the words in the dictionary are arranged how? In what part of your book would you look for the word CANDY; for WATER; for LINEN; for ZEBRA?
Test-- 10 minutes

On what page in your dictionary do you find the following words?

1. oak
2. bus
3. sober
4. tart
5. rush
6. dab
7. azure
8. rattle
9. umpire
10. label
11. cab
12. quack
13. swoop
14. valley
15. quit
Exercises for Beginning Dictionary Study

I. Write the alphabet and then after each letter write a word beginning with that letter. Try to think of a word that every Detective should know.

1. 9. 18.
2. 10. 19.
3. 11. 20.
4. 12. 21.
5. 13. 22.
7. 15. 24.
8. 16. 25.

II. Copy these letters in a list, leaving space for one letter before and one letter after each one.

1. f 5. c 9. t
2. q 6. m 10. r
3. p 7. o
4. x 8. w
Match the sound it makes with the name of the animal. If you are not sure use your dictionary to find out the correct answer.

<table>
<thead>
<tr>
<th>Number</th>
<th>Sound</th>
<th>Animal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>whinny</td>
<td>monkey</td>
</tr>
<tr>
<td>2.</td>
<td>moo</td>
<td>cat</td>
</tr>
<tr>
<td>3.</td>
<td>bray</td>
<td>elephant</td>
</tr>
<tr>
<td>4.</td>
<td>squeak</td>
<td>cow</td>
</tr>
<tr>
<td>5.</td>
<td>bleat</td>
<td>lion</td>
</tr>
<tr>
<td>6.</td>
<td>squeal</td>
<td>donkey</td>
</tr>
<tr>
<td>7.</td>
<td>trumpet</td>
<td>dog</td>
</tr>
<tr>
<td>8.</td>
<td>roar</td>
<td>horse</td>
</tr>
<tr>
<td>9.</td>
<td>purr</td>
<td>pig</td>
</tr>
<tr>
<td>10.</td>
<td>bark</td>
<td>squirrel</td>
</tr>
<tr>
<td>11.</td>
<td>chatter</td>
<td>mouse</td>
</tr>
<tr>
<td>12.</td>
<td>grunt</td>
<td>sheep</td>
</tr>
</tbody>
</table>
Mark the vowels long or short in these words:

I.

a a e e i i
nation begging kick
candy leading chilly
change cherry kite
black cheese printing
aviation propeller dime
parachute pilot
raiders tigers
navigator

boat hunting
hot curiosity
smoke submarine
orange gunner
command accuse
motor clue
Words with double consonants are divided into syllables between the consonants. Put a line between syllables thus:

run-ning

butter  patted
little  borrow
puddle  pudding
shallow  cannon
dragging  dripping

Compound words are divided between the small words that make up the large word.

hopeless  northwest
brushwood  withdrew
uproar  earthquake
courtyard  leadership
damage  sunset
forefeet
If words all have the same **first** letter, we watch the **second** letter when we arrange the words. Make a list of these words in alphabetical order. Watch the **second** letters.

<table>
<thead>
<tr>
<th>chilly</th>
<th>boat</th>
<th>drown</th>
</tr>
</thead>
<tbody>
<tr>
<td>candy</td>
<td>busy</td>
<td>daisy</td>
</tr>
<tr>
<td>curious</td>
<td>beauty</td>
<td>duty</td>
</tr>
<tr>
<td>cereal</td>
<td>baby</td>
<td>dear</td>
</tr>
<tr>
<td>cold</td>
<td>bison</td>
<td>dough</td>
</tr>
<tr>
<td></td>
<td>blame</td>
<td>dwarf</td>
</tr>
<tr>
<td>smoke</td>
<td>will</td>
<td></td>
</tr>
<tr>
<td>story</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sailor</td>
<td>water</td>
<td></td>
</tr>
<tr>
<td>sugar</td>
<td>wish</td>
<td></td>
</tr>
<tr>
<td>swift</td>
<td>wooden</td>
<td></td>
</tr>
<tr>
<td>savage</td>
<td>Wellesley</td>
<td></td>
</tr>
<tr>
<td>sentence</td>
<td>white</td>
<td></td>
</tr>
</tbody>
</table>

Arrange your spelling words for this week in alphabetical order.
Each of these words has three (3) parts. Say each part to yourself—then draw a line between the parts of the word, thus—

<table>
<thead>
<tr>
<th>I</th>
<th>II</th>
<th>III</th>
</tr>
</thead>
<tbody>
<tr>
<td>interpret</td>
<td>stowaway</td>
<td>directly</td>
</tr>
<tr>
<td>pioneer</td>
<td>Puritan</td>
<td>champion</td>
</tr>
<tr>
<td>determine</td>
<td>parachute</td>
<td>wilderness</td>
</tr>
<tr>
<td>regular</td>
<td>molasses</td>
<td>fortunate</td>
</tr>
<tr>
<td>expression</td>
<td>furious</td>
<td>advertise</td>
</tr>
<tr>
<td>hickory</td>
<td>buffalo</td>
<td></td>
</tr>
<tr>
<td>position</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Look up the meaning of any of the underlined words that you do not know. Show that you know how to use them by writing the sentences again in your own words.

Pioneers could often predict the weather.
Lightning Joe was alarmed at the tipping of the coach.
The boys coasted down the hill.
The neighbors donated food to the strangers.
The people all felt merry at the Christmas party.
Find the following words in your dictionary. Put the correct word in the blank for each sentence.

1. bellows 2. anvil 3. tongs 4. forge 5. smithy

1. The blacksmith placed the shoe on the ...........
2. Long pincers were called ...........
3. Mr. White burned coal in his ...........
4. The blacksmith shop was called the ...........
5. The ........... blew air on the fire.

Find these words in your dictionary. Draw a small picture beside each word to show that you know what it means.

<table>
<thead>
<tr>
<th>Group I</th>
<th>Group II</th>
<th>Group III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bonnet</td>
<td>Anchor</td>
<td>braids</td>
</tr>
<tr>
<td>hinge</td>
<td>barge</td>
<td>socks</td>
</tr>
<tr>
<td>bucket</td>
<td>bouquet</td>
<td>lilac</td>
</tr>
<tr>
<td>muffler</td>
<td>compass</td>
<td>canoe</td>
</tr>
<tr>
<td>moccasin</td>
<td>cunner</td>
<td>bench</td>
</tr>
<tr>
<td>spectacles</td>
<td>dragon</td>
<td>dipper</td>
</tr>
<tr>
<td>icicles</td>
<td>moat</td>
<td>cannon</td>
</tr>
<tr>
<td>ladle</td>
<td>oriole</td>
<td>plume</td>
</tr>
<tr>
<td>barrel</td>
<td>pumpkin</td>
<td>van</td>
</tr>
<tr>
<td>bellows</td>
<td>quill</td>
<td>seal</td>
</tr>
<tr>
<td>quiver</td>
<td>stag</td>
<td></td>
</tr>
<tr>
<td>shears</td>
<td>tureen</td>
<td></td>
</tr>
<tr>
<td>wick</td>
<td></td>
<td></td>
</tr>
<tr>
<td>rail</td>
<td></td>
<td></td>
</tr>
<tr>
<td>bureau</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Find the meaning of these words in your dictionary.
In the blanks in the sentences, write the word meaning that fits in the sentence. Sometimes you may need only part of a word meaning. Choose carefully.
1. herd 2. bison 3. trails 4. ford 5. alarm
1. Lightning Joe followed the buffalo ______ across the prairie.
2. The horses crossed the river at a ______.
3. There were many ______ in the West in the early days.
4. A ____ of buffalo always had a leader who decided the way they should go.
5. The buffalo were ______ by the noise and ran away.

Each of these words has two parts. Say these words to yourself and decide where you should separate the parts. Then draw a line between them like this: but-ton
1. something
2. book case
3. useful
4. content
5. washer
6. quickly
7. reading
8. into
9. admit
10. paper
**Accent**

Many words have only one syllable such as book, boy, cow. When words have more than one syllable, we say one part louder than the other. We say that we accent the loud syllable. In the dictionary you will find the accented syllables marked with an accent above and at the end of the syllable.

Mark the loud syllables of these words like this — *glacier*.

1. hangar
2. aircraft
3. hotel
4. landing
5. flier
6. ranger
7. cabin
8. transport
9. soldier
10. runway

Check with your dictionary to see if you are correct.
Practice on Alphabetical Order

Write in the space at the right the word that comes first in your dictionary. Use the dictionary to check your answers.

1. clam class
2. gold glue
3. neigh nestle
4. program produce
5. absent accent
6. cub crust
7. restless return
8. strap stream
9. cheery cheese
10. nobody nothing

Find in your small dictionary a word or words to explain the meaning of these words taken from your story "Home".

Trundle bed
peal
ramrod
powder horn
patchwork

Same directions for words in story "Off to the Woods."

goad
yearling calves
gee
yoke
Average Group

The first step with the reading group on the fifth grade level was the division of the group into small units needing to overcome definite reading deficiencies and to build reading skills which would, in the aggregate, add up to more effective reading in both the oral and the silent spheres.

Toward this goal, various activities were pointed. In the initial survey, during which the teacher recorded in detail and carefully, the deficiencies of each pupil, it was found that jerky, word-by-word eye and lip movements were an affliction common to nearly every pupil in the group. To overcome this, the various techniques and devices to encourage wider eye span were employed.

The blackboard and charts were put to effective use. Phrases of three words, such as:

at the game

in the sky

were read by the instructor orally, first in an exaggerated word-by-word, jerky manner, then in a smooth, sense-sensing manner. The pupils did likewise. Pleasure in realizing the difference in sound was stressed. The increased eye-span drill stressed the aesthetic pleasure other listening pupils derived from the smoother reading, and equally, the pleasure the reader derived when hearing his own voice come out in smooth, sense-sensing units of sound.
As mastery of the short phrases was assured, longer phrases taken from Fifth-grade reading material were put on the blackboard and charts. Always the stress was on joy and pleasure of the "sound" of fluent, easy reading.

Definite counting was established from the start. Record-charts were kept for each pupil. At the beginning, many saw and said but one word at a time. With encouragement and practice, confidence was established to look ahead just one more word, while the lips were saying the preceding word.

In the above manner, a pupil saw that it could be done, and strove to better his own look-ahead figures.

As the experience progressed, more groups within groups were set up. A leader of each group recorded the number of words being pronounced by a reader after and while the reader was looking up from his material, while the rest of the group, watching the same reading matter, checked for accuracy.

When mastery of increased eye-span and smooth-sensing of reading material had been attained generally, a new development of reading-power was begun. This was Enrichment of Vocabulary.

In vocabulary enrichment, it was decided that the pupils' needs were not so much the learning of many new words, but the learning of and the ability to use all the many various meanings of familiar words, for many of which the pupils knew and used but one meaning.
First, the words, as words, on blackboard and charts, were studied, through informal definition, arrived at always by the use of the word in a sentence, by either pupil or teacher.

From this step, the same words were looked up in the children's dictionaries, to familiarize the pupils with formal definitions.

A third time, the same words were put into simple sentences by the pupils, this time fitting each sentence to the dictionary definition. This was to develop confidence in being able to employ a word after formal definition.

When facility with simple words was established, we progressed next to words in Fifth grade reading material, taking them as they occurred.

The same above three steps were used for each of these words. Reading was not interrupted, but rather a brief, informal definition was given "on the spot" and the word or words added to a "look-up" list.

Never did the pupils "look-up" alone. Always it was a happy sharing by either teacher and group, or leader and group.

When the procedure had been deeply rooted and working automatically, the techniques of Silent-Reading research were begun. Only the superior pupil groups were able for independent research, so that the other groups had to do
something equally satisfying and pleasurable.

For the superior group, topics in Social Studies, Art, Nature, Exploration, and Sports were assigned. These superior groups were broken into individuals, each researching on a specific part of the topic.

One pupil would, e.g., list the words peculiar to that topic, and give a word-list of specialized vocabulary to the group.

Others in that group would look up the meanings of the special words, and report.

Still others would report on the meaning and give topics and information in committee reports.

What were the lesser-ability groups doing? How were they continuing on their own level, with vocabulary enrichment? How could they feel that they were progressing, and contributing as vitally to the groups as the superior ability groups?

The solution was both happy and profitable. We decided to use the word-list previously worked on, which had been thoroughly mastered. From these lists the lower-ability groups chose words with double, triple, or multiple meanings, which would lend themselves to cartoon-drawing or other graphic illustrations of the multiple meanings, such as:

sock
hail
score
A large surface, either oak-tag or drawing-paper, was kept in one piece, but divided by lines into as many sections as the word to be illustrated had meanings. The word was printed across the top of the paper. In each section one meaning of the same word was drawn, preferably in line-drawings, filled in with color. The explanation of each of the separate meanings of the same word was thus presented to the entire class, not only to the groups as little entities. These were also displayed in the hallways of the school, arousing and stimulating the interest and curiosity of pupils who were in other Olympic Teams, working along entirely different phases of reading.

Every group was busy, and each individual in each group was absorbed in some phase of development of reading skills which he needed. Interest was intense, school-wide, for pupils tend to discuss at recess that in which they are most interested, and teachers could overhear rival Olympians from rival groups extolling the prowess and merits of their particular "teams", and whenever Measuring Tests were given, as they were at regular intervals, speculation ran high as to which "team" would score highest.

Alongside the development of reading skills, was the interest in the ability to spell. The spelling abilities were aired publicly, never on paper. After all, Olympian contests in Ancient Greece, were not matters of paper and ink. Teams
were pitted against teams, in the assembly-hall, and anxiety and striving to excel and to win could not have been hotter at the foot of Mount Olympus. One mother, with a family of six problem sons, was so moved by the sudden school-fervor aroused in them, (to the extent of one of them winning hands down the "finals"), that she telephoned the club sponsor during the evening, at her out-of-town home, to tell her that in six years, she had never had such a happy day as when her sons came home proudly announcing that one of the family had won the "laurels" for spelling, against the entire array of "teams".
Retarded Readers

Two afternoons a week the slowest division of the "retarded" group had phonic drill with the Grade I teacher. She injected much interest and succeeded in arousing attention and, in some cases, enthusiasm.

Simple stories were read aloud and words which were new or unusual were placed upon the board. The book, *Building Word Power* proved to be exceptionally helpful. The children played well-known games like "Fish", dominoes, "Old Maid" and Parcheesi; but with variations to fit the present situations. Some poems were written on the board by the teacher, dictated by the pupils, after the auditory rhyming games were played.

Colored bird pictures were used which provided reading material on the blackboard and later on were used as a guessing-game. The teacher would hold up the picture, and the child who had the most pictures at the end of the game, won.

Another "Science" game the retarded readers enjoyed, was to have a bird picture pinned on the back of a child. The class saw the picture, and then the child asked questions until he guessed the bird pinned on his coat. He then named another child to take his place.

A more difficult game was to place the pictures on the chalk tray with the names covered. Separate slips with the birds' names were placed in a pile on the table. A child went to the table and drew a slip, read aloud the name he had drawn, and placed the slip beside the correct picture of the bird. If he made a mistake, the children corrected him.

Another game enjoyed by all was to draw a bird diagram on the board, and point quickly to the labelled parts—head, bill, neck, wing, foot. Later on, the children went to the board and wrote the names themselves. The older children in the Retarded Reader section especially enjoyed labelling "parts of a tree", "parts of a flower", and birds.

Some Nature Study Seat Work provided material for drawing, coloring, reading, and silent reading tests. They were very much enjoyed by all and were adapted to the various grade levels; namely, grades four, five and six, of the Retarded Readers Group. Especially artistic children used these as poster suggestions and many gaily colored posters and "murals" resulted. A happy, contented group worked away as a "Science Club", and many collections were started which have since been continued.

Each day, part of the period was devoted to vocabulary drill. The words were taught by means of pictures, gestures, The group acted them; made sentences using them.

humorous, generally; or explained them by using related words. The second day, the group would be tested on the words of the preceding day. Starting with ten words, it was found that six were sufficient; three for the very lowest group.

For daily vocabulary "games" the checks were multiple choice, sentences to fill in blanks-completion exercises-synonyms for flash response, and board sketches for such words as: anchor, buoy, bouquet. Vocabulary tests were presented as a series of relay races— the winner of the series to have his name inscribed on the big shield in the hall.

Each day they had a three-minute test to check speed and comprehension, using the Standard Reading Tests in booklet form. We called it an airplane flight for speed and the children named it the "Zooming Game." Every child had a chart, or graph, on which he could record and determine his own progress. The children enjoyed these Speed Tests, and often asked if they could do more than one each day. However, time was not available.

In the opinion of the three Club Sponsors, this experiment was a great success. Since it was called the "Olympic Games" not one parent objected to a Grade Six child going to a Grade Four room. Since it was entitled 1/ McCall and Crabbe, Standard Tests in Reading, Book 2, New York: Columbia University Bureau of Publications.

1/
"Games", no child objected! The children were whole-heartedly delighted at the entire set-up and would ask in enthusiastic tones every day about the "surprise" games. A visiting superintendent from a nearby town said at the conclusion of his visit, that he had never seen children more responsive and alert. He added that he hoped to see the day when someone in his town would be interested enough to try a similar experiment.

The team-work and desire for "all to pull together!" has been excellent, and has given a decided lift to the school morale. The social adjustment has helped some children to get along better in the grade where they are actually registered. The chance for "success" with children of the same or more approximately the same mental standing has heartened many a retarded learner and has caused his eyes to shine. When we consider how dark and dreary days must be without a chance to succeed--it seems that this fact alone should include the "Olympic Games" on any school program. Wherever the mentality has given us any foothold at all on an increased understanding--that gain has been triumphantly made, and held!
CHAPTER V

EXPERIMENTS WITHIN A CLASSROOM

"GROUPS" vs. "TEAMS"

In the following chapters some data and evaluation thereof, appear showing divisions when children are divided within their own classroom. Grade Six was used for this purpose in 1945-46. The children previously listed as Grade Five in the Club Experiment of 1945 and who changed less either for loss or gain than the other two grades involved in the Club Experiment were used. With few exceptions, the grade was composed of "average" pupils who were not too easily excited over any phase of school work.

The method used for division was again, the Gates Reading Survey Test given December 5, 1945 and on February 5, 1946 and again on April 5, 1946. The purpose of this study is to determine, within the limits of the data available, whether or not homogeneous "groupings", or heterogeneous "teams", produce greater gains or raise the grade levels in a given grade.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Raw Gr. Age</td>
<td>Raw Gr. Age</td>
<td>Raw Gr. Age</td>
</tr>
<tr>
<td>1 A-M*</td>
<td>11-0 28.6 12-0</td>
<td>11-2 30 6.7</td>
<td>11-4 40 8.7 14-5</td>
</tr>
<tr>
<td>2 B-F</td>
<td>10-11 5412 0</td>
<td>17-8 11-1 55</td>
<td>12.2 17-10 11-3 60 13.0 18-8</td>
</tr>
<tr>
<td>3 C-TC</td>
<td>12-4 43.9 15-6</td>
<td>12-6 44 10.2</td>
<td>15-11 12-8 47 11.2 15-11 12-8 47 11.2 15-11</td>
</tr>
<tr>
<td>4D-PJr</td>
<td>11-10 5412 0</td>
<td>17-8 12-0 61</td>
<td>13 18-8 12-2 62 13. 18-8 12-2 62 13. 18-8</td>
</tr>
<tr>
<td>5E-TS</td>
<td>11-8 37.8 13-9</td>
<td>11-10 40</td>
<td>8.7 14-5 12-0 44 10.2 15-11</td>
</tr>
<tr>
<td>6E-S</td>
<td>11-4 4611 0 16-9</td>
<td>11-6 48 11.4 17-0</td>
<td>11-8 54 12.0 17-8</td>
</tr>
<tr>
<td>7 G-R</td>
<td>12-4 19.4 310-0</td>
<td>12-6 28</td>
<td>6.2 12-0 12-8 33 7.4 17-1</td>
</tr>
<tr>
<td>8 H-P*</td>
<td>11-5 30 6.7 12-5</td>
<td>11-7 39 8.5 14-3</td>
<td>11-9 43 9.8 15-6</td>
</tr>
<tr>
<td>9 H-J*</td>
<td>11-7 39 8.5 14-3</td>
<td>11-9 42 9.4 15-1</td>
<td>11-11 48 11.4 17-0</td>
</tr>
<tr>
<td>10 L-T</td>
<td>11-2 28 6.2 12-0</td>
<td>11-4 32 7.2 12-11</td>
<td>11-6 37 8.0 13-9</td>
</tr>
<tr>
<td>11M-EM*</td>
<td>11-8 4611 0 16-9</td>
<td>11-10 56 12.4 18-1</td>
<td>12-0 60 13.0 18-8</td>
</tr>
<tr>
<td>12McGM*</td>
<td>11-5 25 5.5 11-4</td>
<td>11-7 30 6.7 12-5</td>
<td>11-9 32 7.2 12-11</td>
</tr>
<tr>
<td>13McGP</td>
<td>12-5 23 5.0 10-10</td>
<td>12-7 24 5.2 11-0</td>
<td>12-9 27 6.0 11-10</td>
</tr>
<tr>
<td>14 M-J*</td>
<td>11-5 36 7.8 13-7</td>
<td>11-7 46 11.0 16-9</td>
<td>11-9 47 11.2 15-11</td>
</tr>
<tr>
<td>15 M-G</td>
<td>11-9 30 6.7 12-5</td>
<td>11-11 32 7.2 12-11</td>
<td>12-1 42 9.4 15-1</td>
</tr>
<tr>
<td>16 N-AW</td>
<td>11-6 4611.5 17-1</td>
<td>11-8 53 11.9 17-7</td>
<td>11-10 60 13.0 18-8</td>
</tr>
<tr>
<td>17 O-R</td>
<td>12-11 37 8.0 13-9</td>
<td>13-1 40 8.7 14-5</td>
<td>13-3 47 11.2 16-11</td>
</tr>
<tr>
<td>18 P-T</td>
<td>11-5 6013.0 18-8</td>
<td>11-8 63 13. 18-8 11-10 64 13. 18-8</td>
<td></td>
</tr>
<tr>
<td>19 R-Ch</td>
<td>11-2 31 7.0 12-9</td>
<td>11-4 37 8.0 13-9</td>
<td>11-6 42 9.4 16-1</td>
</tr>
<tr>
<td>20T-Sh*</td>
<td>11-3 41 9.0 14-9</td>
<td>11-5 53 11.9 17-7</td>
<td>11-7 54 12.0 17-8</td>
</tr>
<tr>
<td>21T-J</td>
<td>10-7 5412.0 17-8</td>
<td>10-9 57 12.6 18-3</td>
<td>10-11 60 13.0 18-8</td>
</tr>
<tr>
<td>22T-P*</td>
<td>12-6 31 7.0 12-9</td>
<td>12-8 40 8.7 14-5</td>
<td>12-10 42 9.4 15-1</td>
</tr>
<tr>
<td>23W-H</td>
<td>11-4 40 8.7 14-5</td>
<td>11-6 42 9.4 15-1</td>
<td>11-8 50 11.6 17-3</td>
</tr>
<tr>
<td>24 W-S</td>
<td>11-11 37 8.0 13-9</td>
<td>12-1 36 7.8 13-7</td>
<td>12-3 41 9.0 14-9</td>
</tr>
<tr>
<td>25 S-B*</td>
<td>14-1 18 4.1 9-9</td>
<td>14-3 22 4.8 10-7</td>
<td>14-5 27 6.0 11-10</td>
</tr>
</tbody>
</table>
GATES READING SURVEY TEST GRADES 3-10 EVALUATION SPEED

<table>
<thead>
<tr>
<th>December 5, 1945</th>
<th>February 5, 1946</th>
<th>April 5, 1946</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range 60-19</td>
<td>63-24</td>
<td>64-27</td>
</tr>
<tr>
<td>Median 37</td>
<td>41</td>
<td>45.5</td>
</tr>
<tr>
<td>Upper Quartile 60-46</td>
<td>63-55</td>
<td>64-60</td>
</tr>
<tr>
<td>Lower Quartile 18-28</td>
<td>32-24</td>
<td>40-27</td>
</tr>
</tbody>
</table>

Raw Scores Totals
936 1050 1163

All Children (Groups) gained 114 points
All Children (Teams) gained 113 points

Girls (Groups) gained 64 points
Girls (Teams) gained 35 points
Boys (Groups) gained 50 points
Boys (Teams) gained 78 points

Gain was practically the same in Speed in Reading, either with Groups or in Teams.

Girls, however, seem to gain best in Groups and the boys gain best in Teams.

Girls gained approximately 9 points each and Boys gained approximately 8 points each, so that the girls seem slightly better in Speed in reading on the whole.
# TABLE XI

GATES READING SURVEY TEST GRADES 3-10 COMPREHENSION

<table>
<thead>
<tr>
<th>Girls</th>
<th>December 5, 1945</th>
<th>February 5, 1946</th>
<th>April 5, 1946</th>
</tr>
</thead>
<tbody>
<tr>
<td>Names*</td>
<td>Raw Gr.</td>
<td>Age</td>
<td>Raw Gr.</td>
</tr>
<tr>
<td>1 A-M</td>
<td>55</td>
<td>6.2</td>
<td>12-0</td>
</tr>
<tr>
<td>2 B-F</td>
<td>63</td>
<td>7.4</td>
<td>13-1</td>
</tr>
<tr>
<td>3 C-T</td>
<td>59</td>
<td>6.9</td>
<td>12-8</td>
</tr>
<tr>
<td>4D-PJr</td>
<td>76</td>
<td>10.0</td>
<td>15-9</td>
</tr>
<tr>
<td>5E-TS</td>
<td>54</td>
<td>6.1</td>
<td>11-11</td>
</tr>
<tr>
<td>6E-S</td>
<td>61</td>
<td>7.2</td>
<td>12-11</td>
</tr>
<tr>
<td>7G-R</td>
<td>45</td>
<td>5.0</td>
<td>10-10</td>
</tr>
<tr>
<td>8H-F*</td>
<td>53</td>
<td>6.0</td>
<td>11-10</td>
</tr>
<tr>
<td>9H-J*</td>
<td>55</td>
<td>6.2</td>
<td>12-0</td>
</tr>
<tr>
<td>10L-T</td>
<td>61</td>
<td>7.2</td>
<td>12-11</td>
</tr>
<tr>
<td>11M-EM*</td>
<td>62</td>
<td>7.3</td>
<td>13-0</td>
</tr>
<tr>
<td>12McM*</td>
<td>49</td>
<td>5.5</td>
<td>11-4</td>
</tr>
<tr>
<td>13Mc-P</td>
<td>37</td>
<td>4.4</td>
<td>10-1</td>
</tr>
<tr>
<td>14M-J*</td>
<td>59</td>
<td>6.9</td>
<td>12-8</td>
</tr>
<tr>
<td>15M-G</td>
<td>56</td>
<td>6.4</td>
<td>12-2</td>
</tr>
<tr>
<td>16N-AJr</td>
<td>63</td>
<td>7.4</td>
<td>13-1</td>
</tr>
<tr>
<td>170-R</td>
<td>46</td>
<td>5.1</td>
<td>10-11</td>
</tr>
<tr>
<td>18 P-T</td>
<td>67</td>
<td>8.0</td>
<td>13-9</td>
</tr>
<tr>
<td>19 R-C</td>
<td>50</td>
<td>5.6</td>
<td>11-5</td>
</tr>
<tr>
<td>20 T-S*</td>
<td>58</td>
<td>6.7</td>
<td>12-5</td>
</tr>
<tr>
<td>21 T-J</td>
<td>80</td>
<td>10.7</td>
<td>16-4</td>
</tr>
<tr>
<td>22T-F*</td>
<td>65</td>
<td>7.6</td>
<td>13-4</td>
</tr>
<tr>
<td>23 W-H</td>
<td>60</td>
<td>7.0</td>
<td>12-9</td>
</tr>
<tr>
<td>24 W-S</td>
<td>59</td>
<td>6.9</td>
<td>12-8</td>
</tr>
<tr>
<td>25 S-B*</td>
<td>40</td>
<td>4.6</td>
<td>10-4</td>
</tr>
</tbody>
</table>

Number 25 is a "Special Student."
### GATES READING SURVEY TEST GRADES 3-10 EVALUATION COMPREHENSION

<table>
<thead>
<tr>
<th></th>
<th>December 5, 1945</th>
<th>February 5, 1946</th>
<th>April 5, 1946</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range</td>
<td>37-80</td>
<td>38-82</td>
<td>48-83</td>
</tr>
<tr>
<td>Median</td>
<td>59</td>
<td>63</td>
<td>71</td>
</tr>
<tr>
<td>Upper Quartile</td>
<td>63-80</td>
<td>70-82</td>
<td>78-83**</td>
</tr>
<tr>
<td>Lower Quartile</td>
<td>37-50</td>
<td>38-55</td>
<td>48-61</td>
</tr>
<tr>
<td>Raw Scores</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>1435</td>
<td>1673</td>
<td>1731</td>
</tr>
</tbody>
</table>

All Children (Groups) gained 238 points
All Children (Teams) gained 58 points

Girls (Groups) gained 91 points
Girls (Teams) gained 33 points
Boys (Groups) gained 147 points
Boys (Teams) gained 25 points

Girls Groups gained approximately 10 points each
Girls Teams gained approximately 4 points each
Boys Groups gained approximately 9 points each
Boys Teams gained approximately 1½ points each

Gains very much more noticeable in Groups for Comprehension.
The Girls seem to be better in Comprehension in Reading
although the two Perfect Scores (**) were made by Boys.
### TABLE XII

**GATES READING SURVEY TEST GRADES 3-1C VOCABULARY**

<table>
<thead>
<tr>
<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>January 5, 1945</td>
<td>February 5, 1946</td>
<td>April 5, 1946</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Raw Gr.</td>
<td>Age</td>
<td>Raw Gr.</td>
<td>Age</td>
<td>Raw Gr.</td>
<td>Age</td>
<td>Raw Gr.</td>
<td>Age</td>
<td>Raw Gr.</td>
<td>Age</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<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>A-M*</td>
<td>10</td>
<td>45</td>
<td>6.8</td>
<td>12-7</td>
<td>11-2</td>
<td>54</td>
<td>8.5</td>
<td>14-3</td>
<td>11-4</td>
</tr>
<tr>
<td>B-FJr</td>
<td>10</td>
<td>48</td>
<td>7.4</td>
<td>13-1</td>
<td>11-1</td>
<td>50</td>
<td>7.8</td>
<td>13-7</td>
<td>11-3</td>
</tr>
<tr>
<td>C-CT</td>
<td>12-4</td>
<td>50</td>
<td>7.3</td>
<td>13-7</td>
<td>12-6</td>
<td>51</td>
<td>8.0</td>
<td>13-9</td>
<td>12-8</td>
</tr>
<tr>
<td>W-Jr</td>
<td>12-10</td>
<td>44</td>
<td>6.7</td>
<td>12-5</td>
<td>12-0</td>
<td>60</td>
<td>9.2</td>
<td>14-11</td>
<td>12-2</td>
</tr>
<tr>
<td>D-TE</td>
<td>11-8</td>
<td>46</td>
<td>6.3</td>
<td>12-7</td>
<td>11-10</td>
<td>47</td>
<td>7.2</td>
<td>12-11</td>
<td>12-0</td>
</tr>
<tr>
<td>E-S</td>
<td>11-4</td>
<td>43</td>
<td>6.6</td>
<td>12-4</td>
<td>11-6</td>
<td>48</td>
<td>7.4</td>
<td>13-1</td>
<td>11-8</td>
</tr>
<tr>
<td>G-R</td>
<td>12-4</td>
<td>24</td>
<td>4.5</td>
<td>10-3</td>
<td>12-6</td>
<td>25</td>
<td>4.7</td>
<td>10-5</td>
<td>12-8</td>
</tr>
<tr>
<td>H-P*</td>
<td>11-5</td>
<td>24</td>
<td>4.5</td>
<td>10-3</td>
<td>11-7</td>
<td>34</td>
<td>5.9</td>
<td>11-8</td>
<td>11-9</td>
</tr>
<tr>
<td>H-J*</td>
<td>11-7</td>
<td>38</td>
<td>6.3</td>
<td>12-1</td>
<td>11-9</td>
<td>47</td>
<td>7.2</td>
<td>12-11</td>
<td>11-11</td>
</tr>
<tr>
<td>C-T</td>
<td>11-2</td>
<td>47</td>
<td>7.2</td>
<td>12-4</td>
<td>11-4</td>
<td>51</td>
<td>8.0</td>
<td>13-9</td>
<td>11-6</td>
</tr>
<tr>
<td>M-EM*</td>
<td>11-8</td>
<td>45</td>
<td>6.8</td>
<td>12-7</td>
<td>11-10</td>
<td>52</td>
<td>8.2</td>
<td>13-11</td>
<td>12-0</td>
</tr>
<tr>
<td>S-M*</td>
<td>11-5</td>
<td>30</td>
<td>5.4</td>
<td>11-2</td>
<td>11-7</td>
<td>36</td>
<td>6.1</td>
<td>11-11</td>
<td>11-9</td>
</tr>
<tr>
<td>M-P</td>
<td>12-5</td>
<td>30</td>
<td>5.4</td>
<td>11-2</td>
<td>12-7</td>
<td>31</td>
<td>5.5</td>
<td>11-4</td>
<td>12-9</td>
</tr>
<tr>
<td>M-J*</td>
<td>11-5</td>
<td>40</td>
<td>6.4</td>
<td>12-2</td>
<td>11-7</td>
<td>50</td>
<td>7.8</td>
<td>13-7</td>
<td>11-9</td>
</tr>
<tr>
<td>M-C</td>
<td>11-9</td>
<td>36</td>
<td>6.0</td>
<td>11-10</td>
<td>11-11</td>
<td>50</td>
<td>6.4</td>
<td>12-2</td>
<td>12-1</td>
</tr>
<tr>
<td>N-A</td>
<td>11-6</td>
<td>44</td>
<td>6.7</td>
<td>12-5</td>
<td>11-8</td>
<td>48</td>
<td>7.4</td>
<td>13-1</td>
<td>11-10</td>
</tr>
<tr>
<td>C-R</td>
<td>12-11</td>
<td>40</td>
<td>6.4</td>
<td>12-2</td>
<td>13-1</td>
<td>43</td>
<td>6.6</td>
<td>12-4</td>
<td>13-3</td>
</tr>
<tr>
<td>E-T</td>
<td>11-6</td>
<td>48</td>
<td>7.4</td>
<td>13-1</td>
<td>11-8</td>
<td>51</td>
<td>8.0</td>
<td>13-9</td>
<td>11-10</td>
</tr>
<tr>
<td>E-C</td>
<td>11-2</td>
<td>36</td>
<td>6.1</td>
<td>11-11</td>
<td>11-4</td>
<td>38</td>
<td>6.3</td>
<td>12-1</td>
<td>11-6</td>
</tr>
<tr>
<td>C-T-S*</td>
<td>11-3</td>
<td>50</td>
<td>6.8</td>
<td>13-7</td>
<td>11-5</td>
<td>56</td>
<td>8.7</td>
<td>14-5</td>
<td>11-7</td>
</tr>
<tr>
<td>T-J</td>
<td>10-7</td>
<td>70</td>
<td>10.4</td>
<td>16-1</td>
<td>10-9</td>
<td>74</td>
<td>10.9</td>
<td>16-7</td>
<td>10-12</td>
</tr>
<tr>
<td>T-F*</td>
<td>12-6</td>
<td>42</td>
<td>6.5</td>
<td>12-3</td>
<td>12-8</td>
<td>61</td>
<td>9.3</td>
<td>15-0</td>
<td>12-10</td>
</tr>
<tr>
<td>H-S</td>
<td>11-4</td>
<td>43</td>
<td>6.6</td>
<td>12-4</td>
<td>11-6</td>
<td>45</td>
<td>6.8</td>
<td>12-7</td>
<td>11-8</td>
</tr>
<tr>
<td>E-S</td>
<td>11-11</td>
<td>42</td>
<td>6.5</td>
<td>15-3</td>
<td>12-1</td>
<td>44</td>
<td>6.7</td>
<td>12-5</td>
<td>12-3</td>
</tr>
<tr>
<td>S-B*</td>
<td>14-1</td>
<td>20</td>
<td>4.0</td>
<td>9-8</td>
<td>14-3</td>
<td>27</td>
<td>4.9</td>
<td>10-8</td>
<td>14-5</td>
</tr>
</tbody>
</table>

Number 25 is a Special Student.
GATES READING SURVEY TEST GRADES 3-10 EVALUATION VOCABULARY

<table>
<thead>
<tr>
<th></th>
<th>December 5, 1945</th>
<th>February 5, 1946</th>
<th>April 5, 1946</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range</td>
<td>70-20</td>
<td>74-25</td>
<td>31-84</td>
</tr>
<tr>
<td>Median</td>
<td>43</td>
<td>48</td>
<td>54</td>
</tr>
<tr>
<td>Upper Quartile</td>
<td>47-70</td>
<td>52-74</td>
<td>58-84</td>
</tr>
<tr>
<td>Lower Quartile</td>
<td>20-35</td>
<td>25-40</td>
<td>31-48</td>
</tr>
<tr>
<td>Raw Scores Totals</td>
<td>1023</td>
<td>1163</td>
<td>1335</td>
</tr>
</tbody>
</table>

All Children (Groups) gained 140 points
All Children (Teams) gained 172 points
Girls (Groups) gained 83 points
Girls (Teams) gained 26 points
Boys (Groups) gained 57 points
Boys (Teams) gained 146 points

Girls gained approximately 9 points each by Groups.
Boys gained approximately 9 points each by Teams.

Gains made by Teams were superior to gains made by Groups.
Girls made greater gains by Groups.
Boys made greater gains by Teams.
CHAPTER VI
LITERATURE UNIT USED AS MOTIVATION FOR GROUPS
THREE GRADE LEVELS WITHIN CLASSROOM

Literature in Groups—Horizontal Division, Homogeneous Grouping.—In Remedial Reading, the teacher must start where the child is, to gain success. The teacher, in testing, should use a set of books with no grade markings. Every child needs an adequate sight vocabulary, and it is our task to ascertain how many words he knows instantly. We must see if he can "sound out" new words and with what degree of success he corrects his own mistakes. How well does he comprehend easy material? Have we noticed his eye movements and the position of book?—held closely or far from face? Is he a lip-reader? It seems to be true that some people are so auditory-minded that they cannot get sense except by sounding the words and hearing the sentence! Judd\(^1\) pointed out, after an extensive study of eye-movement records, that oral reading is natural in the primary grades. "The child cannot go directly from the symbol to the meaning without utilizing the rich background of oral language."


-77-
The "oral language" of which Judd speaks, seems to be a necessity for many older children who are poor in silent reading.

Principals, beginning administrative duties in a new school, will find a survey is essential to a successful reading program. The survey centers about a testing program. Every child in school should be included. It should be repeated, year after year, in order to get the retarded readers as early as possible. Give the survey early in the school year, as it takes time to administer, correct, and evaluate the tests. Some schools give the tests in the Spring, so as to make an early start the next year. There are three ways of making a survey:— (1) standardized reading tests; (2) collecting and analyzing pupils' cumulative records; (3) analyzing school performance. 1/

McCallister 2/ gives instructions for "Diagnosis Through Informal Reading Exercises" as follows:

(1) Can the pupil interpret, with facility, materials of the level of difficulty ordinarily assigned in his regular school work?

(2) Can he comprehend the more important thoughts of a passage at a single reading?

(3) Can he interpret a passage satisfactorily on re-reading?

(4) Is excessive re-reading necessary for interpretation?

2/ James M. McCallister, op. cit., p.72.
(5) Does he read carefully enough to comprehend full and complete answers to questions, or is he satisfied with superficial interpretation?

(6) Does he recognize his own shortcomings when given an opportunity to correct his own errors?

(7) Can he direct his attention effectively to content?

(8) Can he secure the exact thought of an author?

(9) Does his oral reading give evidence of intelligence of interpretation or is it jerky and expressionless?

(10) Does he distinguish between relative values, such as the difference between main thoughts and supporting details?

(11) Can he select pertinent material in response to questions?

These questions are reported verbatim, since they are thorough and complete. McCallister feels that there should be administrative provision in every school system to assure proper attention to the deficiencies existing in reading. He suggests: (1) individual remedial instruction for seriously retarded pupils; (2) need for corrective group instruction; (3) need for guidance in reading in the teaching of all content subjects.

Gillingham and Stillman say on page 50 that some teachers advise against reading to slow readers, lest they become too lazy to try for themselves.

1/ James McCallister, op. cit., p.6.

2/ James McCallister, op. cit., p.9.

We have concluded this is a great mistake. It is especially important that these children be introduced to the delights of the world of books. It may be a very long time before they can realize this delight through their own efforts. If we wait, they may be confirmed in their dislike of Reading.

It is exceedingly difficult to find "easy" books for adolescents. Baldwin's *Fifty Famous Stories Retold*, (American Book Company) is an excellent book for that purpose. *Lorna Doone* has done very well as far as reducing the vocabulary and "stepping-up" the action, by Jordan and Washburne (of Winnetka fame!) Scott, Foresman and Company. They have another book done by the same people with a reduced vocabulary burden, *When Washington Danced* which is not so exciting as *Lorna Doone*.

Motivation for poor readers can often be aroused by giving them the care of the bulletin board. They like to print or write short words like "Trees", "Ships", "Pirates", "Stars". Many poor readers paint or cut letters very nicely. Let them feel that their contributions are very important, so that they can experience a small measure of success! Notebooks can interest poor readers, or slow readers. Many a boy or girl is heartened by the praise for his well-illustrated notebook until, his confidence mounting, he attempts work heretofore deemed impossible.

The vocabulary burden discourages many children with reading difficulties. "Vocabulary difficulties inhibit
successful reading, lower pupils' interest and lessen progress."  

Pupils are interested in reading when they do not encounter too many word difficulties, provided the content is interesting. On page 69, the method described for interesting pupils of below average mental ability in adequate word recognition, is to give him reading books with a grade placement below his actual grade placement. The child gains fluency and confidence through much easy reading. The content difficulty can be increased gradually from time to time.

Methods for enlarging the pupils' vocabulary, are: (1) use a picture dictionary; (2) use drill exercises; (3) teach prefixes and suffixes; (4) teach antonyms; (5) chart all new words (illustrated, if possible); (6) keep individual lists in notebooks (original or "cut out" illustrations).

In every class of twenty-four or more, there will be at least three group levels in reading. Prepare the work for a three level assignment where the "Superior" group can do much self-checking (and aid in correcting the work of others). The "Normal" group using factual materials, less recreational reading and much vocabulary drill forms the second group. Group Three, Retarded Readers, find reading difficult, and therefore, need much easy material. All


2/ Ibid., p. 71.
written assignments should be brief and explicit. All oral directions should be given simply and clearly. This group needs much drill, less emphasis on speed, and more emphasis on comprehension. Dr. Durrell's book, \(^1\) gives suggestions for reading lessons on three levels.

**Literature Levels**

The question has often been asked, "Is an intensive study of Literature by the slow or average group ever justifiable?" Mr. Uhl\(^2\) says that the slow groups should: (a) abolish required reading lists; (b) supply interesting material (not too juvenile); (c) reduce vocabulary burden; (d) proceed slowly. He goes on to say that extensive reading is superior to intensive reading in the improvement of speed and vocabulary, and that "profitable study is often informal, i.e. chats."

Another question, "Should there be Reading Lists for the various grade levels?" On page 147, Mr. Uhl says, "Only the defenseless condition of the child, and the scarcity of reading materials in the schools, enable teachers to insist upon minimum lists for pupils".... "At present, opinion seems


3/ Willis L. Uhl, op. cit., p.147.
unfavorable to such lists." Agreeing wholeheartedly with such an eminent authority, the following unit was planned for the groups divided into grade levels, (i.e. slow, average, and superior readers—although all were registered in the grade 6 register in a suburban town less than twenty miles from Boston). Materials of interest were provided for enriching the superior students' assignments, and the book used as a text 1/ for the slow readers was especially prepared for remedial reading by Carleton Washburn's teachers in Winnetka, Illinois. The pupils were divided after giving a Gates Reading Survey Test. The tests showing comparison of grade work, reading levels in groups, and in teams, follows the unit.

1/ "Six Great Stories" (Treasure Island), Scott, Foresman Co.
Reading Lessons

Three Level Assignments

A-- The Superior Students
B-- The Average Pupils
C-- The Retarded Readers

The "long" view of the entire unit, is a study of Treasure Island with Robert Louis Stevenson's biography, and a list of sea stories for extensive, correlated reading.

The aim is to let the Superior Students read much and learn to make valid comparisons—possibly to produce a play, or marionette sketch "as the spirit moves"! Twin texts used were Treasure Island (Broadus edition), and Porto Bello Gold by A. Howden Smith.

The Average pupil will have read Treasure Island in the original and the minimum essentials of Stevenson's biography. (The Lake English Classics, Broadus School Edition, Scott, Foresman Company).

The Retarded Readers are reading Carleton Washburn's Treasure Island for retarded readers in Six Great Stories, (Scott, Foresman and Company).

My Grade Six boys and girls say we are studying "Pirates" and so we can call it by their own term. Group "A" are to hunt up references to famous pirates in fact. (Research) Get as many reference books as you can from the public library, before giving your "pep" talk on piracy and "Yo ho ho! for a life of Adventure!"
A list of books on pirates follows:

The Pirates' Who's Who—Philip Gosse
On the Spanish Main—John Masefield
The Book of Buried Treasure—R.D. Paine
Book of Pirates—Howard Pyle
The Real Story of the Pirate—A.H. Verrill
The Pirates of the New England Coast—G.F. Dow and J.H. Edmonds
The Romance of Piracy—E. Keble Chatterton

Doubloons: A Story of Buried Treasure—C.B. Driscoll
(These accounts are all true).

Boys' Book of Salvage—David Masters
(Treasure sunk at sea is sought for in this book).

Buccaneers and Pirates of Our Coast—Frank R. Stockton
(All the famous pirates are here).

Treasure Island in Grade Six should be read for the fun and the thrill. It needs very little motivation, and the materials contributed will deluge the enthusiastic teacher!

The frontispiece of Literature and Life, Book I, (Scott, Foresman Company) for Grade 10 or First Year High School, has a nicely colored illustration of Long John Silver hustling Jim along at the rope's end. Hold it up, or have it on the bulletin board, and ask the entire class (A, B and C) "What kind of person do you take the one-legged man to be?" "How is he hurrying the boy along after him?" "Why do you suppose he is in a hurry?" "Where do you think they are?"

Curiosity is awakened that cannot be satisfied until the reader arrives at the chapter where the scene is described.
Stevenson's famous map can be enlarged by a group who can be trusted to reproduce accurately and in detail but on a larger scale. Group "A" are to give two-minute talks on different pirates well-known in history. Group "B" are to look up in Stevenson's biography, the reasons for writing the story and why certain characters came in. (Pages 18 and 19 of the Preface to the Lake Classics). Group "C" are reading the easy vocabulary story. Questions are placed on the board daily or dictated to be copied in the assignment book or mimeographed.

Examples:

A. Just how did the pirates locate the spot where the treasure had been buried?

B. What caused Billy Bones' death? (Answer is complex)

C. What was "Flint's pointer"?

A. Explain the changes in Silver's attitude toward Jim from the time Jim stumbled into the blockhouse to the end of the story.

B. What was the meaning of the "black spot"?

C. Why did Black Dog run out of the "Spyglass" when Jim entered?

The above questions are based on fact or interpretations of facts. The following questions require application of knowledge to new situations.
A. Is eavesdropping ever justified?

B. What do you think happened to the three pirates marooned on Treasure Island?

C. Do you think Silver led an honest life after his escape from the Hispaniola?

Explain your answers.

Let us now take a definite day's work with the three groups and we will settle arbitrarily, on a day when Group A is reporting on Porto Bello Gold, a prelude to Treasure Island, by A. Howden Smith, 1924.

"A" Group.

1. Compare your lists of events that happened before the opening of Treasure Island which must be told in any preceding story. Does Mr. Smith include them in Porto Bello Gold?

2. Compare the two descriptions of the island, Treasure Island (Pages 89-91) and Porto Bello Gold (Pp.117-120). Which is better? Why do you prefer it?

3. Give the details by which a half-page account of burying the treasure (in Stevenson's story) page 106, is enlarged to fill six pages of Porto Bello Gold (pages 293-8).

5. Consider carefully the pirates' dialogues and talk in both books. Any difference? If so, which method is more effective?

6. What do you think of Bill Bones as mate of the "Walrus" when he gets his scar and gains possession of the map?

7. What hints about the character and exploits of Flint did Mr. Smith find in Treasure Island, and how did he use them?

8. In neither story is an account of Flint burying the treasure on the island. Why? Write your own narrative of what happened.


10. What about Silver? Should he have played a bigger part in Porto Bello Gold?

11. Name your cast of characters for your radio skit. Are you sure these voices will give the right impression? If no time for a rehearsal today, we shall meet tomorrow, to rehearse "sound effects."

Group "B."

Oral Reading, Chapter 11, "What I Heard in the Apple Barrel."

1. The group who looked up the duties of a quartermaster may report. What does this tell us about Long John?
2. The boy who is to read from Pepys' Diary, April 11, 1661, will give us an illustration of what "sun-dried" meant. Do you think this method _did_ serve as a warning? Why?

3. From what you read in Stevenson's biography, who named Flint's ship the "Walrus"? Why is it a good choice?

4. Who were "Davis" and "England"?

5. What does Silver tell us that makes us realize he had excellent control of the pirates?

6. What was the pirates' nickname for Silver?
   Who looked up its meaning?

7. What did Silver say that made Jim realize that he himself had been flattered and fooled in the self-same way?

8. What was the name of the coxswain? Have you ever heard the word "coxswain" before? Where? What did Hands want to do, tell why?

9. What does Silver say has happened to Pew and Flint?

10. Why does Silver want to delay the showdown?

11. Whom does Silver want to kill with his own hands?

12. Where had Mr. Arrow got his liquor?

_Conversation_

May we see the pictures collected, posters drawn? Any committee reports on records suitable to play between scenes in our radio skit? Talk over why suitable or not. Who changed your bulletin board, and why did he choose the parrot as his central poster? Do you like the effect this week? Discuss.
Group "C" (Slow Readers)

1. Read the description of the boat. What type of boat? Can you draw it? Or make a diagram? Did you find any boat pictures? In the pictures brought in, which more nearly approximates the "Hispaniola"?

2. Read the description of the island (Chapter 13). What was the name of the tallest hill? What was peculiar about its shape? Look at William's poster. Did he get it so that you would know at once it was the hill in the book?

3. Read the description of the "Admiral Benbow Inn". Can anyone draw a poster showing the doorway? Florence, show your collection of "inn" pictures. Some of these are old English inns. Which looks most like the description John read aloud?

4. Were any of you suspicious of Long John? Before Jim was in the apple barrel? Eddie, what made you suspect him? Edith, what suspicion did you have? Have you seen this word (suspicion) or heard it before? Where? (movie) Use it many times, or get them to do so.

5. Felix, read your paragraph on "Why I Like John Silver."

6. Mabel, read your diary of Ben Gunn's lonely days on the island. Why didn't he listen to the radio? What amusements can a man have who is all alone on a deserted island?
7. Did anyone find out what the word "Requiem" meant? Yes, it was in the papers when Cardinal O'Connell was buried. Did anyone learn the poem? Where is Stevenson buried?

8. Let me see your drawings of the Stockade and of Ben Gunn's coracle. William has drawn schooners, sailboats, and canoes. Is his schooner like the Hispaniola? Why not? Not all schooners are alike, and you've drawn a very fine two-master.

9. Who is going to make the announcement about the radio skit? Why did you choose Edna? Let me know what you are going to say, Edna. That's very clearly said— I heard every word distinctly. What radio announcer do you like best? Why? Who is going to be Ben Gunn? Let me hear you call, "Darby McGraw bring aft the rum!" Remember you're a man and a man anxious for a drink! Bill, you try it! Felix, you try it. Why does Felix sound the best of all?

10. May I see your programs? What did the Art teacher think of your idea, Jack? Why did she think Anne's pattern would be better? Do you agree? Yes, I think Anne's ship shows more action and is easier to cut out and paste. Yours is too artistic, Jack. It would take too long to do it, but I want it on the bulletin board. Will you put it in the empty space on the left? It looks fine! When can you finish the programs? I'll be here until four p.m., but you must not stay after that. Couldn't you each one do a
sample and take it home to copy?

11. Who is to write the invitation to the Superintendent? Why did you choose Ethel? May I see it? What will we do with Mary's, which is almost as good? Mary, the group would like our Principal to have that. You may be excused to take it to the office.

12. Let me see the boys who are to pull at the capstan bars while the Glee Club sings. Boys, you'll have to bend way over, and really pull! All together, now! Good! Did the Physical Education teacher help you with this? Ask him to take you into the gym at three fifteen for about five minutes. Who is going to ask Mr. Smith? What are you going to say? Tell him why you need more help. That's right!

**Materials Needed**

- Treasure Island
- Porto Bello Gold
- Poe's Gold Bug
- Ship posters, pictures, and drawings.
- Ship model.
- Records of sea chanteys and sea songs
- Pirate pictures
- Deserted-looking island scenes.
- Inns, (English, preferred).
Annotated Bibliography

Sea Stories

Bone, Captain David W., The Brassbounder, Lookoutman

If you want to become thoroughly acquainted with boats and sea-life, these books will open your eyes.

Bullen, Frank T., The Cruise of the Cachalot

This famous yarn of the whaling days drew from Kipling the exclamation, "I've never read anything that equals it in deep-sea wonder and mystery!"

Connolly, James B., Out of Gloucester

Stories of our own Massachusetts fishermen.

Conrad, Joseph, Youth, Typhoon, and The Nigger of the Narcissus

Cooper, James Fenimore, The Pilot, The Red Rover, Wing and Wing

America's pioneer in adventure stories.

Dana, Richard Henry, Two Years Before the Mast

This is a famous account of the hardships of sailors on American merchant ships in 1837.

Finger, C.J., Courageous Companions

A young English lad meets every kind of adventure on the first voyage around the world with Magellan.

French, Joseph L., Great Sea Stories

Hale, J.R., Famous Sea Fights

Hawes, Charles B., Dark Frigate, The Mutineers

Philip Marsham, becoming a sailor, finds himself among pirates in the days of King Charles the First.

Hopkins, W.J., She Blows! and Sparm at That!

A whaling story and a whale of a story!
Kempton, Kenneth P., Phantom Gold

Kipling, Rudyard, Captains Courageous

A wealthy boy falls off an ocean liner and has to work as a common sailor on a fishing schooner before he gets back to land.

Lesterman, John, Adventures of a Trafalgar Lad

A sailor boy is captured by pirates, who put him in perils as great as those of Jim Hawkins.

London, Jack, Sea Wolf

This story of the Pacific may remind you of Israel Hands; the brutal captain fears nothing but death.

Marryat, Captain Frederick, Mister Midshipman Easy, Masterman Ready

The landlubber meets a storm, a mutiny, a lonely isle, trouble with natives—"It's got everything."

Masefield, John, Dauber, Jim Davis

A boy captured by smugglers, the whole book filled with the scent of the moors, and the salt of the sea.

Meigs, Cornelia L., Clearing Weather

Just after the American Revolution, the Jocasta sailed for South America. You are kept in suspense until the end.

Melville, Herman, Moby Dick

The classic that is a world philosophy. The white whale beckons us on to real adventure on a whaling ship.

Morley, Frank, East South East

Young Farr leaves Baltimore in 1806; he has wild adventure hunting whales and treasure before he gets home again.
Nordhoff, C.B., Derelict

This book takes you away to the South Seas during the World War, makes you a prisoner on a lonely island, but brings you peace at last.

Nordhoff and Hall, The Mutiny of the Bounty

Captain Bligh of the Bounty arouses the hatred of his men and finally they set him adrift in an open boat. The movie was well done with Charles Laughton as Captain Bligh.

Paine, Ralph D., Lost Ships and Lonely Seas

Full of the daring and mystery of sea life.


The characters talk like real sailors and are most convincing.

Sabatini, Rafael, The Sea Hawk

Played by Tyrone Power in the movie version.

Sabatini, Rafael, Captain Blood

The thrilling tale of a slave who became a masterful buccaneer.

Shannon, Monica, Tawnymore

The hero, son of a buccaneer, saves a Spanish galleon loaded with treasure.

Smith, A.D. Howden, Port Bello Gold

A prelude to Treasure Island; you see Captain Flint and Silver bury their booty on Dead Man's chest, as well as on Treasure Island.

Stockton, Frank R., Casting Away of Mrs. Lecks and Mrs. Aleshine

This is a rare book— a truly humorous tale of shipwreck and mystery.
Tomlinson, H.M., *The Sea and the Jungle, Old Junk*

Exciting, and full of adventure.

Verne, Jules, *The Mysterious Island*

Jules Verne prophesied so many strange things which have actually come to pass, that we are beginning to credit him with an uncanny ability to predict the future.
Science in Three Level Groups

Units submitted:

(1) The Bat*


(b) Worksheet for study

(c) Test # 1

(d) Test #2 (if # 1 is not passed)

(e) Science Notebook notes

(f) Spelling

(g) Test on Science Notes

(h) Activities

* Voted the favorite unit studied while in three level group.
The book, *Learning About Our World* by Craig and Condry, published by Ginn and Company, was used by the Superior Group. The following worksheet was passed to all children, as the group read the second problem of the chapter entitled, "Some Animals Hibernate," on page 67, section 3, "The Bat."

**Worksheet No. 9 - The Bat - Page 67.**

1. Name the only mammal that flies.
2. What does the flying squirrel do?
3. When are we most liable to see bats?
4. On what food do bats feed?
5. Name any two kinds of food that he especially likes.
6. How many legs have most mammals?
7. How many legs has a bat?
8. Describe its wings.
9. How is the body kept warm?
10. When does the bat go to sleep? (page 67)
11. Answer questions under picture on page 68.
12. Where does the bat go to hibernate?
13. In what position does he stay?
14. How does the mother bat care for her children?
15. Does she catch insects for her young? Why?
16. Name another animal that feeds its young as a bat does.
17. What does she do when the baby bats become heavy?
18. Why is the bat considered a help to man?
19. Why are people afraid of bats?
20. Do you know any foolish story about a bat?
Read the story again. *Are you ready to be tested?

Whenever the children are ready, they return their work sheets to the proper envelope, and take Test No. 1 slip (for Worksheet No. 9). They understand that Test No. 1 is difficult, so they do not attempt it until ready. If Test No. 1 is not 80% (or better), Test No. 2 is given after further study.

Test #1  The Bat  Page 67
Worksheet # 9

1. What kind of animal is the bat?
2. Explain fully why we should never kill bats.
3. How many legs has a bat? Describe its wings.
4. When do bats hibernate? Where? In what position?
5. When does a bat hunt for food? (two times)
E.C. Why doesn't a bat stop to eat?

* Any five correct, gives a score of 100. Any four correct, rates 80%. If three are wrong, study again and try Test #2.

Test #2  The Bat (Worksheet #9)

1. Name the only flying mammal.
2. Explain what we mean by mammal.
3. How many legs have most mammals?
4. Describe the bat's wings.
5. Why would it hibernate in winter, even if it could find food?
6. What sort of food does it like?
7. At what times does it hunt food?
8. Where does it go to hibernate?
9. What position does it take?
10. How does the mother bat care for her young?
E.C. Why do we consider bats helpful animals?

---

Material copied from board into Science Club Notebook (all pupils marked for penmanship).

**Brown Bat**

This animal flies only at night with his pink mouth open, devouring mosquitoes and other insects. His webbed wings are very sensitive. During the day, he sleeps hanging head downward. His hooked wings hold him securely. A mother bat carries her babies clinging to her breast. The winter is spent hibernating in some cave or tree.

**Spelling** (All Groups)

1. flies  6. sensitive  11. breast
2. devouring  7. downward  12. hibernating
3. mosquitoes  8. hooked  *13. cave
4. insects  9. securely  *14. spent
*5. webbed  *10. clinging  *15. tree

Starred words are for lowest group.
Test on Minimum Essentials

Brown Bat

1. What mammal flies at night?
2. What does it eat?
3. What does sensitive mean?
4. When does a bat sleep?
5. How?
6. How do they spend the winter?
7. What does hibernating mean?
8. What does devouring mean?

Starred questions - lowest group. All questions, all groups.

Reports from Superior Group on Flying Squirrels, Bats, Vampire Bats. This unit is given in October, and posters showing flying bats against a full moon, can be done by the artistic students. (Voted the best "Art" project).

See page 10 "Animal Project" by Madalene B. Sawyer and Grace Mildred Seymour of the Children's Museum of Boston (copyrighted, 1932). Address, P.O. Box 4, Jamaica Plain, Massachusetts.
CHAPTER VII
SPELLING IN GRADE FORMATION
THREE GRADE LEVEL IN FIVE GROUPS AND FIVE TEAMS
DATA AND EVALUATION

Spelling

Comparisons between Spelling taught at Group Levels and in Teams.-- The Spelling in the Intermediate Grades was taught using the approved book for the entire town.\(^1\) When the grade scores are given, it is for a standard test\(^2\) administered after approximately two months of work given in the usual manner, as outlined carefully in the book, used throughout the entire town.

Alternating forms of the Spelling Test taken from "The Modern School Achievement Tests" were given after approximately two months of work given to groups at reading grade level (which had consisted of words necessary to the units of study under consideration). The teachers of the various intermediate groups agreed that words possessing no bearing at all on the activities of the day, possibly prepared by a person living in a totally different industrial or geographical area, should

\(^1\) Lillian Billington Silver, Burdett and Company, Boston, Mass.

\(^2\) The Modern School Achievement Tests (Forms I and II), Bureau of Publications, Teachers' College, Columbia University, New York, N.Y.

-102-
be discarded for words which were outgrowths, or necessities, of their activities.

The teachers felt that the spelling should consist of words which must be mastered to express the activity. The children felt a definite need for these words to use in compositions, outlines, reports, or in the Science notebooks. Suppose, for instance, that the lower level, the slow learners, are studying "Birds" and are examining the wing structure of an actual specimen (dead, or stuffed). They discover and comment on the fact that the wing has long, strong feathers in order to carry the bird on their long flights. The children ask the name of the longest feathers, and the word Primaries is written on the board and clearly pronounced. For vocabulary enrichment, we discuss other first things called "Primary", "prime", and "primer."

Next, we noticed the shorter feathers, generally a bit different in color. Children always ask if they are called primaries; or they say, "What are these called?" The teacher answers, "Secondaries." They learn the meaning of the word; and we talk of secondary schools, second grade. In noticing the gay epaulets of the red-winged blackbird, the further question is elicited, "What are these called?" Then the word "Tertiaries" is taught with vocabulary enrichment. Children love to think they now know the Latin words "Primus, secundus, and tertius."
The sixth grade children thrill to think they can count to three in Latin! We draw a diagram of the wing, and label the three different kinds of feathers. Because the children feel very "grown-up", and oh! so thrilled at their success in understanding "such hard words," there are very few failures in spelling these three words even among retarded readers. Pride in achievement, joy in success, plus interest in the Science Unit, seems to provide the necessary incentive and we have the proper motivation.

**Factors in Motivation**

Davis, in Chapter 13 of *Psychology of Learning*, speaks of the factors which influence attention as (1) change. Attention in a classroom may be prolonged by changing materials, or by treating the same materials in a different way. Children enjoy finding pictures in magazines showing birds in various attitudes; boys bring in feathers, or collections of nests and the girls delight in making posters and room decorations. The words which have been taught, are thus presented again and again in many different ways, as they label the pictures in their notebooks.

Davis speaks of (2) intensity; and says that "size is an

---

important factor in attracting attention." This is especially true with slow learners. The diagram or outline on the board, or wall chart, seems to mean much more than small illustrations in the text. Teachers who can intensify the attention by rapidly illustrating on the blackboard, during the course of the lesson, are indeed fortunate.

Davis says that the Law of Frequency demands that in all learning situations, there should be opportunity for drill and review. Group contests, spelling matches between grades, or schools, and standardized tests (where they try to beat the "average grade-level" record), all offer a fine opportunity for both motivation and recall.

The Law of Recency says there should not be too long an interval between learning and review; and that when the responses are pleasant, there is a tendency to want to repeat, whereas, when the responses are unpleasant, there is a decided tendency to avoid! The unit, plus motivated activity, makes for pleasurable responses.

In presenting the unit, the teachers must see that every child sees the material on the board, in large letters, that the new word is seen and accurately observed in the text, or outside reading; and that we give children as many meaningful

1/ Robert Davis, op. cit., p.126.
2/ Robert Davis, op. cit., p. 126.
experiences as we can possibly squeeze into a crowded curric-
ulum. We must remember that low retention of impressions
comes because visual images are so easily misunderstood; and
auditory impressions are so easily distorted. Children are
not apt to be very conscientious in regard to observed and
inferred items.

Yoakam 1 speaks of the intrinsic method, as the specific
need for a skill which, naturally will cause a strong interest.
He speaks of "motivated practice" and suggests: (1) easy ex-
ercises in initial stages (therefore, interesting because of
success); (2) frequent testing for repetitive drill; (3)
show results of drill to stimulate improvement. Easy Science
exercises were prepared forming part of an integrated unit,
with frequent tests, and much repetition in the spelling in-
volved. Samples are included.

Freeman 2 says, "training must adapt itself to individual
differences." He goes on to say, "differences exist after
the same amount of practice, after the same type of teaching,
at the start of the lesson, and certainly at its conclusion."
He, therefore, thinks that training should be given in dif-
ferent amounts to these different children; that those who

1/ G.A. Yoakam and R.G. Simpson, Introduction to Teaching
and Learning, New York: MacMillan Company, 1934, Chapter X.
2/ Frank N. Freeman, How Children Learn, Boston: Houghton-
Mifflin Company, 1917, Chapter IX.
excel to a high degree may omit training, and that those who are inferior need much training. Individual differences in spelling can be met by having at least three levels: the fast, the average, and the slow pupils. These would be the three "group-levels" spoken of in the tests after ascertaining the group-learning rate* and the individual learning-rate.

In "team" work, there would be at least five, and possibly six teams. Since the teams are cross sections of the class, the better spellers can help the poorer, and drill provides the "repetitive experiences." The challenge of team spirit arouses enthusiasm and provides the "pleasurable" experiences. The opinion of the author is that an ounce of praise is worth of ton of blame in any market (no matter what the Federal Regulations may be!), and that "cum ita sint res," it behooves the teaching profession to provide interesting material, simple enough to allow success for slow learners, and challenging enough to provide an opportunity for enrichment for the superior student.

*Sample lessons in Spelling correlated with (1) Literature and (2) Science follow.
## TABLE XIII
### STANDARD SPELLING

<table>
<thead>
<tr>
<th>Girls' Names*</th>
<th>Raw C.A.</th>
<th>Raw Gr. C.A.</th>
<th>Raw Gr. C.A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 6, 1945</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. A--M*</td>
<td>10-9</td>
<td>43</td>
<td>11-4</td>
</tr>
<tr>
<td>2. B--F</td>
<td>10-8</td>
<td>47</td>
<td>11-8</td>
</tr>
<tr>
<td>3. C--T</td>
<td>12-1</td>
<td>30</td>
<td>10-3</td>
</tr>
<tr>
<td>4. D--F</td>
<td>11-7</td>
<td>42</td>
<td>11-3</td>
</tr>
<tr>
<td>5. E--T</td>
<td>11-5</td>
<td>30</td>
<td>10-3</td>
</tr>
<tr>
<td>7. G--R</td>
<td>12-1</td>
<td>15</td>
<td>8-7</td>
</tr>
<tr>
<td>8. H--F*</td>
<td>11-2</td>
<td>36</td>
<td>10-10</td>
</tr>
<tr>
<td>9. H--J*</td>
<td>11-4</td>
<td>42</td>
<td>11-3</td>
</tr>
<tr>
<td>10. L--T</td>
<td>10-11</td>
<td>54</td>
<td>12-3</td>
</tr>
<tr>
<td>11. M.E.M*</td>
<td>11-5</td>
<td>69</td>
<td>14-4</td>
</tr>
<tr>
<td>12. Mc-M*</td>
<td>11-2</td>
<td>54</td>
<td>12-3</td>
</tr>
<tr>
<td>13. Mc-F</td>
<td>12-2</td>
<td>31</td>
<td>10-5</td>
</tr>
<tr>
<td>15. M--G</td>
<td>11-6</td>
<td>32</td>
<td>10-6</td>
</tr>
<tr>
<td>16. N--A</td>
<td>11-3</td>
<td>43</td>
<td>11-4</td>
</tr>
<tr>
<td>17. C--R</td>
<td>12-8</td>
<td>46</td>
<td>11-7</td>
</tr>
<tr>
<td>18. P--T</td>
<td>11-3</td>
<td>57</td>
<td>12-6</td>
</tr>
<tr>
<td>19. R--Chas 10-11</td>
<td>27</td>
<td>10-0</td>
<td>4.3</td>
</tr>
<tr>
<td>20. T--S*</td>
<td>11-0</td>
<td>47</td>
<td>11-8</td>
</tr>
<tr>
<td>21. T--J</td>
<td>10-4</td>
<td>56</td>
<td>12-5</td>
</tr>
<tr>
<td>22. T--F*</td>
<td>12-3</td>
<td>69</td>
<td>14-4</td>
</tr>
<tr>
<td>23. W--R</td>
<td>11-1</td>
<td>50</td>
<td>11-11</td>
</tr>
<tr>
<td>24. W--S</td>
<td>11-8</td>
<td>34</td>
<td>10-8</td>
</tr>
<tr>
<td>25. S--B*</td>
<td>13-10</td>
<td>18</td>
<td>9-0</td>
</tr>
</tbody>
</table>

Number 25 is a "Special Student."

**Range** 15-69
**Median** 43
**Upper Q. 54-69**
**Lower Q. 15-30**

Test given after regular grade work had been given to all the children.

Test given the first day of school, 1945.
### TABLE XIII

**STANDARD SPELLING**

<table>
<thead>
<tr>
<th>January 2, 1946</th>
<th>March 4, 1946</th>
<th>May 1, 1946</th>
</tr>
</thead>
<tbody>
<tr>
<td>11-1 43 11-4 5.5 11-3 45 11-6 5.7 11-5 51 12-0 6.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11-0 49 11-10 6.0 11-2 52 12-1 6.3 11-4 55 12-5 6.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12-5 33 10-7 4.8 12-7 42 11-3 5.4 12-9 37 10-11 5.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12-0 48 11-9 5.9 12-2 51 12-0 6.2 12-4 51 12-0 6.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11-9 44 11-5 5.6 11-11 45 11-6 5.7 12-1 41 13-4 5.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11-5 43 11-4 5.5 11-7 49 11-10 6.0 11-9 47 11-8 5.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12-5 19 9-1 3.5 12-7 22 9-5 3.8 12-9 23 9-7 3.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11-6 43 11-4 5.5 11-8 48 11-9 5.9 11-10 48 11-9 5.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11-3 65 13-5 7.6 11-5 61 12-11 7.1 11-7 67 13-9 8.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11-9 69 14-4 8.7 11-11 69 14-4 8.7 12-1 73 15-6 9.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11-6 63 13-1 7.3 11-8 64 13-3 7.4 11-10 65 13-5 7.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12-6 35 10-9 4.9 12-8 35 10-9 4.9 12-10 39 11-0 5.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11-6 59 12-8 6.9 11-8 65 13-5 7.6 11-10 65 13-5 7.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11-10 43 11-4 5.5 12-0 45 11-6 5.7 12-2 50 11-11 6.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11-7 45 11-6 5.7 11-9 50 11-11 6.1 11-11 51 12-0 6.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13-0 61 12-11 7.1 13-2 63 13-1 7.3 13-4 60 12-9 7.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11-7 60 12-9 7.0 11-9 66 13-7 7.3 11-11 63 13-1 7.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11-3 30 10-3 4.5 11-5 40 11-1 5.3 11-7 43 11-4 5.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11-4 60 12-9 7.0 11-6 65 13-5 7.6 11-8 63 13-1 7.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-8 68 14-0 8.4 10-10 66 13-7 7.8 11-0 73 15-6 9.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12-7 74 16-6 10.0 12-9 75 16-0 10.1 12-11 73 15-6 9.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11-5 53 12-2 6.4 11-7 59 12-8 6.9 11-9 60 12-9 7.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12-0 42 11-3 5.4 12-2 43 11-4 5.5 12-4 (broken arm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14-2 17 8-10 3.3 14-4 23 9-7 3.9 14-6 23 9-7 3.9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Number 25 is a "Special Student."**

<table>
<thead>
<tr>
<th>Range 17-74</th>
<th>Range 22-75</th>
<th>Range 23-73</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median 48</td>
<td>Median 51</td>
<td>Median 56.5</td>
</tr>
<tr>
<td>Upper Q. 61-74</td>
<td>Upper Q. 65-75</td>
<td>Upper Q. 73-63</td>
</tr>
<tr>
<td>Lower Q. 17-42</td>
<td>Lower Q. 22-43</td>
<td>Lower Q. 47-23</td>
</tr>
<tr>
<td>(Teams)</td>
<td>(Teams)</td>
<td>Regular grade work</td>
</tr>
<tr>
<td>Test given after children had worked in groups at reading level</td>
<td>Test given after children were divided into teams.</td>
<td>Test given with daily study from spelling book.</td>
</tr>
<tr>
<td>Horizontal Division</td>
<td>Vertical Division</td>
<td>No groups nor teams.</td>
</tr>
</tbody>
</table>
STANDARD SPELLING EVALUATION

September - November, 1945. Regular Grade Work 20 points gain

Total Gain 6 points loss

November, 1945 - January, 1946. Group Work 156 points gain
Three Levels 0 points loss

Total Gain 156 points

January - March, 1946. In "5" Teams 86 points gain

Total Gain 6 points loss

March - May, 1946

Regular School Work 49 points gain

No Groupings 13 points loss

Total Gain 35 points

Regular School Work 50 points gain

Motivated Groupings 236 points gain

( B-Level Grouping Best )
CHAPTER VIII
STATEMENT OF PROBLEM AND METHODS OF EVALUATION
TEAMS VS. CLUBS

Literature Illustration for Team Work

Teams vs. Clubs.-- Problem: Do children work better in three groups at their own reading level by grade? Or do they respond to coaching from the captains and lieutenants of teams formed by cross sectioning the class? The "groups" (at grade reading levels) would form a horizontal division. The "teams" are composed of a cross section of the entire class, forming a vertical division. Thus, each team is composed of a superior student, or captain; a good student, or lieutenant; down to a private, generally the lowest in mental division. The captain or lieutenant coaches the weakest members of the team, because in the daily drill all marks are averaged to form a "team" score. It develops leadership and a more sympathetic understanding of the "other fellow's troubles."

How the Groups or Teams were finally measured.-- The gains were tabulated by a comparison of the scores earned by the various groups on the following standardized achievement
tests, shown on score charts, given at the beginning and the completion of study. The attempt is made to determine whether or not groups or teams produce greater homogeneity within the grade, and raises the average level of mental age and achievements on that certain grade level.

Samples of the units and tests used in both groups and teams are to be found on the following pages.

Children's favorite lessons, according to a survey, are listed. Illustrations are bound separately and are to be included in the Appendix of this service paper.

TEAM WORK

Vertical Division with Heterogeneous Grouping

Samples of Lessons voted as "favorites" in a survey taken of the lessons given while the pupils were in "team" formation.

I. Literature, Spelling and Vocabulary
   "The Hills at Home" (poem)

II. Social Studies "Life in the Middle Ages"

III. Science Units (for teams)
   (1) (a) White Tail Deer
       (b) White Tail Fawn
       (c) Vocabulary, suggestions and activities
       (d) Illustrations
   (2) Luna Moth
III. Science Units (continued)

2. Luna Moth
   (a) Notes
   (b) Spelling
   (c) Test made out by captain of one team
   (d) Illustrations

3. Fish (voted favorite lesson)
   (a) Information
   (b) Direction
   (c) Sample tests
   (d) Sample art "correlations"

Literature, Spelling, and Vocabulary (Team Work)

Sample Lesson

"The Hills at Home" (a poem)

In team work, the five captains checked the memorizing of the poem, the spelling lists, and the vocabulary assignments. In case of absence, the lieutenants replaced the captains; or in regard to special ability, such as spelling, the lieutenant often took over the drill. Special places in the assembly hall, principal's office, teachers' room, were assigned to the groups when devoted to research, or activities. This poem was voted the favorite for two successive years in sixth grade literature. The fact that a soldier wrote it, made it timely before VJ Day; but the fall of 1945
found a new group of children loving the lines. The activities were many and varied. We had radio skits from soldiers in Japan, Germany, who told of the different scenery and how they longed for home. The Art classes drew pictures of New England autumnal scenery, and the contrasting landscapes of tropical countries. The Science classes traced and colored the autumn leaves of various trees; and waxed and mounted real autumn leaves which were especially bright in color. The captains looked up other "homesick" poems, - "Oh! to be in England! now that April's here!"

The vocabulary classes were conducted like "Quiz" programs, - with "poignant" the $64.00 question! Three boys were delighted to find that their fathers were "caught" on the $64.00 question!

Judging from teachers' marks, the teams did better work than the reading group levels, on factual material. However, the comparisons show that in the Gates Reading Survey Test, the gains in speed were practically identical for groups or teams. The gains were more noticeable in groups for comprehension; the vocabulary showed more improvement under the competition of teams.
THE HILLS AT HOME

(from "War Poems by Our Armed Forces" - 1943)

Tell me, were the home hills near
As scarlet this September
As I, for autumn exiled here,
So poignantly remember?

Once let the leaves begin to turn
When days grow tawny-mellow,
And Lord! how they beautiful they burn —
Sun-copper and moon-yellow.

And are the home nights still and keen,
Now winter stars are climbing
Over the hills' November sheen
Of sharp and fragile riming?

Oh, let the home hills be as bright
As, far-sent, I have thought them
When dark days turn at last to light
And I come home to autumn.

Spelling

1. scarlet
2. September
3. autumn
4. exiled
5. poignantly
6. remember
7. tawny
8. mellow
9. beautiful
10. copper
11. keen
12. sheen
13. November
14. fragile
15. riming
16. far-sent
Vocabulary

1. What color is a real scarlet?
2. Which month is September? Why capitalized?
3. Why isn't autumn capitalized? When does autumn come?
4. Do you know of any people Hitler exiled? Have you heard of any other famous exiles? (Evangeline)
5. Here's the $64.00 question: What does poignant mean? How does it change it to add "ly"? Use it in a sentence.
6. What word is an antonym for remember?
7. What does tawny mean? What animal has tawny coloring?
8. How do we know when fruit is mellow? Is mellow a color? How does age mellow wood in furniture, pipes?
9. What word is an antonym for beautiful?
10. What color is copper? Have you ever seen a sunset on a hot day when it looked like a bright new penny?
11. What does keen really mean? How do we use it in slang?
12. What does sheen mean when I say "the sheen of satin"--the rustle of lace?
13. Why is November capitalized? Which month is it?
14. What word is an antonym for "fragile"? What does fragile mean? Where have you seen it?
15. What does the noun "tyme" mean? If we make a word by adding "ing" what would it mean?
16. What does the hyphen do to far sent? What do they mean together?
17. Find the parenthetical expression in verse number one.
18. Why is Lord capitalized in verse number two since it is not the beginning of the line?
19. What does it mean when the apostrophe follows hills?
20. What is the sheen that is fragile on the hills?
21. Find a parenthetical expression in verse number four.
22. Who wrote this poem?
23. What words tell you he has a good vocabulary?
24. Find two or three words which he has made up himself.
25. In what sort of climate do we think the author finds himself when he writes the poem?
26. What does he wish for the future?

On pages 115 and 116 is shown a sample lesson, on SKILLS--"Literature", including Spelling and Vocabulary questions on the poem, The Hills at Home.
CHAPTER IX
SOCIAL SCIENCE UNIT OF WORK FOR "TEAMS"

Unit of Work--Life in the Middle Ages
Sixth Grade

I. Desired Outcomes of the Unit (Aims)

A. Attitudes and Appreciations

To develop:

1. A sympathetic understanding of the manner in which the people of a shattered civilization tried to establish security and certainty, by linking the individual with others, preferably stronger than himself.

2. A growing appreciation of our dependence upon other people.

3. A keener appreciation of science, invention, education, and improvements of the last few centuries.

4. A greater appreciation of the "American Way of Life" (homes, food, schools, roads, sanitation).

5. A deeper appreciation of knighthood, and its strivings for better things.

6. A deeper appreciation of the contributions of...
A. Attitudes and Appreciations (continued)

To develop: (continued)

6. ... King Arthur, Richard, the Lion-hearted.
7. Attitudes of co-operation, courtesy, and tolerance in group activities.
8. Attitudes of self-reliance, initiative, courtesy, and good manners on the part of individuals.
9. An increased interest in literature.

B. Understandings

To gain better understandings of:

1. How the people in the Middle Ages supplied their needs.
   (a) organizing guilds
   (b) organizing transportation.
2. The fact that man is dependent upon the wise use of plants and animals for food, clothing and shelter.
3. The fact that, with their shattered civilization, the people in mediaeval times had a hard life and few opportunities for betterment, and therefore should not be judged too harshly for their code of living.
4. The fact that man uses ways of travel that are best suited to his environment.
5. The influence of religion on the lives of both knights and peasants.

6. The differences in mode of life in (1) town, (2) village, (3) castle.

C. Essential Abilities

To develop increased ability in:

1. Collecting and organizing subject matter.
2. Thinking and talking to the point during discussions.
3. Industrial and Art Activities
4. The creative Type of work—art, music, dramatization, and writing.
5. Reading—Oral and Silent.
6. The use of reference material to verify points in question.
7. Reading with definite questions and problems in mind.
8. Reading and interpreting maps.
9. Solving individual or group problems.
10. Using the library.
11. The use of tools.

To develop better habits of:

1. Planning before executing
2. Studying
3. Staying with a problem until it is finished.
4. Listening carefully to reports
5. Neatness and accuracy in all types of work
6. Courtesy extended from groups to groups, and from one individual to all others.
7. Cooperation
8. Observation
9. Thrift in use of time and supplies

II. Suggested Activities

A. Introduction of Unit

1. Show attractive pictures and discuss them.
2. Show helmet, battle axe, and coats of arms.
3. Read an interesting chapter from some colorful book with action and drama in it. (See bibliography).

B. Discussion

1. Concerning shelter:
   Living in (a) castle; (b) in a village; (c) in a town, and (d) in a monastery.
   Asking (1) of what materials made and why; (2) what furniture and its use.

2. Concerning the obtaining, preparation, cooking and eating of foods:
   What did they have on hand?
   How could they preserve it?
   What luxuries did they desire?
   Methods of cooking and eating
   Rules of etiquette.
3. Concerning dress:--
Find illustrations of the monks' habit, the knight's armor, the court lady's dress, dress of the serf and the serving wench.

4. Concerning their work:--
What did the serfs do?
What did the pages do?
What did the squires do?
What did the knights do?
What did the priests do?
What did the great ladies do?

5. Concerning recreation, education and religion:--
What games did children play?
What sports did older people enjoy?
Who possessed the learning in those days?
Find all you can about "life in a monastery"
What festivals were held?
What kind of music did they like?

6. Concerning transportation:--
What was the chief means of travel?
(a) In England?
(b) In Europe?
(c) In the Holy Land?
(d) Why were roads so poor?
7. Concerning communication:—
How was news sent from one castle to another?

8. Concerning people:—
What kinds of people would reside in:
(a) a castle (occupation)
(b) a monastery (occupation)
(c) a town (occupation)

9. Concerning trade:—
For what product were new trade routes opened?
Why did they need these products?
Why did they need new routes?
What did they use for money?
What were the dangers of the routes?

D. Reports
1. Book Reports
2. Oral reports on topics being read and discussed.
3. Outside Reading discussed
4. Group Activities reported upon by chairmen
5. Individual Projected explained

E. Research
1. Looking at pictures in the National Geographic Magazine
2. Looking at pictures in books
3. Looking at stereoscopic slides
4. Looking at actual specimens of armor, weapons, etc.
5. Looking in advertisements for illustrations to be pasted into notebooks

6. Drawing pictures to illustrate:
   (1) castle battlements
   (2) plan of castle
   (3) moat
   (4) drawbridge

F. Construction Activities:
   1. Constructing a cardboard castle
   2. Constructing a stained-glass window
   3. Making furniture for castle or cottage
   4. Making tools or weapons
   5. Making musical instruments
   6. Making dolls’ dresses to illustrate the ladies-in-waiting— the village maid.
   7. Constructing a mill-wheel
   8. Making clay caravans
   9. Making a collection of spices
   10. Making a map to show location of spices
   11. Making a map to show path of Crusades
   12. Making a map to show travel routes

G. Appreciation Activities
   1. Enjoying pictures of action and travel
   2. Enjoying poetry and song of the times
   3. Reading stories for pleasure
   4. Hearing reports
5. Listening to legends of the people
6. Writing and Presenting a Play
7. "Knights of the Round-Table Club"

H. Creative Activities
1. Dramatic Play - "From Page to Knight"
2. "A Tournament" (re-enacted)
3. "An Attack upon a Castle"
4. "A Feast in a Castle"
5. Battle between Saracens and King Richard's Forces described as over the radio of today
6. "The Hunt"
7. "A Pilgrimage"
8. Murals (simulating tapestries)
9. Tapestries (pressed crayonex work)
10. Poems to be sung by:
    (a) A Troubadour
    (b) A warrior
    (c) In the cloister
11. Collecting and assembling of miscellaneous pictures, products, or articles

I. Materials

Construction, Arts and Crafts
1. Branches, twigs, straw for village hut
2. Cardboard castles
3. Clay knights
4. Soap sculpture
5. Clay for Dishes, Boar's head, etc.

6. Wrapping paper for murals and large simulated tapestries

7. Oilcloth for maps

8. Beads for jewelry

Reading Materials

1. Bibliography

2. Magazines (St. Nicholas)

3. Texts—Histories, Geographies

III. Anticipated Outcomes of This Study in Terms of Usual School Subjects

A. Geographical Principles
   Climate, location, routes of travel, resources, environment and how they affected the people of England and Europe.

B. Industrial Arts Activities
   Clay, Soap, Cardboard, Oilcloth—tapestries and murals.

C. Arithmetic
   Measuring, trading, distances, making castle or monastery to scale.

D. Reading Activities
   Use of an index; use of references.

E. Language Activities
   Reports, poems, plays, songs, letters, and needed mechanics of writing and speaking.
F. Spelling
   All words misspelled by the children, or words asked for in their creative work.

G. Music and Rhythm
   Sons of the minstrels, battle songs, spiritual songs.

H. Nature Study
   Falcons, wild boar, deer.

I. Health
   Good posture (articles carried on head in the East)
   Disregard for present health rules
   Review Health Rules and give reasons for these rules.

J. Art Activities
   Color Schemes, designs, painting, drawing, Coats of Arms, Banners, Tapestries.
Planning the Unit

Outline of Medieval Life

I. The Fundamental Needs of Mankind

A. Food

1. Menus in Medieval Europe


B. Clothing (Ibid., pp. 170-173)

C. Shelter (Ibid., European Homes, p. 158)

II. Means of Supplying Man's Needs

A. Craftsmen's Guilds (Ibid., p. 244)

B. Organized Transportation (Ibid., pp. 321-22)

III. Travels

A. Travels of Marco Polo (Ibid., pp. 298-99)

B. The Crusades (Ibid., p. 117)

Questions to Ask for Discussion and Reference

1. What is a shrine? Do we have any shrines today? If so, where are they and who visits them?

2. Locate and describe American shrines.

3. Describe the dress of the pilgrims and their modes of traveling.

4. Why did the Christians make pilgrimages to the Holy Land? What people controlled the Holy Land in 1095? From whom had they taken it?
5. What was the religion of the Turks? In what countries is this the chief religion today?

6. What does respect for the rights of others mean? Did the Turks show respect for the rights of Christians?

7. In what way did Peter the Hermit really begin the Crusades?

8. Tell about the tragic end of Peter the Hermit and Walter the Penniless. Do you think they did more harm than good? Why?

9. How did Pope Urban, at the Council of Clermont, induce the nobles to go on a Crusade in 1095? What did he promise them?

10. What motives (other than religious motives) urged men to go on a Crusade?

11. Were the Christians who went on the Crusades obeying the words Christ taught? (Read an account of the capture of the Holy Land by the Christians).

12. Compare the methods of warfare used by the Crusaders with those of modern times.

13. What effect did the climate have on the Crusaders?

14. What was the condition of the roads?

15. Explain the badge of the Crusaders.

16. Tell of the rise of the Orders of Knights Templars and Knights Hospitallers.

17. Who started the Second Crusade? How?
18. Why did it fail?
19. How did jealousy among Christian rulers aid the Turks?
20. Why did Richard Third return home without accomplishing his purpose?
21. Why was Richard called the "Lion-Hearted"? Tell the class about his escape. 1/
22. What was the Children's Crusade? Why do you suppose that people let the children go? 2/
23. Read about the last great Crusader, St. Louis. 3/
24. How did the Crusades promote trade? 4/
25. List some important results of the Crusades.
26. List some things the Crusaders saw for the first time in the East.
27. What change did the invention of the printing press bring about in the monasteries?
28. Read about Mohammed and his creed (see bibliography).
29. Dramatize the ceremony of knighting a squire.
30. Why did so many people enter monasteries and nunneries in the Middle Ages? Why are there comparatively few today?


31. Did the Arabs object to the Christians making pilgrimages to the Holy Land? Read about Arab culture (see bibliography)

32. Read a translation of Chaucer's *Canterbury Tales.*

33. Read about the shrine of Saint Thomas. 1/

34. How did the Crusaders weaken feudalism in Europe? 2/

35. How long did the Turks hold Constantinople? 3/

36. Look up the word tolerant. If the Turks had been tolerant, what difference might there have been in the history of the Middle Ages?

37. What does co-operation mean? How did the lack of co-operation affect the success or failure of the Crusades?

38. Do you see how intolerance causes wars? What intolerance did Hitler practice?

39. What can we do to prevent a future war? How can we begin in Hardy School today?


IV. Living Conditions in the Middle Ages

A. Life in a Castle

1. Find a picture of a medieval castle and explain how it was built.

2. What training was necessary to become a knight, and how and where did the boys get the training?

3. Describe the various parts of the ceremony of knighting a squire.

4. Compare the knights of yesterday with the airplane pilots of today.

5. Describe the siege of a castle ("Ivanhoe", Chapters 19-25. See Bibliography).

6. List ten or more men of today who, you think, deserve the title of "Knight."

7. Has chivalry "gone out of style"? What relics still survive?

8. How did the ladies spend their time in the days of chivalry? Compare them with the independent women of today.

9. Plan a meal to be served in a castle. Name some inconveniences of those days that we do not have today. Name some helps in those days that we lack today.

B. Living Conditions in a Town
1. Why did the towns decay when the Teutons arrived? What built them up again? Why did the Teutons dislike cities? What have the Teutons done in this war to destroy cities?

2. What especial privileges did the town dwellers have?

3. Describe a medieval city.

4. Why were the cities always struggling with each other? What was the result?

5. Do we still have "apprentices"? If so, in what occupations and professions?

6. Find a picture of a medieval Fair. What is it like? 1/ (See bibliography)

7. Do we have purer drinking water than the water supply of the Middle Ages? Why?

8. What is a feud? Why were there so many feuds at this time?

9. Have you ever heard of any feuds in America? Where?

C. Living Conditions in a Village

1. In medieval times what idea was held of the divisions of the human race? How do you suppose such a belief arose? By whom was education spread at that time? 1/

2. Draw a diagram of a medieval village.

3. Compare the ways of cultivating the soil in the Middle Ages with modern ways. What is meant by "rotation of crops"? Which way is better? Why? 2/

4. Why did the peasants allow themselves to be oppressed for so long? 3/

5. Why were there no shops in the villages of the Middle Ages? Explain the reason for your answer.

6. Terrible plagues spread over towns at that time, killing thousands needlessly. Why do you think plagues spread so rapidly in those days? 4/

V. Amusements

A. Music and Minstrels 5/

B. Jugglers

C. Hunting 6/


4/ Louise I. Capen, op. cit., p. 533.

5/ Louise I. Capen, op. cit., p. 479.

V. D. Tournaments 1/

Compare the sports and games of the Middle Ages with ours. Do you think greater skill is required in our sports?

VI. Education

A. Knighthood - ref. "Knighthood" Life in Medieval Times Unit of Teaching Pictures, Picture Reference Library, Boston, Massachusetts.

B. Guilds

1. Do we have guilds today? What do we call them now, and how do they differ from the early organizations?

2. List some of the articles that you can buy in modern markets that you could not have bought in the Middle Ages. Why could you not have bought them?

3. Can you think of any articles made in the Middle Ages that are not made now? Why? 2/


5. Monasteries

1. Training of Monks ("Gabriel and the Hour Book")


2/ Louise I. Capen, op. cit., p.244.

C. Monasteries

2. Describe a monastery

3. Discuss the monks and nuns and the reasons why men and women chose that life.


4. Read about St. Benedict and the Benedictine Order.

5. Explain the vows taken by the monks and the novitiates.

6. The monks contributed two great services to education. Explain the importance of each.

Ref. Across the Ages, by Louise I. Capen, libraries, p. 503; knowledge confined to, p. 571; monastery schools, p. 513; humanism opposed, p. 504.

VII. Religion

A. Religious fervor of the Crusaders

Monastic orders

B. Cathedrals

VIII. Miscellaneous Information


3/ Louise I. Capen, op. cit., Index.
1. Vocabulary of the Middle Ages
   a. curfew—cover fire, and go to bed.
      During the Middle Ages, a bell was rung to tell the people when to stop work for the day.
   b. villain, formerly meant a peasant.
   c. Crusades comes from the word "crux" meaning a cross.
   d. Muslin is so named because it was made in Mosul.
   e. Morocco leather is named for the place where it is manufactured.
   f. Damask is named for Damascus.
   g. A pilgrim who brought back a palm leaf from the Holy Land was called a "palmer".
   h. Private dishes were rare. The people ate by twos from a "trencher". Explain our expression "a valiant trencherman."

2. Medical Milestones from Across the Ages by Louise I. Capen

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1096-1272</td>
<td>Crusades</td>
</tr>
<tr>
<td>1112</td>
<td>Plague in England</td>
</tr>
<tr>
<td>1136</td>
<td>Leper Hospital established in England</td>
</tr>
<tr>
<td>1172</td>
<td>Plague among troops of Henry Second in Ireland</td>
</tr>
<tr>
<td>1193-1197</td>
<td>Great Famine and Pestilence in England</td>
</tr>
</tbody>
</table>
1201 Plague in England
1257-1259 Famine Fever in England
1330 Introduction of gunpowder in warfare - end of feudalism
1348-1350 Black Death - the Great Epidemic - England
1472-1478 Plague in London
1493 Smallpox Plague in Germany
1517 Sore Throat Plague in Amsterdam (diphtheria)
1539 Influenza Plague (England and Europe)
1551 Influenza Plague (France)
1570 Plague in Europe
1613 Smallpox Plague (England and Scotland)
1661 Typhoid Fever Epidemic (London)
1665 Great Plague in London
1666 Great Fire in London destroyed infected areas.

Reference, Across the Ages by Louise I. Capen, p. 551, "Medieval Plagues".

How did these plagues reach England from the Far East?

Reference, Rats, Lice and History, by Hans Zinsser

Devils, Drugs, and Doctors, by Haggard

Mystery, Magic, and Medicine, by Haggard

What does "alliteration" mean? Give an illustration.

List some reasons why people in the Middle Ages could not conquer disease as we can now.

Make comparisons of conditions, then and now, in regard to sanitation and health. About how often, according to the "Medical Milestones" did these plagues occur?

What do we do now to avoid them?

How did the Bubonic Plague come from the East?

How did London finally get rid of the Plague?

What have you seen done, in Wellesley, which would make the town better as far as healthful living is concerned?

Do you know of anything more that should be done?
Tests for the Unit.  Multiple Choice

Sample:  Rome's greatest contribution to civilization was:  
        art, science, law, religion.

1.  The years between the fall of Rome and the 14th Century 
    are called the:  Golden Age, Middle Ages, Elizabethan 
    Age, Renaissance.

2.  The system of government in the 11th Century was called:  
        republic, empire, feudalism, democracy.

3.  The land belongs to the:  King, serfs, pages, nobles.

4.  Work on the manor was done by:  barons, priests, lords, 
        serfs.

5.  The knights lived in:  mills, monasteries, huts, castles.

6.  The customs and practices of the knights were called:  
        chivalry, monasticism, apprenticeship, seamanship.

7.  A popular sport was:  chariot racing, hawking, discus 
        throwing, tomahawking.

8.  A town with many privileges was called a:  commune, 
        fief, township, village.

9.  A group of tradesmen was called a:  union, guild, 
        committee, association.

10. The houses in the towns fostered:  good health, disease, 
        recreation, insulation.

11. The most powerful person in the 11th Century was:  
        King, Captain, Pope, Baron.
12. Those who gave their lives to the service of God were called: monks, pilgrims, lords, vassals.

13. A famous order of monks was founded by: Richard, Benedict, Hildebrand, Gulnar.

14. The learnings of the Greeks and Romans were preserved by: vassals, crusaders, serfs, monks.

15. About 600 A.D. there sprang up a new religion called: Buddhism, Mohammedanism, Judaism, Christianity.

16. The Arabs in the Holy Land were conquered by: Huns, Turks, Gauls, Irish.

17. The Holy Land is in: Palestine, Greece, Persia, China.

18. A holy spot is called a: monastery, tomb, shrine, church.

19. A trip to a holy place is called a: tour, journey, itinerary, pilgrimage.

20. The Christians had been mistreated in Jerusalem by the: Arabs, Chinese, Egyptians, Turks.

21. A crusade is a: war for a holy cause, capture of a church, revolt against the government, mutiny on the high seas.

22. Europeans were urged to go on a crusade by: Louis XII, Urban II, Gregory IX, Pope Pius.

23. The capital of the Eastern Roman Empire was: Constantinople, Antioch, Alexandria, Jerusalem.

25. The first Crusade was in: 1300, 1096, 1286, 1066.
26. The badge of the Crusaders was a: sword, uniform, lion, cross.
27. The Christian ruler of Jerusalem in 1099 was: Godfrey, John, Richard, Saladin.
28. The Holy Land was held for: 300 years, 50 years, a decade, 100 years.
29. Jerusalem was taken from the Christians by: Peter the Hermit, Louis IX, Saladin, Hildebrand.
30. While Richard was on a crusade, his throne was threatened by: Alexius, Henry, Alfred, John.
31. Frederick Barbarossa was a ruler of England, Sweden, Germany, France.
32. The Children's Crusade was: successful, disastrous, helpful, healthful.
33. An order founded to defend the cross was: Knights' Hospitallers, Knights Templars, Teutonic Knights, Crusaders.
34. An order founded to care for the sick was: Teutonic Knights, Arabian Nights, Knights Hospitallers, Knights Templars.
35. The last crusader was: Richard First, Louis IX, Marcus Aurelius, Philip Augustus.
36. The number of crusades was in all about: 8, 15, 5, 100.
37. The purpose of the Crusades gradually changed to:
   religion, trade, education, health.

38. Things we like, but can do without are called: necessities,
   needs, luxuries, essentials.

39. The most important result of the Crusades was: capture
   of Jerusalem, use of spices, caravans, growth of trade.

40. Trading paved the way for: explorations, war, feudalism,
    monarchy.

41. The great trading city of the Thirteenth Century was:

42. The "letting" of blood to cure a disease was done by:
   barbers, apprentices, minstrels, knights.

43. The revival of art and learning was called the:
   Golden Age, Dark Ages, Pre-Historic, Renaissance.

---

True-False Test

1. The Crusades started about fifty years before William
   the Conqueror invaded England.

2. Saladin was King of Egypt.

3. The capital of the Roman Empire of the East was Tyre.

4. The Mohammedans were infidels.

5. Philip Augustus was drowned on his way to the Holy Land.

6. The centre of the Catholic Church in the time of the
   Crusades was Rome.

7. The serfs accepted their lot without complaint.

8. Hildebrand was king of England.

9. The First Crusade was in 1096.
10. During the Middle Ages people believed their king was chosen by God.
11. Duke Godfrey was made ruler of Jerusalem.
12. The Children's Crusade was led by Stephen.
13. The Knights Hospitallers were organized to care for the sick.
14. Gunpowder was invented at the time of the Second Crusade.
15. There were twenty crusades in all.
16. A squire became a knight for having done some brave deed.
17. Hunting and hawking were favorite sports.
18. Monks devoted their time to work, prayer, and study.
19. A large city during the Middle Ages had about 5,000 inhabitants.
20. A pilgrimage is a journey to a holy place.
21. The peasants paid heavy taxes to their lord.
22. Some of the monks owned valuable property.
23. Feudalism was started for the protection of life and property.
24. Training for knighthood began at the age of ten.
25. A tenant's land was all in one piece.
26. The land of a lord was called a fief.
27. Watermelons and oranges are native to the United States.
28. Peter the Hermit was a wise leader.
29. A crusade is a war for a holy cause.
30. Glass was first made in France.
31. The pages studied reading, writing and arithmetic.
32. When a tenant died, he left his land to his son by will.
33. Carpets were unknown to Europeans in the 11th Century.
34. The lords lived in stone castles.
35. According to the law, all land belonged to the King.
36. A peasant could never become a knight.
37. At the age of fourteen a page became a squire.
38. The best farmers were the monks.
39. A guild was similar to a labor union today.
40. A boy studying to learn a trade was called a squire.
41. Disease was common in the early towns.
42. The market place was called a monastery.
43. A tournament was a hand-to-hand fight between knights on horseback.
44. The Christians treated the conquered Turks kindly.
45. The followers of Philip Augustus were called Saracens.
46. Peter the Hermit made careful preparations before he left.
47. Richard and Philip forgot their quarrels while they were fighting the Turks.
48. At the time of the Crusades learning had died out in the East.
49. Blondel was Richard's youngest brother.
50. We seldom use Arabic numbers today.
Matching Test

1. Urban II
2. Peter the Hermit
3. Knights Templars
4. Godfrey
5. Saladin
6. Stephen
7. Alexius
8. John Lackland
9. Leopold
10. Blondel
11. Frederick Barbarossa
12. Hildebrand
13. Knights Hospitallers
14. Philip Augustus
15. Richard I
16. Robin Hood

The Scourge of God
Duke of Austria
Pope during early Crusades
Christian ruler of Jerusalem
King of Egypt
Beginner of Crusades
Brother of Richard
Defenders of the Cross
Leader of the Children's Crusade
Emperor of Constantinople
Pope during later Crusades
King of England
Richard's Minstrel
Order who cared for the sick
Emperor of Germany
King of France
Head of the Turks
An outlaw in Sherwood Forest

What Do You Think?

1. Marco Polo wrote, "The city of Peking (China), has precious stones, pearls and spices in great abundance. It has vast quantities of gold. The entire roof of the ruler's palace is covered with gold." Would this description hold good today? Explain fully.

2. Three inventions of the Middle Ages are considered to have played an important part in history. They are:
   (1) The magnetic needle; (2) the use of gunpowder in warfare; (3) Printing and the manufacture of paper.

What phases of life have been affected most directly by these Inventions?
3. During the Middle Ages, the Saracens gave Europe new stimulation in agriculture. They used irrigation, unknown to Europeans. They taught Europeans to like asparagus, coffee, sugar, lemons, oranges and cotton.

Why were these things unknown in Europe?

4. Medieval towns had none of the comforts of modern cities. Narrow, crooked streets, if paved at all, were laid with cobblestones. Evil odors were smelt everywhere, even in high-class districts; watchmen with lanterns, guarded the streets at night. The rich had fine houses. The poor lived in filthy tenements. At night, shopkeepers fastened huge metal shutters over the front of their shops and bolted them.

What changes are there in life in Wellesley?

5. The statute of Winchester, passed by the Parliament, of Edward I of England in 1285, read, in part, as follows:

"For the greater security of the country the King has commanded that in great towns the gates be shut from sunset to sunrise; and henceforth, six men must watch at every gate. And, if any stranger pass by, he shall be arrested and delivered to the sheriff. And it is commanded that hedges be cut near the highways so that no man may lurk there to do harm to the passer-by."

Were people in cities in the Middle Ages safer than those in country districts? Are people in modern cities any safer than those dwelling in rural districts?
6. A chronicle written by a bishop in his notebook, during the Third Crusade, reads as follows: "The days become cold. The hail overturns our tents and beats upon us. We lost many of our horses. Storms rotted our salt pork and melted the biscuit. The soldiers' armor is covered with rust. Many fall ill for lack of food. But our hearts are filled with high hopes of recovering the Holy Sepulcher."

What sad facts about the Crusades can you see in the above quotation? Tell of the modern ways.

7. A strange crusade was made in the Thirteenth Century (1212). It was called the Children's Crusade. A young shepherd boy of France started it, and the movement spread to Germany. About 50,000 boys and girls, most of them under twelve years of age, joined this crusade. Some made their way over the Alps into Italy. Some reached the Mediterranean through southern France. Some actually embarked for Palestine, in trading vessels. Few returned to their homes. Many were killed, some died of starvation, some of diseases, and some were captured and sold as slaves.

Why was this crusade a very foolish undertaking?

8. When Charlemagne carried Christianity north of his kingdom into Saxon barbarian territory, he ordered his men to kill all who would not allow themselves to be baptized into Christianity. He is said to have massacred over 4,000 objectors in a single day.
Why did Charlemagne resort to such a cruel order?

Have you heard any stories like this today?

9. The knights of King Arthur's Round Table went in search of the Holy Grail (a cup from which Christ drank at the Last Supper) which had disappeared. Some knights left the search to turn to selfish amusements and pleasure. Of all the knights only one-Sir Galahad- was permitted to see it at close view.

Why was Sir Galahad the only one to see the Holy Grail?

10. Leprosy is a disease dreaded by mankind for thousands of years. During the Middle Ages, when the lepers wore hoods to hide their ghastly faces and rang a bell crying, "Unclean! unclean!" the disease was looked upon as fatal. Leprosy is still a disease menace in Hawaii and the Philippines. There is a leprosarium in Louisiana which belongs to the Federal Government. It cared for over 300 patients in 1938.

Where have you heard of lepers? Do you know the remedy which science believes will cure leprosy in time?

11. Law on feudal estates during the Middle Ages came to be recognized as "Might makes right." The feudal lord could hold court in which quarrels among his tenants were settled.

Why isn't it true that "Might makes right"?
12. Medieval towns had to struggle against feudal lords and kings for the privilege of self-government. Lords who went off as crusaders sometimes sold governing privileges to towns. Kings encouraged towns to seek freedom from feudal lords. Frequently towns forced kings to grant them concessions and charters and rights of self-government.

What do we mean by "self-government"? Do you know what a "charter" is? Where have you heard the term before?

(Queries from Across the Ages adapted and abridged for Grade Six use).

---

**Factual Test**

1. What is a crusade?
2. Describe the banner of the crusades.
3. What knights tried to help the sick and wounded?
4. Give two results of the Children's Crusade.
5. List three articles of food brought into Europe from the East at the time of the Crusades.
6. Write three facts about Richard the Lion-Hearted.
7. Write three facts about Richard's brother.
8. Tell three difficulties met by the knights of the Crusades.
9. What do you know about Marco Polo?
10. Name the three inventions of the Middle Ages which played a very important part in history. Which do you consider the most important, and tell why.
11. List three discomforts of the medieval town. Which do you consider the worst, and why?
12. What happened to strangers in the days of Edward I of England? Can you explain this?
13. Who started the Children's Crusade? About what time? How old were his followers? What happened to them?
15. What dread disease frightened people in the Middle Ages? What warning was given to the travelers to stay away?
16. What was the rule when a feudal lord settled a dispute in the Middle Ages?
17. How did the lords who went off to the Crusades raise money?
18. Who signed the Magna Carta?
19. Why?
20. Who signed the Atlantic Charter (Why?)
21. What did they call contagious diseases in the Middle Ages?
22. What dread disease was brought to Europe from the East?
23. How was it brought?
24. How was it stopped?
25. Explain the origin of curfew, and crusade.
Children's Bibliography


Baldwin, James, Story of Roland, New York: Scribners' Sons.


Beard and Bagley, Our Old World Background, New York: Macmillan Company.


Carter, Russell Gordon, King's Spurs, Boston: Little, Brown Co.

Cather, Katherine Dunlop, Castle of the Hawk, New York: Century Company.


Chaucer, Geoffrey, Canterbury Tales (done into prose by Eleanor Farjeon Hale).


Clay, Beatrice, Stories of King Arthur and His Round Table, New York: E.P. Dutton, 1913.


Doran, Dr. Knights and Their Days, London Richard Bentley, 1856.


Haaren, J.H. and A.B. Poland, Famous Men of the Middle Ages, New York: Charles Scribners Sons.

Hall, Jennie, Our Ancestors in Europe, Boston: Silver, Burdett Company.


Hartley, D., Mediaeval Costume and Life, New York: Scribners.


Hewes, Agnes Danforth, Boy of the Lost Crusade, Boston: Houghton, Mifflin Co.

--- , Swords on the Sea, New York: Knopf.


Kelty, Mary G., *Other Lands and Times*, Boston: Ginn and Co. (Unit 4, pp.311-375).


*Lighting the Torch*, New York: Longmans

*Out of the Flame*, New York: Longmans


--- *Heroes of the Middle Ages*, Boston: Houghton, Mifflin Co.


(The Court of King Arthur by W.H. Frost, and Mediaeval People by E.E. Power)
CHAPTER X
SAMPLE TEACHING UNIT--FISH

Many tests and illustrations of the work done by the "teams" are included in the Appendix.

Fish Unit

Minnows

Range: Found in shallow, fresh water all over the world.

Distinguishing features: small size, widely recognized as "shiners" because of the silvery flashes given out by the scales.

Use: Furnish food for larger fish and are also a sweet pan fish, though not very desirable because of the numerous small bones; excellent for live bait.

Facts: There are nearly 2000 species of minnows; yet all are very nearly alike, having soft fins and being covered with tiny scales. In the spring, the lower parts of the body, and the fins (lower surface) are often charged with bright red pigment.

Directions:

Be able to reproduce the fish diagram, labelling all parts correctly. List all the new words in your vocabulary,
and look them up in the dictionary. Learn to spell them. Study for a short test, and a spelling lesson, as well as a diagram of the fish (from memory). Every captain will check diagrams, vocabulary, spelling, before the final examination.

Test:--

Part I Spelling
Part II Diagram
Part III Test

Activities: Stories of fishing trips. Drawings for border in classroom. Sketches for use in Science notebooks as illustrations. Stories read aloud, selected from Huckleberry Finn, and other stories. (Samples of crayon work are included).

Fish test. (compiled by the captains of all teams, after considerable debate!)

Minnow Test

Part I

1. Where are minnows found?
2. What size are they?
3. Why are they called "shiners"?
4. Of what use are they?
5. How many species are there in all?
6. What color are the lower parts of body and fins in spring?

Part II

Draw and label the fish diagram.
Part III Spelling Words. (selected by captains)

1. distinguished
2. features
3. recognized
4. furnish
5. desirable
6. excellent
7. diagram
8. minnows
9. bait
10. species

(extra credit word)--

e.c. numerous
CHAPTER XI

LIMITATIONS OF STUDY AND
SUGGESTIONS FOR FURTHER RESEARCH

1. The Binet tests had not been given three of the children. The tests used were group tests, listed elsewhere.

2. The classes, although a fair sampling of the population, were small.

3. A surprisingly small amount of research has been devoted to the specific problem of determining the effect of "humor" upon the motivation of the pupils affected. A wealth of information, bearing directly upon this problem, would be appreciated.

4. Classification of pupils according to progress, or to chronological age, might increase homogeneity or heterogeneity in such important areas as interests, aptitudes, experiences and ambitions. It would, however, depend greatly upon the enthusiasm and the ingenuity of the individual teachers involved in the experimental teaching.

5. The leaders in "team" work are handicapped by tutoring the weaker pupils and thereby failing to roll up their
own individual scores. The teacher's reaction to the improved "morale" was immeasurable. The group work can better be measured and, therefore, it made a better showing of tangibles. The team work increased homogeneity by reducing the power of the leaders to run up large individual scores. The three level groups plan increased heterogeneity, in that the leaders in each level were working with others on the same approximate level and, therefore, no time was required for tutoring the weak. The boys preferred team work and the girls preferred group levels.

6. A noticeably small amount of research has been devoted to the specific problem of determining the effect of leadership upon the pupils affected. Much information which would shed light on this particular phase of motivation is needed.

7. Tests which would point out more accurately the pupil's ability to select and to evaluate the necessary materials are urgently needed.

In conclusion, Table XIV shows a comparison of some standard test scores with the class standing of the pupils tested. The tests used were: the Detroit Alpha test; the Otis Quick-Scoring Test, and the Henmon-Nelson Intelligence Test.
### TABLE XIV

**COMPARISON OF STANDARD TEST SCORES WITH CLASS STANDING**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Kgm Gr. 4</td>
<td>Detroit</td>
<td>Alpha</td>
<td>Raw</td>
<td>Stdg</td>
<td>Intel. Test</td>
<td>Raw</td>
<td>Stdg</td>
</tr>
<tr>
<td>1. A-M*</td>
<td>---</td>
<td>11-3</td>
<td>15-2</td>
<td>56</td>
<td>135</td>
<td>5</td>
<td>11-4</td>
</tr>
<tr>
<td>2. B-F</td>
<td>134</td>
<td>11-3</td>
<td>15-6</td>
<td>64</td>
<td>147</td>
<td>2</td>
<td>11-4</td>
</tr>
<tr>
<td>3. C-T</td>
<td>114</td>
<td>113</td>
<td>12-8</td>
<td>13-0</td>
<td>45</td>
<td>103</td>
<td>15</td>
</tr>
<tr>
<td>4. D-P</td>
<td>139</td>
<td>119</td>
<td>12-2</td>
<td>13-11</td>
<td>49</td>
<td>115</td>
<td>10</td>
</tr>
<tr>
<td>5. E-T</td>
<td>120</td>
<td>113</td>
<td>12-0</td>
<td>12-5</td>
<td>42</td>
<td>103</td>
<td>15</td>
</tr>
<tr>
<td>6. F-S</td>
<td>135</td>
<td>125</td>
<td>11-8</td>
<td>15-4</td>
<td>57</td>
<td>131</td>
<td>6</td>
</tr>
<tr>
<td>7. G-R</td>
<td>109</td>
<td>100</td>
<td>12-8</td>
<td>11-2</td>
<td>35</td>
<td>88</td>
<td>19</td>
</tr>
<tr>
<td>8. H-P*</td>
<td>116</td>
<td>110</td>
<td>11-8</td>
<td>12-3</td>
<td>41</td>
<td>104</td>
<td>14</td>
</tr>
<tr>
<td>9. H-J*</td>
<td>133</td>
<td>117</td>
<td>11-11</td>
<td>11-6</td>
<td>37</td>
<td>96</td>
<td>16</td>
</tr>
<tr>
<td>10. J-T</td>
<td>136</td>
<td>111</td>
<td>11-5</td>
<td>12-10</td>
<td>44</td>
<td>113</td>
<td>12</td>
</tr>
<tr>
<td>11. M-M*</td>
<td>145</td>
<td>131</td>
<td>11-11</td>
<td>16-6</td>
<td>64</td>
<td>138</td>
<td>3</td>
</tr>
<tr>
<td>13. McGP107</td>
<td>101 (absent)</td>
<td>(a)</td>
<td>12-8</td>
<td>10-6</td>
<td>43</td>
<td>82</td>
<td>17</td>
</tr>
<tr>
<td>14. M-J*</td>
<td>109</td>
<td>119</td>
<td>11-9</td>
<td>14-8</td>
<td>53</td>
<td>125</td>
<td>8</td>
</tr>
<tr>
<td>15. M-G*</td>
<td>119</td>
<td>112</td>
<td>12-1</td>
<td>12-8</td>
<td>43</td>
<td>105</td>
<td>13</td>
</tr>
<tr>
<td>16. N-A</td>
<td>137</td>
<td>137</td>
<td>11-10</td>
<td>15-6</td>
<td>58</td>
<td>130</td>
<td>7</td>
</tr>
<tr>
<td>17. O-R</td>
<td>99</td>
<td>95</td>
<td>13-2</td>
<td>12-0</td>
<td>40</td>
<td>91</td>
<td>18</td>
</tr>
<tr>
<td>18. P-T</td>
<td>134</td>
<td>11-10</td>
<td>13-6</td>
<td>47</td>
<td>113</td>
<td>12</td>
<td>11-11</td>
</tr>
<tr>
<td>19. R-C</td>
<td>117</td>
<td>11-7</td>
<td>10-10</td>
<td>33</td>
<td>94</td>
<td>17</td>
<td>11-7</td>
</tr>
<tr>
<td>20. T-S*</td>
<td>146</td>
<td>132</td>
<td>11-6</td>
<td>15-10</td>
<td>60</td>
<td>137</td>
<td>4</td>
</tr>
<tr>
<td>21. T-J</td>
<td>140</td>
<td>10-11</td>
<td>17-0</td>
<td>67</td>
<td>155</td>
<td>1</td>
<td>11-10</td>
</tr>
<tr>
<td>22. T-J*</td>
<td>96</td>
<td>107</td>
<td>12-10</td>
<td>15-4</td>
<td>57</td>
<td>119</td>
<td>9</td>
</tr>
<tr>
<td>23. W-H</td>
<td>141</td>
<td>110</td>
<td>11-8</td>
<td>13-0</td>
<td>46</td>
<td>114</td>
<td>11</td>
</tr>
<tr>
<td>24. W-S</td>
<td>108</td>
<td>114</td>
<td>12-3</td>
<td>13-8</td>
<td>48</td>
<td>113</td>
<td>12</td>
</tr>
<tr>
<td>25. S-B*</td>
<td>82</td>
<td>88</td>
<td>14-5</td>
<td>11-2</td>
<td>35</td>
<td>78</td>
<td>21</td>
</tr>
</tbody>
</table>

No. 25 is a Special Student.

- Range 78-155
- Median 113
- (24 pupils took test)

Pupil No. 24 took Binet test

Pupil No. 14 took Binet test
<table>
<thead>
<tr>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 3</th>
<th>Column 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value 1</td>
<td>Value 2</td>
<td>Value 3</td>
<td>Value 4</td>
</tr>
<tr>
<td>Value 5</td>
<td>Value 6</td>
<td>Value 7</td>
<td>Value 8</td>
</tr>
<tr>
<td>Value 9</td>
<td>Value 10</td>
<td>Value 11</td>
<td>Value 12</td>
</tr>
<tr>
<td>Value 13</td>
<td>Value 14</td>
<td>Value 15</td>
<td>Value 16</td>
</tr>
<tr>
<td>Value 17</td>
<td>Value 18</td>
<td>Value 19</td>
<td>Value 20</td>
</tr>
<tr>
<td>Value 21</td>
<td>Value 22</td>
<td>Value 23</td>
<td>Value 24</td>
</tr>
<tr>
<td>Value 25</td>
<td>Value 26</td>
<td>Value 27</td>
<td>Value 28</td>
</tr>
<tr>
<td>Value 29</td>
<td>Value 30</td>
<td>Value 31</td>
<td>Value 32</td>
</tr>
<tr>
<td>Value 33</td>
<td>Value 34</td>
<td>Value 35</td>
<td>Value 36</td>
</tr>
<tr>
<td>Value 37</td>
<td>Value 38</td>
<td>Value 39</td>
<td>Value 40</td>
</tr>
<tr>
<td>Value 41</td>
<td>Value 42</td>
<td>Value 43</td>
<td>Value 44</td>
</tr>
<tr>
<td>Value 45</td>
<td>Value 46</td>
<td>Value 47</td>
<td>Value 48</td>
</tr>
<tr>
<td>Value 49</td>
<td>Value 50</td>
<td>Value 51</td>
<td>Value 52</td>
</tr>
<tr>
<td>Value 53</td>
<td>Value 54</td>
<td>Value 55</td>
<td>Value 56</td>
</tr>
</tbody>
</table>

*Note: The table continues with similar entries.*
BIBLIOGRAPHY


Beal, Alice Burton, "An Evaluation of Techniques for Determining the Difficulty of Primary Grade Reading," Master's Thesis, Boston University, 1937.

Benedict, Agnes F., Children at the Crossroads, New York: Commonwealth Fund Division of Publications, 1930.


Center, Stella S., and Gladys L. Persons, "Teaching High School Students to Read" (a Study of Retardation in Reading), English Monograph No. 6, National Council of Teachers of English, 221 West 65th St., Chicago, Illinois.


Department of Supervisors and Directors of Instruction of the N.E.A., Thirteenth Yearbook, "Mental Health in the Classroom," 1941.

BIBLIOGRAPHY

Durrell, Donald D., Improvement of Basic Reading Abilities, New York: World Book Company, 1940.


Goggans, Sadie, Ph.D., Units of Work and Centers of Interest in the Organization of the Elementary School Curriculum, Contributions to Education, No. 803, New York: Teachers College, Columbia University, 1940.


BIBLIOGRAPHY


Hildreth, G., Teaching the Three R's, New York: Educational Publishers, 1935.


Kelty, Mary G., Teaching American History in the Middle Grades of the Elementary School, Boston: Ginn and Company, 1928.


Lane, Robert Hill. The Principal in the Modern Elementary School, Cambridge, Mass.: Riverside Press, 1944.


BIBLIOGRAPHY


McCallister, James M., Remedial and Corrective Instruction in Reading, New York: D. Appleton-Century Co., Chapter 4, p. 45.


Moede, W., Der Wetteifer, seine Structur und sein Ausmass, Volume 15, 1914, pp. 353-368.


Mossman, Lois Coffey, "Present Tendencies Relative to Lesson Planning," Teachers College, Columbia University, March, 1924.
BIBLIOGRAPHY


National Education Association, "Better Reading Instruction", 1935.


O'Leary, Margaret, "Study of Gains Made through Remedial Reading Instruction," Master's Thesis, Boston University, 1940.


Ruch, Mackenzie and McClean, People Are Important, Chicago: Scott, Foresman, 1941.

Simmons, Rachel McKnight (Ph.D.), "A Study of a Group of Children with Exceptionally High Intelligence Quotients in Situations Partaking of the Nature of Suggestion," Contributions to Education, No. 788 (sponsored by Leta S. Hollingworth), New York: Teachers College, Columbia University,

Smith, Mila B., One Hundred Ways to Teach Silent Reading, New York: World Book Company, 1937.

Sobel, Frances S., Ph.D., "Teachers' Marks and Objective Tests as Indices of Adjustment," Contribution to Education No. 674, Columbia University, 1936.

BIBLIOGRAPHY


<table>
<thead>
<tr>
<th>Date</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mar 4, 1947</td>
<td>Aug 1, 1953</td>
</tr>
<tr>
<td>Jul 21, 1949</td>
<td>Oct 2, 1950</td>
</tr>
<tr>
<td>May 5, 1950</td>
<td>Jul 1, 1951</td>
</tr>
<tr>
<td>Jul 26, 1950</td>
<td>Apr 24, 1951</td>
</tr>
<tr>
<td>Aug 18, 1950</td>
<td>Apr 24, 1951</td>
</tr>
<tr>
<td>Aug 1, 1952</td>
<td>Mar 29, 1952</td>
</tr>
<tr>
<td>Jul 17, 1952</td>
<td>Aug 8, 1952</td>
</tr>
<tr>
<td>Aug 15, 1952</td>
<td>Oct 24, 1952</td>
</tr>
<tr>
<td>Dec 1, 1952</td>
<td>Jan 5, 1953</td>
</tr>
<tr>
<td>May 3, 1953</td>
<td>May 3, 1953</td>
</tr>
</tbody>
</table>

Library Bureau Cat. No. 1137
Service Paper
Hesler, R.A.
1946

IA.
itted grouping in grades
6.