

RESEARCH BULLETIN

OF THE NATIONAL
EDUCATION
ASSOCIATION

VOL. XIII · No. 5
NOVEMBER · 1935

BETTER READING INSTRUCTION

A Survey of Research and Successful Practise

Published by the RESEARCH DIVISION of the
NATIONAL EDUCATION ASSOCIATION

1201 Sixteenth Street, N. W., Washington, D. C.

RESEARCH BULLETIN OF THE NATIONAL EDUCATION ASSOCIATION

Published five times each year
in January, March, May,
September, and November

President, AGNES SAMUELSON

Executive Secretary, WILLARD E. GIVENS

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Entered as second-class matter February 10, 1923, at the Post Office at Washington, D. C., under Act of August 24, 1912. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized February 10, 1923.

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FOREWORD

THE RESEARCH DIVISION of the National Education Association has not made it a practise to conduct investigations relating to the details of classroom procedure. Representing the entire profession, it has been concerned for the most part with problems of general educational policy, including such fields of inquiry as teacher personnel, school finance, and curriculum. However, the present bulletin on methods of teaching reading in the elementary grades, marks a commendable departure from this general policy. It deals with classroom procedures, but with procedures in a field broad enough to command the interest of all teachers directly or indirectly. Elementary teachers are concerned directly with problems of reading method. Those who teach at higher grade levels see their work conditioned daily by the reading habits which their pupils have acquired.

Teachers in the elementary school are searching constantly for better methods of teaching reading. Whenever the occasion is presented, they express strong interest in their work in this subject and genuine concern about problems of reading instruction. The following questions, taken from teachers' actual inquiries, are typical:

- How can children be kept interested in learning to read?
- How can pupils be trained to make regular and rhythmic eye-movements?
- What is the best method of teaching phonics?
- How can pupils be taught to grasp the central thought of a paragraph or selection?
- How can rate of reading be increased?
- Where can I get references to help me find interesting materials?
- What are some good ways of teaching children to read with good expression?
- How can lip movement be eliminated?
- How can drill be made interesting to children?

This issue of the *Research Bulletin* offers help on questions such as these. It is primarily a teaching handbook, suggesting appropriate objectives, materials, and procedures. It does not always answer the question: What is the *best* way? But it suggests one or more effective ways to attack many of the most difficult teaching problems. In addition, the bulletin is a yardstick with which teachers can evaluate their own practises. They can use it to compare their procedures with those followed by a group of highly competent teachers. They can consult it to discover wherein their methods do, and do not, conform with practises recommended on the basis of research findings. It will justify its existence if it serves only to stimulate this wholesome type of self-criticism.

Altho addressed specifically to teachers of reading in the elementary grades, the bulletin should be helpful also to supervisors and administrators, in developing and evaluating their programs of reading instruction. It is well adapted to use in teacher-training classes, for it is not only a treatise on method but also a guide to the most helpful literature on reading instruction.

WILLARD E. GIVENS, *Executive Secretary,*
National Education Association.

Introduction

The ability to read is a basic accomplishment scarcely less important for a child in the modern world than learning to walk and talk. The social order as it exists today relies on reading more than we often realize. Deprive mankind of the ability to read and all written records become useless. Without it, property rights, contracts, and every other social and economic agreement can be attested only by word of mouth. Without it literature becomes meaningless, history is legend, and science an occult mystery passed on from master to apprentice.

Whether the process of learning to read is "the scourge of infancy" as Rousseau termed it in his day, or an interesting and delightful adventure, depends largely on how it is taught. In the hands of an artist teacher, reading is in truth a magic carpet, introducing pupils to strange regions and new experiences while they are in school and becoming a source of lifelong satisfaction and enjoyment. Poorly taught, reading is a disagreeable school task, to be laid aside as quickly as possible when school days are over.

All too often reading instruction is of the latter type. It is estimated that the "reading public" consists of not more than fifty million people out of nearly twice that many old enough to have graduated from the elementary school. In a democracy, especially, this situation is serious. For altho reading is not a cure-all, we need not expect to manage public affairs intelligently until we as a people read more extensively and more efficiently than at present. The good citizen must be able to read rapidly and well in order to keep abreast of current happenings, in order to take full advantage of an ever-growing store of recorded thought and experience.

Reading has long been regarded as the heart of the curriculum, and today, more than ever before, efficient reading instruction is a responsibility of first importance in every school. Children must be taught to read better, in view of the larger demands for reading which now confront us. They must acquire the ability to read without waste of time and energy, for there are many other activities which also must find a place in an already crowded curriculum.

During the past few years rapid strides have been made in improving teaching methods in this field; but further progress can be achieved. Furthermore, the best classroom practises need to be adopted more widely than at present.

The Present Study

Purpose and scope of this bulletin—This study is concerned with the problem just mentioned; that is, it seeks to encourage wider use of effective classroom procedures. It examines the problems which teachers find most troublesome and when possible offers help in their solution. It draws upon two sources of information. *First*, it reviews the practises of a group of unusually successful teachers, not on the assumption that these practises are faultless, but because they represent a high type of reading instruction whose practical value has been demonstrated in actual classroom situations. *Second*, to support and supplement this summary of progressive practise, the bulletin brings together important research findings, and recommendations from the general literature on reading instruction.

Reading instruction covers such a broad field that certain arbitrary limits have been fixed for this study. First of all, the inquiry is limited to reading instruction in the first six grades, the field of elementary education common to schools organized under the 8-4, the 6-3-3, and other plans. Teachers in Grades VII and VIII, or in junior high schools, should find the bulletin helpful as a background for their work. They will find in it, also, practises as appropriate for the grades they are teaching as for the earlier grades. But, of course, teachers in grades beyond the sixth will need to rely heavily on other sources, which deal specifically with reading instruction at the junior high-school level. In the second place, this study is limited to regular class instruction. Diagnosis and special remedial teaching are important parts of the work of nearly all teachers of reading, but it did not seem possible to give adequate consideration to these problems in the present investigation.

The inquiry relating to successful teaching practises—As a first step in selecting a group of teachers whose work in reading is outstanding, thirty-five deans and professors of education, including a number of the recognized authorities on reading instruction, and all the state superintendents and commissioners of education were asked to suggest a few of the schools or school systems which, to their knowledge, were doing unusually good work in reading. The superintendents and supervisors in the schools recommended were then informed of the plan of this study and were asked for assistance in collecting the data. Cooperation was obtained from 203 schools or school systems. A questionnaire was then submitted to the supervisory officer in charge of reading instruction in each of these schools, inquiring into administrative and supervisory practises affecting reading instruction and asking for supervisors' opinions with reference to a few important teaching problems. In addition, each supervisor was asked to select a few of the most efficient teachers in the school or school system—from one to three at each grade level, depending on the size of the school system—and to distribute to them a questionnaire for teachers. This questionnaire, relating to classroom practises, was filled out by the teachers thus selected and returned to the Research Division of the National Education Association.

The school systems participating in the study represent forty-three states. Nearly four-fifths are city school systems; the remainder, rural, with the exception of ten laboratory schools or training schools in connection with departments or schools of education. Of the reports from cities, about one-third are from cities over 100,000 in population, one-fourth from cities 30,000 to 100,000, and the remainder from

smaller cities. Table 1 shows the number of reports tabulated from teachers in each grade, and indicates the level of training and experience of the 1527 teachers who cooperated.

Altho there is every reason to believe that those who participated in this study have reported more effective reading practises than those employed in the average school, no claim is made that they are the nation's most efficient teachers and supervisors. There may be teachers whose work is more effective than that of any member of this group; there are probably hundreds whose methods compare favorably with those reported here. Furthermore, this bulletin does not attempt the difficult, if not impossible, task of selecting best practises from the various ones reported. Instead it deals with averages, percents, average ranks, and other group measures, even tho this plan tends to feature the work of the average member of *this group* of outstanding teachers. The work described is not represented as the ideal, but rather as practical reading instruction of superior quality.

The bulletin emphasizes, perhaps more than it should, the formal aspects of reading instruction. It does not reflect as clearly as might be desired the recent tendency to base reading instruction on children's experiences and to integrate the reading program with other pupil activities. The reason for this emphasis is clear. The questionnaire method lends itself best to the description of practises that are to some extent uniform. It is not well adapted to the description of any teaching program in which formal instruction is minimized, such, for example, as a reading program which develops the necessary habits and skills by making reading an essential part of pupil activities in other subjects or fields of interest.

TABLE 1.—NUMBER OF REPLIES AT EACH GRADE LEVEL AND THE AVERAGE TRAINING AND EXPERIENCE OF THE 1527 TEACHERS REPORTING

Grade level	Number of teachers	Average number years' training beyond high school	Average number special courses taken in the teaching of reading	Average number years' teaching experience
1	2	3	4	5
I.....	288	3.1	2.9	10.8
II.....	260	3.1	2.7	8.8
III.....	270	3.0	2.3	7.7
IV.....	225	3.1	1.9	6.8
V.....	229	3.1	1.9	6.6
VI.....	255	3.2	2.1	6.7

The survey of the literature on reading instruction—To supplement the findings of the questionnaire study outlined above, a comprehensive review was made of books and articles relating to reading instruction in the elementary schools. Special attention was given to research studies, but the recommendations and suggestions given in general treatises on reading method were also noted. Table 2 suggests the scope of this analysis and shows, in five-year periods, when the various books and articles appeared. The increase in the number of titles for each five-year period indicates a growing interest in reading instruction. The difference is too large to be accounted for wholly by improvements in bibliographic service during the same period.

TABLE 2.—APPROXIMATE DATE OF PUBLICATION OF THE 1356 REFERENCES CONSULTED

Period	Number of titles
1	2
Prior to 1900.....	23
1901-1905.....	8
1906-1910.....	16
1911-1915.....	58
1916-1920.....	143
1921-1925.....	326
1926-1930.....	457
1931-1935 (incomplete for 1935).....	325
Total.....	1356

It is believed that the findings and recommendations cited in this bulletin are among the most important and most practical ones from the literature on reading. Nevertheless, they should not be accepted uncritically. The problem of selection has been a difficult one, and a considerable amount of adaptation and interpretation has been unavoidable. Moreover, the studies themselves are subject to certain limitations. Many of the suggestions of authorities on reading are based on observation, experience, and opinion; many research studies are inadequate or inconclusive.

Organization of the bulletin—An outline of the general objectives of reading instruction in the elementary grades forms the final part of this introductory statement. The next section of the bulletin deals with teaching reading to beginners, setting forth specific aims,

and describing various classroom activities and teaching practises. Then follows a comparative analysis of teaching methods in the various grades, intended to serve not only as a guide to appropriate procedures in a particular grade but also as a progress chart, giving teachers perspective with reference to the relationship between their own work and that of others. The remaining sections deal with the materials of instruction, the measurement of reading achievement, and the administration and supervision of the reading program. A general overview of the study is provided by the brief summary of findings and recommendations given on p. 324-25.

Use of the bulletin—Students and teachers in service who have made no extensive study of reading problems should find this bulletin helpful as an introduction to reading methods. But it attempts to offer more than an introductory presentation; it has been prepared as a handbook for teachers to use in planning a year's work, in selecting appropriate materials and procedures from day to day, and in evaluating their work in reading. It is a source of ready reference for administrative and supervisory officers concerned with the improvement of reading instruction, and for curriculum committees at work on courses of study in reading. Each section of the bulletin might well serve as the basis for study and discussion in one or more faculty meetings. The references listed at the end of each section and in the footnotes can be used to locate quickly most of the best references available on almost any phase of elementary reading.

In order to make the bulletin as helpful as possible in individual and group study, certain study helps have been prepared for use with it. These include: (1) a list of suggested study activities for groups of teachers and for individuals, (2) a series of topics suitable for talks, panel discussions, or special study, (3) a number of questions for study and discussion based on each section of the bulletin, and (4) a list of problems on which research is needed. Bibliographies are also available on almost any special problem such as "Reading Readiness." The study helps or special bibliographies will be supplied on request by the Research Division, National Education Association, 1201 Sixteenth St., Washington, D. C.

The General Objectives in Elementary Reading

The broad objectives of reading instruction fall into a simple classification when approached from the pupil's point of view. His purpose is twofold: (1) to learn to read; and (2) to read to learn. Of course, when reading is properly taught, the child pursues these objectives simultaneously. From the beginning he acquires rich and varied experience thru reading and all thru his school career he learns to read more effectively.

Four growth stages—To reach these goals, the pupil, during his elementary-school career, passes thru four rather definite stages of growth, periods which cannot be rigidly defined or taken as inflexible divisions of the teaching program, but which may be used as helpful teaching guides.¹ They are:

1. *The preparatory period* (kindergarten and early part of the first grade) to provide the child with whatever background experiences and vocabulary training he needs before reading instruction begins.

2. *The period of initial instruction* (first grade) in which the child is introduced to reading as a thought-getting process and learns to read independently simple passages in primers or first readers.

3. *The period of rapid improvement in reading ability* (normally in Grades II and III) distin-

guished by the establishment of correct eye-movement habits, rapid growth in word recognition, and marked improvement in all the attitudes, habits, and skills used in oral and silent reading.

4. *The period of reading to learn* (Grades IV, V, and VI) in which the pupil cultivates a variety of reading interests and tastes, begins to evaluate what he reads, further improves his basic reading habits, learns to find and use books effectively, and uses reading to extend and enrich his experiences.

There is considerable overlapping in these periods. During each one, teachers must strive to refine and perfect the habits and skills developed in the last and lay the foundations for the growth which is to follow. Moreover, in any class group there will be pupils representing two, or even three, different stages of progress whose special needs and interests must be recognized. Again, the individual pupil may be at one stage of advancement in one phase of reading and at different stages of progress in other phases. Yet these growth periods indicate in broad outline the major emphasis in correct reading instruction.

The next section of this bulletin is concerned with reading instruction during the first two stages of growth. The remaining sections apply to teaching practises in all the elementary grades, but more particularly to those followed during the third and fourth growth periods.

Selected References on the Objectives of the Reading Program

1. ANDERSON, CHARLES J., and DAVIDSON, ISOBEL. *Reading Objectives*. New York: Laurel Book Co., 1925. Ch. II, "The Objectives of Reading Instruction," p. 11-25.
2. BRUECKNER, LEO J. "The Analysis of Skills in Reading." *Elementary English Review* 5: 109-12; April, 1928.
3. CUTRIGHT, PRUDENCE, and RIEDELL, ADALINE. "A Survey of Primary Reading Activities." *Elementary English Review* 8: 54-59; March, 1931.
4. DOLCH, EDWARD W. "Goals in Intermediate Reading." *Elementary School Journal* 35: 682-90; May, 1935.
5. GIST, ARTHUR S., and KING, WILLIAM A. *The Teaching and Supervision of Reading*. New York: Charles Scribner's Sons, 1927. Ch. II, "Reading Objectives and Their Attainment," p. 11-47.
6. NATIONAL SOCIETY FOR THE STUDY OF EDUCATION. "Essential Objectives of Instruction in Reading." *Report of the National Committee on Reading*. Twenty-fourth Yearbook, Part I. Bloomington, Ill.: Public School Publishing Co., 1925. p. 9-19.
7. SMITH, NILA B. *American Reading Instruction*. New York: Silver, Burdett and Co., 1934. 287 p.
8. SMITH, NILA B. "Functional Reading Objectives." *Educational Method* 12: 427-32; April, 1933.

¹ Adapted from: National Society for the Study of Education. *Report of the National Committee on Reading*. Twenty-fourth Yearbook, Part I. Bloomington, Ill.: Public School Publishing Co., 1925. Ch. 3, p. 21-73. The Committee also recognizes a fifth growth period identified with Grades VII to XII, a period for the refinement of specific attitudes, habits, and tastes. Teachers in grades beyond the sixth should consult the yearbook for further information about appropriate aims, materials, and teaching procedures.

Laying the Foundations in Reading

Practises in the teaching of reading during the preparatory period and the period of initial instruction are matters of direct and immediate concern to teachers in the kindergarten and in the primary grades. Indirectly, these practises concern other teachers as well, for they determine in large measure the reading achievement which pupils later attain.

The Preparatory Period

Specific aims—The same national committee which defined the general objectives of reading instruction in terms of growth periods also suggested the specific aims appropriate for each period. According to their analysis, the child during the preparatory period should acquire:

1. Wide experience, along the lines of his interests; experience which will enable him to understand the stories and activities about which he will read.
2. Reasonable facility in the use of ideas, in conversation, and in doing simple reasoning.
3. Sufficient command of simple English sentences to speak with ease and freedom.
4. A relatively wide speaking vocabulary.
5. Accuracy in enunciation and pronunciation.
6. A genuine desire to read.¹

Use of a pre-primer period—Altho the development of reading readiness is one of the major purposes of kindergarten training, first-grade teachers also are interested in the problem, for often they must delay formal instruction for a while and encourage development along the lines indicated above. In many cases children enter the first grade with no kindergarten training. Other pupils have had a certain amount of kindergarten training, but still are not ready to learn to read. Ninety-five percent of the first-grade teachers who responded to the present inquiry into the classroom practises of successful teachers make use of a pre-primer period to assure reading readiness. The length of the period varies with the needs of the pupils; sometimes it lasts only a few days, sometimes several weeks.

Activities of the pre-primer period—A few of the important activities engaged in by teachers and pupils during the pre-primer period are listed below, arranged according to frequency of mention in reports from the 288 successful first-grade teachers who cooperated in this study.

1. Providing various experiences as a basis for stories; e. g., trips and excursions, interesting toys, pets, parties, and activity projects of various types.
2. Making charts about children's own experiences.
3. Games to develop word recognition.
4. Use of action words and sentences.
5. Matching words with pictures and objects.
6. Story telling.
7. Display and discussion of pictures.
8. Dramatization.
9. Use of workbooks and seat work of other types.
10. Making booklets.
11. Learning the names of labeled objects in the room.
12. Learning nursery rhymes.
13. Following printed directions.
14. Reading to children.
15. Drawing and handwork.
16. Singing and rhythm games.
17. Informal conversation and free play.
18. Flash-card exercises.
19. Looking at books in the "reading corner."

This list would have to be extended greatly to include all the activities mentioned in the questionnaire replies. Many related activities, and numerous variations and adaptations, are suggested by these general categories.

When reading instruction should begin—One of the crucial issues in first-grade teaching is the question of when to introduce the children to reading. The teacher must be able not only to cultivate reading readiness thru appropriate experiences and activities, but also to determine accurately when the pre-primer period has served its purpose. Numerous suggestions on how to determine reading readiness are available in books and articles on primary reading.² In general they correspond

¹National Society for the Study of Education. *Report of the National Committee on Reading*. Twenty-fourth Yearbook, Part I. Bloomington, Ill.: Public School Publishing Co., 1925. p. 27.

²See especially: National Society for the Study of Education, *op. cit.*, p. 27. ¶ Holmes, Margaret C. "Investigation of Reading Readiness of First Grade Entrants." *Childhood Education* 3: 215-21; January, 1927. ¶ International Kindergarten Union (now the Association for Childhood Education). *Points of View on the Problem of Reading Readiness*. Washington, D. C.: the Union, 1929. ¶ Clark, Hazel, and Shank, Spencer. "Supervising a Reading Readiness Program." *The Principal and Supervision*, Tenth Yearbook. Washington, D. C.: Department of Elementary School Principals, National Education Association, 1931. p. 460-70.

to the practises listed in Table 3 based on reports from 288 successful first-grade teachers in reply to the question, "How do you determine when a child is ready to read?" Among the definite symptoms which teachers may watch for are the following:³

Attitudes:

- Joy in the use of books.
- Sense of responsibility toward group activities; spirit of cooperation.
- Carefulness in handling books; respect for other people's books.
- Interest in the environment of home, school, and community.
- Realization of the pleasures and values found in reading.
- Self-reliance; little need of encouragement.
- Persistence in carrying out activities begun.

Knowledge:

- Rich fund of meanings related to child interests.
- Knowledge of several simple stories, some folklore, and many nursery rhymes and poems.
- An adequate vocabulary.

Abilities:

- To express meanings or desires in good oral sentences.
- To listen attentively to rhymes and stories and comprehend them.
- To follow a line of thought.
- To retell a story told or read to the group.
- To recall experiences.
- To repeat brief rhymes or messages correctly.
- To supply missing words in familiar rhymes and stories.
- To sense emotional coloration in stories heard.
- To anticipate what comes next in stories.
- To carry on activities that will develop reading interests.
- To dramatize simple stories.
- To follow oral directions.
- To classify pictures or other objects.
- To recognize and distinguish forms.
- To discriminate between sounds.
- To recognize reading situations—signs, labels, names of objects, own name, titles of pictures, etc.
- To handle books properly, turning the pages with care.

It is generally agreed that reading instruction should be postponed until the child's mental age is at least six or perhaps six and one-half years. It is important, too, that he be free from defects of vision, or hearing. Several good tests of reading readiness are available, some measuring the child's range of information and experiences, others his ability to distinguish differences in word-form, and to follow directions.⁴ Intelligence tests for preschool children also, such as the Pintner-Cunningham and others of similar type, are useful in determining children's mental maturity. Smith found that word-matching ability was an excellent criterion of readiness, showing a correlation of .87 with the achievement made by 200 first-grade pupils.⁵ Nice emphasizes length of children's sentences as a criterion of maturity.⁶ She suggests that 30 to 100 samples of children's sentences be taken, and the average number of words per sentence be used as one indication of maturity.

TABLE 3.—METHODS OF DETERMINING READING READINESS AS REPORTED BY 288 SUCCESSFUL FIRST-GRADE TEACHERS

Evidence considered	Number of times mentioned	
	1	2
Interest (pretending to read; looking at pictures; children's inquiries; etc.)		189
Reading readiness test results		54
Mental age		43
Ability in oral expression		42
Sufficient background; adequate range of experiences		35
Ability to match words		17
Chronological age		14
Physical condition (including muscular control)		14
Kindergarten teachers' judgments		8
Ability to concentrate		7
Social adjustment		5

³ Adapted from: U. S. Department of the Interior, Office of Education. *The Activity Program and the Teaching of Reading*. Bulletin, 1931, No. 2. Washington, D. C.: Government Printing Office, 1931. 95 p. Also, Lee, J. M.; Clark, W. W.; and Lee, Doris M. "Measuring Reading Readiness." *Elementary School Journal* 34: 656-66; May, 1934.

⁴ Among the readiness tests available are: *The Betts Ready to Read Tests* obtainable from the Keystone View Co., Meadville, Pa. *The Metropolitan Readiness Test*. World Book Co., Yonkers-on-Hudson, New York. *The Lee-Clark Reading Readiness Test*. Southern California Book Depository, Hollywood, Calif. *The Minneapolis Reading Readiness Scales*. Minneapolis Public Schools, Curriculum Department. *Reading Aptitude Tests* (by Marion Monroe). Houghton Mifflin Company, Boston, Mass. *Reading Readiness Chart*, a diagnostic chart accompanied by definite teaching suggestions: Hahn, Julia H. *First Grade Manual To Accompany the Child Development Readers*. Boston: Houghton Mifflin Company, 1935. p. xx-xxvi.

Two other tests are described in: Berry, Frances M. "The Baltimore Reading Readiness Test." *Childhood Education* 3: 222-23; January, 1927. *Deputy, Erby C. Predicting First-Grade Reading Achievement*. Contributions to Education, No. 426. New York: Teachers College, Columbia University, 1930. 55 p.

⁵ Smith, Nila B. "Matching Ability as a Factor in First Grade Reading." *Journal of Educational Psychology* 19: 560-71; November, 1928.

⁶ Nice, Margaret M. "Length of Sentences as a Criterion of a Child's Progress in Speech." *Journal of Educational Psychology* 16: 370-79; September, 1925.

The Period of Initial Instruction

Specific aims—During the initial period of reading instruction rapid progress should be made in:

1. Associating meanings with written or printed symbols.
2. Developing a thoughtful reading attitude.
3. Interpreting simple passages, thus securing new experiences thru reading and enlarging the meanings of familiar words.
4. Acquiring a sight vocabulary.
5. Developing independence in the recognition of simple but unfamiliar words.
6. Establishing correct basic habits, such as speed and accuracy in word recognition, a wide span of recognition, regular progress along the lines, and accurate return sweeps of the eyes from the end of one line to the beginning of the next.⁷

Abilities developed in first-grade classes—

More than 50 percent of the first-grade teachers participating in the present study make a conscious effort to develop the specific abilities listed in Table 4. All except the last ability listed are goals of achievement in more than three-fourths of the classrooms.

TABLE 4.—SPECIFIC ABILITIES USED AS DEFINITE OBJECTIVES BY 288 SUCCESSFUL FIRST-GRADE TEACHERS

	Percent of teachers	
	The ability to:	
	1	2
Recognize words in groups; i. e., in phrases or thought units.....		96.5
Recognize both words and word-groups more quickly.....		95.1
Follow printed directions.....		87.8
Recognize words of which the pupil already knows the meaning.....		86.5
Get the meaning of new words from context.....		83.7
Find the answer to fact questions.....		75.3
Observe punctuation marks.....		52.4

Teaching emphasis—Phases of reading instruction emphasized by the same group of teachers afford further insight into appropriate first-grade objectives. The first row of symbols in Figure II, p. 292, shows where the emphasis falls in a majority of the 288 classrooms. Twelve pairs of contrasting items are included, such as *mechanics vs. meaning*; *comprehension vs. rate*. Each symbol shows the percent of teachers who emphasize the first of

the pair, the second, and the percent who place equal emphasis on both. More than 75 percent of the group emphasize comprehension more than rate, assimilative reading more than cursory reading, and directed reading more than free reading. Prevailing practise among these teachers also favors strongly (1) greater emphasis on meaning than on mechanics, (2) more oral reading than silent reading, and (3) more extensive use of literary materials than factual materials. Sixty-nine percent of the group place equal emphasis on habits and attitudes. Agreement on other pairs is less complete, particularly the last, where 36 percent use basal texts more than other books, 32 percent use them less, and 32 percent make equal use of texts and other materials. Also in the case of extensive reading vs. intensive reading, 44 percent emphasize the former, 37 percent the latter. The figure suggests certain trends, but the lack of agreement is enough to suggest that teaching emphasis in any given class should be determined on the basis of the needs, interests, and abilities of the children. Teaching emphasis that results in excellent pupil achievement in one case may be inappropriate under other circumstances.

Types of instruction—Figure I shows the relative importance attached to six types of instruction by 288 first-grade teachers. Oral reading is given the highest rank; instruction and drill in phonics, the lowest. It is significant, too, that every first-grade teacher reported the use of oral reading and 98 percent the use of drill in word recognition; whereas, for each of the other types, 6 to 11 percent of the teachers reported that they do not give instruction of this kind. This comparison is not intended to suggest that separate periods are provided for the various types of instruction. Oral reading, word study, and one or more types of silent reading, are often included in a single class period.

Adapting procedures to each situation—Mention has been made already of the fact that teachers must adapt their practises to the circumstances under which they are working. This is true in setting up objectives and outlining the general plan of instruction; but it is especially true in selecting and applying

⁷ National Society for the Study of Education, *op. cit.*, p. 35-36. For another helpful outline of first-grade objectives given in terms of attitudes, skills, habits, and knowledges see: Hahn, Julia L. *First Grade Manual To Accompany the Child Development Readers*. Boston: Houghton Mifflin Company, 1935. p. xl-xlii.

specific classroom procedures. Success in teaching is not achieved as success in cooking, by following recipes. One group of pupils may learn rapidly when reading is introduced in a certain manner. For another group the same approach may be wholly inappropriate. Procedures should be adapted to the needs of the child, in no case attempting to fit the child to a certain method of teaching. This precaution should be kept clearly in mind in connection with the suggestions on method which follow.

The approach to reading—Table 5 shows how 288 successful teachers make the approach to reading. The majority teach pupils first to recognize complete sentences, but nearly a third use short paragraphs as the first unit of recognition. A very few begin with phrases, still fewer with words, and only one with the letters of the alphabet. More than three-fourths teach pupils to read printed symbols first, but only a fifth teach pupils to print before script writing is introduced.

Studies in educational psychology show that words are not recognized by first noting

TABLE 5.—WHAT PUPILS ENCOUNTER FIRST IN READING

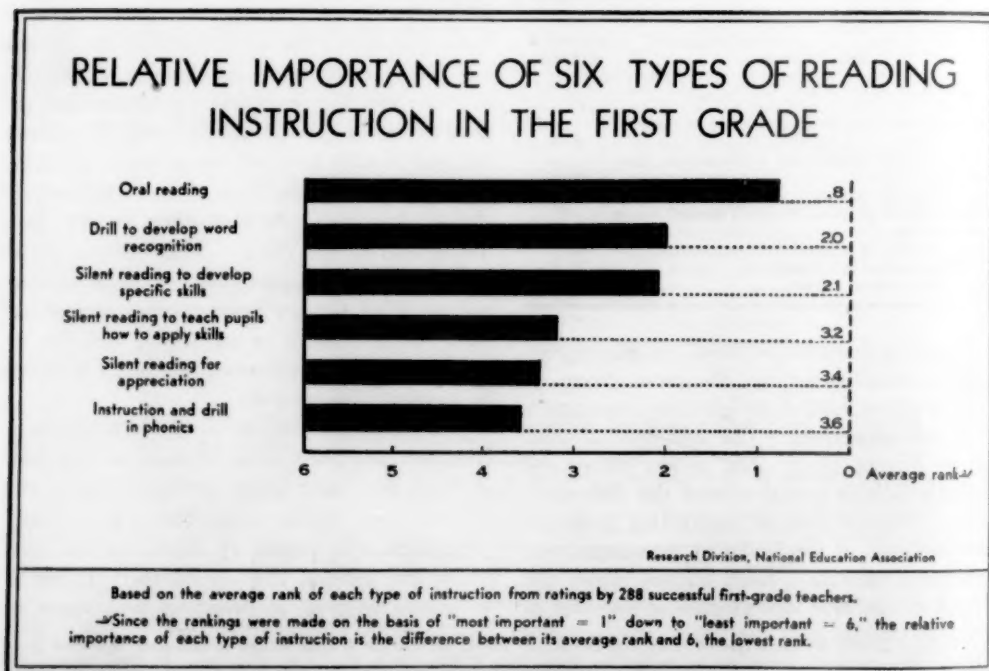
Elements introduced first	Percent of teachers
1	2
<i>The first unit of recognition</i>	
Short paragraphs.....	33.7
Sentences.....	61.9
Phrases.....	2.9
Words.....	1.0
Letters of the alphabet.....	0.5
<i>Symbols pupils are taught to read first</i>	
Printed symbols.....	80.3
Script writing.....	6.7
Both, from the beginning.....	13.0
<i>Symbols pupils are taught to make first</i>	
Printed symbols.....	20.7
Script writing.....	76.4
Both, from the beginning.....	2.9

Based on questionnaire replies from 288 successful first-grade teachers of reading.

separately each letter, then grasping the meaning.⁸ For that reason, the alphabet method of approach is not the natural one. Likewise it has been found that, especially in the very beginning, children recognize whole sentences, and sometimes groups of sentences, more easily

⁸ For a brief review of such studies see p. 295-97.

FIGURE 1



Percent of teachers
2
33.7
61.9
2.9
1.0
0.5
80.3
6.7
13.0
20.7
76.4
2.9

the mean-
method
Likewise
the very
sentences,
are easily

G

nk

than single words or phrases. Sentences are more irregular in general appearance, thus affording more cues to recognition. Moreover, it is easier to associate an idea with a group of symbols—for example, "Close the door, John"—than to associate the meaning of an isolated word such as "door" with the group of letters of which it is composed. Even when teachers have considerable skill in building up a sight vocabulary of isolated words, as some do, there is a tendency for pupils introduced to reading by this method to become word-by-word readers. Their criterion of success is being able to grasp the meaning of each word encountered, instead of being able to get the idea expressed in a sentence. They tend to call out in an expressionless monotone, "The-little-red-hen-found-some-corn," instead of grouping the words into correct thought units, "The little red hen found some corn."⁹

It should not be inferred from the foregoing paragraph that pupils do not need to learn the alphabet. Individual letters and their sounds are important, but they are to be learned after the child has made considerable progress in learning to read simple passages. Children who make rapid progress in reading often learn most of the letters and their sounds quite incidentally, requiring a minimum of special teaching. Slow learners require more drill. Teachers should take note of the pupils who need special attention and, at the appropriate time, give whatever drill is necessary for mastery of the alphabet.

Teaching children to read printed materials before they read written sentences is a practice favored not only by the successful teachers who assisted with this study but also by educational psychologists and experts in the field of reading instruction. Moreover, there is considerable evidence that teaching children only to print while in the primary grades, that is, to use *manuscript writing*, results in more

rapid progress in reading.¹⁰ Several advantages are claimed for this method of writing, said to have been advocated first by an Englishwoman, M. M. Bridges, in 1899:

1. It is more legible because of simplicity and definiteness of letter form.
2. The beginner learns only one alphabet.
3. It is especially helpful to a child with vision defects.
4. It makes possible more rapid progress in reading, since children do not have to master an additional set of symbols for each word.
5. The motor processes involved in printing words in the same form in which they are encountered in books aid the pupil in word recognition.

It is claimed also that manuscript writing is an aid in spelling, that pupils learn to write in manuscript style more easily than they learn cursive writing, and that it encourages greater neatness. On the other hand, cursive writing is used so generally that pupils must eventually learn to read it and, in nearly all cases, to write in that style. Manuscript writing is slower—at least for many individuals. And finally, there is a certain amount of difficulty involved whenever the transition is made from manuscript to cursive writing. We are concerned here, not with the merits of manuscript writing as a system of writing, but only with its effect on reading. That this effect is wholesome seems to be an established fact. If manuscript writing is used in the beginning, experimental results thus far reported suggest the fourth grade as an appropriate time to change to cursive writing.¹¹

A limited amount of experimentation has also been carried out with reference to the influence of the use of the typewriter on beginning reading.¹² The excellent results in reading obtained in these experiments seem to justify further trial use of this method.

Specific suggestions on method—During the pre-primer period, children learn to recognize

⁹ See especially: Buswell, Guy T. *Fundamental Reading Habits: A Study of Their Development*. Supplementary Educational Monographs, No. 21. Chicago: University of Chicago Press, 1922. 150 p.

¹⁰ Grill, Erma G. "Manuscript Writing and Its Value to a Sight-Saving Child." *Educational Method* 9: 407-12; April, 1930.

¹¹ Keim, S. Lucia. "The Present Status and Significance of Manuscript Writing." *Journal of Educational Research* 24: 115-26; September, 1931. ¹² Long, Howard H., and Mayer, Willa C. "Printing vs. Cursive Writing in Beginning Reading Instruction." *Journal of Educational Research* 24: 350-55; December, 1931. ¹³ Voorhis, Thelma G. *The Relative Merits of Cursive and Manuscript Writing*. Lincoln School, Research Studies. New York: Teachers College, Columbia University, 1931. 58 p.

¹⁴ Arnold, Esther W. "The Transition from Manuscript to Cursive Writing." *Elementary School Journal* 33: 616-20; April, 1933.

¹⁵ Spencer, Herbert L. *An Experimental Study Showing the Relative Influences of the Typewriter on Various Phases of Reading Ability Among Elementary-School Pupils*. Doctor's thesis, University of Pittsburgh, 1934. ¹⁶ Unzicker, Cecilia E. *An Experimental Study of the Effect of the Use of the Typewriter on Beginning Reading*. Contributions to Education, No. 610. New York: Teachers College, Columbia University, 1934. 96 p.

a number of words at sight—at least their own names, the names of other children in the room, the names of certain objects in the classroom and in their immediate environment, and certain action words entering into their play. First of all, they read from the bulletin board, the blackboard, and elsewhere, as needs arise in connection with their work and play. The teacher begins to “talk” to them by printing on the blackboard her greetings, directions, and plans for the day. Later she makes use of a special period for directed reading.

In the first special reading periods, the material used may be either a standard type obtained from a publisher of children's textbooks or material developed by the teacher. For those who develop their own blackboard and chart materials, the following suggestions by Pennell and Cusack should be helpful:

1. The story should be one in which the children are keenly interested.
2. There should be a central idea.
3. There should be a good opening and a good closing sentence.
4. Correct sequence of sentences should be observed.
5. The sentences should be short and of fairly uniform length.
6. The vocabulary should consist largely of words already known to the pupils.
7. Words and phrases should be repeated frequently, but in different situations.
8. Phrases should not be divided at the end of lines.
9. The writing or printing should be large, legible, and bold.
10. The spaces between words should not be too great.¹³

In presenting material to beginners, Hahn recommends a general procedure consisting of four steps: (1) the introductory reading of the whole story, (2) a practise period, (3) rereading and using the story for a specific purpose, and (4) individual and group activities.¹⁴ With reference to the first step she says:

The introductory reading of the whole story should be accomplished as quickly as possible under the leadership of the teacher who introduces new words and phrases in such a way that the thought

is kept uppermost in the child's mind all of the time. . . . The introductory period is not a drill period. New words and phrases . . . are introduced only in order that children may move intelligently thru the story. . . . If the context and the pictures or a question do not bring out the word . . . the teacher supplies it and leads the children skillfully over the difficulties which might otherwise interfere with the understanding of the story. The teacher does not, at this stage, expect the children to master the new words altho some of them may do so.

After the children have read the whole selection silently from beginning to end and have grasped the thought, practise on words and phrases is necessary for many children before they can reread the story fluently by themselves. Sometimes this is given during the same class period as the introductory reading; sometimes in a later period. Games involving show-me-the-word-that-says, action games, flash cards, and exercises in identifying words in new arrangements and combinations are among the many types of practise which may be provided. No more practise should be given than the pupils really need.

Following the practise on words and phrases, pupils should be prepared to reread the story for individual or class enjoyment, for the entertainment of others outside the class, or to acquire specific information to be used in carrying out related activities. In this case the reading should be a relatively smooth and independent process.

As a final step, individual or group activities are provided in which the pupil makes use of the vocabulary in new reading situations. The use of workbooks or mimeographed seat work, construction, drawing, dramatization, games, and numerous other activities can be used to supplement the regular reading lesson.

Neither the foregoing method nor any other is equally appropriate on all occasions. Teachers should adapt this plan to their own teaching situations. It is especially important for them to select the devices which they can use most skilfully—devices which are at the same time best adapted to the purposes at hand and to the abilities, needs, and interests of the pupils.

¹³ Adapted from: Pennell, Mary E., and Cusack, Alice M. *The Teaching of Reading for Better Living*. Boston: Houghton Mifflin Co., 1935. p. 192.

¹⁴ Hahn, Julia L. *First Grade Manual To Accompany the Child Development Readers*. Boston: Houghton Mifflin Co., 1935. p. 11-14. For other outlines of procedure see other recently published teaching manuals; also, Pennell, Mary E., and Cusack, Alice M., *op. cit.*, p. 147-259. ¶ Parker, Samuel C. “How to Teach Beginning Reading.” *Elementary School Journal* 22: 15-30, 104-17, 175-88, and 254-68; September to December, 1921. ¶ Buswell, Guy T., *op. cit.*, 150 p.

Zirbes¹⁵ points out eight common mistakes in beginning reading, which teachers will do well to avoid:

1. Busy-work remotely related to reading.
2. Beginning too soon, especially with the children of foreign-born parents.
3. Reading in concert as a regular routine.
4. Teaching "the," "in," "of," etc., in isolation.
5. Teaching the A-B-C's to babies who should be playing.
6. Ignoring pupils' current interests for a story in the book.
7. One-paragraph reading. Too little continuous silent or oral reading.
8. Stereotype procedure of any kind.

By way of general advice, Meriam¹⁶ suggests that teachers: (1) be informal; (2) develop reading ability thru normal activities in which reading functions; (3) watch for good phrases and expressions used by the children and place same on blackboard; (4) write well; (5) regard the identification of each individual word as relatively unimportant; (6) be patient—tell the child what a word is "70 times 7;" and (7) expect slow progress at first.

Phonics—Nearly all authorities in reading agree that children should have a certain amount of practise in word analysis, that is, phonetic training. Without it, they are handicapped in the presence of unfamiliar words and may, on the one hand, depend on the teacher to tell them the new words, or, on the other, resort to random guesses. The issues are: When should phonetic instruction begin? What letter sounds should be taught? What methods should be used? On these questions agreement is less unanimous.

Altho in 1925, seventeen of twenty-one systems of reading analyzed by Gates¹⁷ suggested the introduction of phonics within the

first two weeks and all of them within the first six, the better practise seems to be to postpone phonetic instruction until considerable progress in reading has been made. The National Committee on Reading suggests that it be delayed "until the child has established the habit of thought-getting, has a reasonable stock of sight words, and has begun to note freely gross similarities and differences in words."¹⁸ Experiments indicate that phonetic training is relatively ineffective during the first half of Grade I.¹⁹ A sight vocabulary of 50 to 100 words is an essential prerequisite.

The selection of the phonetic elements to be taught is a problem that merits the careful study of every primary teacher. The number of sounds that might be taught is legion, but they are far from equal in importance. Many sounds are learned incidentally by nearly all children. Moreover, certain sounds occur much more frequently than others in the words which children encounter. The list of sounds to be taught, therefore, should be selected with care, using the results of the phonetic analyses that have been made.²⁰ The basic list of phonetic elements selected for use in the first grade in Winnetka as a result of the study by Vogel, Jaycox, and Washburne follows:

1. All the short vowel sounds.
2. All simple consonant sounds.
3. The rule for lengthening the vowel before final "e."
4. The phonograms: *ee, ed, ing, er, ea, an, ou, en, ay, oo* (as in good), *oo* (moon), *ar, oar* (cow), *ow* (show), *ill, st, th, sh, and gr.*

With respect to teaching methods, most authorities recommend that teachers: (1) begin phonetic instruction with an analysis of the words in children's sight vocabularies; (2) set aside separate periods for teaching phonics; (3) teach the easiest sounds such as "m" and

¹⁵ Zirbes, Laura. "Present Practices in Teaching Reading as They Affect Child Development." *A Better Beginning in Reading for Young Children*. Bulletin of the Association for Childhood Education. Washington, D. C.: Association for Childhood Education, 1932. p. 2-7.

¹⁶ Meriam, Junius L. "Avoiding Difficulties in Learning to Read." *Educational Method* 9: 413-19; April, 1930.

¹⁷ Gates, Arthur I., and others. "Problems in Beginning Reading." *Teachers College Record* 26: 578; March, 1925.

¹⁸ National Society for the Study of Education, *op. cit.*, p. 90.

¹⁹ Sexton, Elmer K., and Herron, John S. "The Newark Phonics Experiment." *Elementary School Journal* 28: 690-701; May, 1928. ¶ Garrison, S. C., and Heard, M. T. "An Experimental Study of the Value of Phonics." *Peabody Journal of Education* 9: 9-14; July, 1931.

²⁰ Important studies of this type are:

Atkins, Ruth E. "An Analysis of the Phonetic Elements in a Basal Reading Vocabulary." *Elementary School Journal* 26: 596-606; April, 1926. ¶ Burbank, E. D. "Phonetics in the Elementary Grades for Teachers of Normal Children." *Volta Review* 22: 113-16, 217-20, 274-78, and 323-27; March to June, 1920. ¶ Cordts, Anna D. "Facts for Teachers of Phonics." *Elementary English Review* 3: 116-21; April, 1926. ¶ Sartorius, Ina C. *Generalization in Spelling*. Contributions to Education, No. 472. New York: Teachers College, Columbia University, 1931. 65 p. ¶ Vogel, Mabel; Jaycox, Emma; and Washburne, Carleton W. "A Basic List of Phonics for Grades I and II." *Elementary School Journal* 23: 436-43; February, 1923. ¶ Washburne, Carleton W. "The Commonest Syllables." *Journal of Educational Research* 14: 199-205; October, 1926. ¶ Washburne, Carleton W., and Vogel, Mabel. "A Revised List of Phonics for Grade II." *Elementary School Journal* 28: 771-77; June, 1928.

"s" before the difficult ones such as "b" and "p"; (4) give different children different amounts of phonetic instruction, according to their needs; (5) adopt a definite system of phonics—of which there are several; (6) carefully relate the work in phonics to a rich reading program; and (7) in all phonetic training, deal with words as units, the teacher underlining or covering up parts of words to emphasize phonetic elements.

Materials of instruction in the primary grades—Suggestions on evaluating and selecting children's books, a description of the materials in use in the classrooms of 1527 competent teachers, teachers' criticisms of materials being used, and a list of helpful guides to children's literature are given in a later section of this bulletin.²¹ For that reason, the discussion here is limited to certain findings from the present questionnaire study: (1) a review of the difficulties reported by a group of successful teachers in providing suitable primary reading materials; and (2) a list of some of the special types of reading material which they find helpful in Grades I and II.

The leading difficulties in providing suitable materials named by 288 first-grade and 260 second-grade teachers are listed below according to frequency of mention:

1. Finding a sufficient amount of easy reading material.
2. Lack of funds to obtain needed materials.
3. Finding materials appropriate for slow learners.
4. Finding materials bearing directly on a particular teaching unit.
5. Problems of administrative routine, such as supplementary readers in use by other teachers when wanted.
6. Finding factual books easy enough for primary children.
7. Finding beneficial seat work.
8. Finding a variety of material with similar vocabulary.
9. Necessity for making appropriate materials.
10. Finding enough story-book type materials.
11. Finding materials adapted to the interests and abilities of different children.
12. Securing up-to-date materials.

Similarly, the following types of special materials were mentioned as most helpful in first- and second-grade teaching:

1. Workbooks.
2. Seat work, such as, word builders, sentence builders, mimeographed read-and-do exercises, etc.
3. Flash cards—word, phrase, and sentence cards.
4. Reading charts—published charts and experience charts prepared by teachers and pupils.
5. Pupils' booklets.
6. Children's newspapers.
7. Visual aids.
8. Bulletin board displays.
9. Phonetic charts.
10. Games and puzzles.
11. Picture dictionaries.
12. Written directions and action sentences on blackboard.
13. Graphs showing progress of individual pupils or classes.

Special difficulties in beginning reading—First-grade teachers who participated in this study were asked to list a few of the teaching problems which they had found most difficult during the year just closing and to state briefly what they had done to solve each problem. Table 6 lists the problems mentioned by more than five teachers.

Word-by-word reading stands out as the problem most frequently encountered. To eliminate this tendency, teachers report the following devices: (1) provide phrase drills; (2) have pupils read silently first to get the thought, then orally; (3) mark off, in some way, appropriate thought units; (4) use easy materials; (5) have pupils read, then repeat what was read from memory; (6) have preparatory word study; (7) give pupils a motive for reading—let them read to find out something; (8) commend pupils for reading in a conversational way; (9) emphasize speed; (10) encourage pupils to look ahead, to use a wider eye-voice span; (11) discontinue word flash cards; and (12) compare the good readers to a train which "stops at stations only."

Several devices were mentioned repeatedly in connection with the different kinds of difficulty in oral reading; for example, (1) extensive practise in both silent and oral reading, (2) the use of easy material, (3) genuine audience situations, (4) reading for a definite purpose, (5) thoro preparation before reading, (6) training in phonetics, and (7) the correction of faulty habits of English usage.

²¹ See p. 309-14.

Dramatization was mentioned frequently as particularly helpful in developing good expression and voice control. Accuracy is promoted by word and phrase drills. Repetition can often be eliminated by covering each word as soon as it is called, or if the pupil is reading from the blackboard, by erasing each word as it is read. One teacher tells her pupils that repetition in reading is like "going back home to start over, every time one comes to a traffic light."

A number of teaching devices were also mentioned frequently in connection with the various difficulties centering around word recognition. Extensive reading of easy material, flash-card drills, word games, keeping word lists, and exercises in noting likenesses and differences are among the procedures most often listed. The two devices used most in teaching pupils to cope with new words are drill in getting new words from context, and training and drill in phonics. Special attention to initial and final letters, the use of pictures and picture dictionaries, recognizing known words within longer, unknown words, and the development of pupils' self-confidence are other important methods used in developing accurate and rapid word recognition. The teachers' reports stress the importance of variety in teaching methods in this field, for so much dependence must be placed on repetition that, without variety, vocabulary study is unusually dull.

A problem of method often mentioned was that of eliminating the tendency to interpret letters or words in reverse order, for example, confusing "was" and "saw." This rather common difficulty in the early stages of reading has been thought by some to be associated with left-handedness.²² Their hypothesis is that the brain centers which control motor responses in left-handed persons are so closely identified with those used in reading that the result is confusion and a tendency to make reversals in reading. Many, however, refuse to accept this explanation. In the most recent and ex-

tensive study of the question, involving 136 carefully matched pairs of right- and left-handed children, the latter made the fewest reversals in every test situation provided.²³ Apparently, the difficulty cannot be attributed to left-handedness, but is one experienced in some measure by nearly all children. There are tests to discover what letters or words a pupil reverses and to discover in any given case how serious the difficulty is.²⁴

Methods of eliminating reversals in reading mentioned in the questionnaire replies from 288 successful first-grade teachers were: (1) give

TABLE 6.—PROBLEMS ESPECIALLY TROUBLESOME TO 288 FIRST-GRADE TEACHERS

Problem	Number of times mentioned
1	2
<i>Problems relating to oral reading:</i>	
Word-by-word reading.....	78
Hesitancy or carelessness in oral reading.....	21
Mispronunciations.....	12
Repetition of words or phrases.....	9
Expression and voice control in oral reading.....	9
Substitutions—words of same, or similar, meaning.....	6
<i>Problems relating to word recognition:</i>	
Pupils' inability to figure out new or different words.....	59
Lack of an adequate sight vocabulary.....	51
Confusion of similar words.....	32
Difficulties in recognizing and interpreting abstract words.....	17
Inability to recognize known words in new situations.....	16
Reversals.....	15
<i>Other problems:</i>	
Vocalization.....	52
Line following.....	36
Poor comprehension.....	35
Irregular progress along the line and inaccurate return sweeps of the eyes.....	25
Eye span too narrow.....	25
Memorization.....	20
Lack of interest on the part of pupils.....	20
Difficult transitions: print to script; charts to books; one type size to another; etc.....	19
Pupils read too slowly.....	13
Language handicaps.....	12
Span of attention too short.....	12
Guessing.....	11
Incorrect interpretation of letters.....	9
Lack of phonics.....	8

²² Dearborn, Walter F. "Teaching Reading to Non-Readers." *Elementary School Journal* 30: 266-69; December, 1929. Also, Orton, Samuel T. "The 'Sight-Reading' Method of Teaching Reading as a Source of Reading Disability." *Journal of Educational Psychology* 20: 135-43; February, 1929.

²³ Phillips, Albert J. "Relation of Left-Handedness to Reversals in Reading." *Elementary English Review* 11: 97-98, 118; April, 1934. See also, Crider, Blake. "Lack of Cerebral Dominance as a Cause of Reading Disability." *Childhood Education* 10: 238-39, 270; February, 1934.

²⁴ Phillips, Albert J., *op. cit.* Also, Teegarden, Lorene. "Tests for the Tendency to Reversal in Reading." *Journal of Educational Research* 27: 81-97; October, 1933.

training in the discrimination of form, size, and color; (2) play games involving left to right responses; (3) increase the amount of phonetic training, with special emphasis on initial letters; (4) cut down on the amount of silent reading, and increase oral reading; (5) teach pupils to do typewriting first, introducing writing later; and (6) provide practise exercises using kinesthetic stimuli to help establish correct recognition. Kinesthetic practise exercises are carried out in the following manner.²⁵ The troublesome word is written on the blackboard. The pupil traces it, pronouncing it as he does so. This is done several times, until the pupil thinks he can write it from memory. The word is erased. The pupil tries to reproduce it from memory, immediately and at intervals thereafter. Two important elements in exercises of this type should be noted. First, the pupil pronounces the word while tracing over it—not the letters in the word. Second, the pupil reproduces the word from memory, not from copy. Not only reversals in reading but also other difficulties in word recognition can sometimes be corrected by special exercises of this sort.

In eliminating undesirable habits, such as vocalization (lip-movement) or line following, setting up the correct ideal and praise for worthy achievement are of primary importance. Individual progress charts are often used to advantage. To decrease vocalization, some teachers have pupils place fingers on lips, use sentence flash cards, provide more silent reading and less oral reading, or emphasize speed of reading. The use of line markers is by far the most common device used to prevent pupils from pointing out each word. Another simple device to prevent pointing is to have the book held in both hands. The use of line markers, and reading from charts following a pointer, are favorite methods of obtaining regular progress along the line and accurate return sweeps from the end of one line to the beginning of the next.

Reading comprehension is improved by (1) having pupils read to find out something definite, (2) silent reading followed by some

form of self-expression such as dramatization or drawing, (3) read-and-do exercises, and (4) opportunities for enriched experiences. The last named item is also important in removing language handicaps. Flash-card exercises and exercises in finding words and phrases quickly on the page are widely used in increasing the eye span. Memorization is prevented by presenting the words of familiar stories in a variety of new arrangements and combinations. Interest in reading can be developed, among other ways, by providing an abundance of attractive materials, making reading a pleasant experience, and by making reading necessary for the accomplishment of something the child wishes to do.

Difficulties pertaining to the interpretation of letters in the alphabet may take the form of identifying some over-potent letter with a particular word. For example, the pupil may call every word containing the letter "k," *milk*. Another common difficulty is caused by confusing capital and small letters. A third type is identified with children whose pre-school learning has focused their attention too firmly on letters, instead of on ideas and words. Such difficulties usually require exercises in careful observation and much individual instruction.

First-grade standards for promotion—Numerous studies have shown that the leading cause of non-promotion in the primary grades—particularly the first—is lack of satisfactory progress in reading. Because of the large percent of failure at that level a few schools are abolishing grade lines in the primary department, classifying pupils according to their achievement but not in grades, and promoting pupils only from the department. Since most schools, however, still classify pupils by grades and continue to fail large numbers of pupils because of reading, the promotion standards set for first-grade pupils merit consideration.

Reed's analysis of these standards in 1927 is one of the best summaries of practise now available.²⁶ Her findings with respect to the amount of required reading, size of an ac-

²⁵ Orton, Samuel T., *op. cit.* See also, Fernald, Grace M., and Keller, Helen B. "The Effect of Kinaesthetic Factors in the Development of Word Recognition in the Case of Non-Readers." *Journal of Educational Research* 4: 355-77; December, 1921; Keller, Helen B., and Fernald, Grace M. "Remedial Work for Non-Readers." *Problems of the Elementary School Principal in the Light of the Testing Movement*. Second Yearbook. Washington, D. C.: Department of Elementary School Principals, National Education Association, 1923. p. 345-46.

²⁶ Reed, Mary M. *An Investigation of Practices in First-Grade Admission and Promotion*. Contributions to Education, No. 290. New York: Teachers College, Columbia University, 1927. 136 p.

ceptable reading vocabulary, and the amount of phonetic knowledge expected in each half of the first grade are given in Table 7. For each item the range and average amount is

indicated. The range begins at zero in every case, because there was always one or more cities having no requirement with respect to each of the respective items.

TABLE 7.—FIRST-GRADE PROMOTION STANDARDS IN 155 CITIES

Requirement for promotion	Average		Range	
	Low first	High first*	Low first	High first*
1	2	3	4	5
Number of:				
Primers pupils must read.....	2.31	2.89	0 to 10	0 to 10
First readers pupils must read.....	1.80	2.51	0 to 5	0 to 15
Supplementary readers pupils must read.....	2.50	3.50	0 to 12	0 to 15
Words required in the reading vocabulary.....	168.7	290.0	0 to 850	0 to 1639
Phonograms pupils are expected to know.....	25.0	26.6	0 to 62	0 to 150
Phonetic families pupils must know.....	15.0	30.0	0 to 40	0 to 90

Source: Reed, Mary M. *An Investigation of Practices in First-Grade Admission and Promotion*. Contributions to Education, No. 290. New York: Teachers College, Columbia University, 1927. p. 111.

* These requirements are in addition to those listed for the low first grade.

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Comparative Analysis of Teaching Methods

This section of the bulletin deals with reading instruction in the various grades from I to VI, presenting side by side the teaching objectives and classroom practises followed in the several grades. The teacher of reading in one grade, for example the fourth, will find it helpful to watch for special references to fourth-grade work and to take special note of the column (or row) in each table and figure which applies to fourth-grade teaching. Inter-grade comparisons should also be made especially by those who teach in one grade only.

Objectives of the Reading Program

Specific aims—Specific objectives appropriate for use during the stages of growth known as the preparatory period and the period of initial instruction have already been given.¹ Those outlined by the National Committee on Reading for the two remaining periods identified with elementary grades are as follows:

Specific aims during the period of rapid growth in fundamental attitudes, habits, and skills

1. To provide a rich variety of reading experience.
2. To stimulate keen interest in reading wholesome books and the habit of reading independently for pleasure and information.

3. To secure rapid growth in habits of intelligent interpretation.

4. To increase the rate and accuracy of both oral and silent reading.

5. To develop desirable habits of interpretative oral reading.

6. To continue training in the skilful use of books, and introduce pupils to the use of libraries.²

Specific aims of the period of wide reading

1. To provide rich and varied experiences thru reading in practically every field of thought and experience for which pupils are prepared—history, biography, geography, travel, science, and art.

2. To strengthen interest in entertaining, instructive, and worthwhile reading.

3. To secure continued growth in habits of intelligent interpretation corresponding to the greater maturity which pupils have attained.

4. To further improve and refine the habits of recognition in both oral and silent reading; particularly, to increase the rate of silent reading.

5. To improve the quality of oral interpretation and establish correct standards for various oral-reading situations.

6. To develop skill in the use of books, including the use of dictionaries, encyclopedias, and other references, and to acquaint pupils further with the intelligent use of library facilities.²

Specific abilities developed by successful teachers—Table 8 indicates some of the important reading abilities which the 1527 suc-

¹ See "Laying the Foundations in Reading," p. 279 and 281.

² Adapted from: National Society for the Study of Education. *Report of the National Committee on Reading*. Twenty-fourth Yearbook, Part I. Bloomington, Ill: Public School Publishing Co., 1925. p. 46 and 56-57.

TABLE 8.—PERCENT OF TEACHERS IN EACH GRADE WHO MAKE A CONSCIOUS EFFORT TO DEVELOP CERTAIN READING ABILITIES

The ability to:	Percent of teachers in each grade					
	I	II	III	IV	V	VI
1	2	3	4	5	6	7
Recognize words in groups (i. e., in phrases or thought units).....	97	94	83	76	62	58
Recognize both words and word-groups more quickly.....	95	92	83	73	59	50
Follow printed directions.....	88	91	90	89	87	85
Recognize words of which the pupil already knows the meaning.....	87	83	71	60	43	38
Get the meaning of new words from the context.....	84	94	86	93	91	91
Find the answer to fact questions.....	75	90	90	92	89	88
Observe punctuation marks.....	52	71	72	69	63	54
Adapt the method of reading used to the purpose at hand.....	44	55	64	66	71	70
Get the general point of view expressed, or "total meaning," in a selection.	42	64	76	83	89	91
Adapt the method of reading used to the difficulty of the material at hand.	41	55	64	67	58	64
Find the main idea in a paragraph.....	31	61	80	94	94	96
Pay particular attention to important elements in a sentence.....	19	29	32	36	42	38
Relate what is read to a topic or theme.....	19	33	54	60	66	73
Make an independent organization of materials.....	14	20	40	47	61	72
Follow the author's organization of a selection.....	10	23	33	37	45	52
Make use of transitional words, thus keeping pace with "turns of thought."	6	12	20	24	28	37
Number of teachers' reports on which the percents are based.....	288	260	270	225	229	255

Read table as follows: Of the 288 first-grade teachers reporting, 97 percent make a conscious effort to develop the ability to recognize words in groups; the same ability is stressed by 94 percent of the 260 second-grade teachers; 83 percent of the 270 third-grade teachers; etc.

Based on questionnaire replies from 1527 successful teachers of reading.

successful teachers who participated in this study make a conscious effort to develop in their pupils. The grade level at which each ability is developed by the largest percent of teachers is indicated by bold-faced numerals. Thus in column 2, the bold-faced numerals, 97, 95, and 87, indicate that the recognition of words in groups, the recognition of words and word-groups more quickly, and the recognition of words of known meaning are teaching objectives more commonly adopted in Grade I than in any other grade. Other abilities listed are in greater favor in a grade beyond the first: for example, following printed directions in Grade II; and in Grade VI, the last four abilities listed in the table. The ability which is featured most prominently in each grade is indicated by the percents underscored. In Grade I, the number underscored is 97 (also one of the bold-faced numbers referred to above), identifying the recognition of words in groups as the ability developed by the largest percent of first-grade teachers. In Grades IV, V, and VI, the ability to find the main idea of a paragraph outranks all others. Abilities listed as important in every grade include: (1) getting the meaning of new words from the context; (2) finding the answers to fact questions; and (3) following printed directions. Other abilities, for example word recognition, diminish in importance from grade to grade, or increase in importance, as in the case of the ability to organize materials read. Using the percents given in Table 8, teachers in any grade can rank the various abilities for that grade. Or, by noting the abilities used as objectives by more than 50 percent, or perhaps 75 percent, of those reporting, they can readily discriminate between abilities which successful teachers believe are of major and minor importance for the grade involved.

Teaching emphasis—Figure II shows what phases of reading instruction are being emphasized by teachers of unusual ability. Comprehension is emphasized more than rate by the great majority of teachers in every grade. The same is true of assimilative reading as compared with cursory reading. There are a number of significant changes in emphasis, as children pass from grade to grade. Among those which should be noted are the pronounced increase in emphasis on silent reading, and the more gradual but consistent increase in emphasis on free reading, sight reading, and on the use of books other than textbooks.

Types of instruction—Figure III indicates the relative importance in each grade of six types of reading instruction according to the teaching practises of 1527 successful teachers. These teachers were asked to evaluate each type of instruction by assigning the rank "1" to the type used most, "2" to the next, etc. The figure shows the average rank of each type of instruction in each grade. The increasing importance of the various types of silent reading in the later elementary grades and the decreasing importance of oral reading, drill in word recognition, and phonics stand out clearly in the diagram. Silent reading to develop specific reading skills ranks relatively high in all the grades. Phonetic training is rated lowest in every grade.

It should not be inferred from Figure III that the various types of reading instruction are given in separate periods—one for oral reading, one for word drill, etc. Any well-conducted reading period is likely to include a certain amount of word study, opportunity for oral reading, and practise in one or more types of silent reading.

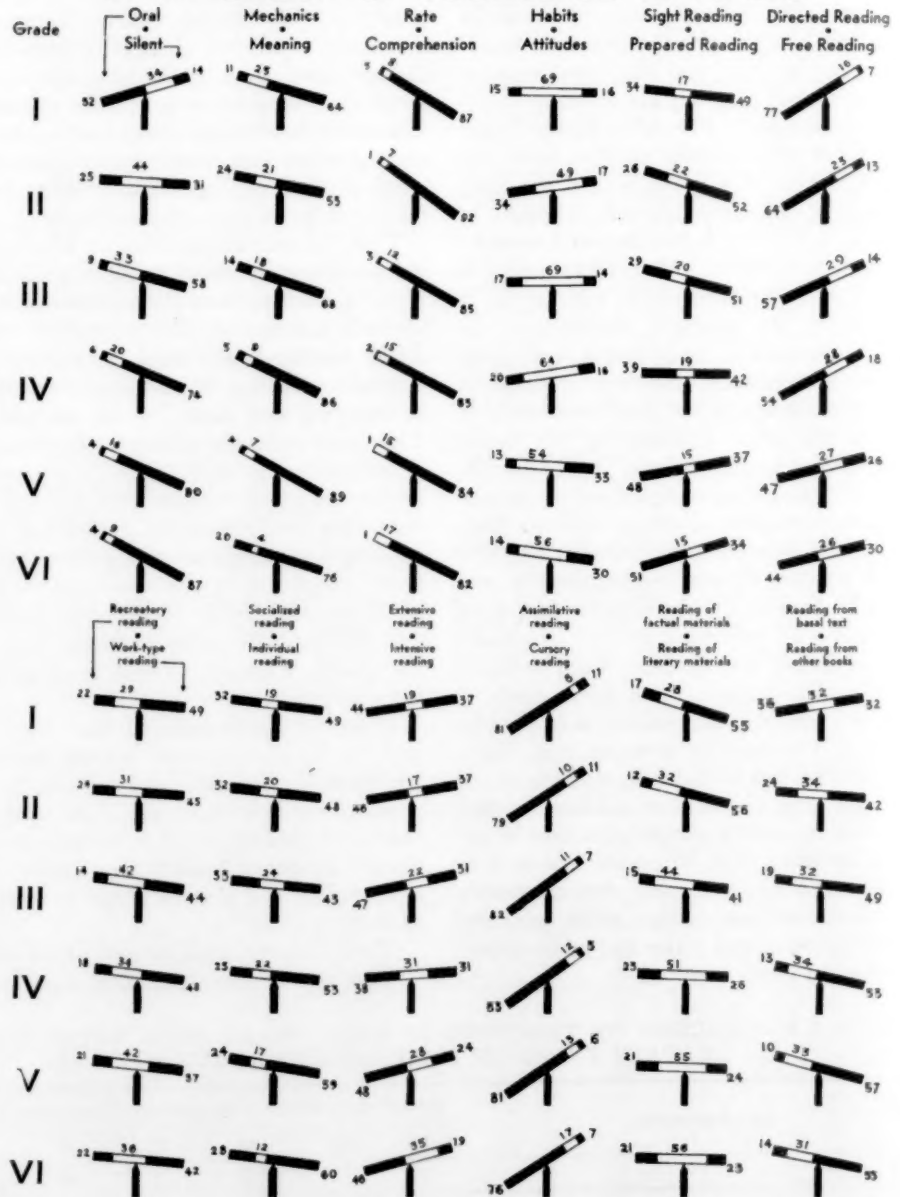
Table 9 shows what percent of the teachers in each grade report that they never use the

TABLE 9.—PERCENT OF TEACHERS IN EACH GRADE WHO NEVER USE CERTAIN TYPES OF READING INSTRUCTION

Type of instruction	Percent of teachers not using each type of instruction; Grade					
	I	II	III	IV	V	VI
1	2	3	4	5	6	7
Oral reading.....	0.0	0.4	0.4	0.9	0.0	0.4
Drill to develop word recognition.....	2.5	2.7	3.3	11.0	13.4	12.0
Silent reading to develop specific skills.....	5.8	3.6	0.4	0.9	1.0	1.3
Instruction and drill in phonics.....	6.2	4.5	8.5	35.3	44.8	45.9
Silent reading for appreciation.....	6.4	0.9	1.2	2.3	0.5	0.8
Silent reading to teach pupils to apply skills.....	11.3	3.3	1.3	1.8	0.5	0.4
Number of teachers' reports on which the percents are based	288	260	270	225	229	255

FIGURE II

PHASES OF READING EMPHASIZED IN EACH GRADE BY A GROUP OF SUCCESSFUL TEACHERS



Research Division, National Education Association

Read chart as follows: In the first grade, 52 percent of the teachers place greater emphasis on oral reading than on silent reading, 34 percent give equal emphasis to both, and 14 percent emphasize silent reading, 64 percent emphasize meaning more than mechanics, 25 percent place equal emphasis on these factors, and 11 percent emphasize mechanics. Interpret other pairs in the same way—for all grades.

Based on questionnaire replies from 1527 successful teachers of reading—225 to 288 in each grade.

various types of instruction. Altho Figure III shows that oral reading decreases in importance from grade to grade, some use of it is made by nearly every teacher in every grade. On the other hand, instruction in phonics, which is used to some extent by nearly all teachers in the first three grades, is never used by one-third to one-half of the teachers in grades beyond the third.

Since it is often helpful to know not only the procedures that are considered best but also the pitfalls most likely to be encountered, Figure IV is introduced at this point. Based on replies from 144 of the supervisors who participated in this study, it indicates the grade level where teachers, as a general rule, are believed to overemphasize and underemphasize each type of instruction. In this case the supervisors are reporting, not the work of their best teachers, but the general tendency among all the teachers under their supervision. Many supervisors recommended neither more nor less extensive use of the various types of instruction, believing apparently, that in their own school systems a well-balanced program is being carried out. A much larger percent recommended more emphasis on the various types of instruction than less. The types of instruction

cited most frequently as requiring less attention were oral reading, especially in Grades III and IV, and drill to develop word recognition, especially in Grades I and II. Types of instruction believed by many supervisors to be in need of greater emphasis include: silent reading to teach pupils how to apply reading skills and silent reading for appreciation, especially in Grades IV, V and VI; silent reading to develop specific skills and free reading, in all the grades; and drill to develop word recognition and instruction and drill in phonics, particularly in Grades II and III.

Proper balance between oral and silent reading—One of the most debated issues in the field of reading instruction is the place of oral reading in the total program.

Until a few years ago, oral reading was overemphasized in the great majority of schools. Even yet, there are thousands of elementary classrooms in which instruction in oral reading is virtually the only kind that is given. Such a policy, of course, is indefensible, and wherever this condition exists, steps should be taken immediately to correct it. Silent reading is the type that pupils will use most. Hence, the greater part of their training should be in silent reading. The remedy lies, however, not in the

FIGURE III

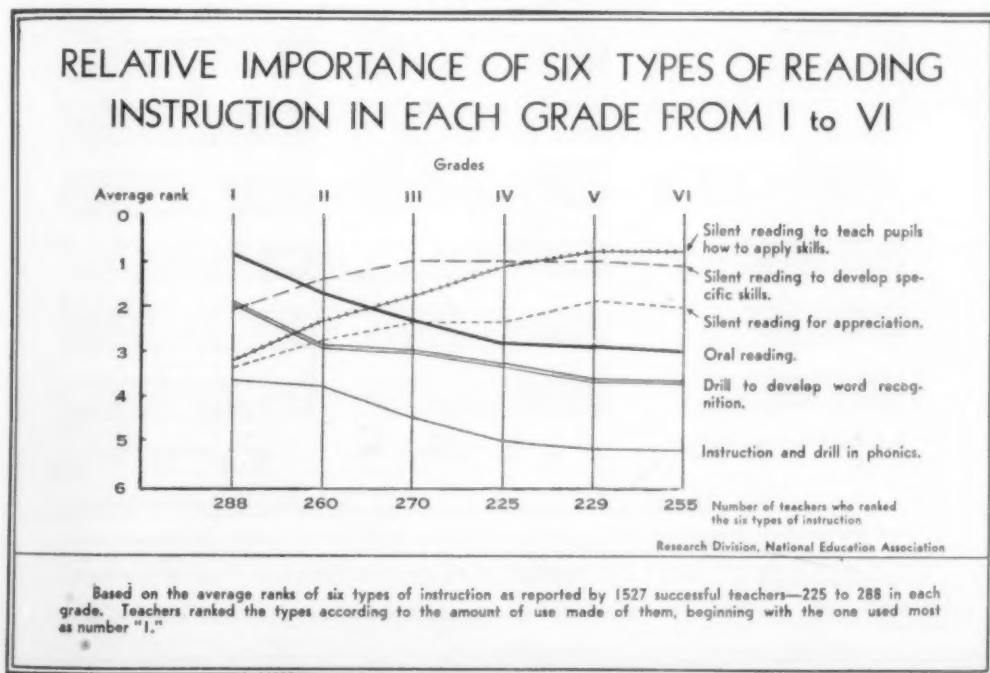
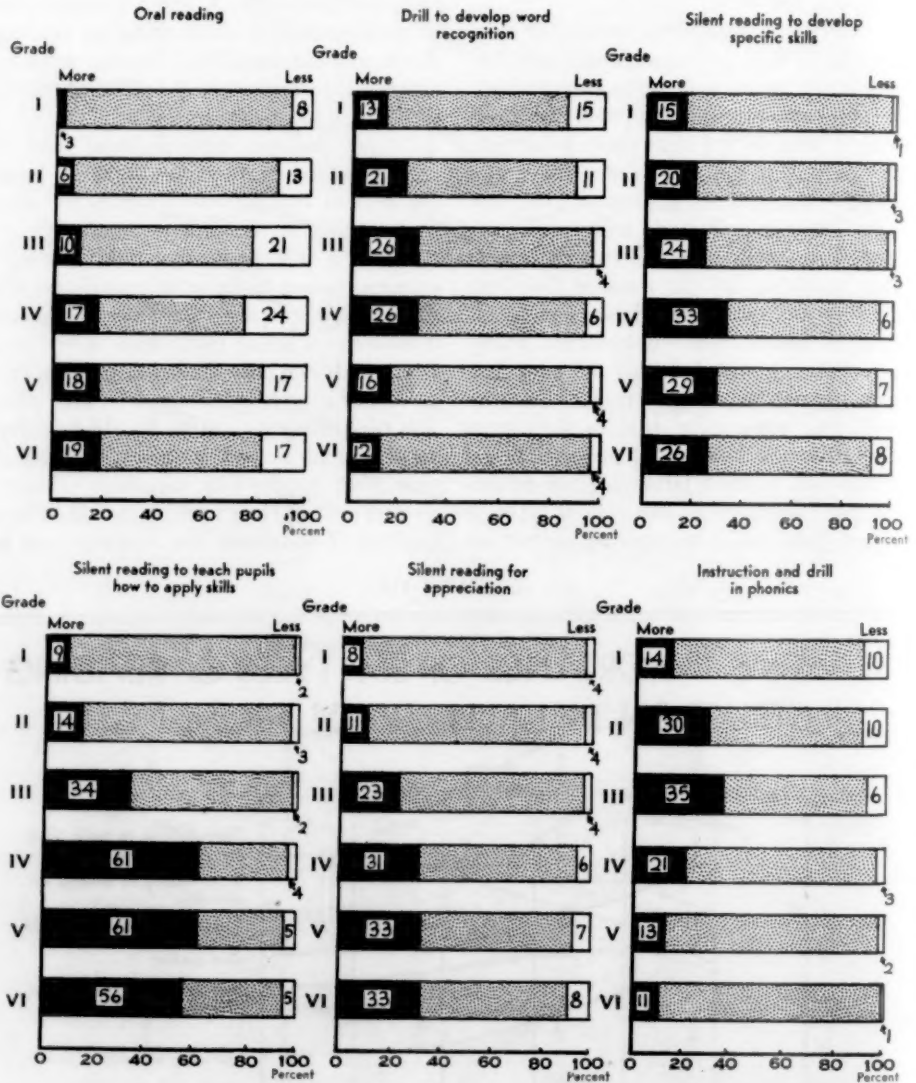


FIGURE IV

SUPERVISORS' OPINIONS AS TO TYPES OF INSTRUCTION WHICH RECEIVE TOO LITTLE, OR TOO MUCH, ATTENTION IN THE VARIOUS GRADES



Research Division, National Education Association

Read chart as follows: Three percent of the supervisors reporting believe that, generally speaking, the first-grade teachers under their supervision should emphasize oral reading more than at present; 8 percent less; the remainder (89 percent) suggest no change in emphasis. Similarly interpret percents for oral reading in Grades II to VI, and for other types of instruction in all the grades.

Based on replies from 144 supervisors of reading in elementary schools in which outstanding results in reading are being achieved.

complete elimination of oral reading, but in devoting to it only a reasonable amount of time and attention.

Basing his observations on extensive studies of eye-movement records, Judd points out that oral reading is natural in the primary grades—that the child cannot go directly from the symbol to the meaning without utilizing the rich background of oral language which has become for him the carrier of meanings. The direct step from symbol to meaning is a later skill which comes thru training.³ Judd,⁴ Buswell,⁵ W. S. Gray,⁶ and others have shown that oral reading is properly emphasized until the pupil's rate of reading begins to approach his normal rate of speech. With a certain amount of training in silent reading from the beginning, the amount increasing from month to month, this point should be reached before the pupil is ready for the fourth grade. From that time forward, emphasis should be placed on silent reading. Otherwise, the pupil's silent reading is likely to be identical with his oral reading so far as the mechanics are concerned, the only difference being that he whispers the words to himself instead of speaking them aloud.

Has our zeal to lift silent reading to its proper level carried us too far? Baker,⁷ Camp,⁸ C. T. Gray,⁹ and Moore¹⁰ are among those who believe the pendulum has swung too far—that many schools should reexamine their practises and reinstate a sound program of oral reading instruction. They point out that oral reading assures the accurate association of printed words and word sounds, creates a firmer bond between words and ideas, aids the child in spelling, tests understanding, develops appreciation for beauty in English expression, develops a pleasing speaking voice, establishes

proper voice control, and involves important social interests and relationships. Because of obvious values, such as these, a suitable amount of oral reading instruction should be provided in all the grades, taking care only that oral reading does not crowd out ample training in effective silent reading.

Improving Certain Phases of Reading

Since many classroom procedures which can be used effectively in developing fundamental reading habits, increasing rate of reading, and improving comprehension, are suggested or implied in findings from research investigations, certain important findings are summarized briefly in the paragraphs below.

The development of the fundamental reading habits—In the lower grades instruction ordinarily is focused on the development of such fundamental habits as (1) speed and accuracy in recognizing common words; (2) ability to make an independent attack on new words; (3) discontinuance of "crutches" such as pointing, the use of line markers, and vocalization; (4) the establishment of correct eye-movement habits; and (5) reasonable skill in using reading as a thought-getting process.

1. *Word recognition*—A number of early studies demonstrated that words (and sometimes phrases) rather than letters are the natural units of recognition. Erdmann and Dodge found that words could be recognized at a distance too great for individual letters to be distinguished.¹¹ Their report compares word recognition to the recognition of people. Ordinarily we recognize our acquaintances by general appearance, but in cases of close resemblance—for example, identical twins—we are forced to take note of certain details. Boggs,¹² Huey,¹³

³ Judd, Charles H. *Reading: Its Nature and Development*. Supplementary Educational Monographs, Vol. II, No. 4 (Whole No. 10). Chicago: University of Chicago Press, 1918. p. 138-42.

⁴ Judd, Charles H., *op. cit.*, p. 142-51.

⁵ Buswell, Guy T. *An Experimental Study of the Eye-Voice Span in Reading*. Supplementary Educational Monographs, No. 17. Chicago: University of Chicago Press, 1920. 106 p.

⁶ Gray, William S. "Principles of Method in Teaching Reading, As Derived from Scientific Investigation." *Fourth Report of the Committee on Economy of Time in Education*. Eighteenth Yearbook, Part II. National Society for the Study of Education. Bloomington, Ill.: Public School Publishing Co., 1919. p. 27.

⁷ Baker, Franklin T. "The Case for Oral Reading." *Elementary English Review* 5: 131-34; May, 1928.

⁸ Camp, Cordelia. "An Oral Reading Program in the Elementary Grades." *Elementary School Journal* 32: 435-41; February, 1932.

⁹ Gray, Clarence T. "Purposes and Values of Oral Reading in the Intermediate and Upper Grades of the Elementary School." *Elementary School Journal* 29: 335-43; January, 1929.

¹⁰ Moore, Annie E. "Some Aspects of Oral Reading in the Primary Grades." *Elementary English Review* 9: 83-85, 98; April, 1932.

¹¹ Erdmann, B., and Dodge, Raymond. *Psychologische Untersuchungen über das Lesen auf Experimenteller Grundlage*. Halle, Germany, 1908.

¹² Boggs, Lucinda P. "How Children Learn to Read: An Experimental Study." *Pedagogical Seminary* 12: 496-502; December, 1905.

¹³ Huey, Edmund B. *The Psychology and Pedagogy of Reading*. New York: Macmillan Co., 1908. p. 102-16.

Hamilton,¹⁴ Tinker,¹⁵ and Bowden¹⁶ have verified this conclusion. Bowden found that children could recognize words quite well with letters shifted about but that adding letters, or inserting letters which changed the contour of the words, interfered greatly with comprehension. Ruediger studied the field of vision to see how wide a span the eye can compass while remaining focused at a given point.¹⁷

Dearborn,¹⁸ Whipple,¹⁹ Kibbe,²⁰ and Tinker²¹ have measured, not the field of vision, but the number of letters, numbers, or words that are ordinarily recognized in a single brief exposure. Whipple's findings are typical:

	Average	Upper limit
Span for digits....	3 or 4	6 or 7
Span for consonants	4 to 7	Possibly 8 with vowels interspersed
Span for isolated words	4	Not infrequently 5
Span for words in sentences	4 to 6	

Individuals differ greatly in speed and accuracy in recognizing a series of items and in the number of items which they can grasp in one exposure. In any reading situation, an individual's recognition span is determined in part by his general ability and reading skills, and in part by his interest in, and acquaintance with, the subjectmatter. Even among adults, one person can read mathematics like fiction, another science, and someone else history.²²

2. *Vocabulary development*—Building up a vocabulary of sight words and developing a wide span of recognition are vital problems

in the teaching of reading. Authorities are quite generally agreed that definite vocabulary training should supplement those opportunities for growth which are afforded by children's incidental experiences and activities. Some would make this training an integral part of a normal reading situation, using a variety of specially planned materials to introduce pupils to new words and their meanings, but always keeping the words in context.²³ Others favor a certain amount of word drill and analysis of words more or less in isolation.²⁴ The pupil's recognition vocabulary soon must develop far beyond the range of words which he uses in oral or written expression.²⁵ Progress is slow in the beginning; one writer believes that children in the low first grade should not be expected to learn more than two new words per day.²⁶ In the later elementary grades progress is more rapid. Thorndike believes that in Grades IV, V, and VI children should learn from 1000 to 4000 words beyond the conversational learning of home, school, and street.²⁷ Other investigators have discovered important facts about the way children learn new words, for example:

1. Length of a word is not an important factor in determining its difficulty.
2. Frequency of use as indicated by word lists, such as those of Gates or Thorndike, is not closely related to the difficulty of words for the learner.
3. Pupils frequently confuse words having similar beginnings, similar endings, the same general contour, or the ending of one word similar to the beginning of another.
4. The meaning which a word has for the child is particularly important in word learning.

¹⁴ Hamilton, Francis. *The Perceptual Factors in Reading*. Columbia University Contributions to Philosophy, Psychology and Education, Vol. 17, No. 1. New York: Science Press, 1907. p. 56.

¹⁵ Tinker, Miles A. "Visual Apprehension and Perception in Reading." *Psychological Bulletin* 26: 223-40; April, 1929.

¹⁶ Bowden, Josephine H. "Learning to Read." *Elementary School Teacher* 12: 21-33; September, 1911.

¹⁷ Ruediger, W. C. "The Field of Distinct Vision." *Archives of Psychology* Vol. 1, No. 5. 1921.

¹⁸ Dearborn, Walter F. "Professor Cattell's Studies of Perception and Reading." *The Psychological Researches of James McKee Cattell*. Columbia University Contributions to Philosophy, Psychology and Education, Vol. 22, No. 4. New York: Science Press, 1914. p. 34-45.

¹⁹ Whipple, Guy M. "Range of Visual Attention." *Manual of Mental and Physical Tests*. Baltimore: Warwick and York, 1910. p. 222-44.

²⁰ Kibbe, Delia. "A Classroom Test of the Span of Recognition." *Elementary School Journal* 24: 60-62; September, 1923.

²¹ Tinker, Miles A. "How Formulae Are Read." *American Journal of Psychology* 40: 476-83; July, 1928.

²² Judd, Charles H., and Buswell, Guy T. *Silent Reading: A Study of the Various Types*. Supplementary Educational Monographs, No. 23. Chicago: University of Chicago Press, 1922. p. 24.

²³ Foremost advocate of this method is Arthur I. Gates, who explains the "intrinsic method" in *New Methods in Primary Reading*. New York: Teachers College, Columbia University, 1928.

²⁴ Representative of this point of view are articles by Eleanor Holmes, "Vocabulary Instruction and Reading." *Elementary English Review* 11: 103-05; April, 1934; and Henmon, V. A. C. "An Experimental Study of the Value of Word Study." *Journal of Educational Psychology* 12: 98-102; February, 1921.

²⁵ Symonds, Percival M. "Size of Recognition and Recall Vocabulary." *School and Society* 24: 559-60; October 30, 1926.

²⁶ "Can First Grade Children Learn Two New Words a Day?" *Denver Public Schools Bulletin* 2: 10-12; October, 1928.

²⁷ Thorndike, Edward L. "Word Knowledge in the Grades." *Nation's Schools* 14: 19-20; December, 1934.

5. Pupils often identify words by fixing attention on some minute detail, such as a tall middle letter, the dot over an "i," or the tail of a "y."

6. Names of objects which would seem to be of great interest to children are not always easy for them to learn.

7. Distribution of practise periods is important in securing retention. The first repetition should come within twenty-four hours after a word is first presented, and at intervals thereafter until recognition is established. Pupils remember about 70 percent of new words encountered for twenty-four hours but only about 50 percent if there is no repetition within ninety-six hours.

8. Pupils improve rapidly with practise in their ability to learn new words. One group learned nearly twice as many new words on the fifth day as on the first.²⁸

²⁸ See especially:

Gates, Arthur L., and Boeker, Eloise. "A Study of Initial Stages in Reading by Pre-School Children." *Teachers College Record* 24: 469-88; November, 1923. ¶ Meek, Lois H. *A Study of Learning and Retention in Young Children*. Contributions to Education, No. 164. New York: Teachers College, Columbia University, 1925. 96 p. ¶ Wiley, Will E. "Difficult Words and the Beginner." *Journal of Educational Research* 17: 278-89; April, 1928.

²⁹ See p. 288.

Table 10 summarizes the recommendations of the National Committee on Reading with reference to what should be done in each grade to develop a meaning vocabulary and promote accuracy and independence in word recognition.

3. "Crutches"—Ability to read silently without pointing, using line-markers, moving the lips, or resorting to the use of other "crutches" is another of the fundamental, or basic, reading skills. Efficient silent reading habits cannot be established until such artificial devices are abandoned. Methods of breaking up such habits are suggested elsewhere in this bulletin.²⁹

4. *Correct eye-movement habits*—Thru laboratory investigations, educational psy-

TABLE 10.—SUGGESTIONS ON HOW TO DEVELOP A SATISFACTORY READING VOCABULARY

Teaching suggestions	Grade for which the suggestion is offered					
	I	II	III	IV	V	VI
I	2	3	4	5	6	7
On how to develop a large meaning vocabulary:						
Extension of pupils' actual experiences and their experiences thru reading . . .	X	X	X	X	X	X
Repetition of new words in connection with additional experiences	X					
Use of new words in a variety of activities and situations	X					
Detection, by the teacher, of inaccuracies in children's expression	X					
Use of context as a cue to word meanings		X	X	X	X	X
Pupils trained to know when they should ask for help in interpreting words . .		X	X			
Practise in the use of synonyms		X	X	X	X	X
Practise in classifying words		X	X	X	X	X
Use of vocabulary tests		X	X	X	X	X
Recording individual difficulties as a basis for remedial work and provision for individual differences, as needed	X	X	X	X	X	X
On how to develop accuracy in word recognition:						
Teaching, as sight words, a list of words from the children's speaking vocabulary.	X	X	X	X	X	X
Identification, by pupils, of gross differences between words in the sight list . .	X					
Use of books deferred until pupils are "ready" to read	X					
Introduction of phonics when pupils begin to note gross similarities and differences in the form and sound of words	X					
Definite instruction in phonics, adapted to individual needs	X	X	X			
Early attention to pupils' inaccuracies in oral and written expression	X	X	X			
Practise in arranging words alphabetically		X	X			
On how to develop independence in word recognition:						
Having pupils approach the reading lesson with definite questions or purposes in mind	X	X	X	X	X	X
Use of markers at first to limit attention to one line	X					
Focusing attention on a relatively short unit, i. e., sentence or paragraph . . .		X	X	X	X	X
Instruction on different ways to attack new words	X	X	X			
Telling pupils words they cannot be expected to decipher	X	X	X			
Establishment of self-confidence	X	X	X	X	X	X
As little interruption of thought as possible	X	X	X			
Emphasis on meaning—not words	X	X	X	X	X	X
Instruction and practise in applying phonetic knowledge		X	X	X	X	X
Giving whatever word-drill is needed in separate periods—not at a time when pupils are reading for the thought	X					

Adapted from: National Society for the Study of Education. *Report of the National Committee on Reading*. Twenty-fourth Yearbook, Part I. Bloomington, Ill.: Public School Publishing Co., 1925. p. 91-96.

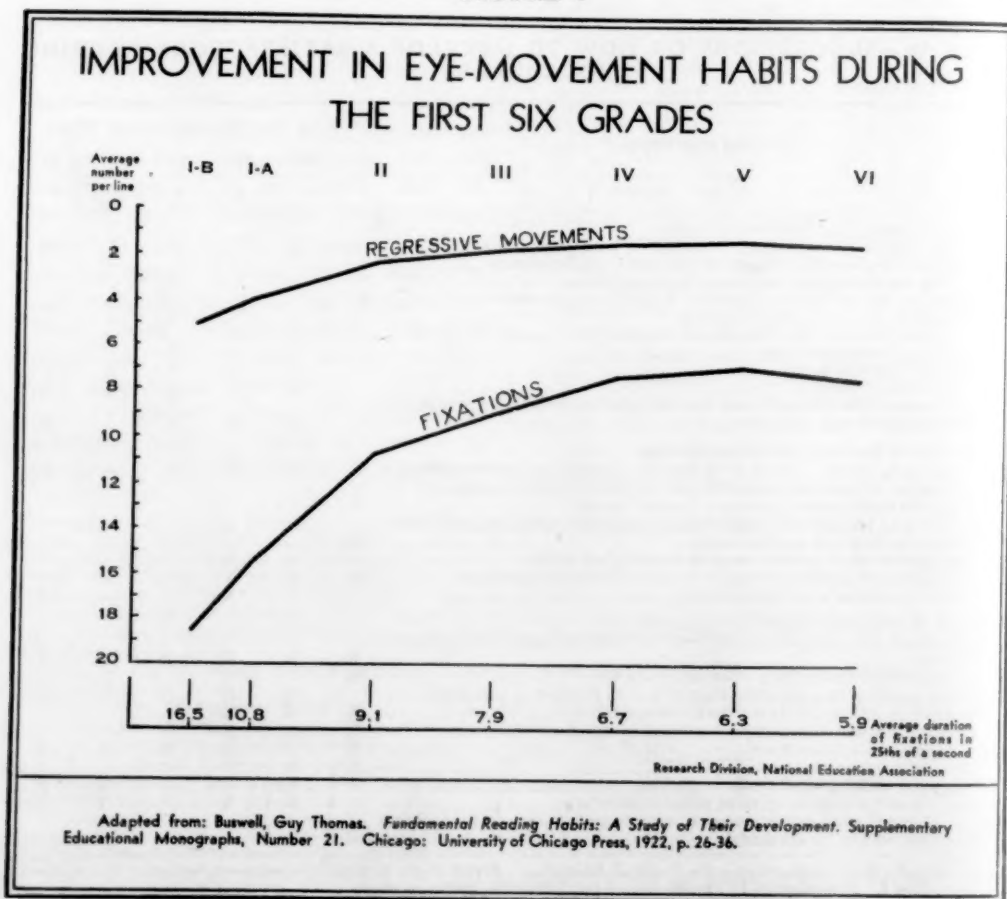
chologists have determined the manner in which the eyes function in reading and have noted the differences between the eye-movements of good and poor readers. As one reads, the eyes move along the line in a series of rapid shifts and momentary pauses. The shifts are lightning-like movements, so rapid that the eye sees nothing until it comes to rest.³⁰ The pauses, called fixations, altho differing greatly in length, usually average about three-tenths of a second. About 5 to 6 percent of the total reading time is required for the shifts between fixations, leaving 94 to 95 percent for perception.³¹ When reading is done efficiently, the eye-movements are regular and somewhat rhythmic and the re-

turn sweep from the end of one line to the beginning of the next is made quickly and accurately. Poor reading, on the other hand, is marked by a large number of fixations or pauses; the movements are quite irregular—first to right, then to the left to look again at some word passed by—and on the return sweep, the eye often fails to find the beginning of the next line.

When reading is taught effectively, eye-movement habits improve rapidly during the elementary-school period. Growth standards suggested by Buswell's study are given in Figure V. Grades I, II, and III stand out as the important ones in establishing correct eye-movement habits.

- ³⁰ Dodge, Raymond. "The Illusion of Clear Vision During Eye-Movement." *Psychological Bulletin* 2: 193-99; June, 1905.
 † Holt, Edwin B. "Eye-Movement and Central Anaesthesia." *Harvard Psychological Studies* 1: 3-45; January, 1903.
³¹ Erdmann, B., and Dodge, Raymond, *op. cit.* † Tinker, Miles A. "Eye Movement Duration, Pause Duration, and Reading Time." *Psychological Review* 35: 385-97; September, 1928.

FIGURE V



Classroom teachers, of course, cannot determine with absolute accuracy the eye-movement habits of their pupils. Buswell suggests a practical technic, however, for observing general improvement and discovering gross irregularities.³² Whenever faulty eye-movement habits are discovered, teachers should regard them as *symptoms* of some fundamental difficulty—not as *causes* of poor reading. They are to be eliminated by finding and correcting the real difficulty, not by attempting to “pace” the eye-movements as some have attempted to do.³³ In other words, desirable eye-movement habits are not developed by direct teaching, but are a byproduct of correct reading instruction.

5. *Reading as thought-getting*—Another fundamental in silent reading is the habit of looking upon reading as a thought-getting process. Unless emphasis is placed on sentence interpretation instead of on word recognition, word-calling instead of true reading can be expected.

The improvement of rate of reading—Numerous experiments have shown that very few people, children or adults, read at their own maximum rates. By devoting special attention to this phase of reading, rate can be improved considerably in most classrooms without loss in comprehension. Significant gains in rate have been achieved thru the use of flash-card drills and short exposure exercises of other types, speed drills, and extensive practise with

easy or familiar materials, thru the development of larger reading vocabularies and greater familiarity with language forms, thru the elimination of vocalization, line following, and other faulty reading habits, and thru the keeping of individual progress charts.³⁴

Among the factors known to exercise considerable control over the individual's rate of reading are: (1) size of the reader's vocabulary, (2) power of comprehension, (3) familiarity with the field, (4) the reader's purpose, (5) ability to concentrate, (6) the rate of fixation-accommodations, and (7) speed of association.³⁵

The improvement of comprehension—Methods which have been recommended for the improvement of reading comprehension, as a result of their effective use in classroom experiments, include: (1) improvement of the reading vocabulary; (2) emphasis on meaning vs. mechanics in oral-reading instruction; (3) training in reading with a definite rhythm of expression, i.e., in thought units; (4) development of the habit of always reading for a specific purpose; (5) practise in reading for a variety of purposes; (6) frequent use of tests and the keeping of individual progress charts; and (7) instruction and practise in finding the central thought, following directions, answering fact questions, reproducing as many ideas as possible from a selection read, and outlining, or otherwise organizing, ideas gained from reading.³⁶

³² Buswell, Guy T. *Fundamental Reading Habits: A Study of Their Development*. Supplementary Educational Monographs, No. 21. Chicago: University of Chicago Press, 1922. p. 142-47.

³³ Tinker, Miles A. “The Role of Eye Movements in Diagnostic and Remedial Reading.” *School and Society* 39: 147-48; February 3, 1934.

³⁴ See especially: Book, William F. “The Development of Higher Orders of Perceptual Habits in Reading.” *Journal of Educational Research* 21: 161-76; March, 1930. ¶ Breitwieser, J. V. “Training for Rapid Reading.” *Application of Psychology to Education*. Research Studies 4-7. Berkeley: Bureau of Research in Education, University of California, 1922. p. 15-17. ¶ Coil, Oscar T. *Methods of Increasing Speed in Silent Reading Thru Class Instruction*. Unpublished master's thesis, Department of Education, University of Chicago, 1923. ¶ Gray, Clarence T. *Types of Reading Ability as Exhibited Thru Tests and Laboratory Experiments*. Supplementary Educational Monographs, Vol. 1, No. 5. Chicago: University of Chicago Press, 1917. ¶ Oberholtzer, Edison E. “Testing the Efficiency of Reading in the Grades.” *Elementary School Journal* 15: 313-22; February, 1915. ¶ O'Brien, John A. “The Development of Speed in Silent Reading.” *Report of the Society's Committee on Silent Reading*. Twentieth Yearbook, Part II. National Society for the Study of Education. Bloomington, Ill.: Public School Publishing Co., 1921. p. 54-76. ¶ O'Brien, John A. *Silent Reading*. New York: Macmillan Co., 1921. 290 p.

³⁵ See especially: O'Brien, John A. “The Development of Speed in Silent Reading.” *op. cit.* p. 54-76. ¶ Hulten, C. E. “A Study of the Speed of Upper Grade Reading.” *Journal of Educational Research* 10: 141-48; September, 1924. ¶ Traxler, Arthur. “The Relation between Rate of Reading and Speed of Association.” *Journal of Educational Psychology* 25: 357-65; May, 1934. ¶ Wager, Ralph E. “Fixation-Accommodation Rates as Factors in Reading.” *Journal of Educational Psychology* 15: 579-87; December, 1924.

³⁶ See especially: Alderman, Grover H. “Improving Comprehension Ability in Silent Reading.” *Eleventh Annual Conference on Educational Measurements*. Bulletin of the Extension Division, Vol. 11, No. 3. Bloomington, Ind.: Indiana University, 1925. p. 28-37. ¶ Germane, Charles E. “Outlining and Summarizing Compared with Rereading as Methods of Studying.” *Report of the Society's Committee on Silent Reading*. Twentieth Yearbook, Part II. National Society for the Study of Education. Bloomington, Ill.: Public School Publishing Co., 1921. p. 103-12. ¶ Gray, Clarence T. “The Anticipation of Meaning as a Factor in Reading Ability.” *Elementary School Journal* 23: 614-26; April, 1923. ¶ Holmes, Eleanor. “Reading Guided by Questions vs. Careful Reading and Re-reading without Questions.” *School Review* 39: 361-71; May, 1931. ¶ Knoche, Selma L. *A Study of the Rhythm of Expression of Thirty High School Pupils*. Unpublished master's thesis, Department of Education, University of Chicago, 1923. ¶ McCarty, Pearl S. “Increasing Comprehension in Silent Reading.” *School Review* 39: 758-66; December, 1931. ¶ Springstead, Clara B. “Improving Speed and Comprehension in Reading.” *Journal of Educational Method* 5: 48-52; October, 1925. ¶ Yoakam, Gerald A., and Truby, Charlotte. “The Effect of Certain Practise Exercises in Reading.” *University of Pittsburgh School of Education Journal* 1: 60-61; January-February, 1926.

Among the factors which influence comprehension in reading are intelligence, vocabulary, ability to organize, rate, memory span, freedom from lip-movement, environment, amount of practise in reading, regularity of school attendance, width of the recognition span, motivation, and reasoning ability.³⁷

Factors which often account for errors in interpretation are: pupils' faulty language habits, preconceived ideas, the introduction of irrelevant facts and ideas, or disregard of important modifying elements.³⁸

The Classroom Practises of a Group of Successful Teachers

Special types of reading lessons—Some of the special types of reading lessons employed by the successful teachers who participated in the present study and the extent to which they are used at each grade level, are indicated in Table 11. Nearly all teachers in all grades give special lessons on the proper use and care of books and, except in Grade I, on the use of the index and table of contents.³⁹ Instruction on the use of glossaries and dictionaries is often given in the third grade and usually in all grades beyond the third.⁴⁰ Encyclopedias are used, for the most part in Grades IV, V, and VI.⁴¹ Very little instruction on the use of

card catalogs and library guides is given except in Grades V and VI.

Lesson plans—The use of some type of definite lesson plan is all but universal among the teachers whose practises are reviewed in this bulletin. Some use lesson plans of more than one type, for example, a plan for a month's work and plans for each day. The lesson plan most in favor is the one outlining a unit of work covering an indefinite period of time. About 55 percent of the teachers make use of this type. Next in popularity is the weekly lesson plan, used by more than one-third of the teachers reporting; then the daily plan, used by one-fourth to one-third of the group. Semester plans and monthly plans are used rather infrequently—by about 5 percent of those replying.

Altho the use of some kind of definite, written plan is reported by nearly all the teachers, the quality or degree of helpfulness of the plans being used varies greatly. Sometimes the written plan may be only a statement such as "Have pupils read _____ *Reader*, p. 85-87; use test questions, p. 175." In other cases more detailed plans are developed. The one which follows, actually taken from a teacher's plan book, is of the latter type. It is presented, not as a model plan, but as an example of a relatively complete teaching outline.

³⁷ Hilliard, George H. *Probable Types of Difficulties Underlying Low Scores in Comprehension Tests*. University of Iowa Studies in Education, Vol. 2, No. 6. Iowa City: University of Iowa, 1934. 60 p.

³⁸ Thorndike, Edward L. "The Understanding of Sentences: A Study of Errors in Reading." *Elementary School Journal* 18: 98-114; October, 1917. ¶ Maryland State Department of Education. *Silent Reading*. Maryland School Bulletin, Vol. 5. Baltimore: the State Department of Education, 1924. 88 p.

³⁹ Helpful teaching suggestions along this line are given by Vilda Barker in "Informal Testing of the Use of Books and Libraries." *Elementary English Review* 10: 143-45; June, 1933.

⁴⁰ Most authorities agree that instruction on the use of the dictionary should begin no later than Grade IV. For a survey of opinion see: Dolch, Edward W. "The Use of the Dictionary." *Elementary School Journal* 30: 669-74; May, 1930.

For teaching suggestions for each of the Grades II to VI see: Pickard, Vera E. "Training Children to Use the Dictionary." *Elementary English Review* 10: 139-42, 150; June, 1933.

⁴¹ For suggestions on method see: Raddatz, Agnes, and McAlister, Gladys M. "The Use of Encyclopedias in the Elementary School." *Elementary English Review* 10: 146-47, 160; June, 1933.

TABLE 11.—PERCENT OF TEACHERS IN EACH GRADE WHO TEACH CERTAIN TYPES OF SPECIAL LESSONS

Type of lesson	Percent of teachers; Grade					
	I	II	III	IV	V	VI
1	2	3	4	5	6	7
Instruction on the proper use and care of books.....	97	97	97	96	90	88
How to use an index or table of contents.....	68	91	94	93	90	87
The use of chapter and sectional headings.....	38	59	69	78	79	80
How to use the dictionary.....	10	7	36	87	93	91
How to use the glossary or appendix.....	4	4	40	75	84	87
How to use encyclopedias.....	0.7	2	13	45	74	86
The use of a card catalog in the library.....	2	5	7	13	34	47
The use of library guides to books and periodicals.....	0.3	0.8	2	12	23	38
Number of teachers' reports on which the percents are based.....	288	260	270	225	229	255

SAMPLE LESSON PLAN ⁴²

LESSON TYPE—Silent reading; developmental.

MATERIALS—"How Jerry Got His Nickname," _____ *Reader*, p. 130.

INTRODUCTION—"I know a story about a queer little family. It was not a family of people. One day the mother warned her children about something dangerous. But one child did not mind; he did the very thing he was told not to do. What usually happens when children do not mind?"

MOTIVE FOR READING—"Would you like to read about this family? What would you like to find out about them?" Write on board children's questions, such as:

- What kind of a family was it?
- Who was the naughty child?
- What did the mother warn the children about?
- How was the naughty child punished?

MASTERY OF DIFFICULTIES—Phrases on board:

- | | |
|-----------------|-----------------|
| a queer family | tiny squeaks |
| near our pantry | it means danger |

STANDARDS TO BE RECALLED—

1. Try to get new words by reading the rest of the sentence; look at the first letter; see how the word ends. Ask for help if necessary.
2. Keep lips closed while reading.
3. Do not point.

RECALL OF MOTIVES—Refer to questions on the blackboard.

SILENT READING—Distribute books. Pupils find story in table of contents and turn to it. Then read silently, teacher giving help as needed and watching to see that standards are remembered.

CHECK ON COMPREHENSION—Use mimeographed test.

THE TEST

Draw a line under the right answers

1. It was a family of:

dogs	mice	cats
------	------	------
2. These were the ones in the family:

Jerry	Mother	Tatty
Auntie	Daddy	Merry
Kitty	John	
3. Mother told them:
 - not to eat too much
 - not to get their hands dirty
 - not to go near the little house
4. This one was naughty:

Kitty	John
Tatty	Jerry
5. This is how the bad one was punished:
 - he had no dinner
 - he lost his tail
 - his mother put him to bed
6. What was the bad one's nickname?

Bob	Bobtail	Bobby
-----	---------	-------

⁴² This plan for a second-grade reading lesson was submitted by Mary G. Moore, teacher in the Rountree School, Springfield, Mo.

Lesson plans should be adapted to the teacher's own habits of thinking and doing. They will vary in style and content according to the materials used and the reading situation involved. In any good plan, however:

1. The plan is focused on specific outcomes.
2. It lists the materials to be used.
3. It outlines the activities to be carried out.
4. It suggests the sequence to be followed.
5. It often carries a few important questions or items of special information.
6. It is relatively brief, legible, and so well organized that it can be followed readily.

A few school systems have standardized plan books calling for certain definite facts about

each proposed lesson. Figure VI shows one such form, filled out by a first-grade teacher.

Order in which textbook selections are used—In the lower grades many teachers use the selections in reading textbooks in the order in which they appear, but in the higher grades the regular sequence is seldom followed. Figure VII indicates the trend of practice in this matter. When selections are not used in the order given, choices are made most frequently so that the work in reading will correlate with work in other subjects. Other factors taken into account, listed here according to frequency of use, are: (1) seasons and special days, (2) pupils' interests, (3) pupils' needs, (4) order

FIGURE VI

The effective plan is to the teacher what the blueprint is to the architect

Grade: One. Subject: Reading. Work Assigned: "Topsy and the Beavers," _____ Reader, p. 88. Remote Aim: To develop the ability to get thought with accuracy, facility, and reasonable rapidity. Immediate Aim: To read and understand the story "Topsy and the Beavers." Procedure: Introductory Questions: "Did Topsy like being a kitten? What did the rabbits say to Topsy? Describe Topsy." New Vocabulary: (On blackboard) "The big woods," "to the water," "in the sun," "at work," "cut down," and "wet paws." Find story in table of contents. Read to find out what the beavers did. Oral reading, children choosing own stopping places. Questions on content: "How did the beavers build their houses?" "What did Topsy do?" "What did Topsy tell mother beaver?" "Draw a picture of Topsy."	Date: April 20. Lesson Type: Developmental. Results:
--	---

A LESSON PLAN MADE OUT ACCORDING TO A STANDARD FORM

(This plan was submitted by Mary Katkin, teacher in the Oxford School, Fairhaven, Mass.)

of difficulty, (5) teacher's specific aim for the lesson, (6) relation of the stories to each other, and (7) remedial work.

Classroom use of newspapers and magazines—The extent to which children's newspapers and magazines are used in each grade in the classrooms of successful reading teachers is indicated by Figure VIII. In the upper elementary grades, particularly, they are used extensively.

Uses made of central libraries—The percent of teachers in each grade whose pupils make use of central libraries is indicated in Figure XII, p. 313. Going to the library to select books for home reading is the type of library activity reported most frequently. Library periods under the direction of a trained librarian, free reading periods in the library, story hours, and periods in which stories are read to children are other plans often mentioned.

Stimulating interest in outside reading—Figure IX shows the relative merits of certain methods of stimulating interest in outside read-

ing, according to the opinions of 1527 capable teachers. Altho, in general, the methods that rank high at one grade level tend to rank high at all levels, there are certain devices which seem better adapted to some grades than to others. For example, interesting displays of books, and reading contests, are rated considerably higher in the early grades than in the later ones. On the other hand, pupil recommendations and booklists are rated slightly higher in the upper grades than in the lower ones. Five of the methods stand out as clearly superior to the other four.⁴³

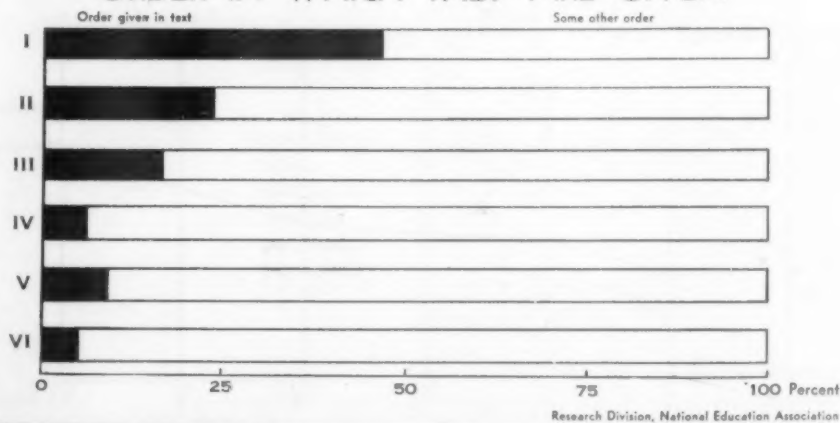
Several teachers mentioned the use of reading clubs as a means of stimulating interest in outside reading.⁴⁴ These are organized like other school clubs, with pupil officers and the teacher as sponsor. The club meets at intervals, usually about once a week, and pupils report to each other on the books they have been reading, read orally their favorite selections, or perhaps dramatize a story.

⁴³ Among the many helpful articles dealing with this problem are: Bilger, Estelle S. "Developing Reading Interests Through Hobbies." *Reading and the School Library* 1: 16-17; October, 1934. ¶ Colburn, Evangeline. "Guidance in Voluntary Reading." *Elementary School Journal* 28: 666-72; May, 1928. ¶ Cutright, Prudence, and Brueckner, Leo J. "Measurement of the Effect of the Teaching of Recreational Reading." *Elementary School Journal* 29: 132-37; October, 1928. ¶ Rasche, William F. "Methods Employed to Stimulate Interests in Reading." *School Review* 37: 29-36, 124-31, 204-14, 293-303; January to April, 1929.

⁴⁴ A successful reading club is described by William A. King in "The Development of Outside Reading of Elementary School Pupils." *The Elementary School Principalship*. Fourth Yearbook. Washington, D. C.: Department of Elementary School Principals, National Education Association, 1925. p. 360-66.

FIGURE VII

PERCENT OF TEACHERS IN EACH GRADE WHO USE THE SELECTIONS IN READING TEXTBOOKS IN THE ORDER IN WHICH THEY ARE GIVEN



Based on reports from 1527 successful teachers of reading—225 to 288 in each grade.

Methods of checking up on outside reading—Teachers have several different methods of determining how much their pupils read outside the classroom and what they derive from their free reading. Certain methods are used more frequently than others and practise varies from grade to grade. Figure X shows for each grade the percent of teachers participating in this study who use various checkup devices “frequently,” “occasionally,” or “never.” The black portion of each circle shows the percent of teachers using the method frequently; the shaded portion, those who use it occasionally; the unshaded portion, those who never use the method. Both oral and written reports become increasingly useful from the first grade to the sixth. It is in the upper grades also that teachers make greater use of checkups with librarians and watch recitations more closely for evidences of outside reading. Tests on outside reading, especially end-of-semester tests, are not very generally employed. The conference with parents on pupils’ outside reading is a popular device for occasional use, but few teachers use this method frequently except in the lower elementary grades. The report to

the class is used more or less frequently by nearly every teacher in every grade.

A number of teachers have their pupils prepare written book reports according to a standard form, of which the following is typical.⁴⁵

BOOK NOTES

TITLE OF BOOK.....

NAME OF AUTHOR.....

DATE FINISHED.....

I LIKED THIS BOOK BECAUSE.....

THE BEST PART OF THE BOOK TELLS.....

MY NAME IS.....

Providing for individual differences—The methods commonly used by successful teachers to provide for differences in pupils’ interests, needs, and abilities are summarized in Table 12. Five of the six methods listed are in quite general use, and apparently, teachers ordinarily

⁴⁵ This form, developed for use in the second grade, was supplied by Helen E. Shaw, teacher in the Pinckney School, Lawrence, Kans.

FIGURE VIII

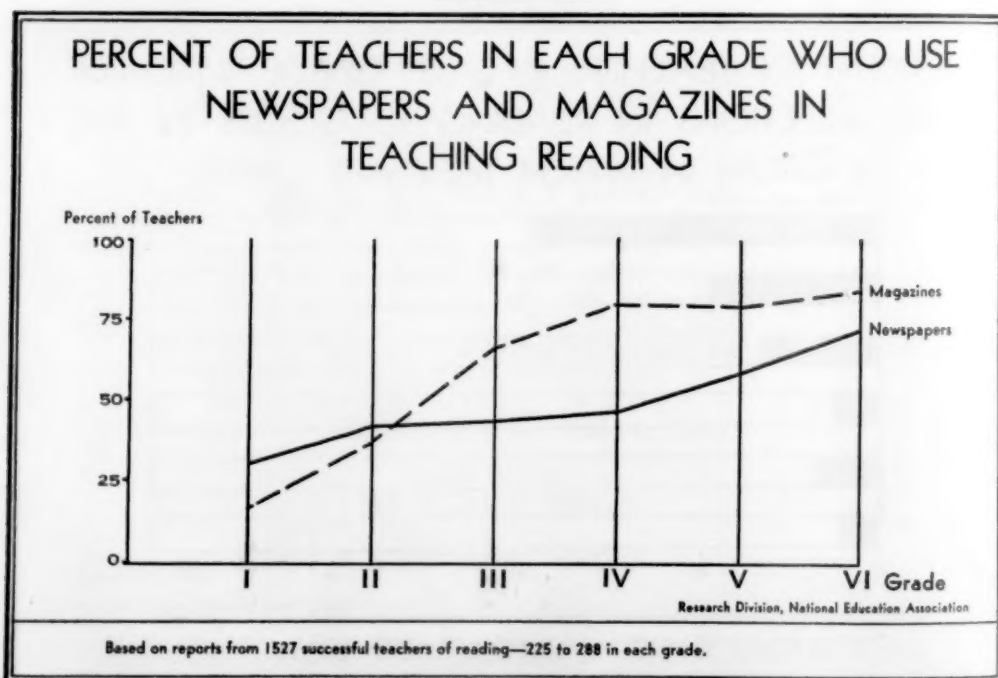
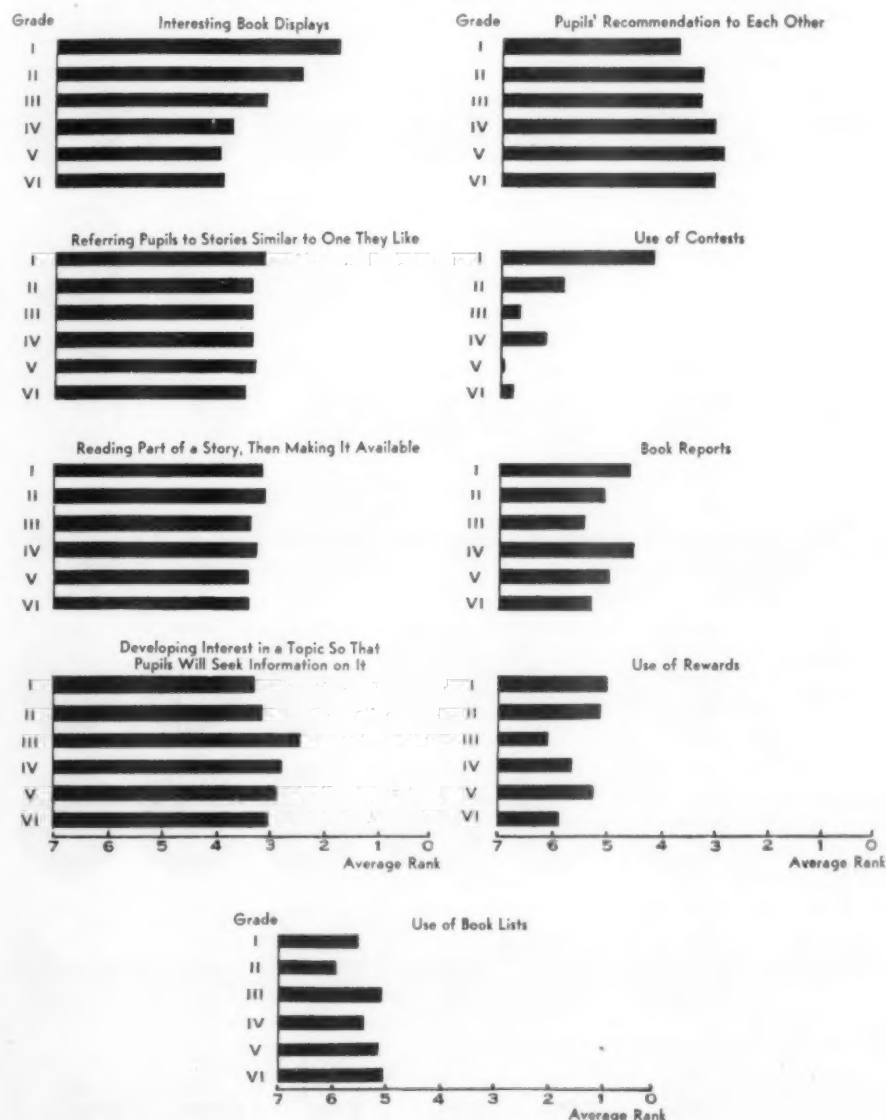


FIGURE IX

RELATIVE VALUE OF NINE DEVICES FOR STIMULATING INTEREST IN OUTSIDE READING, ACCORDING TO THE OPINIONS OF 1527 COMPETENT TEACHERS

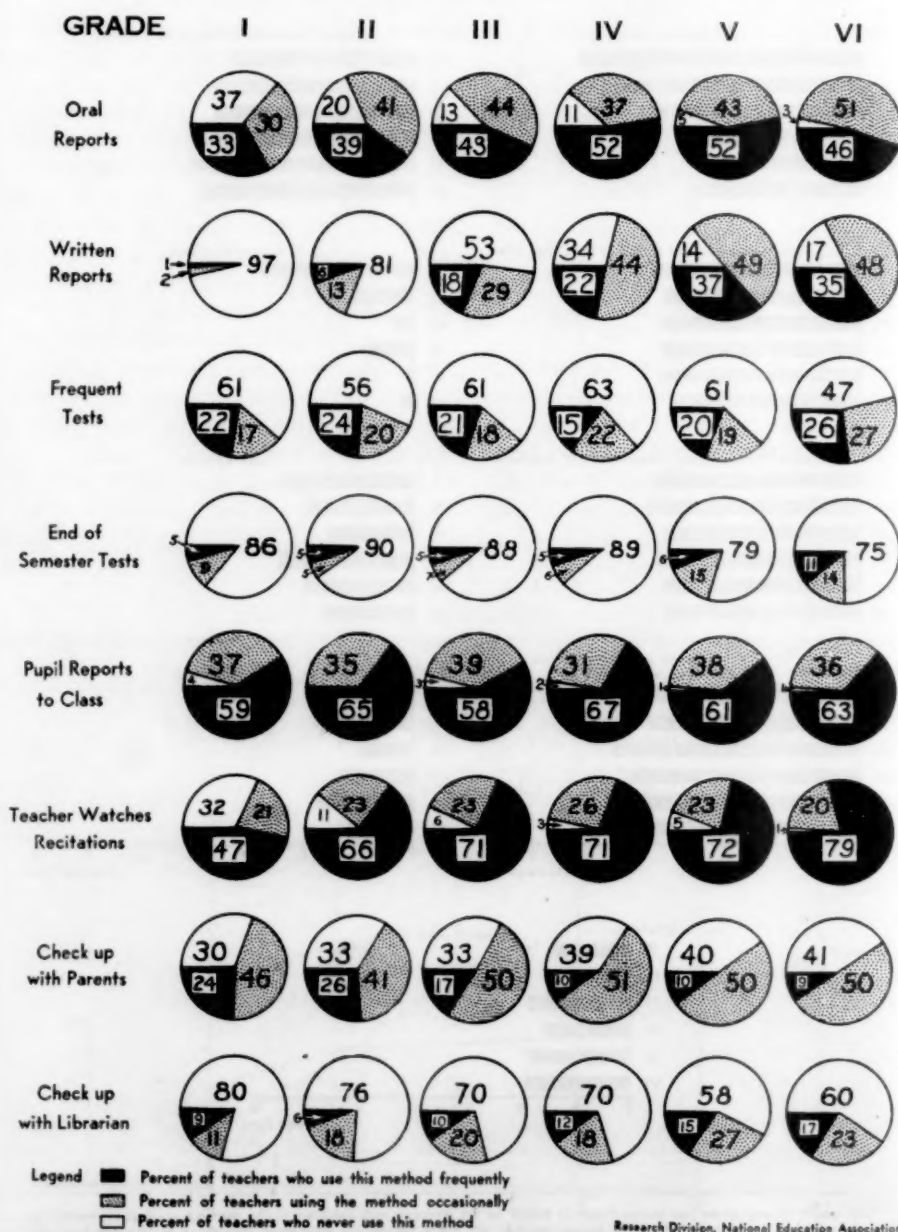


Research Division, National Education Association

The length of any given bar in this Figure is based on the average rank assigned to the method which it represents by the teachers of a particular grade. The longer the bar, the more helpful the method is considered by the teachers who cooperated in this study.

FIGURE X

EXTENT TO WHICH VARIOUS METHODS ARE USED IN CHECKING UP ON PUPILS' OUTSIDE READING



Based on reports from 1527 successful teachers of reading—225 to 288 in each grade.

use about four out of the five. Teaching by the "individual contract" plan is practised in a few schools, somewhat more often in the upper elementary grades. The percents in this table suggest that individual differences receive somewhat less attention in the upper grades than in the lower ones, thus raising the question as to whether teachers of reading in the upper grades are making adequate provision for the individual pupil.

Relating reading to other subjects—From 80 to 90 percent of the teachers in the various grades reported they had a *definite plan* for relating reading instruction to one or more other subjects in the curriculum. The subjects with which reading was most often correlated systematically were the social studies, English, arithmetic, and hygiene. The amount of time devoted to reading instruction in connection with these subjects varied greatly. In some cases there was only a 10-minute period one day a week; in others, there were daily 30-minute periods. On the average, about 40 minutes a week was given to reading in connection with hygiene, about 50 minutes per week to reading and arithmetic, and about 65 minutes per week to reading and English. The average amount of time devoted to reading instruction in conjunction with the social studies increased from grade to grade—from about 70 minutes per week in Grade I to 135 minutes per week in Grade VI.

Difficult teaching problems—One of the questions on the inquiry form filled out by the 1527 successful teachers who cooperated in this study was, "List a few of the problems in the teaching of reading which you have found most difficult during the current school year."

The problem mentioned by the largest number of teachers in every grade was the *lack of*

sufficient or suitable reading materials. Other problems mentioned frequently by teachers in all the grades were:

1. Creating interest and good taste in reading.
2. Developing good habits of oral reading.
3. Improving comprehension in reading.
4. Building a larger reading vocabulary.
5. Increasing rate of reading.
6. Providing for individual differences.
7. Overcoming faulty language habits and developing greater facility in expression.
8. Eliminating faulty reading habits—particularly vocalization, line-following, and the habit of guessing.
9. Developing accuracy in word recognition.
10. Teaching pupils to read in thought units.

In the first and second grades, other problems often mentioned were: (1) the physical, mental, or social immaturity of pupils; (2) pupils' absences; (3) short attention span; (4) the transfer of pupils from one school to another; (5) providing appropriate drills and seat work; and (6) unreasonable expectations and lack of understanding on the part of uninformed or overambitious parents. In Grades III to VI, lack of training in phonics, developing the ability to use reading skills effectively in study, developing flexibility in reading habits, and eliminating superficial reading, were some of the additional problems listed.

Relative efficiency of reading instruction in the various grades—Numerous suggestions on classroom procedure have been stated or implied in the foregoing summary of classroom practises and research findings. In evaluating these suggestions, teachers may well raise the question, At what grade level does reading instruction tend to be at its best, and at what level is it least satisfactory? The best available answer to this question is found in the opinions of supervisors of reading with reference to the work of all teachers of reading in the school

TABLE 12.—PERCENT OF TEACHERS WHO USE EACH OF SIX METHODS OF PROVIDING FOR INDIVIDUAL DIFFERENCES

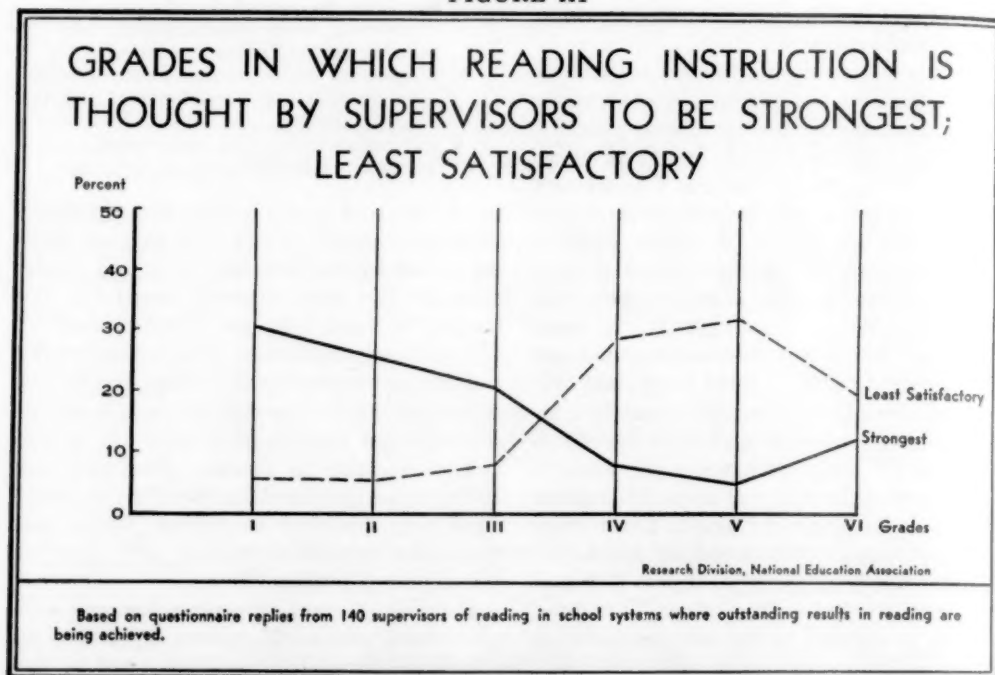
Method	Percent of teachers who use each method; Grade					
	I	II	III	IV	V	VI
	2	3	4	5	6	7
Group pupils according to ability.....	96	92	88	83	76	71
Require different amounts of reading.....	83	85	82	81	84	75
Use different materials.....	76	81	82	82	82	78
Give individual help.....	83	90	84	81	73	68
Use different teaching methods.....	82	80	82	73	72	70
Teach by the "individual contract" plan.....	4	4	7	6	6	13
Number of teachers' reports on which the percents are based.....	288	260	270	225	229	255

systems represented in this study.⁴⁶ These opinions are set forth in diagrammatic form in Figure XI. More than three-fourths of the replies indicate that reading instruction is strongest either in Grades I, II, or III and

least satisfactory in Grades IV, V, or VI. If these observations are correct and typical of the general situation, teachers in the upper grades should be unusually self-critical, and on the alert for improved methods of teaching.

⁴⁶ It should be noted that these opinions refer to the work of all teachers of reading in the school systems represented—not to the work of the few superior teachers who reported their classroom practices.

FIGURE XI



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1. DOLCH, EDWARD W. *The Psychology and Teaching of Reading*. Boston: Ginn and Co., 1931. 261 p.
2. GATES, ARTHUR I. *The Improvement of Reading*. rev. ed. New York: Macmillan Co., 1935. 668 p.
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7. O'BRIEN, JOHN A. *Reading: Its Psychology and Pedagogy*. New York: Century Co., 1926. 308 p.
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10. SMITH, NILA B. *One Hundred Ways of Teaching Silent Reading, for All Grades*. Yonkers-on-Hudson, New York: World Book Co., 1925. 149 p.
11. TUTTLE, FLORENCE P. *Oral and Silent Reading Practices*. New York: Longmans, Green and Co., 1931. 246 p.
12. YOAKAM, GERALD A. *Reading and Study*. New York: Macmillan Co., 1928. 502 p.

Materials of Instruction

The teaching problem mentioned by the largest number of the teachers who took part in this study was that of "providing sufficient and suitable reading material." The paragraphs which follow are concerned with the selection and evaluation of children's books and with the way in which a group of successful teachers obtain and use reading materials.

The Selection of Reading Textbooks

Teacher participation—Teachers are not always permitted to use the textbooks they prefer, but the trend is toward greater dependence on teachers' judgments in this important matter. Of 154 school systems having superior reading programs, 29 use textbooks adopted on a statewide basis; 102 use texts adopted on a local basis; 20 use books selected locally within limits prescribed by a state-adopted, optional list; and 3 have no *adopted* textbooks, teachers being entirely free to make their own selection. Wherever textbooks are adopted locally, teachers usually are called upon for assistance. In only 2 of the 154 school systems, where supervisors reported on this item, are reading textbooks selected by the board of education, and in only 15 is the selection made by the superintendent, the supervisor, or the two working cooperatively without the help of teachers. The following procedures in textbook selection are mentioned in the replies from supervisors where texts are adopted on a local basis:

1. Trial use.
2. Use of a score-card.
3. Extensive analyses (new words per page, total vocabulary, etc.).
4. Several teachers, working independently, rank samples in order of merit.
5. Conferences, after examination of samples.
6. Checking with a list of defects in the series to be abandoned—those which constitute the reason for changing.
7. Analysis of methods recommended or implied by the materials of the text.
8. Comparison with local syllabus and word lists.
9. Visits to schools using the books under consideration.

Just as teachers are being called on to select or help to select reading textbooks, they are being asked also to select library materials. This was true in 128 of the 165 school systems which reported their practises in selecting books for school libraries. In about three-fourths of the cases, some use is made of booklists of one or more of the following types:

1. Lists issued by libraries.
2. Lists prepared and published by private authors.
3. Lists issued by state departments of education or appearing in courses of study.
4. Lists compiled in the local school system.
5. Publishers' booklists.
6. Lists appearing in newspapers and magazines.
7. Lists prepared by national organizations.
8. Reading circle lists.
9. Lists published by universities.
10. Lists found in reports of research studies.
11. Lists compiled from records of pupils' free reading.

Many of the procedures and criteria suggested earlier with reference to the selection of textbooks are equally appropriate in selecting library materials. Several of the lists of children's books which teachers will find most helpful are given on p. 314.

Research relating to the selection of reading textbooks—Reading materials need not be evaluated merely on the basis of general impressions and unsupported opinions. Books can be compared with each other quite objectively and judged according to a number of definite and reliable standards. A number of helpful checklists and score-cards have been developed.¹ But far more important than these are the numerous research studies which define appropriate reading materials in terms of children's interests, needs, and abilities, and show, thru careful analyses, the qualities that are and are not desirable in children's textbooks. The next few paragraphs deal with certain factors which should always be taken into account in selecting children's books, presenting some of the most significant research findings with reference to each factor.

¹ See especially: Waterman, Ivan R., and Melbo, Irving R. "A Plan of Procedure for the Evaluation of Textbooks in Reading." *Elementary School Journal* 35: 662-74; May, 1935. ¶ Power, Effie L. *Library Service for Children*. Chicago: American Library Association, 1930. p. 31-32. ¶ Simpson, Mabel E. "An Analytical Study of Basal Reading Texts for the Elementary School." *Journal of Educational Method* 7: 400-11; June, 1928. ¶ Mead, Cyrus D. "A Score Card for Rating Primary Readers." *Educational Administration and Supervision* 15: 427-30; September, 1929.

Excellent score-cards, available only in mimeographed form, have been developed in the schools of Medford, Oregon; Lincoln, Nebraska; and Berkeley, California (Elementary Department Bulletin No. 12, February 26, 1930).

Children's interests—Whether or not a book is interesting to children is determined in part by its physical make-up, in part by the types of material presented in it, and to a considerable degree by the nature of the topics covered.

Bamberger found that small children prefer:

1. Books that are not too small—at least 5 by 7 inches.
2. Books with bright colored bindings—especially blue, red, and yellow.
3. Books without the word "Reader" in the title.
4. Books with numerous illustrations.
5. Pictures with a high degree of color saturation.
6. Pictures involving humor and action.
7. Stories in a familiar field.
8. Relatively few lines on a page, and margins at least 1 inch wide.²

Lewerenz found that the general appearance and physical make-up of books has more influence on girls than on boys.³

Generally speaking, children show somewhat greater interest in prose than in poetry and prefer narratives to factual selections, descriptions, and other types of prose.⁴ Their interests vary considerably according to age and, among older children, according to sex. Differences in interests are also found among children who differ greatly with respect to mental ability, home environment, health and physical development, emotional endowment, and reading ability.⁵ There is no significant difference between the interests of boys

and girls up to the age of eight or nine years.⁶ Children like stories involving action and adventure, surprise, beauty, humor, and remarkable achievement. They prefer stories in which the characters display kindness, bravery, and good judgment, and those which end happily. Given these qualities, a story appeals to children whether it be a myth, folk tale, fairy story, piece of fiction, or the recital of an actual event. Stories about animals or about children rank high in interest appeal. Girls are more likely to be interested in an account of boys' adventures than boys in the adventures of girls.⁷ Children, especially those in the early grades, like stories and poems which repeat the same phrases or sentences over and over.⁸ The following criteria, developed by a group of pupils as their own guide in selecting and evaluating materials, reflect certain vital pupil interests:

1. The story must deal with something we want to know about.
2. It must be written in words we can understand.
3. If it states facts, they must be accurate.
4. If it tells a story supposedly true to life, it must not be overdrawn.
5. It must become more interesting as the story proceeds.
6. It must be written in good English.⁹

Among the qualities that detract from children's interests are overmaturity, abstractness, lack of action, unreality, gloominess, monotony,

² Bamberger, Florence E. *The Effect of the Physical Make-up of a Book Upon Children's Selection*. Johns Hopkins University Studies in Education, No. 4. Baltimore: Johns Hopkins Press, 1922. 162 p.

Related investigations include: Martin, Helen. *Children's Preferences in Book Illustrations*. Western Reserve University Bulletin, New Series, 34, No. 10. Cleveland: Western Reserve University, 1931. 58 p. ¶ Mallinger, Bonnie E. *Children's Interests in Pictures*. Contributions to Education, No. 516. New York: Teachers College, Columbia University, 1932. 52 p. ¶ Newton, Lesley. "Modern Trends in Book Illustration for Children." *Elementary English Review* 9: 89-94, 98, 110; April, 1932.

³ Lewerenz, Alfred S. "An Experiment in Evaluating Books Read and Enjoyed by School Children." *Los Angeles Educational Research Bulletin* 9: 10-14; September, 1929.

⁴ Green, Jenny Lind. *Reading for Fun*. Boston: Richard G. Badger, 1925. 205 p. ¶ Gates, Arthur I.; Peardon, Celeste C.; and Sartorius, Ina C. "Studies of Children's Interests in Reading." *Elementary School Journal* 31: 656-70; May, 1931. ¶ Jordan, Arthur M. *Children's Interests in Reading*. rev. ed. Chapel Hill, N. C.: University of North Carolina Press, 1926. 103 p.

⁵ Terman, Lewis M., and Lima, Margaret. *Children's Reading: A Guide for Parents and Teachers*. 2nd ed. New York: D. Appleton and Co., 1931. 422 p. ¶ Gates, Arthur I. *Interest and Ability in Reading*. New York: Macmillan Co., 1930. 264 p. ¶ Jordan, Arthur M., *op. cit.*, 103 p. ¶ Huber, Miriam B. *The Influence of Intelligence Upon Children's Reading Interests*. Contributions to Education, No. 312. New York: Teachers College, Columbia University, 1928. 39 p. ¶ Johnson, B. Lamar. "Children's Reading Interests as Related to Sex and Grade in School." *School Review* 40: 257-72; April, 1932. ¶ Coast, Alice B. "Children's Choices in Poetry as Affected by Teachers' Choices." *Elementary English Review* 5: 145-47, 159; May, 1928. ¶ Lewerenz, Alfred S., *op. cit.*, p. 10-14.

⁶ Belser, Danylu, chairman. "The Reading Interests of Boys." *Elementary English Review* 3: 292-96; November, 1926. Also: Terman, Lewis M., and Lima, Margaret, *op. cit.*, 422 p.

⁷ Outstanding investigations of children's reading interests in addition to those already cited include: Dunn, Fannie W. *Interest Factors in Primary Reading Material*. Contributions to Education, No. 113. New York: Teachers College, Columbia University, 1921. 70 p. ¶ Dowell, Pattie S., and Garrison, K. C. "A Study of Reading Interests of Third Grade Subjects." *Peabody Journal of Education* 8: 202-06; January, 1931. ¶ Garnett, Wilma L. "A Study of Children's Choices in Prose." *Elementary English Review* 1: 133-37; June, 1924. ¶ Grant, Emma B., and White, Margaret L. "A Study of Children's Choices of Reading Materials." *Teachers College Record* 26: 671-78; April, 1925. ¶ Huber, Miriam B. "Children's Interests in Poetry." *Teachers College Record* 28: 93-104; October, 1926. ¶ Mackintosh, Helen K. "Recent Data on Children's Interests in Poetry." *Elementary English Review* 8: 18-20; January, 1931. ¶ Uhl, Willis L. *The Materials of Reading*. New York: Silver Burdett and Co., 1924. p. 97-160.

⁸ Smith, Lois Z., and Bradbury, Dorothy E. "How Do Young Children Respond to Animal Stories Containing Single Statement, Verbal Repetition, and Ideational Repetition of Content?" *Childhood Education* 7: 18-22; September, 1930.

⁹ Green, Jenny Lind. "When Children Read for Fun." *School and Society* 17: 390-92; April 7, 1923.

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poor literary style, stories of too great length, and books that duplicate too much of the content of books previously read.¹⁰

Vocabulary difficulty—In selecting children's reading material, care should be taken to select books in which the general level of vocabulary is appropriate for the children who are to use them. The range should be as wide as possible without going beyond the pupils' ability. There should be enough new words to provide for pupil growth but not enough to create undue reading difficulties. New words should be repeated often enough to permit their mastery. The number of repetitions necessary for mastery depends, of course, on the vividness of the situations in which the words are encountered. Gates points out, however, that the typical reading text with new words in the ratio of 1 in 10 to 1 in 17 is difficult even for the brightest pupils.¹¹ He offers the following hypothesis as to the number of repetitions required by children in the primary grades for the mastery of an ordinary new word:

<i>Children six to seven and one-half years old with an I. Q. of:</i>	<i>Probable number of repetitions required for mastery of new words</i>
120 +	20
110-119	30
90-109	35
80-89	40
70-79	45
60-69	55

¹⁰ Uhl, Willis L. *Scientific Determination of the Content of the Elementary School Course in Reading*. University of Wisconsin Studies in the Social Sciences and History, No. 4. Madison, Wis.: the University, 1921. 152 p. ¶ Kibbe, Delia E., and others. "Duplicate Material in Elementary Readers." *Elementary English Review* 4: 35-41; February, 1927. ¶ Wilson, Maud E. "Repetition of Material in Elementary Readers." *Elementary School Journal* 28: 622-26; April, 1928. ¶ Cooper, Ruby. "Overlapping of Content in Elementary Readers." *Elementary School Journal* 32: 542-45; March, 1932.

¹¹ Gates, Arthur I., *op. cit.*, 264 p.

¹² Among the many helpful references on the vocabulary of reading textbooks, see especially:

Brown, M. Ethel. "A Mastery Vocabulary in Primary Reading." *Problems of the Elementary School Principal in the Light of the Testing Movement*. Second Yearbook. Washington, D. C.: Department of Elementary School Principals, National Education Association, 1923. p. 296-306. ¶ Dolch, Edward W. *Reading and Word Meanings*. Boston: Ginn and Co., 1927. 129 p. ¶ Gregory, C. A. "The Reading vocabularies of Third-Grade Children." *Journal of Educational Research* 7: 127-31; February, 1923. ¶ Harring, Sidney. "What Primer Shall I Use Next?" *Elementary School Journal* 32: 207-13; November, 1931. ¶ National Society for the Study of Education. *Report of the National Committee on Reading*. Twenty-fourth Yearbook, Part I. Bloomington, Ill.: Public School Publishing Co., 1925. p. 186-93. ¶ Selke, Erich. "A Comparative Study of the vocabularies of Twelve Beginning Books in Reading." *Journal of Educational Research* 22: 369-74; December, 1930.

¹³ Bruner, Herbert B. "Determining Basic Reading Materials Through a Study of Children's Interests and Adult Judgments." *Teachers College Record* 30: 285-309; January, 1929. ¶ Clarence R. Stone gives a critical evaluation of this method in "Grading Reading Selections on the Basis of Interest." *Educational Method* 10: 225-30; January, 1931.

¹⁴ Cavins, Lorimer V. *A Study of American Poems by Means of Standardized Tests for the Purpose of Grading Such Selections for School Use*. Unpublished doctor's thesis. Department of Education, University of Chicago, 1924. ¶ Cutright, Prudence; Halvorson, George P.; and Brueckner, Leo J. "A Study of One Factor in the Grade Placement of Reading Materials." *Elementary School Journal* 29: 284-95; December, 1928. ¶ Kyte, George C. "Calibrating Reading Material." *Elementary School Journal* 25: 533-46; March, 1925.

¹⁵ Bear, Mata V. *Length of Words as an Index of Difficulty in Silent Reading*. Unpublished master's thesis, University of Chicago, 1926. 77 p.

¹⁶ Johnson, George R. "An Objective Method of Determining Reading Difficulty." *Journal of Educational Research* 21: 283-87; April, 1930.

¹⁷ Lewerenz, Alfred S. "The Measurement of the Difficulty of Reading Materials." *Educational Research Bulletin* (Los Angeles City Schools) 8: 11-16; March, 1929.

¹⁸ Pressey, S. L., and Lively, Bertha A. "A Method for Measuring the 'Vocabulary Burden' of Textbooks." *Educational Administration and Supervision* 9: 389-98; October, 1923.

¹⁹ Patty, Willard W., and Painter, William I. "A Technique for Measuring the Vocabulary Burden of Textbooks." *Journal of Educational Research* 24: 127-34; September, 1931.

The findings from more than thirty vocabulary studies are now available for the guidance of those concerned with textbook selection. Three of the best known word lists are:

1. Gates, Arthur I. *Reading Vocabulary for the Primary Grades*. rev. and enl. ed. New York: Bureau of Publications, Teachers College, Columbia University, 1935. 30 p.

2. The International Kindergarten Union. *The Vocabulary of Children Before Entering the First Grade*. Washington, D. C.: the Union (now the Association for Childhood Education), 1928. 36 p.

3. Thorndike, Edward L. *The Teacher's Word Book*. rev. ed. New York: Bureau of Publications, Teachers College, Columbia University, 1931. 182 p.²²

Grade placement—General vocabulary difficulty and certain other factors can be used to determine the proper grade placement of children's reading materials. Bruner regards children's interests as a fairly safe criterion in determining correct grade placement.¹³ Others take into account difficulties in comprehension or difficulties in sentence structure.¹⁴ Bear¹⁵ and Johnson¹⁶ propose methods for determining grade placement in terms of the percent of polysyllabic words. Lewerenz has developed a technic in which the proportion of words beginning with the letters "w," "h," "b," "i," and "e" serves as a criterion of difficulty.¹⁷ Pressey and Lively¹⁸ and Patty and Painter¹⁹ recommend grade placement in terms of the range and average difficulty of the words in a random sample, to be computed from the

weightings of the words in the sample given in Thorndike's *Teachers Word Book*. More complex methods than any of these are proposed by Vogel and Washburne²⁰ and by Gray and Leary.²¹ Vogel and Washburne's method was used in compiling the widely known *Winnetka Graded Booklist*. The factors which proved most significant in Gray and Leary's study were: (1) number of different, hard words; (2) number of easy words; (3) percent of words that are monosyllables; (4) number of personal pronouns; (5) average number of words per sentence; (6) percent of different words; (7) number of prepositional phrases; and (8) percent of simple sentences.

General make-up of children's books—Size and kind of type, color and texture of paper, and other matters of format and typography should be taken into account in selecting children's reading materials. In this field also, a large amount of research work has been done. There are certain general printing standards to be considered.²² The type face should be legible.²³ The type should be large enough to prevent eye-strain, and somewhat larger for children in the primary grades than for older pupils.²⁴ The best type size for each grade level is still an open question, but the most generally accepted view is that first books in reading should be printed in 18- to 24-point type; later books in smaller type, but not smaller than 12 point for any grade. Fatigue is said to increase rapidly as size of type is reduced.²⁵ Lines should not be too long, and the smaller the print the shorter the line should be. Gress recommends a line of approximately forty letter spaces of whatever size type is used.²⁶ For children's books set in 12- to 18-point type, it is

usually recommended that lines should be from 80 to 100 millimeters, that is, about 3 to 4 inches in length. In selecting books for the first grade, particularly, one other point should be noted. These books are sometimes set with irregular margins in order that each line may be a clause, phrase, or convenient thought unit. The advantage claimed for this style is apparent; the question is, Do the irregular margins (particularly irregular lefthand margins) hinder the early establishment of regular eye-movements? Research studies do not show which plan is better, but the weight of opinion seems to favor regular margins rather than convenient thought units.²⁷

Other important factors in the selection of reading textbooks—How well the organization of a book is adapted to a particular teaching program, the literary quality of the selections used in it, the value of the study helps included, and the interest which it creates in other books and reference materials are factors which should be considered carefully in textbook selection.

The Reading Materials Used by 1527 Successful Teachers

Teachers' criticisms of reading textbooks—According to the opinions of 1527 successful teachers, the most common defects in reading textbooks actually in use in their classrooms are those listed in Table 13. Other faults, mentioned by teachers in the primary grades, were: *selections too easily memorized, wrong ideals, and monotonous stories*. Teachers in the upper grades complained of *lack of suitable study helps, poorly graded selections, and materials having no literary value*.

²⁰ Vogel, Mabel, and Washburne, Carleton W. "An Objective Method of Determining Grade Placement of Children's Reading Material." *Elementary School Journal* 28: 373-81; January, 1928.

²¹ Gray, William S., and Leary, Bernice E. *What Makes a Book Readable?* Chicago: University of Chicago Press, 1935. 352 p.

²² Bacon, Russell. "Typographic Guide Posts." *American Printer* 87: 44-46; September, 1928. ¶ Gress, Edmund G. *The Art and Practice of Typography*. New York: Harper and Bros., 1931. 202 p. ¶ Sherbow, Benjamin. *Making Type Work*. New York: Century Co., 1916. 129 p.

²³ For information about the most legible type faces see: Gress, Walter B. "Legibility of Type Faces." *American Printer* 88: 76-77; April, 1929. ¶ Rothlein, Barbara E. "The Relative Legibility of Different Faces of Printing Types." *American Journal of Psychology* 23: 1-36; January, 1912. ¶ Frazier, J. L. *Type Lore*. Chicago: the Author, 1925. p. 90-94.

²⁴ See: Blackhurst, J. Herbert. "Hygienic Standards in Type and Format of Reading Materials." *Elementary English Review* 5: 101-07; April, 1928; also, "Size of Type as Related to Readability in the First Four Grades." *School and Society* 16: 697-700; December 16, 1922. ¶ Buckingham, Burdette R. "New Data on the Typography of Textbooks." *The Textbook in American Education*. Thirtieth Yearbook, Part II. National Society for the Study of Education. Bloomington, Ill.: Public School Publishing Co., 1931. p. 93-125.

²⁵ Griffing, Harold, and Franz, S. I. "On the Conditions of Fatigue in Reading." *Psychological Review* 3: 513-30; 1896.

²⁶ Gress, Walter B. "What Shall the Measure Be? Is There an Ideal Length of Line?" *American Printer* 88: 56-57; May, 1929. ¶ Gates, Arthur I. "What Do We Know About Optimum Length of Lines in Reading?" *Journal of Educational Research* 23: 1-7; January, 1931.

²⁷ Dearborn, Walter F. *The Psychology of Reading*. New York: Science Press, 1906. p. 38. ¶ Gray, William S. *Summary of Investigations Relating to Reading*. Supplementary Educational Monographs, No. 28. Chicago: University of Chicago Press, 1925. p. 196. ¶ Huey, Edmund B. *The Psychology and Pedagogy of Reading*. New York: Macmillan Co., 1908. 412 p.

Library facilities—Figure XII shows the types of library facilities available to the teachers who cooperated in this study. Classroom libraries are reported by nearly all the teachers, particularly in the primary grades. About half can have their pupils use a central library, either a school library or a nearby public library, the percent gradually increasing from grade to grade. About three-fourths of the teachers regularly obtain books in quantities from a central

library. Where this is done, books are obtained, on the average, about six times per year, and from 18 to 24 books is the usual number borrowed at any one time.

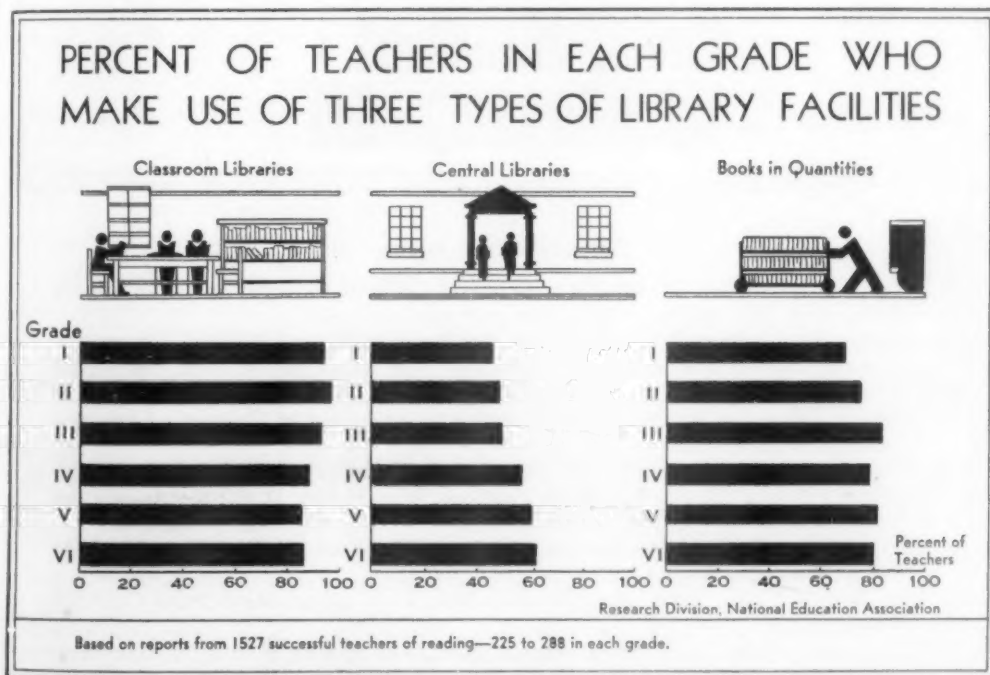
Supervisors seem to prefer classroom libraries rather than a central school library serving all the pupils in the building, at least in the first four grades. Approximately 90 percent of the supervisors taking part in this investigation favored the classroom library in Grades I and

TABLE 13.—CERTAIN COMMON DEFECTS IN READING TEXTBOOKS REPORTED BY 1527 SUCCESSFUL TEACHERS

Defects	Rank according to frequency of mention; Grade					
	I	II	III	IV	V	VI
	2	3	4	5	6	7
Not adapted to children's interests.	1	1	1	1	2	1
Contains words used infrequently in other books.	2	4	5	5	5	5
Vocabulary too large.	3	2	2	2	3	2
New words repeated too few times.	4	6	6	7	7	6
Poorly illustrated.	5	3	3	3	1	4
Poor make-up.	6	7	7	6	6	7
Not adapted to children's experiences.	7	5	4	4	4	3
Vocabulary too small.	8	8	8	8	8	8
Too much repetition.	9	10	12	11	11	11
Stories too long or too short.	10	9	9	9	9	9
Out-of-date.	11	11	10	10	10	10
Sentence structure too difficult.	12	12	11	12	12	12

Based on reports from 1527 successful teachers—225 to 288 in each grade.

FIGURE XII



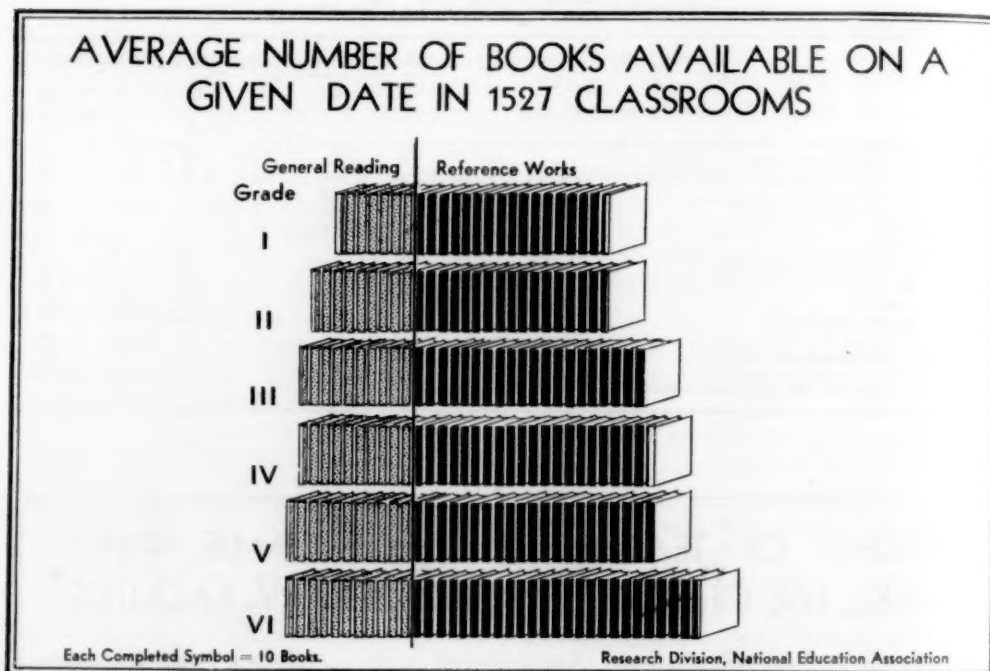
II, 78 percent in Grade III, and 55 percent in Grade IV. For Grades V and VI more than half preferred the central library—54 percent for Grade V and 60 percent for Grade VI.

More important than the source of reading materials is the number and kind of books available. In the present inquiry it was not possible to determine the quality of the books being used

by reading classes, but Figure XIII shows the average number of books available, as of a given date, in 1527 classrooms.²⁸ These averages suggest the importance of a generous supply of reading materials. Apparently, teachers whose work in reading is outstanding obtain, in one way or another, a large number of appropriate children's books.

²⁸ The reports on which these averages are based included books belonging in classroom libraries and any books obtained from a central library which happened to be in the classroom at the time.

FIGURE XIII



Selected References

1. BEUST, NORA, compiler. *Graded List of Books for Children*. Chicago: American Library Association, 1930. 149 p. (New edition in press.)
2. International Kindergarten Union (now the Association for Childhood Education). *Selected List of Poetry and Stories for Children in Kindergarten, First, and Second Grades*. Washington, D. C.: the Association, 1928. 23 p.
3. JOHNSON, EDNA, and SCOTT, CARRIE E., compilers. *Anthology of Children's Literature*. Boston: Houghton Mifflin Co., 1935. 914 p.
4. National Education Association, Department of Elementary School Principals. *Elementary School Libraries*. Twelfth Yearbook. Washington, D. C.: the Association, June, 1933. "Research Studies of Booklists and Reading Interests," p. 453-518.
5. SEARS, MINNIE E. *Children's Catalog*. 4th ed. rev. New York: H. W. Wilson Co., 1930. 877 p. Also, *Cumulated Supplement*, 1932. 106 p.
6. UHL, WILLIS L. *The Materials of Reading*. New York: Silver, Burdett and Co., 1924. 386 p.
7. WILKINSON, MARY S.; WEEDON, VIVIAN; AND WASHBURNE, CARLETON. *The Right Book for the Right Child*. New York: The John Day Co., 1933. 357 p.

Determining Reading Achievement

Kinds of tests used by teachers whose work is outstanding—Insofar as the present study is representative, reading tests constructed by teachers for use only in their own classrooms are used by nearly all teachers in all grades. Nearly two-thirds of the first- and second-grade teachers and more than three-fourths of the teachers in Grades III to VI also use standardized reading tests. In about one-fourth of the cases, citywide tests are administered, that is, tests constructed by supervisory officers, with or without the assistance of teachers, for use in all the schools in the system. In about 10 percent of the cases, tests are constructed by the principal, or a committee of teachers, for use in all comparable classrooms in the same building. These facts, shown in Table 14, suggest the important place that testing occupies in the total reading program. Apparently most of the teachers selected to take part in this investigation use not only the tests which they prepare but also at least one other type of standardized or semi-standardized test.

Number of tests given per year—Table 15 shows the average number of standardized and informal reading tests, respectively, which teachers use in the various grades. In general, standardized tests are given two or three times per year; informal tests thirty to forty times a year, or roughly once a week.

The administration of reading tests—Standardized tests are used in the great majority of cases in a uniform testing program involving the whole school system. Approximately two-thirds of the replies indicated that they were used only in that way. In about one-fourth of the cases, standardized tests are used in uniform testing programs; and, in addition, teachers use them more or less extensively in their teaching. Only about 10 percent of the teachers use them solely to measure achievement in their own classrooms, without reference to the work of other teachers in the same school system.

When uniform testing programs are being carried out, 50 to 60 percent of the teachers reporting say that they themselves are responsible for administering the standardized tests. In 15 to 20 percent of the cases, the tests are administered by the principal or the superintendent, and in about 10 percent, by supervisors. Occasionally they are administered by a special examiner, the psychologist, or some other teacher.

Types of test exercises which teachers find most helpful—Except in the first grade, completion and multiple-choice tests are rated as the most valuable types of informal classroom tests, with true-false and matching exercises ranking third and fourth, respectively. In the first grade, matching exercises are rated as the

TABLE 14.—EXTENT TO WHICH READING TESTS OF VARIOUS TYPES ARE USED BY 1527 SUCCESSFUL TEACHERS

Kind of test	Percent of teachers using tests; Grade					
	I	II	III	IV	V	VI
	2	3	4	5	6	7
1						
Tests prepared by teachers for use in their own classrooms.....	90	94	92	99	95	97
Standardized reading tests.....	64	67	80	79	76	80
Tests prepared for citywide use.....	26	29	25	27	24	20
Tests prepared for use thruout a given school building.....	9	11	13	8	11	10
Number of teachers' reports on which the percents are based.....	288	260	270	225	229	255

TABLE 15.—AVERAGE NUMBER OF STANDARDIZED READING TESTS AND INFORMAL TESTS GIVEN IN EACH GRADE BY 1527 SUCCESSFUL TEACHERS

Kind of test	Average number given per year; Grade					
	I	II	III	IV	V	VI
	2	3	4	5	6	7
1						
Standardized reading tests.....	2.0	2.3	2.5	2.3	2.5	2.4
Informal reading tests.....	32.7	42.0	36.0	35.1	37.2	32.8

most helpful type; then true-false, multiple-choice, and completion in the order named. The essay test is rated far below all these types by the teachers of every grade.

Uses made of test scores—An average of 55 to 65 percent of the teachers in the various grades enter the scores from certain reading tests as part of the pupils' permanent records. The extent to which test scores are presented graphically to pupils to motivate their work is indicated in Figure XIV. Graphs showing individual achievement are the ones most teachers select for frequent use. The percent of teachers making frequent use of graphs of both types increases considerably between Grades I and VI.

How test results are most helpful—The teachers who participated in this study agree almost unanimously as to the ways in which reading tests contribute to classroom instruction. The use of tests in diagnosing reading difficulties is given the highest average rank by the teachers in all six grades. Other ways in which reading tests are helpful, listed in the order of importance assigned to them by the teachers in every grade, are: classifying pupils according to reading achievement, determining

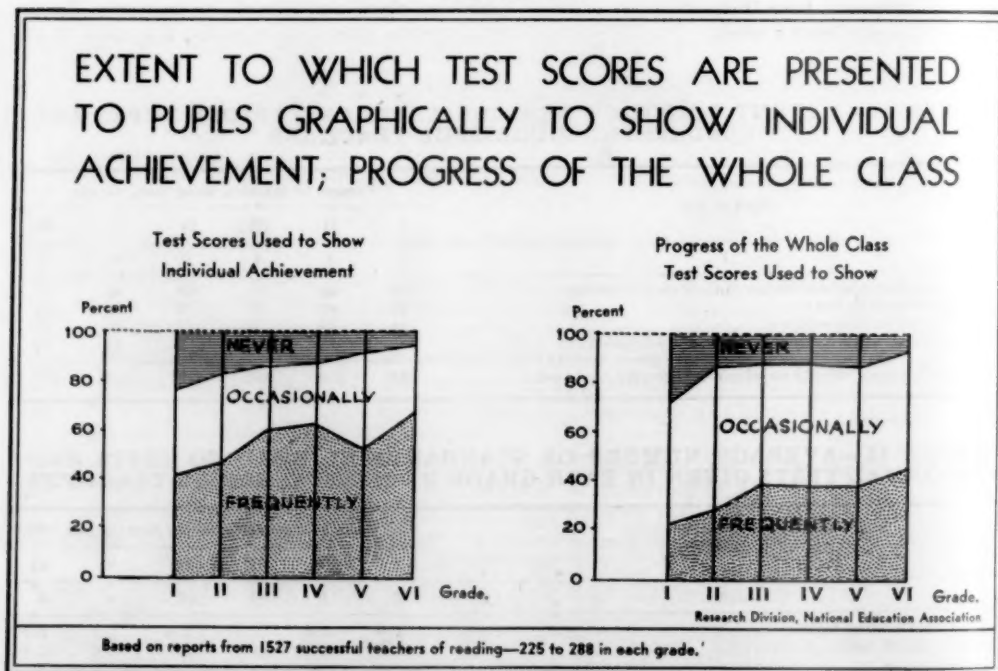
the initial ability of pupils in order to plan classroom work to best advantage, establishing goals of achievement, motivating the work of a class, and, least important of all, determining pupil progress. Since we are so often inclined to think of tests almost wholly in terms of the last named function, every teacher may well reexamine this phase of the work, raising the question, Am I using reading tests as effectively as possible, not merely as a checkup, but as a means of understanding my pupils and planning my work?

Troublesome testing problems—There is also close agreement in the opinions of teachers at the various grade levels with respect to the testing problems that are most troublesome. Listed according to difficulty on the basis of teacher opinion these problems are:

1. Obtaining test materials.
2. The clerical work involved.
3. Constructing informal reading tests.
4. Interpreting test results.
5. Selecting appropriate published tests.
6. Administering tests.
7. Finding adequate time for tests without interfering with other necessary activities.

Standards of achievement which teachers employ—From 168 of the school systems in-

FIGURE XIV



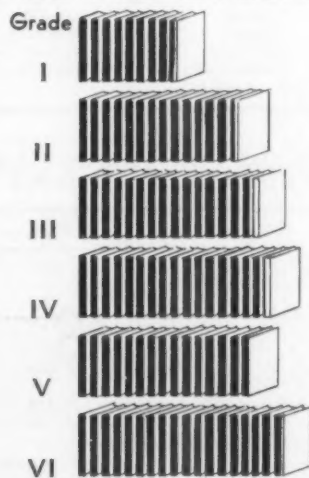
cluded in this study, approximately three-fourths of the supervisors report that norms on standardized tests are set up as criteria, or standards of achievement, for pupils in the various grades. In about two-thirds of the cases, the course of study in use sets forth certain definite abilities and skills that pupils in each grade are expected to develop. In about 45 percent of the schools represented, local norms on standardized tests are used instead of, or in addition to, published norms. Thirty-six percent of the reports indicate that the amount of material covered is used as one important standard of achievement. From these percents it is obvious that definite standards of two or more types are often used as goals of achievement. On the other hand, even among these schools, where outstanding results in reading are being achieved, 15 percent report that *no definite or objective standards* have been adopted.

Amount of reading expected in the various grades—The number of books which teachers expect the average pupil to read varies not only from one grade level to another but also from classroom to classroom in any given grade. Certain teachers in every grade from the first to the sixth report that their average pupils read not more than 5 books during the year. Others report a standard of 30, 40, and sometimes 50 books per year. Figure XV shows the average number for each grade, increasing from 8.6 in Grade I to 17.8 in Grade VI. These standards indicate clearly that the teachers who cooperated in this study look upon extensive reading as an essential element in correct reading instruction. This is in harmony with the findings of several research studies, showing the superiority of extensive reading to intensive study and drill, except in the case of very slow learners.¹ Washburne points out that "on the

¹ See especially: Field, Helen A. *Extensive Individual Reading vs. Class Reading*. Contributions to Education, No. 394. New York: Teachers College, Columbia University, 1930. 52 p. ¶ Hilliard, George H. "Extensive Library Reading vs. Specific Drill as an Aid in Improving Certain Reading Abilities." *Educational News Bulletin* (Western State Teachers College, Kalamazoo) 2: 6-12; June, 1932. ¶ Hunt, C. W. "Extensive Reading: A Factor in Developing Reading Ability." *School and Society* 11: 260-61; February 28, 1920. ¶ O'Brien, Ida. "A Comparison of the Use of Intensive Training and of Wide Reading in the Improvement of Reading." *Educational Method* 10: 346-49; March, 1931. ¶ Scruggs, Sherman D. "Improving Reading Ability in Grades V and VI by Extensive Reading." *University of Kansas Bulletin of Education* 3: 3-10; April, 1931. ¶ Zirbes, Laura; Keelor, Katharine; and Miner, Pauline. *Practice Exercises and Checks on Silent Reading in the Primary Grades*. New York: Lincoln School, Teachers College, Columbia University, 1925. 66 p.

FIGURE XV

AVERAGE NUMBER OF BOOKS WHICH PUPILS IN EACH GRADE ARE EXPECTED TO READ



Each Completed Symbol = 1 Book.

Research Division, National Education Association

average, when a pupil has completed about 15 books on his grade level he will have raised his reading level to the next higher grade."²

Zirbes has proposed a standard for pupils' reading at various grade levels, based not on the number of books read—which is at best a variable criterion—but on the number of thousand-word units.³ On the basis of her observations of practise, she classifies schools according to the amount of reading pupils do in each grade, in the manner indicated in Table 16. It may be helpful in interpreting these standards to recall that an ordinary third reader contains about thirty thousand-word units; earlier readers a smaller number; advanced readers, 60, 70, and sometimes more than 100 units.

Proposed standards for rate of silent reading—Rate standards are usually expressed in one of three ways: (1) number of words per minute; (2) number of words per second, or per 100 seconds; or (3) a point score on a reading test without specific reference to number of words or time units. Since all standardized

rate tests have norms showing the rate of performance expected of pupils at various age or grade levels, these need not be reviewed here. It may be helpful, however, to bring together some of the rate standards, expressed in words-per-minute, which have been proposed at one time or another by various research workers. This is done in Table 17. There is considerable discrepancy among the recommendations and none are based on recent investigations. The standards proposed for the sixth grade by Gray, Courtis, Oberholtzer, and Starch are lower than O'Brien's standard for fourth-grade pupils. O'Brien's standards, however, may be somewhat higher than most classes can be expected to achieve, for he was one of the most successful early champions of rapid silent reading. Gray's proposed standards are probably representative of satisfactory achievement without undue emphasis on rate of reading.

Other standards of achievement—Norms on the various standardized comprehension and vocabulary tests undoubtedly constitute the best available standards for pupil achievement

² Washburne, Carleton W. "How to Fit Reading to Each Individual Child." *Individual Instruction* 1: 2-7; December, 1928.
³ Zirbes, Laura. *Comparative Studies of Current Practice in Reading*. Contributions to Education, No. 316. New York: Teachers College, Columbia University, 1928. p. 80-93.

TABLE 16.—NUMBER OF THOUSAND-WORD UNITS READ BY PUPILS IN CLASSROOMS WHERE INSTRUCTION VARIES IN EFFICIENCY

Type of instruction	Number of thousand-word units pupils read; Grade					
	I	II	III	IV	V	VI
	1	2	3	4	5	6
Traditional.....	10-15	20-35	30-55	50-100	100-200	150-250
Unprogressive.....	25-30	40-65	60-130	150-275	300-550	350-600
Superior.....	35+	70+	150+	300+	700+	800+

Source: Zirbes, Laura. *Comparative Studies of Current Practice in Reading*. Contributions to Education, No. 316. New York: Teachers College, Columbia University, 1928. p. 92.

TABLE 17.—RATE STANDARDS FOR VARIOUS GRADES PROPOSED BY DIFFERENT STUDENTS OF READING PROBLEMS

Standards proposed by:	Words per minute; Grade				
	II	III	IV	V	VI
	2	3	4	5	6
O'Brien ^a	...	...	236	278	293
Brown ^a	...	...	213	269	272
Gray ^b	90	138	180	204	216
Courtis ^a	...	...	160	180	220
Oberholtzer ^a	...	138	156	186	234
Starch ^a	108	126	144	168	192

^a Quoted in *Silent Reading*. Twentieth Yearbook, Part II. National Society for the Study of Education. Bloomington, Ill.: Public School Publishing Co., 1921. "The Development of Speed in Silent Reading," Ch. 4, p. 73.

^b Quoted by Clarence R. Stone in *Silent and Oral Reading*. Boston: Houghton Mifflin Co., 1926. p. 21.

^c Oberholtzer, E. E. "Testing the Efficiency of Reading in the Grades." *Elementary School Journal* 15: 313-22; February, 1915.

in these phases of reading. Other standards, somewhat less objective perhaps, but important none the less, are sometimes defined in terms of new abilities acquired, correct habits established, and wholesome attitudes developed. The desirable levels of achievement at the end of

each of the growth stages in reading which characterize the elementary-school period are set forth in the Twenty-fourth Yearbook of the National Society for the Study of Education.⁴ These deserve the careful attention of all teachers of reading.

⁴ National Society for the Study of Education. *Report of the National Committee on Reading*. Twenty-fourth Yearbook, Part I. Bloomington, Ill.: Public School Publishing Co., 1925. p. 44, 54, and 62-64.

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The Administration and Supervision of the Reading Program

Reading as a separate subject—In 99 percent of the school systems cooperating in this study certain definite periods are set aside for reading instruction in Grades I and II; or in other words, reading is taught as a separate subject. Only 1 percent of the schools are attempting to develop the basic reading habits incidentally, thru activities centered primarily on some other objective. In 97 percent of them, reading is also taught separately in Grade III. In Grades IV, V, and VI the percents drop slightly lower, but only to 94, 93, and 90, respectively.

Time allotments—The present investigation made no inquiry into total time allotments for reading instruction in the various grades, but this has been done in a number of earlier studies. Table 18 brings together the findings of eight investigators. Holman's findings in 1931 differ little from those of Holmes in 1919. The averages are slightly lower for 1931, except in Grade VI, but in no case more than 33 minutes a week, or about 6 minutes a day. The most generous time allotments of all for reading in Grades I and V, and among the highest for Grades II, III, IV, and VI, are those reported by Bagley and Kyte in 1926.

The lowest averages found by any investigator were reported in 1923. These data offer scant support to the statement often heard recently that less time is given to reading instruction now than was given a few years ago. Apparently, for several years it has been customary to give 75 to 80 minutes a day to reading in Grade I, gradually decreasing that amount to 30 or 35 minutes a day in Grade VI.

Types of reading periods—About 37 percent of the teachers whose practises are summarized in this bulletin have class periods in which all reading activities are carried out. This single period provides opportunity for recitation, study, and free reading. Class periods of this type are used about as frequently at one grade level as another, i.e., by a little over a third of the teachers in all the grades. The average length of reading periods of this type ranges from 96 minutes in Grade I down to 45 minutes in Grade VI. In Grade I, about half of the time is devoted to recitation or group reading; in Grade VI, about one-third of the period. Supervised study shows the opposite trend; that is, about a third of the class period is given to supervised study in the lower grades and about

TABLE 18.—AVERAGE TIME ALLOTMENTS FOR READING INSTRUCTION AS REPORTED IN EIGHT DIFFERENT INVESTIGATIONS

Investigator	Scope of study	Date of study	Average number of minutes per week; Grade						Average number of minutes per week, per grade
			I	II	III	IV	V	VI	
1	2	3	4	5	6	7	8	9	10
Holmes ^a	50 cities.....	1919	412	364	291	237	195	181	280
Kirk ^b	31 schools.....	1923	325	250	250	125	125	125	200
Ayer ^c	47 cities.....	1924	430	413	339	250	185	165	297
Latham ^d	60 cities.....	1924	...	...	...	...	...	...	319
Bagley and Kyte ^e	2600 teachers' programs.....	1926	454	377	305	244	197	180	292
Mann ^f	444 cities.....	1926	388	348	293	212	168	149	260
Armentrout ^g	33 schools.....	1927	346	317	298	219	156	141	246
Holman ^h	157 schools.....	1931	379	331	270	224	185	181	262

^a Holmes, Henry W. "Time Distributions by Subjects and Grades in Representative Cities." *Minimum Essentials in Elementary School Subjects—Standards and Current Practices*. Fourteenth Yearbook, Part I. National Society for the Study of Education. Bloomington, Ill.: Public School Publishing Co., 1919. p. 21-27.

^b Kirk, H. H. "Time Distribution by Subject and Grade." *Elementary School Journal* 23: 535-41; March, 1923.

^c Ayer, Fred C. "Average Time Allotments in 49 Large Cities Compared with Seattle." *The Elementary School Curriculum*. Second Yearbook. Washington, D. C.: Department of Superintendence, National Education Association, 1924. p. 139-43.

^d Latham, Ray. "Time Allotment in Grades 1-6 in the Elementary Schools of 60 Cities." *The Elementary School Curriculum*. Second Yearbook. Washington, D. C.: Department of Superintendence, National Education Association, 1924. p. 142-45.

^e Bagley, William C., and Kyte, George C. *The California Curriculum Study*. Berkeley: the University of California, 1926. p. 89.

^f Mann, Carleton H. *How Schools Use Their Time*. Contributions to Education, No. 333. New York: Teachers College, Columbia University, 1928. p. 23.

^g Armentrout, Winfield D. *A Comparison of Time Allotments of Subjects in Elementary Training Schools and Elementary Public Schools*. Colorado State Teachers College Bulletin, Series 26, No. 4. Greeley, Colo.: Colorado State Teachers College, 1927. p. 3.

^h Holman, Julius W. "A Study in Time Allotment in the Elementary School Subjects in Missouri." *School and Community* 17: 161-65; April, 1931.

half in the upper grades. The remainder of the time, from one-sixth to one-fourth of the period, is used either for free reading or for undirected study. Approximately one-third of the teachers using the single reading period distribute class time systematically to recitation, study, and free reading. Two-thirds follow no regular, systematic plan, but distribute the time of each class period as seems best under the circumstances.

Two other types of class periods are about equally common—reported by 31.7 and 31.6 percent of the teachers, respectively. The first arrangement consists of a class period in which recitation and study are combined, but with separate periods for free reading or other special reading activities. The second involves a series of separate periods, each set aside specifically for a particular kind of reading activity, such as recitation, supervised study, or free reading. For the most part, these periods are 20 to 30 minutes in length regardless of grade level or type of activity involved.

Teaching situation—Teachers who teach reading and no other subject are greatly in the minority in the school systems covered by this inquiry. Of 154 supervisors who reported on this item, 137 (or about 90 percent) said that no teacher in the system teaches reading only. Seven reported that a very few of the teachers under their supervision—less than 5 percent—

teach reading only; 7 reported 5 to 19 percent; and 3 reported 20 percent or more. Specialization is possible most often in the upper elementary grades. Only 2 of the 154 school systems had any first-grade teachers giving full time to reading instruction, and only 3 had full-time teachers of reading in Grades II and III. In Grades IV, V, and VI there was at least one full-time teacher of reading in 11, 15, and 18 cases, respectively. Seventy-seven percent of the first-grade teachers cooperating in this study and from that up to 96 percent of the teachers in Grade VI teach reading and *all other subjects*. These facts suggest, and Table 19 shows, that departmentalization is not widely practised in the elementary schools touched by this study.

The practise of classifying pupils into groups homogeneous with respect to reading ability is followed in about three-fifths of the school systems reporting. In about one-fifth of them, however, pupils are grouped according to reading ability only in certain schools or grades, and in 22 percent of the cases, pupils are never classified on this basis.

Other facts pertaining to the reading programs of the 1527 teachers participating in this study are set forth in Table 20. The situation portrayed there is probably quite representative of elementary schools generally.

Use made of systems of instruction—Replies were given by 163 supervisors as to whether or

TABLE 19.—EXTENT TO WHICH DEPARTMENTALIZATION IS USED IN 154 SELECTED SCHOOL SYSTEMS

Percent of pupils in departmentalized classes	Percent of school systems reporting various amounts of departmentalization; Grade						
	I	II	III	IV	V	VI	
	1	2	3	4	5	6	7
None	94.0	90.0	82.0	68.0	59.3	53.3	
1-24 percent of pupils.....	2.0	6.0	9.3	13.3	12.7	15.3	
25-49 percent of pupils.....	1.3	1.3	4.8	5.3	9.3	8.0	
50 percent or more.....	2.7	2.7	3.9	13.4	18.7	23.4	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Based on reports from supervisors in 154 school systems where outstanding work in reading is being done.

TABLE 20.—DAILY PERIODS OF INSTRUCTION AND PUPILS TAUGHT DAILY BY 1527 TEACHERS OF READING

Teaching program	Average number per teacher; Grade						
	I	II	III	IV	V	VI	
	1	2	3	4	5	6	7
Number of daily periods for reading instruction.....	4.8	4.1	3.0	2.1	1.9	1.8	
Number of pupil-groups taught reading daily.....	2.7	2.7	2.4	2.1	2.0	2.0	
Number of pupils taught reading daily.....	35.9	36.2	36.9	37.0	37.4	40.0	

not a particular *system of teaching* was in use in the schools under their jurisdiction. Nearly 60 percent replied that none was followed. However, a definite system was being used in one or more grades in sixty-eight cases, and twenty-seven different systems of instruction were listed in this connection. In view of the manner in which the schools were selected for participation in this study, it would seem that excellent results are possible, not only for teachers with original ideas and an unusual amount of initiative, but also for those who follow the plan laid down in the teaching manuals of many of the current textbooks in reading.

Cooper's analysis of ten widely used systems of teaching beginning reading showed that there is no agreement on a single *best procedure*.¹ The trends or prevailing practises which she was able to discover were:

1. Few negative suggestions are offered in modern teaching manuals.
2. Pupils are to be given practise in reading as the adult does, without goading or teaching.
3. The "intrinsic method" of teaching word recognition is recommended in a larger number of cases than isolated word drills.
4. There is an increasing emphasis on individual needs.
5. The trend is toward simplified vocabularies, based on scientific word lists, with ample repetition of words.

¹ Cooper, Ida M. "A Comparative Study of the Organization for Teaching of Ten Beginning Reading Systems." *Journal of Educational Research* 28: 347-57; January, 1935.

6. Fewer and simpler phonetic elements are to be mastered.

Courses of study in use—Table 21 indicates the types of courses of study used in 161 selected school systems located in communities of different sizes. It shows, also, the percent of relatively new courses and the extent to which courses of study determine classroom procedures. Courses of study prepared for state-wide use are followed more often in small cities and rural communities than in the larger cities. Only about half the courses in use are less than five years old. In every case save one, where the course of study in use is being followed closely, the supervisor reports that it is a good course—a satisfactory guide for classroom procedures.

Supervisory practises—Table 22 indicates the general scope and character of supervisory programs as reported by 172 supervisors of reading in schools where outstanding results in reading are being achieved. About three-fifths of the supervisors encourage a high degree of uniformity in classroom procedures in the case of all teachers in a given grade. Nearly a fourth of them outline the work which teachers are to do rather specifically. Apparently, the largest measure of supervisory control is exercised in small communities.

TABLE 21.—COURSES OF STUDY IN USE IN 161 SELECTED SCHOOL SYSTEMS

Course of study	Location of school systems				Whole group	
	Cities over 100,000	Cities 30,000-100,000	Cities under 30,000	Rural areas		
1	2	3	4	5	6	7
	Number				Number	Percent
Number of schools using state course.....	0	0	16	17	33	20.5
Number of schools using course developed locally.....	34	31	33	7	105	65.2
Number of schools using both state and local course.....	2	1	11	3	17	10.6
Number of schools using no course of study.....	2	1	2	1	6	3.7
Total.....	38	33	62	28	161	100.0
	Percent					
Percent of schools whose course of study has been developed within the last five years.....	47	50	55	52	...	52
Percent of schools in which course of study is followed closely.....	50	56	52	74	...	56

TABLE 22.—SUPERVISORY PRACTISES IN COMMUNITIES OF VARIOUS SIZES

Supervisory practises	Cities over 100,000	Cities 30,000- 100,000	Cities under 30,000	Rural areas	Total
1	2	3	4	5	6
Percent of school systems where a high degree of uniformity in classroom procedures is expected of all teachers in a given grade.....	53.0	53.0	69.0	75.0	62.0
Percent of supervisors who outline the work to be done rather specifically.....	18.0	22.0	23.0	32.0	23.0
Percent of supervisors who from time to time send out supervisory bulletins on reading.....	48.0	41.0	29.0	33.0	37.0
Average number of supervisory bulletins sent out per year by the supervisors using them.....	4.7	4.2	4.8	3.2	4.3

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Summary

This bulletin has been concerned primarily with the teaching methods of a group of unusually competent teachers of reading. It has compared and supplemented these practises with research findings and the recommendations of leading authorities on reading instruction. Briefly outlined here are some of the important characteristics of the work reviewed and a few of the leading suggestions from the literature on reading.

Growth stages—During the first six grades, pupils pass thru four stages of growth in reading ability:

1. *A preparatory period* (kindergarten and early part of Grade I) to develop interest in, and capacity for, learning to read.

2. *A period of initial instruction* (Grade I), in which pupils learn that reading is a thought-getting process and acquire the ability to read simple passages independently.

3. *A period of rapid growth* (Grades II and III) in the fundamental reading attitudes, habits, and skills.

4. *A period of wide reading* (Grades IV, V, and VI) to cultivate new interests, extend and enrich experience, refine the reading abilities already acquired, and lay the foundation for effective study habits.

Objectives and teaching emphasis—The acquisition of an adequate vocabulary of sight words, the establishment of correct eye-movements and other desirable basic habits, and the development of the ability to read independently, are important goals in the lower grades. Growth in power to comprehend, appreciate, and evaluate materials, and to use reading in pursuing other activities are the leading objectives in the upper grades. Oral reading is properly emphasized during the early growth stages; but emphasis should be shifted to silent reading as soon as rate of reading approaches the pupil's rate of normal oral expression.

Methods in beginning reading—Both the practises of successful teachers and the findings from research studies indicate that children should not be introduced to reading until they have attained the mental, physical, and social maturity of the average child of six to six and one-half years. Language habits should be well developed; children should have a wide range of general information and interests; they should really want to read. When this point is reached, reading should be introduced as a thought-getting process in which

pupils learn first to associate an idea with a group of symbols, then to identify the words and symbols themselves. Thru much practise in reading and a limited amount of attention to word analysis in separate periods—according to individual needs—correct eye-movements are established, a basic sight vocabulary is developed, and considerable independence in reading is acquired. During this time it is especially important for pupils to read-to-find-out-something; not just read-the-next-story.

Teaching methods in the various grades—Types of instruction and classroom procedures in the various grades should be selected on the basis of the abilities and attitudes to be developed. Lesson plans should be worked out carefully, using materials suggested by pupils' interests and needs rather than the sequence of a particular textbook. Children's newspapers and magazines can be used to advantage in classroom instruction, especially in Grades IV, V, and VI. It is in these grades also that pupils should acquire strong, permanent interests in outside reading as a leisure activity. This can be accomplished by providing attractive materials relating to topics in which they are interested, by having them recommend to each other the books they enjoy, by reading parts of interesting stories, and in numerous other ways. In all the grades ample provision should be made for individual differences and care should be taken to correlate reading instruction with other subjects and activities. Classroom problems that are particularly troublesome include (1) stimulating interest in reading, (2) adapting instruction to individual differences, (3) developing independence in reading, (4) developing good habits of oral reading, (5) increasing rate of reading, (6) developing accuracy in word recognition, (7) building a larger sight vocabulary, (8) improving comprehension, and (9) eliminating lip-movement.

Reading textbooks—Since teachers are expected to assume large responsibility in the selection of children's books, they need to be familiar with the best sources of materials and with reliable methods of evaluating books. Excellent booklists and score-cards are available and are widely used by successful teachers. According to research studies, the best books for children have the following qualities:

1. *Attractive physical make-up*—Children like brightly colored bindings, interesting titles, numerous illustrations, pictures involving humor and action, good margins, legible type, and not too much material on a page.

2. *Interesting selections*—Children are especially interested in stories involving action, adventure, surprise, beauty, humor, and remarkable achievement. If these qualities are present, stories of all types—myths, folk-lore, fiction, etc.—appeal to them. Generally speaking, they prefer prose to poetry. They like stories about animals or about children.

3. *Balance*—Books with various types of selections are more attractive than those of uniform style.

4. *Literary merit*—The material should extend and enrich experience, create new interests, or develop new appreciations.

5. *Appropriate vocabulary and sentence structure*—The vocabulary should cover as wide a range as possible without going beyond the pupils' ability. Since about 35 repetitions of new words are required for mastery, new words should be repeated often. Vocabulary and sentence structure should be appropriate for the grade level of the pupils.

6. *Correct typography*—White paper without gloss is considered best for children's books. The type should be simple in style and large enough to prevent eye-strain. According to standards widely accepted, first-grade books should be in 18- to 24-point type and those for later grades in nothing smaller than 12-point type. Likewise, it is considered good practise to set the lines 3 to 4 inches in length—the smaller the type, the shorter the line—and to make both the right- and left-hand margins even.

Among the most common defects in reading textbooks are: they are not adapted to children's interests or experiences, the vocabulary is too large, and they are poorly illustrated.

Library facilities—A majority of supervisors prefer classroom libraries to central school libraries in the first four grades. The practise is widely followed of obtaining from some central library 18 to 24 books at a time for classroom use. Teachers who make this arrangement usually obtain books about six times a year. Teachers whose work is outstanding keep a generous supply of reading materials in their classrooms. In the present study the average number of books suitable for general reading ranged from 62 in Grade I to 106 in Grade VI. The total number of books, including supplementary readers and reference books, ranged from an average of 217 in Grade I to 393 in Grade VI.

The measurement of achievement—Reading tests play an important role in the classrooms of successful teachers. One informal test per week and two standardized tests per

year are about the average number given. Objective tests are rated higher than essay tests, particularly matching and true-false exercises in the lower grades and completion and multiple-choice exercises in the upper grades. Tests are said to be most helpful in diagnosing reading difficulties, in classifying pupils, and in establishing standards of achievement.

Standards of achievement—Teachers whose work is outstanding require wide reading on the part of their pupils: an average of 8.6 books per year in Grade I, up to 17.8 in Grade VI. Pupils should attain an average reading rate of about 90 words per minute in Grade I, increasing to something more than 200 in Grade VI—in other words, averages of 1.5 to 3.5 words per second.

The administration and supervision of the reading program—Reading is taught as a separate subject in virtually every school system, and in nearly all cases, in every grade from one to six. From 75 to 80 minutes a day are given to reading instruction in Grade I, the amount decreasing to about 30 to 40 minutes a day in Grade VI. Extensive use is being made of combined periods in which provision is made for reading instruction, supervised study, undirected study of reading assignments, and free reading. Relatively few teachers give full time or even a majority of their time to reading instruction, except in Grades V and VI where departmentalization is more common than in the lower grades. Practises vary greatly with respect to systems of instruction being followed, the kind and quality of courses of study in use, and the scope and character of the supervisory program.

Variations in method—Few, if any, of the trends and procedures outlined in this bulletin are equally valid under all circumstances. Allowance should be made for justifiable variations from the averages reported here; numerous adaptations in procedures should be made in the light of each situation. To achieve success in teaching reading is not unlike a cross-country tour. Ordinarily it is best to follow some well-known highway; but often there is more than one good route, and occasionally time and energy can be saved by turning off into by-roads. So in using this bulletin, teachers must select wisely among the suggestions offered and from time to time enter fields where they must rely on other guides and on their own resourcefulness.

THE LESSON to be drawn from the history of scientific studies of reading is perfectly clear. As investigation proceeds, there must be active co-operation between scientists, school officers, and teachers. The scientist must continue his laboratory studies, discover fundamental differences in reading processes and habits, outline the principles which determine effective methods of teaching, and develop methods of investigation which can be used in the classroom. Administrators must provide agencies for dealing effectively with the mental processes and habits discovered in the laboratory, for applying the instruments of investigation which are available, for checking the results of teaching, and for discovering additional problems for study and investigation. Teachers must be zealous students of reading problems, must apply the results of scientific studies in improving and refining their technique of teaching, and must make use of scientific methods in the daily study of classroom problems. Only through continuous and whole-hearted cooperation on the part of all the agencies interested in reading problems can we hope to attain an adequate solution of both the theoretical and the practical issues involved.

—William S. Gray.
