Curriculum Bulletin

FOR ELEMENTARY SCHOOLS

ADAPTING THE READING PROGRAM TO THE NEEDS OF THE INDIVIDUAL CHILD

DEPARTMENT OF EDUCATION

THE STATE OF COLORADO

INEZ JOHNSON LEWIS
State Superintendent of Public Instruction

DENVER

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CURRICULUM BULLETIN
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Adapting the Reading Program

to the

Needs of the Individual Child

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PREFACE

Purpose of the Work of the Elementary Division

It is the purpose of the Elementary Division of the State Department of Education to assist teachers, principals and town, city and county superintendents with the problems which they are meeting in the improvement of instruction.

Plan of Work of the Elementary Division

The following outline gives the tentative plan which we are following in attacking instructional problems in the field of elementary education.

1. We will work intensively on one or two important problems at a time. This work will consist of:

   a. Studying the professional literature dealing with these problems.

   b. Consulting with experts in the fields in which the problems lie.

   c. Conferring with teachers who have tried out procedures which offer promise in aiding in the solution of the problems.

   d. Visiting classrooms where teachers are using such procedures.

   e. Assisting in the organization of study groups composed of teachers interested in these particular problems. (These groups will study, plan and try out methods and materials designed to help in solving the problems. Reports from these groups will be made to the Elementary Division and will add to the information being collected.)

2. As a result of this intensive work on the problems, bulletins will be prepared making available to all teachers the best present thinking and procedures.

3. These bulletins will be distributed to the teachers of the state through the county superintendents and will

form the basis for discussion at the meetings held in each of the counties by the Elementary Division.

Improvement of the Teaching of Reading Chosen for Study

Reading was chosen for study for the following reasons:

1. Ability to read is a pre-requisite for much of the work in the school and in life.

2. Methods and materials in reading have shown marked improvement in the past few years.

3. There is abundant evidence indicating that there are many weaknesses in our present teaching of reading. We are too frequently failing to make use of the best knowledge and materials available.

4. There is a widespread interest in the problems connected with the teaching of reading and a desire to do something about them.

Adapting Reading to Varying Levels of Ability

(The First Problem for Intensive Study)

Preliminary study of reading, both from professional literature and from contacts and observation in the field, disclosed the fact that many children are not making satisfactory progress in reading. The frequent mention of the word "remedial" in current writings in the field and in conversations with teachers and administrators indicates that something is wrong. In attempting to get at the causes underlying this situation, inadequate adaptation of methods and materials to the varying levels of ability of the children within a class kept coming to the top. It seemed advisable then to begin the study of reading by concentrating on this problem.

Reading Readiness—Next Year's Study

Readiness for beginning reading cannot be left out of the picture in any study related to adapting the reading program to individual differences. Neither can readiness for the reading of any selection at any grade level be neglected. However, it seemed best to make a special study of these phases of the problem. Reading readiness, at the pre-reading level, will be

our chief concern next year and perhaps for the next two years. In this present bulletin we shall deal with readiness but not as fully as we hope to be able to do in a later publication.

Sources of Materials in This Bulletin

The content of this bulletin has been drawn from the latest writings of experts in the field of reading, the work of two committees of teachers who cooperated with the Elementary Division last winter, the suggestions of many teachers, supervisors, administrators and college people throughout the state, and from the experiences and observations of the writer in working with teachers and boys and girls in classroom situations.

Last year the Elementary Division was just getting its program under way and it was impossible to have as many groups of teachers assisting us as we would have preferred. Two groups did meet throughout the year. One was composed of teachers and principals from the suburban schools just outside Denver, including Golden, Bear Creek, Wheatridge, Edgewater, Lakewood, Littleton, Englewood and Aurora. The other group consisted of teachers from small schools having from one to four teachers, in Adams, Jefferson, Elbert, Arapahoe, and Douglas counties. The work of these groups was of great value in determining the practicability of procedures designed to adapt the reading program to children of different levels of ability within the same room.

Bulletin to be Basis for Discussion

This bulletin will be the basis for discussion in meetings with groups of teachers in the various counties of the state during this year. The bulletins will be distributed by the county superintendents previous to the meetings and teachers are urged to bring their questions and constructive criticisms.

FOREWORD

The State Department of Education is happy to present to the teachers of Colorado this curriculum bulletin on reading. The ability to read is a vital need, both in school and in life situations. Teachers, at all grade levels, are confronted with the problem of children who cannot read or whose reading ability is so poor as to interfere seriously with their school work. Even among children who are able to do fairly satisfactory work a wide range in reading ability exists.

One important reading problem, then, is that of adapting reading methods and materials to the varying interests, abilities and needs of the individual child. This work must be done in schools organized on a group instruction basis. Individual work, help and attention must be balanced with group experiences which provide the child with opportunities for social growth.

This bulletin has been prepared for the purpose of suggesting procedures which may assist in meeting this reading problem. The organization of the bulletin is such that a busy administrator or teacher may find the material in which he is interested at any particular time. For example, a superintendent wanting a condensed review of recent trends in reading, will find it in Chapter I, *Recent Trends in Thinking and Practices in Reading;* a first grade teacher interested in reading readiness may read and study Chapter IV, *Reading Readiness at the Pre-reading Level;* a sixth grade teacher, searching for activities in which a number of children of varying abilities may engage, will find suggestions in Chapter V, *Classroom Procedures in Adjusting the Reading Program to Individual Interests and Abilities of Pupils.*

The teacher is a most important factor in learning situations. The same procedure may be either mechanical and uninteresting, or dynamic and challenging, depending on how the teacher presents and develops it with the children. The teacher who studies and knows the children as individuals, will recognize the importance of adapting the reading program to their needs, and will use methods and materials in such a way as to insure the greatest possible all-round growth of each child.

INEZ JOHNSON LEWIS,
State Superintendent of Public Instruction.

ACKNOWLEDGMENTS

The Elementary Division of the State Department of Education gratefully acknowledges its indebtedness to the many teachers throughout the state who contributed suggestions on adapting reading to individual differences. The members of the two committees who worked on this problem contributed greatly by testing the practicability of teaching procedures. Principals, superintendents and college people have assisted with ideas and constructive criticism.

We are especially indebted to Dr. Wilhelmina Hill, University of Denver, who served as consultant in the preparation of this bulletin; Mrs. Helen R. Gumlick, Supervisor of Primary Education, Denver Public Schools, who read and criticized the manuscript; Miss M. Lucile Harrison, Colorado State College of Education, who gave many suggestions for the chapter on *Reading Readiness;* Mrs. Ruth Reed, Rural Supervisor, San Bernardino County, California, who read and criticized the sections containing suggestions for adapting reading to individual differences in small school situations; and Dr. Paul McKee, Colorado State College of Education, who gave suggestions on the general organization of the bulletin.

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INEZ JOHNSON LEWIS,
State Superintendent of Public Instruction.

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CHAPTER I

RECENT TRENDS IN THINKING AND PRACTICE
IN READING

Before going into the problem of adapting the reading program to varying levels of ability and individual differences in interests and experiences, it might be well to discuss the recent trends of thought and practice in regard to the major phases of reading. This will enable us to consider the more specific suggestions on meeting individual differences in the light of the entire reading program.

What Is Reading

The act of comprehension in reading may be defined as the recognition of words (being able to call them by name and realizing that the printed words are but another form of the spoken words) which in their relation to other words, convey meanings. These meanings have their origin in the mind of the reader and are developed through the experiences which he has had. The words serve as stimuli which call up meanings in the mind, provided that the background of experience of the reader has been such as to insure such meanings. As a very simple illustration, a first grade child may be taught to say ''cow'' everytime he sees it in print. This much is mere word calling. The degree of comprehension depends upon the experiences which the child has had with cows. If he has seen cows, has been on a farm where cows were kept, has seen them cared for and milked, the word ''cow'' calls up a multitude of meanings. On the other hand, if he has never seen a cow, or a picture of one, or has never heard people talk about cows, the word ''cow,'' although he can say it, calls up no meaning whatsoever. Such word calling without meaning, although it sometimes passes as such, *is not reading.*

Most writers in the field of reading consider reading to involve more than comprehension. On the recreatory side of reading we have attitudes and appreciations. On the work type side we have such skills as the ability to locate information, to select such portions as assist us in getting the answers to our problems, to evaluate information as to its accuracy, to organize material for use and to decide what is important to remember

and how best to remember it. Many of these abilities may be classified as study skills; work type reading and study are closely allied and there seems to be no advantage to an artificial separation of them.

Also, there is a growing feeling that the reading program should result in a changed behavior on the part of each individual, that the individual should react more appropriately to future reading, and other situations as a result of his experiences in the school program. The reading which the child does should be functional and closely related to his present life needs.

A Well-Rounded Program in Reading

In planning for a well-rounded program in reading it is necessary to consider (1) the stages or periods in the child's reading growth; (2) the child as an individual, his interests, abilities and limitations; and (3) the needs for reading in life situations which the child is meeting and will meet.

The stages or periods of growth in the child's reading progress may be outlined as follows:

1. The pre-reading, or reading readiness period
2. The period of initial instruction in reading (The first book reading—pre-primer, primer, and first grade level)
3. The period of rapid progress in the acquisition of fundamental reading attitudes, habits and skills (Second and third grade level)
4. Period of rapid expansion in reading interests and increase in efficiency in utilizing reading skills (Grades four, five and six)
5. Period of refinement in reading attitudes, habits, and skills (Junior high, senior high, college level)

This classification is useful in thinking about and discussing levels of development. It would be difficult to say, above the beginning reading periods, just what level of growth any particular child had reached at any given time. Growth in reading, as in other abilities, is a continuous process which defies rigid classification into stages or periods.

The time required for the child to progress from one level to the next depends upon many factors such as the level of mental growth which he has reached, his rate of mental maturation, health, social and emotional adjustment, home conditions and school experiences. It is important that the child should not be forced to work at a level for which he is not ready. Rather definite standards of achievement have been set up by various writers for each stage of development.[1] A well planned reading program will make provision for each child to reach the standards for any given level before going on to the next without retardation in grade placement sufficient to cause him to become a social misfit in the group with which he is placed.

The well-balanced reading program also demands that the child be taught to do those kinds of reading which will meet his present and future reading needs. Based on reading needs in life situations, the types of reading which should be included in the program may be classified thus:

1. Work type silent reading (Reading silently for information) This type of reading involves the ability to

   a. Comprehend what is read

   b. Locate information

   c. Select information pertinent to the problem at hand and to evaluate such information as to its worth in solving the problem

   d. Decide what information is worth remembering and how best to remember it

      Since study in the content fields utilizes work type silent reading, it is highly important

2. Work type oral reading (Reading aloud to give information to others) Not used as much as work type silent

3. Recreatory type silent reading (Reading to one's self for pleasure) This type probably accounts for a large part of the reading done in life. It is therefore extremely important that the right attitudes, tastes, and appreciations be developed.

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[1]For a listing and discussion of these standards see: *A Course of Study for Elementary Schools* (State of Colorado Department of Education [1936]), pp. 34-55. Also, "The Teaching of Reading: A Second Report," *Thirty-Sixth Yearbook, Part I*, (National Society for the Study of Education), pp. 65-131.

    4. Recreatory type oral reading (Reading aloud to give pleasure to others)[2]

Materials for work type reading should be largely factual, those for recreatory reading mainly literary in nature.

It would be impossible to say definitely just how the reading time should be divided among these four types of reading. However, it is apparent from the standpoint of use in life that work type silent and recreatory type silent are most important and therefore may justly claim a larger share of school time than the other two.

Interest and Purpose

Interest and purpose are two important factors in securing successful reading experiences. We need to spend more time in arousing an interest in the selection to be read and in assisting the pupils in setting up their own purposes for reading it. It is also essential that a desire to read, both intensively and extensively, be developed. Children should be encouraged to read intensively to learn more about some field of special interest and extensively to acquire new interests. Reading periods need to be provided during which, under the guidance of the teacher, children are free to read books of their own choice.

Every reading experience should be adequately motivated and pupils should be aware of the purpose for which the reading is being done. *Reading to learn is the best way of learning to read.* There is a growing trend in the direction of organizing part of the reading program around problems or centers of interest. Such a procedure makes possible the use of many reading and library skills in a natural setting. At the same time interest and purpose on the part of the pupils are secured through their sharing in the selection and planning of the work. This procedure also facilitates caring for individual differences in interest and ability.

Oral and Silent Reading

Older methods of teaching reading were predominately oral. Then came the realization that life needs in reading were largely for reading to one's self, and the swing toward silent reading in

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[2]A complete presentation of the various types of reading as determined by use in life situations will be found in Paul McKee, *Reading and Literature in the Elementary School,* pp. 46-68.

the schools was on. Today there is a rather general feeling that we have swung too far in the direction of silent reading with a consequent neglect of the oral.

The truth is that there is a place for each. Oral reading may be used in three ways. First, in the beginning stages of reading, oral presentation seems necessary to assist the child in making the connection between the spoken and printed word. Slow learning children probably profit from oral reading for a much longer period than normal or bright pupils. Second, oral reading provides one means for checking on the child's reading. Difficulties in word recognition, reversal tendencies, improper phrasing, etc., may be detected by having the child read orally to the teacher. (Oral reading for this purpose should be done to the teacher not the group.) Third, there are life situations in which the ability to read orally is an asset. These life situations have one element in common, there is always an audience. Here we have our cue for school procedures, reading of this type should always be done in an audience situation. An audience situation demands that the reader have something to impart in which the listeners will be interested, and that he read it well enough to hold this interest.

Silent reading makes up the biggest part of the reading done in life and is therefore entitled to more time in school than is given to oral reading. Most of the study type reading and a large portion of the recreatory reading done in school and out, is of this type. The development of silent reading skills should be begun almost at the beginning of the process of learning to read and should occupy an increasing part of the time devoted to reading as progress is made from one level to the next. The teacher who says to a class of first graders, "Read the next three lines to find out what happened to the pony," is introducing silent reading.

Study reading in the content fields should be largely silent. There is a place in class discussion for reading excerpts orally to prove a point, but oral reading of a geography lesson, taking turns around the class, is an inappropriate use of this type of reading.

Teaching Word Recognition Skills

The generally approved practice seems to be to teach children a variety of ways of attacking new words to be used singly and

in combination. Emphasis is placed on the use of word recognition techniques in actual reading although the skills may be taught in a separate period. Some children need a great deal of help in developing word attack skills while others seem to acquire them almost unaided. The objective is continuously increasing independence in word recognition on the part of the pupil.

Aids in word recognition include:

1. Visual analysis—seeing likenesses and differences between new word and familiar words; general configuration; length of word; familiar beginnings and endings; known word within the new word; etc.

2. Phonetic analysis—sounding the word; recognizing familiar beginnings and endings; familiar parts within the word; dividing the word into syllables; etc.

3. Recognition through context clues—getting the meaning from the way the word is used in the sentence

4. Combination of all three methods

Authorities are agreed that instruction in phonics should not be begun until a sight vocabulary of from 100 to 300 words has been developed, although ear training (teaching children to recognize words that sound alike when they hear them) may be started earlier. Commonly used words, first recognized phonetically, should become a part of the child's sight vocabulary as rapidly as possible since the phonetic method is too time consuming to be continued indefinitely in recognizing frequently recurring words.

Development of Meaning

Since meaning is dependent upon experience, and since many children lack the background of experiences necessary to get meaning from much of the material they are asked to read, it becomes necessary to build this background through excursions, concrete activities, pictures, description, discussion and other promising means. *Readiness for reading in terms of understanding the concepts used is an essential preparation for reading any material at any level.*

Reading Readiness at the Pre-Reading Level

One of the most encouraging trends in recent years in relation to reading is the recognition of the part readiness for beginning reading plays in successful participation in reading experiences. More hopeful still is the fact that many schools are doing something about it. Children need to have reached a certain stage of physical, mental and emotional maturity before they undertake the usual first grade program in reading. Many first grade entrants lack the necessary degree of maturity in one or all of these aspects. Furthermore, the background of experiences, which the beginning child has had, conditions his readiness for reading. His concepts or ideas about such things as animals, policemen, automobiles, a circus, stores, etc., are necessarily dependent upon the quantity and quality of his experiences. So too are his spoken vocabulary and ability to speak in units of thought limited by the opportunities he has had to see and do things and to talk about them.

Some of the abilities necessary for successful first grade reading can be developed, others must wait on natural maturation. Many schools delay formal reading for first grade children who are not ready for it, and provide a variety of experiences designed to help develop those necessary abilities and enrich their background of experience.

Reading and the Content Fields

There are two aspects to the problem of reading in the content fields. First, the study skills demanded in the content fields should be taught in such a way as to insure their functioning in those situations which naturally call for their use. The study skills taught in the reading period should grow out of a need for them which has arisen in the content fields and the program in these fields should be set up in such a way as to require their use in carrying out that work.

Second, many children experience difficulty in understanding what they read in social studies, geography, history, and science texts. This may be due to a number of factors, but probably one outstanding cause lies within the texts themselves. They are often encyclopedic in nature, lacking in detailed description, and filled with concepts, many of which are foreign to the experiences of the children. It is here that the teacher in the content fields must

truly become a *teacher of reading.* Background of experience to understand the new concepts must be built up through concrete experiences such as excursions, construction activities, experiments, etc., or through vicarious experiences such as description and explanation by the teacher, drawings, pictures, films, and the like.

In general, the trend seems to be to give more time, especially in the intermediate grades, in the content fields to developing background for learning, and in teaching those reading skills necessary to study in those fields, with somewhat less time being given to the regular reading period.

Breakdown of Rigid Grade Standards

Far too often our methods of instruction have been based on the theory that all of the children at any given grade level must be exposed to the same materials and methods. The all too frequent procedure is that of requiring pupils to cover the material in the same text regardless of the differing levels of ability within the classroom. Standards of achievement in terms of facts and skills have been set up for each grade and all children have been expected to achieve them. Of course, all children have not reached the standards, and we have resorted to various means of attempting to meet the problem, such as special help, both in and out of school hours, retention and promotion on a basis of over-age.

Standardized tests, both achievement and intelligence, have done much to break down the theory of grade levels with the same work for all children. They show plainly that there is no such thing as a fourth grade, for example, in terms of ability to do any given work or in achievement in any field. An average fourth grade will frequently range in reading achievement ratings on a standardized reading test from first grade reading ability to that of an average eighth grader.

The theory of rigid grade standards has broken down but the practice still continues. Perhaps we are not ready as yet to eliminate grade labels in designating groups of children, but we can and must, in our own thinking disregard them. *A fundamental principle in education is to start where the child is and go on from there.* The trend in the direction of disregarding grade standards and attempting to give children opportunities to do the things they can do successfully is unmistakable.

The Reading Problem in High School

There has been a tendency for teachers at all levels to feel that children coming to them should be prepared to do the work in that grade. As we face the facts we come to realize that no group at any level ever come equally ready to participate in the same work. The first grade teacher doesn't find all of her children ready to begin the reading program, and in the same way the high school teacher finds that not all members of her class are ready to participate in the type of activity she has come to regard as high school work.

If we think of education as a continuous process of growth proceeding in accordance with the individual abilities of the learner, we shall have to discard the idea that at certain stages all children of a group are ready for certain things. If we make an effort to keep the child with a group of somewhat near the same chronological age and level of social maturity, it is inevitable that they shall differ in the academic work which they can do successfully. The artificial standards of achievement for elementary grades, junior high and high school will have to be broken down as far as academic work is concerned. If, upon entering high school, certain children are still reading on a sixth grade level, provision should be made for a continuation of reading work on that level. This is not an easy thing to do, but is a very important adjustment which must be made if we meet the needs of the individual.

Children entering high school are meeting new experiences in new fields where the concepts and vocabulary are often foreign to them. It is impossible in any reading class to give the children all of the concepts and vocabulary necessary for intelligent reading in all fields. The teacher in any special field is best qualified to teach the vocabulary and meanings necessary for work in that particular area. Thus, it becomes the duty of the science teacher to develop the understandings, vocabulary and skills necessary for the successful reading of science materials.

Many high schools are seriously attacking this problem and some promising procedures are being developed. Most encouraging is the change in attitude from one of "take it or leave it" to that of attempting to adjust the school program so that boys and girls of varying degrees of ability and backgrounds of experience can profit from it.

Retarded, Remedial and Slow Learning Readers

Much interest is being shown in remedial reading. The word "remedial" suggests something wrong. If we could eliminate physical, emotional and social handicaps, and find and carry out a perfect developmental reading program there would be no remedial reading cases. As we approach this ideal, helping children to overcome physical, emotional and social handicaps, building adequate readiness before beginning reading, developing a background for reading any selection, providing interesting materials, and making provision for varying rates of learning in children, the number of remedial cases will be materially decreased.

Present practices in dealing with remedial cases call for diagnosis of causes considering all aspects of the child's growth: physical, mental, emotional and social. It is recognized that no single cause is responsible for any child's difficulty. Remedial measures include alleviating, in so far as possible, the causes which lie back of the difficulties. Specific techniques in re-teaching reading are but a part of the program of rehabilitation. A child is not considered retarded in reading if his reading age, as measured by standardized tests, approximates his mental age, provided observed reading attitudes, habits and skills substantiate the findings of the tests.

Bright children may be remedial cases in reading and slow learners may be doing all that can be expected of them. Careful study of reading achievement, in relation to all of the factors which influence the child's ability to achieve, will eliminate from the remedial classification many children now considered to be in that category.

Improvement in Materials for Reading

There has been a decided improvement in basal readers from the standpoint of interest, content, illustrations, lightened vocabulary and concept load and increased repetition of words in meaningful content. Many authors of basal reading texts are providing supplementary materials in the form of transition books to bridge the gap from one grade to the next, readiness books for the beginning of each grade or books in pamphlet form paralleling the basal texts. These materials have a rich and interesting content, with a vocabulary based on the basal reader previously read. Thus the slow learner may stay longer at each level, acquiring vocabulary

through meaningful repetition in interesting content, while the rapid learning child may enrich his experiences through wider reading. As more supplementary materials of this type are used, the need for isolated vocabulary drill will be lessened.

Another desirable improvement is the elimination of grade labels from readers. This makes it possible for the teacher to use a third grade book with a fourth grade pupil whose reading ability is on a third grade level without the pupil feeling that he has been demoted.

Although the trend in the construction of readers is in the direction of a lighter vocabulary load, many of the readers are still too difficult, at the grade levels for which they are intended, for some groups of children. Some schools follow a practice of moving the readers up a half grade or in some cases a whole grade, using pre-primer and primer materials in the first grade, the first grade reader in the second grade, etc.

Use of Many Materials of a Wide Variety in Content and Difficulty

Closely allied with the breakdown of rigid grade standards is the practice of providing a wide variety of reading materials both as to content and difficulty. Instead of supplying a fourth grade with thirty-five copies of the fourth grade reader, better practice will provide several copies each of readers on three or four grade levels. The spread in the number of different grades for which readers are supplied and the number of copies made available at each level will depend upon the distribution of ability within the group of children with whom the materials are to be used.

In addition to supplying reading texts on different grade levels an abundant supply of individual books, of both the informational and recreational types, on a wide variety of subjects and with a wide spread in reading difficulty, is desirable. The increasing use of library materials in the classroom is a promising indication of a more functional reading program.

Standardized Tests in Reading

Tests in reading have shown some improvement. They are becoming more diagnostic in nature, but are far from meeting the needs of classroom situations in this respect. There are tests on the market now which attempt to measure ability to select, evaluate and organize information for use, as well as to check word recogni-

tion and comprehension. There is some tendency to devise tests which get away from mere blank filling, checking multiple choice responses, and marking statements true and false. This trend is highly desirable if we are to measure real ability to read, rather than ability to guess with little assurance of understanding.

School people are beginning to regard the results of tests as one source of information in making up the picture of the whole child. They are being used more to assist in a guidance program for the individual child and less to rate the work of teachers, arrive at standards of promotion and satisfy curiosity.

We have today a wealth of information in regard to the building of a well-rounded program in reading. We have an abundance of worthwhile materials of interest to children on many levels of reading difficulty. It remains for us as teachers to organize this information and these materials, for use in the classroom, in the way which will best meet the needs of boys and girls.

CHAPTER II

THE EXTENT AND NATURE OF INDIVIDUAL DIFFERENCES IN READING ABILITY

A common complaint among teachers at all levels, and especially above the primary grades, is "The child can't read! How can he get his geography if he can't read?" It is one thing to dismiss the problem by placing the blame on previous teachers, and it is quite another to take the attitude that it is our business as the child's present teacher, to try to discover why he hasn't learned to read and what specific difficulties he is having. We can then plan a program which will attempt to take into consideration the causes back of his not being able to read, a program providing reading experiences which he can do successfully and designed to help him in overcoming his specific weaknesses.

As educators have studied and observed the reading problem over a number of years, it has become increasingly evident that much of the trouble in reading lies in our failure to adapt the work to the ability of the learner. Before attempting to show how this is true, perhaps it would be well to list and discuss briefly the nature of the factors which influence progress in reading and the extent to which children of the same age or grade differ in regard to them.

Factors Influencing Success in Reading

1. Mental Development

Reading is a complex process requiring a certain degree of mental maturity for successful achievement. Many of the abilities necessary for learning to read are the same type of abilities measured by intelligence tests. Children vary greatly in the degree of mental maturity they have reached at any given chronological age level, just as they vary in their rate of physical growth. Experimental evidence indicates that in order to be reasonably sure of success in the formal program of first grade reading a child should have a mental age of six and a half years. Table I gives the mental ages attained at various chronological age levels by children differing in their rates of mental growth.

TABLE I

MENTAL AGE ATTAINMENT OF CHILDREN AT VARIOUS CHRONOLOGICAL AGE LEVELS WHO DIFFER IN THEIR RATES OF MENTAL GROWTH

Chronological Age	Rate of Mental Development	Mental Age
6 years	100% or normal	6 years
6 years	90% of normal	5 years 5 months
7 years	90% of normal	6 years 4 months
6 years	80% of normal	4 years 10 months
7 years	80% of normal	5 years 7 months
8 years	80% of normal	6 years 5 months

We see that even the normal child starting to school when he is six years old, has not reached the mental age level which is considered most desirable for beginning the formal reading program. The child whose rate of mental growth is 90 per cent of normal will be seven years old chronologically before his mental age approximates six and a half, and the child whose rate of mental growth is 80 per cent of normal will be eight before he should start formal reading. If this table were extended in both directions we would find that a five year old with a mental age of six and a half would have to have a rate of mental growth of 130 per cent of normal and that a child whose rate is 60 per cent would be eleven years old when his mental age reached the six and a half year level, providing, of course, that he continued to develop at this 60 per cent rate.

What variations in rate of mental growth can we expect in an average group of children? Table II gives this information. It can be seen readily that if we have an average group of six year olds at least 20 per cent will not be ready for formal work in beginning reading. This figure is determined by considering only those whose rate of mental growth is below 80 per cent of normal. Undoubtedly there will be many more in the so-called normal group, rates of 90 to 109 per cent, who will not have reached a mental age sufficient to make successful reading possible. It is from the lower half of this group that many of our problems in reading come. Furthermore, not all of the group will be six years old. They may range from five to seven or more. Those below six with rates of mental

growth below normal will have correspondingly lower mental ages; those above six with rates below normal may approach or reach the mental age recommended for beginning formal reading.

TABLE II

NORMAL DISTRIBUTION OF RATES OF MENTAL GROWTH[1]

Rate of Mental Growth	Per Cent of Cases in Average Group
120% of normal and above (very superior group)	7
110% to 119% of normal (superior group)	13
90% to 109% of normal (normal group)	60
80% to 89% of normal (retarded group)	13
79% of normal and below (very retarded group)	7

2. Physical Development

Of special importance on the physical side is the degree of maturity of the eyes and freedom from eye defects. There is growing evidence that many six year old children lack the maturity of the eye muscles necessary for doing close work. Naturally certain eye defects may hinder learning to read. Defective hearing is also a handicap and speech defects may cause trouble. Handedness and eye dominance may have some relationship to reading difficulties. General health, malnutrition, and defects resulting from children's diseases, are important factors in influencing the type of work the child does in school.

3. Emotional Growth

Children, who are emotionally still in various stages of babyhood, have difficulty in adjusting to school and to the process of reading. Feelings of insecurity at home or at school interfere with learning to read. Children coming from homes where domestic strife is the rule may reflect this condition in their achievement in school activities.

4. Social Adjustment

Children who feel their position in the group to be secure, who adjust easily to new groups, and who make friends readily possess a state of mind conducive to good school work. Cases of severe

[1]S. L. Pressey, *Psychology and the New Education* (New York: Harper and Brothers Publishers, 1933), p. 217.

reading disability have been traced, in part, to feelings of not belonging in the social group.

5. Environmental Influences

The home and community have a share in affecting the child's school performance. Attitudes of parents, living conditions in the home, and the community standards all affect the child and his work in school. The child's past school experiences help to determine his present attitudes toward school and toward reading. A year in school spent in attempting unsuccessfully to do work beyond the pupil's ability may require several years of effort to overcome the wrong habits and attitudes established.

6. Interest

Interest is as important as any of the factors previously mentioned. Interests vary greatly. The fact that there are more retarded readers among boys than girls may be due, in part, to a failure to provide reading materials dealing with things in which boys are interested. The reading program must take into account variations in interest and provide periods during which children may explore fields of their own choice. The teacher should be on the alert to assist in developing old interests and discovering new ones.

Extent of Variation in Reading Ability

Teachers who have given standardized reading tests are aware of the wide range in reading abilities, as measured by such tests, among children in any given grade group. Table III gives the distribution of the reading grade equivalents of the scores made by thirty-two fifth grade children on the Progressive Achievement Test in Reading.[2]

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[2]Ernest W. Tiegs and Willis W. Clark, *Progressive Reading Tests* (Los Angeles: California Test Bureau, 1937).

TABLE III

DISTRIBUTION OF READING SCORES IN GRADES OF
THIRTY-TWO FIFTH GRADE CHILDREN ON THE
PROGRESSIVE ACHIEVEMENT TEST IN READING

Reading Grade	Number of Cases
7.5	1
7.0	2
6.5	2
6.0	7
5.5	5
5.0	7
4.5	2
4.0	3
3.5	2
3.0	0
2.5	1

Total Cases........32

These children live in an average community. The wide range
in the distribution is typical of what may be found when such tests
are given to any considerable number of children.

It is evident that as far as ability to read is concerned, in so far
as the test is a measure of such ability, we have not a fifth grade,
but all of the grades from second to seventh. To give all of these
children reading work from the same fifth grade materials is just
not common sense. Yet such procedure has been and still is the
practice in far too many schools.

Importance of Adjusting the Reading Program to Varying
Levels of Ability

What happens to those children who are not ready to read in
the first grade? What are the results of failure to adapt reading
methods and materials to the abilities of children in any grade
group? All the teacher needs to do to answer these questions is to
look about her in her own room and own school. Even though
that school may be operating on a program which adequately meets

the problem, children entering from schools which are not making these adjustments will furnish ample evidence.

John, a remedial reader in the fifth grade, is rather typical of what happens to many of these children. At the time that a special study was made of John's case he was eleven years old. An individual Stanford Revision of the Binet Simon Intelligence Scale showed that his rate of mental development was 90 per cent of normal, not extremely low.[3] His mental age was 9.9, indicating that he had long since passed the mental age level at which he should have been able to have learned to read. But he hadn't. On the Progressive Reading Test, Primary Form, he rated second grade, but in reality he read poorly at the primer level.[4]

A check on his previous school experiences disclosed that he had entered first grade at the age of six. His mental age then would have been somewhere near five and a half. At first his teacher noticed nothing unusual about John. He seemed perfectly normal and showed average interest in first grade activities.

Near the middle of the year, it became apparent that he was not learning to read as he should. A special help program at school and at home was begun, and although some progress was noted it was decided that he should repeat first grade.

The second year in first grade John probably could have made good progress in reading (an additional year had increased his mental maturity) but for the fact that his attitude had changed. He tried at times but gave up easily. Soon he found ways other than reading by which to get the attention of the younger children. He was never retained again.

The remainder of John's story up to the time of his examination in the fifth grade was the usual thing of going along with the class with the idea that he would get something from listening to the other children. He never became a serious discipline problem but showed unwholesome personality traits such as bullying younger children, showing off, and sullenness.

The tragedy in John's case and in that of many like his, is that if he had not been forced into the formal reading program that first year, resulting in a period of unsuccessful and unhappy experiences, he would probably have been able the second year and in succeed-

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[3]Lewis M. Terman, *Stanford Revision of the Binet Simon Intelligence Scales* (Boston: Houghton Mifflin and Company, 1920).
[4]Tiegs and Clark, *Progressive Reading Tests.*

ing years to have made progress in reading in accordance with his ability.

The diagnosis and the treatment of John's case will be discussed in Chapter VII, *Remedial Reading*.

A program based on the following principles will eliminate many of the reading problems with which we are faced. In such a program:

1. A child's progress in reading is considered satisfactory if his reading age, as shown by reliable standardized reading tests, approximates his mental age, providing no deficiencies or difficulties are apparent. (Achievement in reading of bright children will frequently fall farther below their mental ages than that of normal or below normal children. This is not necessarily cause for concern, unless the discrepancy is large or it is evident that the particular individual is not working to best advantage or is encountering difficulties which retard his progress.)

2. A child does not begin formal first grade reading until we are reasonably sure he is ready for it. (In determining this readiness we may use intelligence and readiness tests, physical examinations, and the results of study, by observation and home contact, of his emotional and social maturity, and background of experiences.)

3. A child progresses from one level of reading to the next at his own rate of speed, as he is able to reach the standards for each level.

4. A child is placed with the group of children with whom he seems to fit best socially and emotionally. (Variations in ability in reading are cared for by grouping within the group for developmental work in the field.)

Completely satisfactory ways and means of putting these principles into practice have not been found. However, many things are being done which aid in accomplishing this purpose. A large part of the remainder of this bulletin is devoted to a description and discussion of these possibilities.
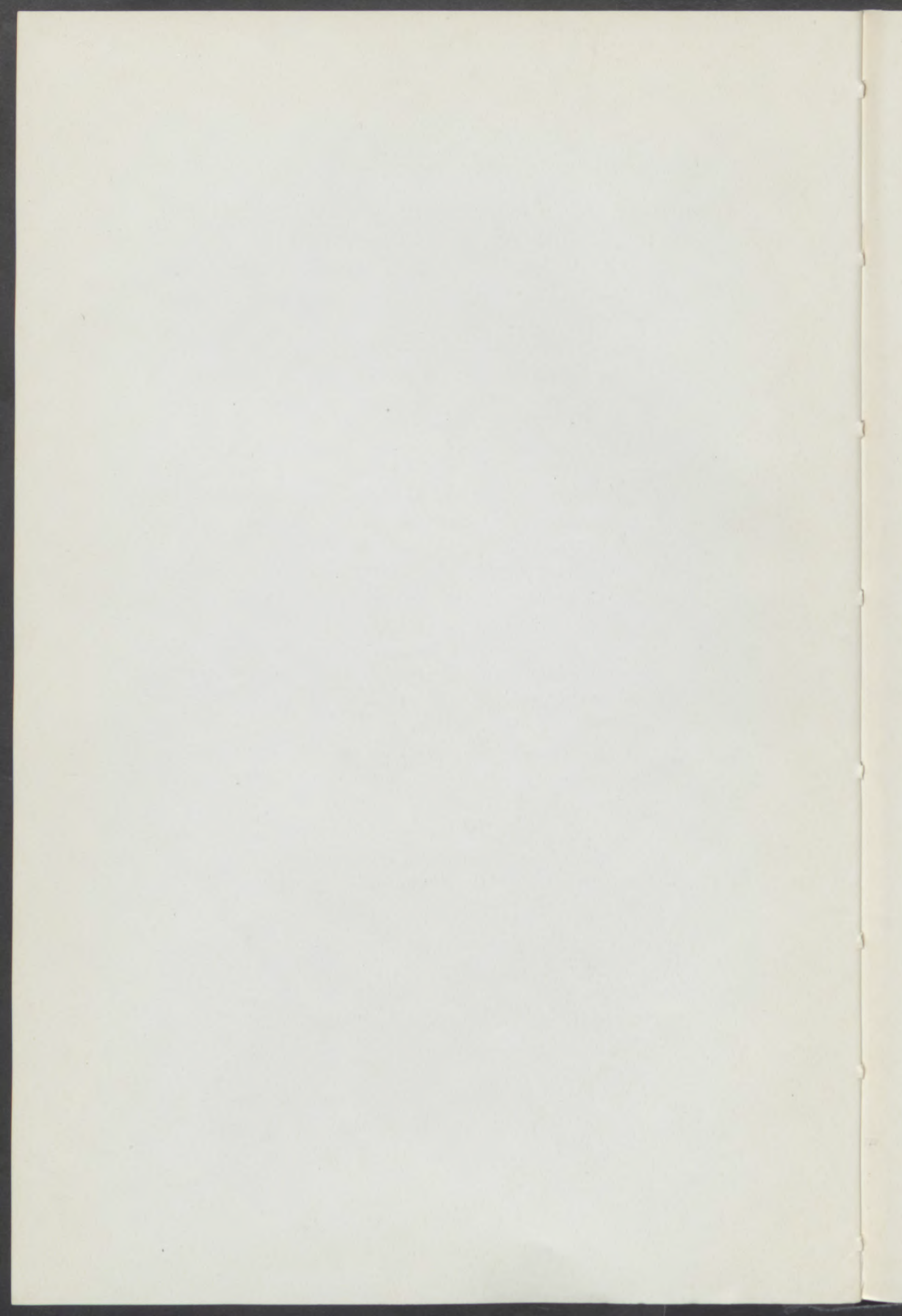
CHAPTER III

ADMINISTRATIVE PRACTICES IN ADJUSTING THE READING PROGRAM TO VARYING LEVELS OF ABILITY

School administrators can aid teachers in adjusting the reading work to the abilities of the children by adopting a liberal attitude toward academic standards for promotion, course of study requirements and by promoting the use of materials of several levels of difficulty in each classroom and grouping of children on an ability basis for certain types of learning situations. By working cooperatively administrators and teachers will be able to reduce the number of remedial reading problems throughout the entire school.

Let us consider some of the practices, largely administrative in nature, which have been and are being used in attempts to do something about the variations among children in rates of progress in reading.

Retention and Special Promotion

One of the oldest and probably most frequently used methods of *fitting the child to the school* is that of retaining slow children and advancing the brighter ones.

Figure I shows, other things being equal, the length of time required if children were allowed to progress at their own rate of speed, for three types of pupils of the same beginning ages, but varying in rates of mental growth, to finish the work of the first six years of school. The child whose rate of mental growth is 80 per cent of normal would require nine years to do the same work that the child whose rate is 120 per cent of normal could do in four years and the normal child in six. We will grant that factors other than rate of mental maturation influence learning. The child whose rate of mental growth is 80 per cent of normal may compensate for some of his deficiency in mental ability by hard, conscientious work, while the superior child with a maturation rate of 120 per cent of normal may be inclined to loaf.

However, the picture developed in this figure represents fairly accurately what has often happened in our schools. Slow learning children have been retained one, two, and even more years; bright

Figure I.

LEVELS OF LEARNING ABILITY IN READING

LEVELS OF ATTAINMENT

| | | 120 I.Q. | 100 I.Q. | 80 I.Q. |

6th. Grade

5th. Grade

4th. Grade

3rd. Reader, Basic & Supplementary

Transition Reader

2nd. Reader, Basic & Supplementary

Transition Reader

1st. Reader, Primer, Pre-Primer, Chart Reading, Readiness

FAST GROUP
(Enrich with much supplementary reading & activities)

AVERAGE GROUP
(Usual materials)

SLOW GROUP
(More reading on each level of difficulty. Progress from level to level as ready. Stay with heterogeneous group for most of activities)

YEARS   1   2   3   4   5   6   7   8   9

children have been advanced one or more years in an effort to find work commensurate with their abilities.

Various kinds and degrees of retention policies have been practiced. On the one hand, we have rigid academic standards for promotion from grade to grade. Theoretically children not meeting these standards are retained until they do. In practice this policy is rarely carried to this logical conclusion; other factors such as effort, over age and disciplinary troubles, come to the rescue and the child is passed on after he has repeated one or two grades. The opposite extreme is that of passing everybody, which in itself doesn't solve the problem any more than retention does. In between, we have such policies as: no child can be retained more than one year; retention should be in the first three grades, if at all, and then not to exceed one year; and numerous variations of this middle of the road course.

Along with policies based on retention of children, we frequently have a great deal of prodding of the laggards, both at school and at home. Play hours are devoted to special help sessions, often at the expense of the dispositions of all concerned. There is a concerted drive on the part of everyone to have the child make the grade, without considering whether or not the standards we are insisting upon his meeting are within his ability to reach. Teachers and parents who have gone through this type of thing with children are well aware of the attitudes which the child frequently develops toward his work, toward school and even toward the teacher and his parents themselves. They are also well acquainted with the strain which such a drive places on them, of nerves worn thin, attempting to be calm and patient under most trying circumstances.

There is nothing wrong with retention as a means of *fitting the child to the school*. It probably does the job about as well as anything else. But if one's philosophy of education calls for beginning with the child and attempting to fit the school to his basic needs and abilities, then retention as usually practiced has no place in any system.

Few of us are willing or able to carry retention to its logical conclusion, namely, retaining everyone not meeting grade standards. Therefore, we do not eliminate the individual differences in learning abilities within the group. Even if we did they would not remain eliminated. Variations in rates of maturation would soon cause some children to be out ahead again. Also in eliminating variations

in mental age we would be increasing the variations in physical size, social maturity and interest. Retention and special promotion will not solve the problem of individual differences.

The question then remains, are we ever justified in retaining children? The present trend is definitely away from retention in the sense of failing the child and making him repeat a year's work. The feeling is that each child is a case for individual study and that his placement with a group in school depends upon his social maturity, as it is affected by his physical, emotional and mental development, rather than upon his academic achievement. In other words, each child should be placed with a group in which there are the most opportunities for his all-round growth and development.

In actual practice many schools still retain some children in the primary grades on a basis of lack of reading ability. Usually no child is retained for more than two years in the elementary school and an attempt is made to build up the attitude that the child has not failed, but needs more maturity to successfully do the work in that grade. Occasionally, the materials used with repeaters are varied the second year in an effort to prevent the development of a lack of interest in reading. If the child's ability is only slightly below normal and if he can be led willingly to repeat the first grade without developing bad attitudes, the added year for mental growth may enable him to do quite satisfactory first grade work the second year. Would it not have been better, however, if he had never been forced to try to read, a task for which he wasn't ready, but had spent his first year in school engaged in readiness activities which he could have done successfully? Even this form of retention seems to be used very sparingly and is gradually beginning to disappear.

Use of Kindergarten and Pre-Primary Groups in Adjusting to Varying Abilities

Schools having kindergartens may control to some degree the entrance of the children to first grade. The kindergarten teacher has an excellent opportunity to observe indications of each child's readiness for reading. Also tests can be administered during the last part of the year which will aid in determining which children are ready to read. Children showing that they probably will not be successful in first grade may be left in kindergarten for an additional semester or year.

Schools having no kindergarten, but having a large enough number of children not ready to read to make a group, may classify them as pre-primary or pre-first and give them a year of kindergarten activities and readiness experiences. At the end of the year they will go to first grade. Neither of these plans need be inflexible; children retained in kindergarten or first classified in the pre-reading groups may be transferred to first grade if they seem to have been misplaced.

Here again, children whose rates of mental maturation are only a little below normal, will be enormously benefited by this extra year of growth. Children whose rates fall far below normal will still be lost if placed in a reading group even after an extra year in the kindergarten or pre-primary group. However, in an average group, there will be a larger number of children who are slightly below normal than those who are greatly retarded; therefore, the number of children not cared for by the extra year in kindergarten or pre-primary groups may not be large. Some provision will need to be made for these cases. Retention in kindergarten or pre-primary groups with a definite readiness program will not completely solve the problem.

Ability Grouping to Aid in Meeting Individual Differences

Large schools, having two or more divisions in each grade, often group the children for placement on a basis of ability. In a school having three first grades one might be composed of children needing prolonged pre-reading experiences, another group could be made up of the middle cases who would be expected to begin reading after a few weeks of preparatory work and progress at a fairly normal rate, and the third group would then consist of the children in the upper levels of ability who could be given an enriched program.

In schools having enough children to form at least three reading groups this plan probably takes care of individual differences in learning abilities in a fairly satisfactory manner. Where only two groups can be formed, further grouping within each group will be necessary. Even with three divisions, sub-groups are frequently found. The common practice in the primary grades is to teach reading in small groups, usually three or more, within the whole class division.

The disadvantage in segregating children on a basis of ability into separate divisions is one of a social nature. Many educators feel that children in school should associate with other children of all levels of ability. Slow learning divisions seem to lose a great deal by being denied the stimulation of the brighter children in group discussions and activities. Then, there is perhaps a danger that the brighter groups may develop a type of intellectual superiority which is undesirable. Many of the activities of a modern classroom can be participated in by all of the children regardless of ability along academic lines. It would seem that children should have the experience of living together with other children having a variety of backgrounds and abilities.

Ability Grouping Within the Heterogeneous Classroom Group for Purposes of Instruction in Reading

It is evident that some children are able to read more difficult materials, read more widely and progress more rapidly than others. Many types of reading activities can be carried out to better advantage in small groups. Therefore, it is expedient to group the children within the heterogeneous class, for purposes of certain instructional jobs in reading. For practical purposes three groups seem to be about as many as the average teacher is able to handle efficiently, although some teachers manage many more. There may be special cases which cannot be placed with even the slower group. For these the instruction may need to be largely individual.

This type of grouping largely eliminates the social objections raised in regard to grouping whole classroom divisions on an ability basis. Ability grouping within the classroom for instruction in reading leaves many other activities in which the whole class group may participate. Music, art, social studies, science and playground activities may center around interests common to the whole class. Even in reading, grouping is not necessary for all work. Appreciation of poetry and certain types of prose, sharing free reading experiences, dramatizations growing out of reading, oral reading audience situations and many other reading activities may well involve all of the children.

An interesting possibility in connection with ability grouping, both of the homogeneous class type and the groups within the heterogeneous class, is that of eliminating failure and retention. If we accept the philosophy that the social maturity of the child is the

guiding criterion in placing him in the school group, we shall be happy to explore all possibilities showing promise of enabling us to put this theory into practice.

Under ability grouping programs there is no reason why children may not proceed through school at the rate of one grade per year, spendng six years in the elementary school and still always work at their own level of ability.

To make this point clear, let us take a heterogeneous first grade beginning school in 1940, divided into three reading groups on a basis of readiness. One group needs a year of readiness work with delayed book reading. Another requires three or four months of readiness and delayed book reading, is ready to begin pre-primer work after Christmas and reaches a first reader level of reading at the end of the year. The third group begins book reading after a preparatory period of a few weeks and is ready for second reader level material in June.

In September, 1941, the entire class goes to second grade, where the slow group, after a preparatory period, begins pre-primer reading; the middle group starts first readers; and the rapid group begins reading materials on the second grade level. In September, 1942, the class is labeled third grade, but the slow group is only starting second grade reading; the middle group is about half way through the second reader; and the best group is reading on a third grade level.

In June, 1946, these children have had six years of elementary school experiences. They have lived and participated in a variety of activities with other children of approximately their own age. They have had six years of successful experiences in reading, working part of the time in groups, each group reading on its own level of ability. The slow group may still be working on the first half of fourth grade reading, the middle group may be reading material of beginning sixth grade difficulty, and the rapid group may be reading materials beyond the sixth grade level.

Admittedly this is a theoretical illustration, but it does serve to show the possibility of eliminating failure under a program of grouping on ability levels in reading. Some schools in Colorado are operating on a plan similar to the one just described. The reading achievement test ratings on groups having gone through six years of school in this way are not available, but it is logical to assume that children develop into better readers by always

reading material on the level of their ability than by always being confronted with material which they cannot read successfully.

To those people who abhor the breakdown of grade standards which this program proposes, it can only be said that these standards have never been effectively met anyway. For evidence to support this statement, one need only to give a standardized test in reading to an average grade and see for himself what per cent of the pupils are reaching grade standards under a system based on the grade idea.

Primary and Intermediate Departments

It is recognized that our graded system is responsible for much of the difficulty we encounter in attempting to give children work which they can do successfully. We have become so accustomed to thinking in terms of certain subject matter, texts, and standards for each grade, that we experience difficulty in thinking in terms of what individual children are able to do. Furthermore, we have done an excellent job in selling this grade idea to our patrons. If all grades could be eliminated, we should be able to really begin to build a program suited to the needs, interests, and abilities of boys and girls. However, we spent considerable time and effort getting this system into general use and now we shall have to put forth even greater expenditure in time and effort to get rid of it.

The plan of primary and intermediate departments is a step in this direction. In reality it substitutes two levels for six. Children enter the primary division, which consists roughly of the work of the first three grades, and instead of being promoted from grade to grade, are advanced from one level of achievement to the next, in groups, as they are able to meet the standards for each succeeding level. Some groups go through the primary division in three years, others require four. The intermediate division may operate in the same way. There are many variations of this plan, but the above description gives its essential features. One decided advantage is that children do not fail, they do not have to attempt work beyond their powers, but may progress from successful experiences at one level to successful experiences at the next.

There are two serious objections to the operation of the two department idea. First, if some children spend four years in the primary division and another four in the intermediate, we have the same problem of over-age and possible social maladjustment as we have when some children are retained two years in the elementary

school. The only advantage, and it is a decided advantage, is that the child hasn't failed, hasn't been confronted with tasks which he could not do. The second objection is that not all children will fit into this scheme. Children in the seriously retarded group will not be able to advance from level to level successfully through six years' work, even if they take eight years in which to do it. So we still have the problem, although to a less degree, of adapting our program to varying levels of ability.

Special Rooms for Seriously Retarded Children

In an effort to meet the problem of the seriously retarded child, special rooms for these people have been established in many larger school systems. With such an arrangement, other plans of ability grouping and primary and intermediate departments work much better, for the children for whom such plans fail to function, are eliminated from the class group. The slow learning group can be given more special attention and in addition many non-academic activities can be made a part of their program. Of course, the old argument of social adjustment comes up. Some educators are violently opposed to any segregation within the public schools, except in the case of feeble-minded children or those so handicapped physically as to make their inclusion in a normal group impossible. Others are just as sure that the advantages of special rooms outweigh the objections. Regardless of which side is right, and both have good arguments, special rooms in small school systems are impossible. Slow learning children in these situations must be taken care of in the regular classroom.

Individualized Techniques of Instruction

In theory, it is extremely hard to argue effectively with the advocates of individualized techniques for teaching facts and skills. Everything seems to be on their side. Regardless of how many ability groups are used, the individual variations still exist. The only true homogeneous group is the individual and even there he varies in his interests and abilities in different subjects. It has been shown that when children are grouped into three divisions on a basis of intelligence, wide variations exist in each group in achievement as measured by standardized reading tests. Some of the children in the slowest ability division will have achievement ratings equal to or above the median achievement of the middle

ability group and some in the middle group will rate as well or better than the median of the highest ability group. Such evidence is hard to refute; ability grouping does not adequately take care of individual differences.

There are some arguments on the other side. Completely individualized techniques lose the advantages of socializing experiences which come from group work. These experiences are important even in such a subject as arithmetic. Also, children in a group undoubtedly learn a great deal from each other through well conducted socialized discussions. The proponents of individualized methods are recognizing this fact and are providing opportunities for discussion periods in connection with the individual work.

Regardless of how right the individualized technique people may be, there are many practical considerations in the typical school situation which make the advisability of adopting such methods questionable. In the first place, individualized techniques require carefully prepared materials, written to the children and designed in such a way that the child can proceed on his own initiative without too much help from the teacher. The average text in use in most schools is not so written or organized. To make these texts self-directing by supplementing them with teacher prepared materials is a task which would require more time than most teachers have to devote to it. Texts and material prepared especially for individual work are usually more expensive than the usual text designed for class use. Furthermore, such individual materials are made to fit one school system and may not work so effectively when tried in other situations. In the second place, individualized techniques place a large amount of responsibility for self directed work on the pupil. This is excellent in some cases, but with slow learning children it doesn't work so well. The slow learner is less capable of self direction and depends more upon the teacher. The teacher may find it more efficient and more economical of time to teach slow learners in groups, rather than to attempt to train them in the use of self directing materials.

Even though we may not adopt any special individual method, it is necessary to do much individualized work. Many children need special help to prevent blocking further progress. All of our work should not be in groups; a supervised work period where the teacher is able to help those who need it is highly desirable.

Administrative Practices in Adjusting the Reading Program to Varying Levels of Ability in Schools Having Several Grades with One Teacher

Teachers in one and two room schools often become discouraged by what they consider to be unsurmountable difficulties arising out of the situation in which they work. Some of these difficulties arise from:

1. Several grades in one room
2. Many subjects for each grade
3. Few children in each grade, often only one or two
4. Wide variations in the abilities of the children
5. Lack of background of experience of many children
6. Scarcity of suitable texts, library books, instructional equipment and materials
7. Inadequate supervision
8. An attitude on the part of parents against change in school procedures

It should be pointed out that all of these conditions are not found exclusively in small schools. Larger systems may have the problems of wide variations in ability and poor experience background on the part of the pupils, parents resisting change, meager instructional materials and inadequate supervisory help.

There are some factors which favor the small school.

1. Often the total number of children in such schools is small as compared with the large classes of from thirty-five to fifty frequently found in city systems.
2. Children in small schools, especially in rural areas, may have had more first hand concrete experiences in actually doing things, than children in urban communities.
3. The rural setting is rich in possibilities for first hand contact with many things in which children are interested. The whole world of nature is there to be explored, whereas city children may only get these contacts second hand, if at all, through trips to parks and museums.

The major problems in organizing a reading program in the small school seem to be: (1) many grades and subjects with few children in each grade, (2) lack of instructional materials, and (3) parents opposed to change. Instructional materials will be discussed in Chapter VIII. We have left, then, for our present

consideration, the problem of many grades, many subjects, and too few children in each grade.

There is need for experimentation to discover ways of meeting this problem. Much of the work which has been carried on has been of a type so revolutionary as to be impractical in many small school situations. We need more suggestions as to procedures which can be put into practice without too radical changes in present methods.

The suggested administrative plans which follow are designed to help in meeting the problem of adjusting the reading program to the varying abilities of children in schools having several grades in one room. Some of these proposals call for considerable change, some do not. Further ideas will be found in Chapter V, *Classroom Procedures in Adjusting the Reading Program to Levels of Ability*.

Ability Grouping for Reading

The purpose of ability grouping for reading in the small school is to eliminate as many reading periods as possible by bringing children together who are approximately equal in reading ability. Table IV and the description which follows will make clear the procedure which is suggested.

TABLE IV
A TYPICAL DISTRIBUTION OF TWELVE CHILDREN IN A ONE ROOM SCHOOL IN GRADE PLACEMENT AND READING ABILITY[1]

Pupils	Grade Placement	Reading Ability (Grade Equivalents)
A	1	Not tested
B	2	Didn't score on test
C	2	3.0
D	3	2.9
E	4	3.5
F	4	4.3
G	6	4.2
H	6	6.0
I	6	7.1
J	7	3.8
K	7	6.9
L	8	9.5

[1]This table represents no one actual situation. The information included was drawn from the experience of the writer in working in one room schools. It is felt that the picture presented is rather typical of what would be found in many schools of this type.

In terms of grade placement we have seven grades repre-
sented. The reading achievement scores are not at all unusual,
schools could be found in which greater variations from the norms
would exist.

Let us analyze the situation further. Suppose that pupil A,
a beginning first grade child, although no readiness or intelligence
test data is given, was ready, in the opinion of the teacher, to
begin reading. Pupil B, although in second grade, didn't even
score on the test. Suppose that further investigation showed that
he had not learned to read. If he is at all ready for reading now,
only one thing can be done, namely, start him in beginning reading.
Pupil C is reading a year above his grade level, while D is just
slightly below. Pupil E is only a little below the norm, F is above,
but G is considerably below. Undoubtedly G cannot read sixth
grade material successfully. Pupil H is reading at his grade level,
I is a year above, but J is another serious problem. Seventh grade
material is out of the question for him. Pupil K is close to the
grade norm, but L is a superior reader.[2]

Here we have the picture. Pupils B, G, and J are retarded
problems. What shall be done? Table V shows how these children
might be grouped.

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[2]In determining whether the reading achievement of any given pupil is satis-
factory, factors other than grade norms will need to be considered. For example,
a child beginning sixth grade with a chronological age of eleven, a mental age
of eleven and a reading achievement of 6.0 grades would be considered to have
made satisfactory progress. Another eleven year old sixth grader with a mental
age of thirteen whose reading achievement was 6.0 grades probably has not
accomplished what we should expect. Other things, too, such as health, home
conditions and school attendance would need to be considered in determining
whether any given child's progress was what should be expected.

However, in planning the reading grouping, we should place the child in a
group where he can work successfully, and his reading achievement rating on a
standardized test is one criteria for such placement. This does not mean that
the child should or will necessarily remain in this group. Other factors may
determine his future group placement.

TABLE V

SUGGESTED PLAN OF ABILITY GROUPING OF TWELVE CHILDREN IN A ONE ROOM SCHOOL FOR PURPOSES OF INSTRUCTION IN READING

Group	Pupils	Grade Placement	Reading Ability (Grade Equivalent)	Difficulty Level of Materials Used
I	A	1	Not tested	Readiness materials,
	B	2	Didn't score on test	pre-primers, primers, first reader, if ready.
II	C	2	3.0	
	D	3	2.9	Third Grade
	E	4	3.5	
III	F	4	4.3	
	G	6	4.2	Fourth Grade
	J	7	3.8	
IV	H	6	6.0	
	I	6	7.1	Sixth Grade
	K	7	6.9	
Special	L	8	9.5	Eighth Grade and Above.

Pupils A and B go together nicely for a beginning reading class. In group II, pupils C, D, and E will probably get along all right. In group III, pupils F, G, and J are on about the same level. With group IV, we have a problem. Pupils I and K could work well together, on seventh grade material, but if we include H, we will have to lower the difficulty of the material to sixth grade. However, if we leave H out we have an extra group with only one child in it. Perhaps the best solution is to leave Group IV as it is with pupils H, I and K. Work type reading on the sixth grade level may not be too easy for I and K, so all three can work together at least part of the time when this kind of reading is being done. If sixth grade work level material is too easy, then I and K will make a separate group and H will have to work alone. It must be remembered that this grouping will be used only part of the time for certain kinds of reading work, such as developmental lessons in comprehension and work type reading skills.

Free recreatory reading will be on an individual basis, with perhaps groups III and IV coming together to discuss what they

have read. These two groups can also combine for reading appreciation periods and oral reading audience situations. Likewise groups I and II will be combined for similar kinds of reading. Occasionally all four groups may work together.

We still have the problem of pupil L. His reading ability is too high to place him with group IV. It seems that this pupil will have to be given special work on the level of his ability during the time devoted to reading with the other groups. A pupil of this type needs to be encouraged to read intensively in some field in which he is particularly interested and widely in many fields to broaden his background. However, pupil L should participate with combined groups in as many activities as possible, for the socializing values which come from working with others. (A more complete discussion of the possibilities of combining grades and groups for certain types of work will be found in Chapter V.)

What have we gained by organizing the reading in this manner? First, we have reduced the number of reading classes or groups from seven to four, and for some kinds of reading to two. Second, we have placed each child so that the material he will read is not above the level of his reading ability. Third, we have enlarged our class groups which should result in greater opportunity for socialization. We now have two children in group I and three each in Groups II, III, and IV, whereas, before we grouped them, we had three grades with one child each, three with two children each, and one with three children.

What are the difficulties which might be encountered in such a program? Probably the greatest obstacle would be the attitude of the parents, but even that is not hopeless. We have some good talking points. We are not demoting the children, but are placing them where they can have materials which they can read. It shouldn't be too difficult to convince B's mother that his chances of learning to read from a second grade book are not good. The parents of pupil J are probably aware by this time that he has difficulty, and may even welcome the interest the teacher is showing in attempting to improve his reading. Then, too, this grouping isn't necessarily permanent and neither is it for all of the child's work in school, not even for all of his reading work. Pupil J may be fairly good in arithmetic computation. If he is, we can play that up. At any rate we can find something he can do fairly well about which we can tell his parents. Perhaps we may not be able

to convince all of the parents. Should we place pupil G in group III in spite of the bitter opposition of his parents? Probably not. Make an exception, let G work alone in the sixth grade reader during the time the other groups are working together, or place him in group IV, and hope that his parents will eventually see the light.

What shall we do if pupil E, fourth grade, now in group II, using the third grade reader knows all the stories in that reader from having heard them discussed last year? This may not be a serious problem. Pupil E may know the stories in the fourth reader too from listening to last year's fourth grade. If possible, obtain new materials for at least part of the work in group II.

There are individual cases where it would be unwise to place a child with his ability group. An over-age sixth grade boy or girl, whose reading ability is on the second grade level, will need to be left with the sixth level group and given easier material for at least part of his work.

Some Alternatives to the Ability Grouping Plan

If ability grouping, as it has been described, is too radical a departure, there are still other possibilities.

1. The extreme cases can be placed with children in a lower grade for part of their reading work. Pupil B could work in first grade and pupils G and J with the fourth.

2. Pupils whose reading abilities fall far below their grade level may be given easier material for as much of their reading work as possible, preferably for all of it, without placing them with children in a lower grade. If we can provide easy books without grade labels, they will be more readily accepted by the children than books bearing a lower grade classification.

Determining the Reading Difficulty of Material
Which a Child Can Read Successfully

Many small schools may not be able to give standardized reading tests to find the child's level of reading ability. It is possible to determine approximately the difficulty level of material which a child can read successfully without giving him a standardized test. The procedure is as follows:

1. Estimate the difficulty level of material which you think the child will be able to read.

2. Select three or four books, with which he is not familiar, above, below and on the level you estimated.

3. Start with a book which you think will be too easy and have the child read a page or more orally to you.

4. Progress upward with books of increasing difficulty until a book is reached in which the child misses not more than one word out of ten. That book is about right. If he misses more than one word in ten, it is probably too difficult.

5. Check comprehension by a few questions about important points in content. If comprehension is poor, even though word recognition is good, the material is too difficult.

Even where standardized reading tests are used, a check by the procedure just described is desirable. Books selected by the child for free reading may be checked for difficulty in the same manner.
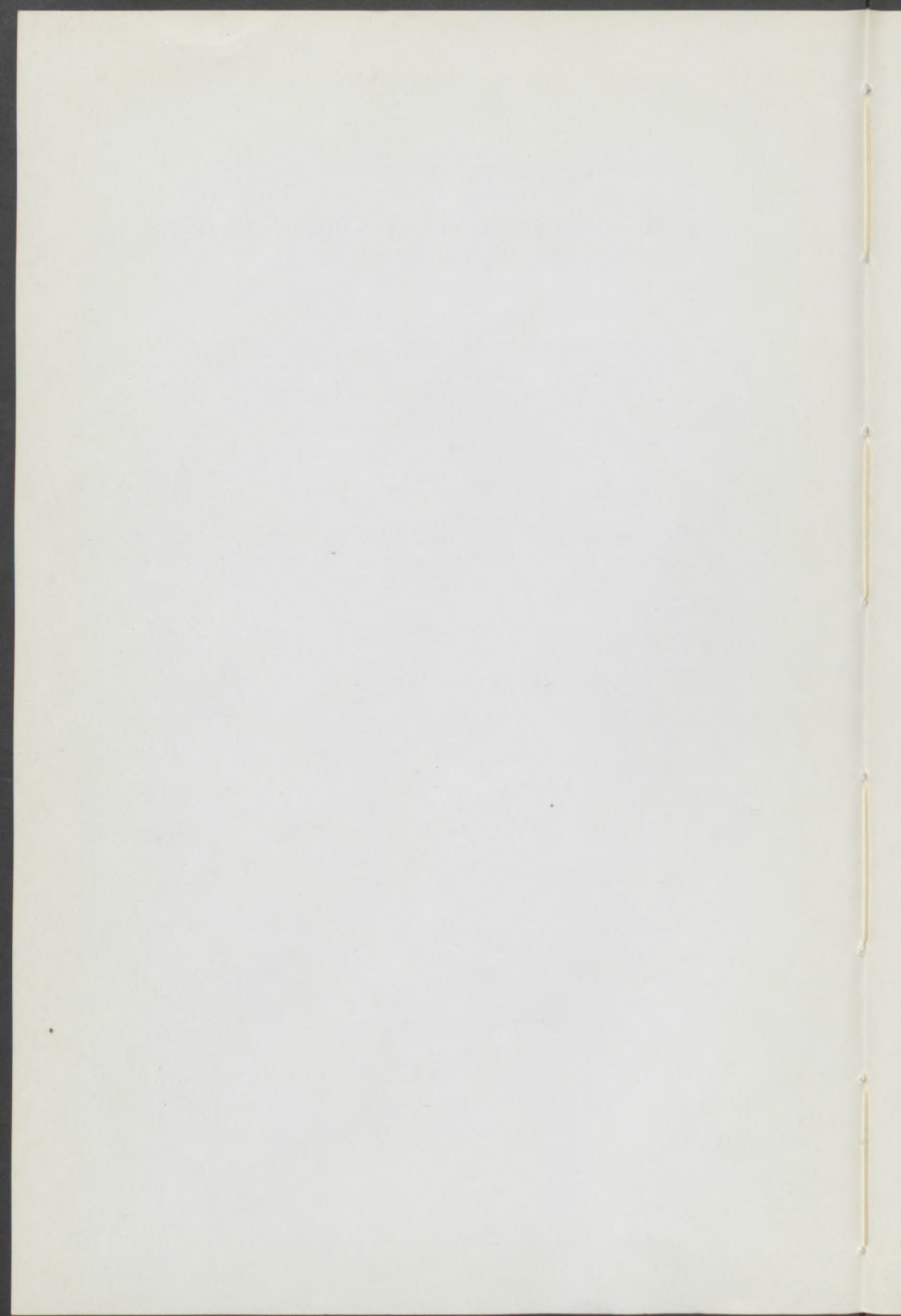
CHAPTER IV

THE READING READINESS PROGRAM AT THE PRE-READING LEVEL

It is not the purpose of this bulletin to deal at length with the reading readiness program. Reading readiness is a new field, one in which much work remains to be done. The present plans of the Elementary Division call for one or more years of intensive study of readiness for reading at the end of which study we hope to be able to prepare a bulletin giving much more information than is included in this chapter. However, any treatment of adapting the reading program to varying levels of ability cannot ignore the problem of readiness. It is basic to the whole discussion of individual differences in abilities in reading. Enough work has been done to provide us with some reliable guides in formulating a readiness program for our schools.

It is recognized that the need for readiness does not end wtih the pre-reading program. Readiness should be developed for reading any selection at any grade level. This phase of the reading readiness work has been mentioned in Chapter I and will be more fully discussed in Chapter V in connection with *Reading in the Content Fields*. Here we are primarily concerned with the readiness program preparatory to beginning book reading.

Developing readiness for reading is a definite part of the kindergarten program for all children. In schools which have no kindergarten it becomes necessary to develop readiness for reading in the first grade. Even when kindergarten experience has been provided, a few weeks of readiness activities are recommended at the beginning of first grade. Some children need only a relatively short period of time devoted to such activities before beginning book reading, others may require several months before developing sufficient readiness for beginning reading and for a few, formal reading may need to be delayed even longer. Reading readiness is not a remedial procedure to be used with only a few children, it is a developmental process from which all children profit.

We shall consider in this chapter (1) the factors involved in readiness for reading; (2) activities in which children engage which will assist in developing readiness; (3) determining when children are ready to read; (4) suggestions for beginning a readiness pro-

gram in a school; and (5) suggestions for a readiness program in schools having several grades with one teacher.

Factors Involved in Readiness for Reading

The factors involved in readiness for reading are almost identical with those listed in Chapter II under the heading of *Factors Influencing Success in Reading.* Therefore, we shall present them here in outline form with but little additional discussion.

I. Mental factors

    1. General level of mental ability—mental age

    2. Specific mental abilities

        a. Ability to see likenesses and differences and to remember letter and word forms

        b. Ability to remember ideas in proper sequence

        c. Ability to do abstract (problematic) thinking and to relate such thinking to action

II. Physical factors

    1. Speech

    2. Hearing

    3. Vision

    4. General health

III. Environmental factors

    1. Home environment

        a. Breadth of experience provided

        b. Interest shown toward school

        c. Education and intelligence of parents

        The concepts (ideas, understandings) which the child has about things in the world in which he lives are determined in part by his intelligence and in part by the opportunities he has had to share in a wide variety of experiences. The wealth or poverty of the child's store of concepts is an extremely important factor in determining his success in reading, for these concepts are the clue to the meanings for which printed symbols stand. (See Chapter I, discussion of *What Is*

Reading.) Other things being equal, the child whose parents have taken the trouble to answer his questions, who have included him in the conversation on a wide variety of topics, and who have shared with him the experiences of visiting places of interest in the community, will have developed a higher degree of readiness for reading than the child who has been denied these opportunities.

2. Community environment

   a. Breadth of opportunities for experience

   Some communities provide much richer opportunities for concept building experiences in certain fields than others. Mary, a second grade child whom the writer met in a one-room school in an isolated rural area, was attempting to read a story about a group of children playing circus, with apparently little understanding of what it was all about. The children in the story were building their circus in a barn loft. In an attempt to discover the child's background of experiences as a possible cause of lack of of understanding the following conversation took place:

   "Mary, did you ever see a circus?"

   "No."

   "Did you ever see an elephant, or a lion or a camel?"

   "No."

   "Where were the children going to have their circus?"

   Mary, after referring to her book replied, "In the barn loft."

   "What is a barn loft?" No response.

   "Did you ever see a barn with an upstairs to it?"

   "No."

   "You know what an upstairs in a house is, don't you?"

   "I don't think so."

Explanation of what an upstairs was like was given, to which Mary enthusiastically replied, "Oh yes, I know! I saw one once. You climbed up on a chair and went through a hole in the roof!"

Needless to say it was unnecessary to search further for the cause of Mary's failure to understand the story she was attempting to read.

3. School environment

a. Pre-school and kindergarten experiences

A good kindergarten program does much to enrich and widen the child's experiences resulting in increased understanding of the world about him.

b. Classroom surroundings

Picture and story books, attractive pictures with labels, bulletin boards on which are posted room duties and announcements, experience and story charts all invite reading and aid in developing a desire to read.

IV. Personality factors

1. Emotional stability

2. Social development

a. Attitude toward self and others

b. Attitude toward school and work

Many of the factors influencing readiness for reading are interrelated. Some are of more importance than others. Harrison lists the most important as being:[1]

1. Adequate mental age

2. Good vision

3. Good hearing

4. Emotional stability

5. Adjustment to school situation

6. The seven abilities which should result from the preparatory period of instruction

The seven abilities just mentioned are the outcomes of seven

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[1]M. Lucile Harrison, *Reading Readiness*, p. 30.

instructional jobs recommended by McKee to be done in the preparatory period for beginning reading.[2] They are:

1. Providing pupils with real, varied, and rich experiences essential to getting meaning from material read

2. Training in the ability to do problematic thinking

3. Training in the speaking of simple English sentences

4. The development of a wide speaking vocabulary

5. Training in accurate enunciation and pronunciation

6. Development of a desire to read

7. Training in keeping a series of events in mind in their proper sequence

In addition to these seven instructional jobs, Harrison lists the following learnings as beneficial to readiness for reading:[3]

1. Knowledge of left and right

2. Recognition of the fact that reading and writing progress from left to right across the page

3. Establishment of a definite handedness

4. Ability to see likenesses and differences in form

Developing Readiness for Reading

Delaying formal book reading for those children whose mental ages fall below 6.5, until they have, by natural maturation, reached the optimum mental age, would in itself be a big help in insuring successful beginning reading. In accordance with this line of reasoning the proposition has often been advanced that children be admitted to school on a basis of mental age instead of chronological age as is the present practice. The application of this suggestion is not practical or advisable due to several reasons. First, parents are accustomed to entering their children at or near the age of six. Second, the school should promote the physical, social and emotional growth of children as well as teach such skills as reading. Where there are no kindergartens we are, as it is, missing the most opportune period in the child's life for developing attitudes, appreciations and habits. To further delay the opportunity for children to learn to live together in school cannot be justified. Third, as has been

[2]Paul McKee, *Op. cit.*, pp. 99-100.
[3]Harrison, *Op. cit.*, pp. 56-58.

pointed out, mental age is only one of many factors determining readiness for reading. It is a highly debatable point as to whether the rate of mental maturation can be increased by training but no one will deny that certain of the other factors making for readiness can be developed through appropriate activities. Therefore, it is evident that delayed reading is not sufficient; we must institute a planned instructional program in reading readiness.

The abilities resulting from the seven instructional jobs given by McKee and the four additional abilities discussed by Harrison may well be taken as objectives or outcomes which we hope will be achieved through the readiness program. These outcomes may be restated as follows:

1. A wealth of concepts (ideas, understandings) resulting from many real, rich and varied experiences

2. Ability to think through simple problems, the result of experience in working in situations which present challenging problems to be solved

3. The ability to express one's self in simple thought units, this ability being developed by having something to talk about and an opportunity to share experiences through conversation with others

4. A good speaking vocabulary developed through experiences and conversation

5. Ability to enunciate clearly and pronounce accurately, an outcome of practice in real conversational situations with the example and the help of the teacher

6. A desire to read stimulated by an environment which encourages reading (Books, pictures, labels, bulletin boards, experience chart stories, stories and poems read and told to children, etc.)

7. Ability to keep a series of ideas in mind in proper order, developed by planning and carrying out activities, listening to and telling stories, and relating experiences

8. Knowledge of right and left, taught by taking advantage of the numerous opportunities which arise for using and practicing the terms in a meaningful way in the daily living in the classroom

9. Recognition of the fact that reading and writing proceed from left to right across the page, learned from story telling pictures in sequence, and by watching as the teacher reads labels, announcements, stories, chart stories, and the like, showing the direction of the reading as she reads

10. Establishment of a definite handedness, by determining through tests and observation hand preference and encouraging the use of that hand in drawing, painting, sawing and other manual activities

11. Ability to see likenesses and differences in forms learned through various game and workbook exercises calling for such discrimination

Some of the kinds of experiences which may be used to develop the abilities listed above have been suggested. Harrison discusses in detail a variety of activities which provide opportunity for growth in one or more of the abilities necessary for reading. Some of the activities suggested are:[4]

1. First hand experience activities which include:
   a. Excursions (Trip to dairy, etc.)
   b. Social experiences (Entertaining parents)
   c. Construction activities (Building with blocks, making booklets, etc.)
   d. Practical experiences (Room duties, caring for pets, etc.)
   e. Games

2. Vicarious experiences by means of:
   a. Stories read and told
   b. Pictures displayed and discussed
   c. Poems read
   d. Songs
   e. Discussing and relating experiences

For a complete discussion of how these and other activities may be used to aid in developing necessary readiness abilities, the reader is referred to the bibliography in the appendix to this bulletin.

[4]Adapted from Harrison, *Op. cit.*, pp. 31-58.

Determining When Children Are Ready to Read

In considering the problem of how to tell when a child is ready to read, it is necessary to think in terms not only of the degree of maturity of the child, but also of the kind of reading program for which he is to be ready. If our beginning reading procedure calls for book reading almost immediately, a higher level of mental maturity will be required than if we approach book reading through some weeks of preparatory reading activities which develop the idea of what reading is and build the vocabulary for the first book stories. The latter approach also gives the teacher an excellent opportunity to find out which children are not ready for book reading so that they may be kept on the informal type of reading for a longer time. Incidentally, this type of program may help to prevent parental objection to delayed book reading because of the fact the children are doing some actual reading.

There is probably no one sure way of knowing when a child is ready to undertake the formal beginning book reading program. Even a combination of test results, both intelligence and readiness, the results from physical examination, and the judgment of the teacher based on observation and home contacts may not be entirely fool proof. Surely, however, information from all of these sources should enter into the total picture upon which the decision is based. Perhaps in doubtful cases it would be better to continue readiness work, as it is always easy to move the child into a reading group when we are assured that he is ready, but it is more difficult to move a child from a reading group to one that is having no formal reading.

Growth in readiness for reading and in the reading process itself is continuous. We cannot say that today the child is in the pre-reading or readiness stage and tomorrow he will be on the book reading level. The transition from the readiness program to book reading should be gradual and may be carried out through simple experience chart reading, and through the introductory materials supplied with many recent basal readers.[5] The teacher's

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[5]There is considerable controversy in regard to the use of reading charts prepared by the children and the teacher growing out of the activities in which they are participating. This controversy centers largely around the use of such charts to develop the basic sight vocabulary to be found in the first book reading the children will do. It is claimed by some reading authorities that it is impossible for most teachers to prepare charts, based on the children's experiences, which will be scientifically sound in such matters as words introduced, rate of introducing new words, repetition of words, etc. These people contend that the materials prepared by reading experts to be used with a basic reading series for introducing book reading are far superior to anything the teacher can prepare. It would seem that there is a need and a place for both types of introductory materials. The use of experience charts primarily to develop an interest in reading and an understanding of what reading is, with vocabulary development incidental, should eliminate these objections.

manual to the basal series, if of recent publication, is an invaluable guide to the teacher in planning and carrying out readiness activities and in introducing beginning book reading.

One school system in Colorado is experimentally trying this procedure: No regular school is held for the first grade the first two weeks in the fall, but instead parents bring their first grade children, on scheduled appointments, for examination. The first grade teachers have been trained to administer the Stanford Revision of the Simon-Binet Intelligence Test, which is given individually to each child.[6] On the basis of this test and what observations the tester has made while giving it, the children are tentatively classified into the following groups: (1) those needing a prolonged readiness program, perhaps as much as a year; (2) those needing a somewhat shorter period of readiness work; and (3) those who will probably be ready for reading after six or eight weeks of readiness activities.[7]

One decided advantage of this plan is that it provides for the administration, individually, of a highly reliable intelligence test under conditions which give the examiner an opportunity to make many valuable observations of the child's emotional and social maturity. Furthermore, it makes possible the grouping of children before they actually come to school which may eliminate much transferring from one teacher to another.

The plan can be criticized on the ground that one test plus limited observation is insufficient evidence on which to group children in regard to their readiness needs. Also it is difficult to secure reliable test results before the child has had an opportunity to adjust to the school situation.

Perhaps a better procedure is to wait until the children have been in school from six to eight weeks and then carry out a testing program using individual intelligence tests or group intelligence tests if the individual tests cannot be given, and a reading readiness test. The grouping of the children will be based on the results of these tests and the observations the teacher has been able to make during the time the children have been in school. If a group intelligence test is used it is desirable to check doubtful cases with an individual intelligence examination.

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[6]Lewis M. Terman, *The Stanford Revision of the Binet-Simon Intelligence Scale* (Boston: Houghton Mifflin Company, 1920).
[7]Various grouping plans and the advantages and disadvantages of each were presented and discussed in Chapter III.

Once an intelligence test has been given to a child it is possible to predict approximately, the mental age which that child will have reached at a later time. For example, a child six years old, chronologically, whose test at that time shows him to have a mental age of five years and six months, has a rate of mental maturation (I. Q.) of 92 per cent of normal (mental age in months ÷ chronological age in months). If we wish to know what this child's mental age will be when he is seven years old chronologically, we multiply the chronological age of seven by his rate of mental maturation. (Seven years are 84 months. 84 months × 92 = 77.28 months or 6 years and 5 + months, mental age.) Predicting the mental age which a child will have at a later time gives information of value in determining at about what time the child will be ready for formal reading.

Re-testing one or more times during the year is a more reliable procedure than predicting future mental age from only one test. Groups of children for whom reading has been delayed several months may be retested using both intelligence and readiness tests. The results of these tests together with the teacher's judgment, based on her observations, may be used in determining which of the group are now ready to begin reading.

Regardless of what plan is used for determining the needs of the children for readiness activities and delayed book reading, certain principles should be followed in so far as possible.

1. Information about the child should be secured from as many sources as possible: physical examinations, mental and readiness tests, teachers' observations, home contacts, and parents.

2. In classifying the child in regard to his readiness needs all of the factors as shown by the information at hand, should be considered.

Beginning a Reading Readiness Program

School people, in considering a readiness and a delayed reading program, often ask, "How can it be done in such a way as to avoid objections from parents?" Naturally it would be unwise to change from a first grade book reading program to delayed reading and a readiness program all in one year. Teachers and children would have difficulty in making the necessary adjustments to say

nothing of parents. Inaugurating such a program might proceed somewhat as follows:

1. All elementary teachers may study the need for readiness work in their own system. Results of readiness or intelligence tests or both, given to first grade children, might serve as a basis for a study of the extent of the problem. Achievement tests in reading in any grade could be used to show the problem as it has developed in that grade. All teachers should study the need for readiness because they are all affected by it and all may help in its solution.

2. All elementary teachers and first grade teachers especially, may study the various kinds of recommended readiness procedures which may be substituted for work in books.

3. When the teachers become aware of the importance of the problem tentative plans for a beginning can be drawn up. At the start, too great a change from established procedures should be avoided. Some of the possibilities are:

   a. Delaying book reading for a month or six weeks for all children.

   b. Planning and carrying out activities designed to help children adjust to school and to each other. Such activities might center around the out of school interests of the children, such as toys or pets, or they might grow out of their new environment, the school, resulting in learning about the building, the people in it and what they do. Beginning a unit on home life would provide opportunities for excursions to see houses being built and for the activities of furnishing and playing in the play house in the room. Such activities not only help children to adjust to school, but at the same time increase the experiences and vocabularies of the children, train in the use of language and challenge problematic thinking.

   c. Reading readiness work books may be used. If this were the only change made at the beginning it would be worthwhile because it would delay reading for a period and would help to develop some readiness abilities. However, there is much more to a complete readiness program than merely working through exercises in a workbook.

d. As soon as possible the idea of grouping should be put into practice, making possible longer readiness periods for slow maturing children. Some may need a year or more. Bright children of normal first grade age probably need only a few weeks or at most two or three months of pre-reading experiences. This differentiation may cause some difficulties in the form of objection by parents. Readiness work in which all engage at the start, may help to eliminate such objections. It may be shown that all children need this work, but some require longer to get it than others.

e. Approach to book reading may be modified, introducing more preparatory experience chart reading, with vocabulary controlled by teacher to include words soon to be met in the pre-primer with a minimum of difficult words. The child should know the words to be met in the first pre-primer stories before he is given the books. These words can best be learned through class-teacher composed stories based on the activities and interests of the children or through materials prepared for that purpose to accompany the beginning books. Several recently published sets of readers provide for such an approach.

4. Meetings may be held with groups of parents whose children are in first grade or will be in first grade the next year. Topics for discussion may include the health of the school child, stressing pre-school physical examinations, assisting the child in making the emotional and social adjustments which are necessary in the new situation and the importance of developing readiness for reading. Parents should be led to feel that the readiness program is necessary for all children. Examples of individual differences among children in learning in out of school situations may be used to lead up to the question of variations among children in rate of developing readiness for reading. Administrators and teachers will be able to tell from the reactions of parents in these meetings, about how far they are ready to go in accepting a readiness program in the school.

By studying, planning, trying out plans, and constantly working toward the goal of a readiness program adjusted to the

varying needs of the children, consistent, permanent progress can be made.

Suggested Activities for Developing Reading Readiness in Schools Having Several Grades with One Teacher

In general, the abilities necessary for successful beginning reading, and the activities which aid in developing these abilities are the same for children in one teacher schools as for children in large city systems. But the specific ways in which children gain these experiences will of necessity differ in these two types of situations. The teacher with many grades but only a few pupils in each grade will encounter the problems of providing opportunities for socializing experiences for the beginners; while the problem of the teacher with many children in one grade may be that of grouping, and providing profitable activities for two or more groups while one group is meeting with the teacher.

Teachers having two grades and several children can probably best handle the problem in ways similar to those employed by teachers with only one grade, namely some plan of grouping for the developmental program in reading. With more than two grades other techniques may be used.

It is the purpose of this section to give suggestions as to how readiness work can be provided for one or more children in a beginning group in a school with several other grades in the same room. There exists a need for trying out in actual situations methods of adapting readiness procedures to schools of this type. It is hoped that the next few years' work in reading readiness will result in accumulating evidence of the practicability of such procedures and the addition of many suggestions not found in this bulletin.

Activities to develop readiness abilities were discussed on pages 43 to 45. They include excursions, social experiences, such as school parties, construction activities, such as building a model farm or furnishing a play house, and dramatic activities, such as playing house, playing store, etc. Our problem here is, "How can such activities be carried out with one or two first graders in a room with several other grades?"

It is evident that to realize the full value of many of these experiences more than one child must participate in them. From

the practical standpoint, it is impossible to take one child on an excursion when several other grades must be considered.

One of the big needs in small many-grade schools is that of finding activities in which several grades can participate together. Socialization calls for working in groups. With this thought in mind, would it not be possible to carry out one or more of the following?

Activities in Which Several Grade Levels May Engage

1. Find some interest common to all of the children of the school. This interest might be in the field of science: the wild animals of the locality, wild flowers, rocks, fossils, the plant and animal life of the region in pre-historic times, domestic animals, trees, and birds. Or the interest might be centered around social themes: the home, how people provide food, clothing, shelter, recreation, the community (local town), how people travel, etc. Or again the interest might be the school: how we can make our school, inside and out, a more pleasant place in which to live and work; how we can plan to share the responsibilities of living together; planning and putting on a school fair where the products of the neighborhood are displayed, a school party, a parents' visiting day.

   Such activities provide opportunities for broadening experiences, enlarging vocabulary, use of language and practice in thinking and acting in meaningful situations. The first grade child can participate in such activities on his level, if encouraged to do so. The teacher can develop in all the children a spirit of cooperative endeavor and a sharing of experiences. Older children can go much more deeply into the common interests, there being no limit to the possibilities for exploration. These group projects would need to be distributed throughout the year, but this is not a disadvantage, as growth in understanding, facility in the use of language and ability to think through problems is a continuous process.

   What of the time which such activities will take from the "regular work?" There are several answers. First, such activities should rightly be considered a part of the regular work. A carefully planned series of social experiences

could well comprise a part of the social studies program. Second, if these experiences are valuable from the standpoint of developing readiness for reading and growth in social understanding they need no further justification. Third, realizing that schools can't be made over in a day, these activities need not consume a disproportionately large share of the school day. In the average school, children often waste enough time to take care of such activities. An average of thirty minutes a day might be sufficient. Fourth, a program of this sort, if successful, will bring added interest and enthusiasm to the life of the school. This may be reflected in a better attitude toward all school work. The writer has witnessed such changed attitudes when activities were introduced. Fifth, many opportunities will arise to connect things learned in pursuing the whole school interest with many topics coming up in other school work. Also, what better oral language experience could be found than the discussion following a field trip, or how could we better develop number concepts than by arithmetic used in planning a school improvement program.

2. The social studies program in the primary grades (one, two and three) could well be built around themes or units in which all of the children in these grades could participate. These units would include such topics as the home, school, farm, community, travel, recreation, etc. The units suggested in the State Course of Study could be used in this way, rotating over a three year period so that there need be no repetition. (There is a need for developing such a curriculum based on a three year or similar rotating plan). All the children in these grades could then share in activities which would be rich in possibilities for developing readiness for reading at not only the pre-reading level, but other levels as well.

3. Appreciation of stories and poems read or told by the teacher is recommended as a readiness developing activity. Could not first, second and third grades be grouped occasionally for such work?

4. Discussing and relating experiences is another activity rich in readiness development possibilities. In addition to the opportunities provided by the activities discussed in 1 and

2, occasional periods of free discussion and story telling might be engaged in by the first three grades.

5. Many games which aid in readiness growth may be shared by several grade levels, including the first, with much more interest than if only one or two children were participating.

All of the activities suggested will be of value to all of the children taking part. Growth in readiness does not end with the pre-reading period.

Activities in Which the First Grade Children and Teacher May Engage

The group activities enumerated above will probably not be sufficient. The teacher will need to spend time with the first grade apart from the larger group. This need will be important at the beginning of the year when the child is getting adjusted to school and is especially necessary in the case of the timid child. These activities may include leading the child to talk about his experiences, showing and talking with him about pictures and picture books, reading and telling stories to him and having him tell stories to you, printing on a chart short experience stories the child has told and reading them with him, helping him plan and carry out construction activities contributing to a larger group activity or one wholly his own, teaching games to be played by only a few children, by encouraging and directing free time play such as building with blocks, dramatic play in the play house or with toys, drawing, painting, etc. Many other readiness activities will be discovered by the resourceful teacher.[8]

The activities discussed on the preceding pages may not always result in the development of all of the concepts or ideas necessary for understanding the material in the first books to be read. The teacher should check the concepts included in these materials and plan special work to develop those meanings which the children have not acquired. The Teacher's Manual for many basal books suggests ways of developing the meanings necessary to the understanding of the selections included.

Reading readiness work books are valuable aids in developing abilities necessary for reading, such as: proceeding from left to

[8]Blocks may be obtained by getting from the lumber yard odd ends of planed lumber. Avoid, of course, rough splintery pieces. These usually can be obtained free or at small cost and offer numerous possibilities for exercising initiative and original effort.

right, recognizing likenesses and differences in form, associating words with ideas and increasing concepts and spoken vocabulary. Such books are not expensive. It is well to use the readiness workbooks which accompany the basal series of readers being used in the first grade. The teacher should guide carefully the use of workbooks by the children, otherwise they will be of no value or may even result in the development of wrong habits.

From where is the time to come for this work? From the same place it would come if we had the usual beginning first grade class in formal book reading.

How Long Should Readiness Work be Continued

The length of the preparatory period will, of course, vary with the individual child. Some may need only a few weeks of readiness work before beginning book reading. Others may not be ready to read before Christmas, some not until the second year, and a few not even then. In some situations, due to pressure from the home, it may be impossible to delay book reading until the child is ready for it. In such cases all we can do is to develop as much readiness as possible before he tries to read and take him slowly from one level to the next, giving him as much easy interesting material on each level as we can.

Possibility of Using Pupil Helpers

If the teacher has many children in several grades it will be difficult to find sufficient time to give the first grade children the attention they need. It is with some reluctance that the use of pupil helpers in such situations is suggested. There are three dangers in such a practice: first, that the pupil helper may do more harm than good; second, that the experience of assisting the first grade may have no educational value to the helper himself; and the third danger lies in objections from parents, both of the children assisted and those assisting.

Considering only the first two difficulties, the reality of the dangers mentioned depends upon (1) the type of work assigned to helpers, (2) the kind of pupils chosen as helpers, and (3) the amount and nature of the preparation given the helpers for their particular jobs. If these three factors are given adequate attention pupil teachers may be used to both the advantage of those being

helped and those doing the helping provided parental cooperation can be secured.

In the reading readiness program what types of things can pupil helpers do? It would seem that, under proper guidance, older children could be used to tell and read stories to the first grade children, to act as chairmen for a story telling or experience relating period by the children, to assist in free time play activities, to guide in construction projects, and to supervise the playing of readiness games. The teacher should not delegate such responsibilities as the making of experience story charts, supervision of readiness workbooks exercises, developmental work in beginning reading, etc.

The children chosen as helpers should be those who have some natural ability in working with little children, who can be trusted to pay attention to business, who can profit by the instruction given by the teacher to prepare them to guide the work of the children they are to help, who are free from physical defects or deformities and habits that might be repulsive, and who are sufficiently good in their own work to enable them to spare some time to act as helpers.

The teacher must take some time, in or out of school, to train these people for their jobs, and he must keep an eye on them while they are at work to see that they are making use of the instruction given. Such training might include general hints as to how to work with little children, such as pleasing manner, voice, etc., with cautions against using force, and specific directions for doing certain types of work. Follow up conferences should be helpful in developing pupil teachers who are really useful in the school, and who are growing in the abilities necessary for successful work with others.

It will be seen that the use of pupil helpers is not an easy way of lightening the teacher's load. However, after the beginning stages of training, it would seem that the plan should begin to bring results by freeing the teacher from a part of the demands of the first grade and at the same time give them the attention they need.

An adequate readiness and delayed reading program is essential in any attempt to care for individual differences in abilities in reading. It is not an easy task to develop such a program, but where teachers realize the need and are willing to study the problem, a program can be worked out which will do much to eliminate many of the so-called remedial problems in reading which are so common in the upper primary, intermediate and junior high school levels.

CHAPTER V

CLASSROOM PROCEDURES IN ADJUSTING THE READING PROGRAM TO INDIVIDUAL INTERESTS AND ABILITIES OF PUPILS

Administrative policies, such as eliminating rigid grade standards, grouping children in classes on levels of social development and grouping within the class for reading instruction, form the foundation on which teachers may build in caring for individual interests and abilities in reading. The extent to which the needs of individual pupils are met depends largely upon the teacher.

In this chapter we shall discuss classroom reading activities which help in adjusting to the individual interests and varying levels of ability in the class group. Some of these suggestions call for library and supplementary materials while others can be carried out with a limited number of books.

Grouping children within the class for reading instruction is recommended as a procedure for meeting individual variations in reading ability. The advantages and disadvantages of this method were pointed out in Chapter III, but it is well to say again that in a well-rounded reading program other ways of adapting to individual differences will also be used. Ability grouping is especially valuable for use in the developmental type of work where all children in the ability group are reading from the same book. There are other kinds of reading situations where children on many ability levels may work together, provided adequate materials are available. Classroom procedures for conducting reading work in ability groups will be discussed first and will be followed by descriptions of how several ability levels may work together on the same reading activity.

Determining the Individual Child's Reading Level

Regardless of what plan for meeting the problem of varying abilities is used, it is necessary to have as accurate a measure of the child's level of reading ability as possible, in order that the materials he is to read may be of a difficulty suited to his ability. Results

of standardized reading tests will be valuable in assisting the teacher in determining the difficulty level at which the child should be reading. A test should be chosen which measures a number of different abilities in reading and in which the guessing element is eliminated as much as possible. In addition to test results the teacher should consider reading habits, attitudes and abilities observed in class and individual reading work. The method given on page 36 of Chapter III may be used as a means of getting further information as to the child's approximate reading ability. A check on the test and teacher's judgment comes in the reading of any material by the child. If it is too difficult we can expect no progress.

Classroom Procedures in Ability Grouping Within the Class for Reading Instruction

Children should be grouped within the class on the basis of their reading ability in order that each group may have books on its ability level. The number of groups within any class will depend upon the range and distribution of variations within the whole class group, the total number of children, the materials available and the training and experience of the teacher. Frequently it is possible to group the varying abilities into three classifications, but sometimes the range is too great and more groups are necessary. There may be a few children whose reading abilities are so far below the slowest group that they will have to be considered as individual cases. As an example of how grouping might be worked out, let us arrange into ability reading groups the children whose reading scores are given on page 17 in Chapter II. Table VI shows how these people might be grouped. In an actual situation the teacher would have more information on which to base the grouping than just the test scores, and in the light of such information the groupings might be made differently.

TABLE VI

GROUPING FOR PURPOSES OF INSTRUCTION IN READING
OF THIRTY-TWO FIFTH GRADE CHILDREN ON THE
BASIS OF READING ABILITY AS MEASURED BY THE
PROGRESSIVE ACHIEVEMENT TEST IN READING.[1]

Group	Reading Grade	Number of Cases	Difficulty of Materials
I	7.5	1	
	7.0	2	Sixth Grade
	6.5	2	
	6.0	7	
		—	
		12	
II	5.5	5	Fifth Grade
	5.0	7	
		—	
		12	
III	4.5	2	
	4.0	3	Fourth Grade
	3.5	2	
		—	
		7	
Individual Case	2.5	1	Second Grade

It will be readily seen, that after grouping we still have a wide range of abilities especially in Group I. We could form two groups here, one consisting of the three children with reading grades of seventh and above, and the other of the nine children whose reading abilities are on the sixth grade level. In Group III, the two pupils whose reading level is three and a half grades may have difficulty with fourth grade materials. It might be better for them to form a group of their own using materials on a third grade level. If we made these two suggested changes we would have five reading groups and one special case. Two of these groups would be small, containing only two and three children each. If grouping is used, as it should be, for only a part of the entire program in reading, these smaller groups may be advisable.

[1]Tiegs and Clark, *Progressive Reading Tests.*

Many teachers feel that it is difficult to manage more than three groups. This belief is partly due to the idea that each group must meet with the teacher every day. In the lower grades this is necessary, but on the intermediate levels it is possible to plan the work so that one particular reading activity will cover more than one day's work. It is possible also to develop self-direction on the part of children so that several groups may carry on reading activities at the same time. Many teachers use pupil helpers or group chairmen who assist in guiding the work of the group. Sometimes each group elects a chairman for a week, the job rotating among the members. With slow groups needing much attention, good readers may be chosen by the teacher to help them. (See page 55 of Chapter IV for a discussion of pupil helpers.) The teacher moves from group to group directing and assisting as need arises. It is surprising to see how well children can carry on their own work under the guidance of a good teacher.

Children in the same reading group should be seated near each other during the group reading time. This arrangement helps to develop an attitude of cooperative endeavor and is economical of the teacher's time in assisting and directing the activities. Where seats are fastened to the floor it is more difficult to seat children in reading groups but is usually possible. This arrangement need be only for the small group reading period.

One question commonly asked in regard to ability groups in reading is, "How can the other groups be kept busy while the teacher is working with one group?" This question has been partly answered in the previous discussion. Well planned work, interesting to children, will do more than anything else to eliminate this difficulty. Where tasks are wholly teacher imposed, with the children having no part in the planning and carrying out of the plans, it is only to be expected that many pupils will finish the required task as soon as possible and then seek more interesting things to do.

There are a number of worthwhile activities which the children and teacher may plan together to be done in connection with the regular reading program at such times when the teacher is busy elsewhere. Some suggestions are listed and teachers and pupils will think of many others.

1. Read to find answers to questions or to get information pertaining to problems raised by the group

2. Read to enjoy a story which has been introduced in the group

3. Complete workbook exercises which have been explained in the group

4. Work on individual reading materials designed to give practice in overcoming special difficulties (See Chapter VIII, page 108)

5. Find interesting information about things discussed in the reading group, or in social studies and science to contribute to the group

6. Work on projects individually or in small groups, growing out of group or class activities in reading, social studies and science, such as making booklets, painting murals, building a play store, etc.

7. Follow individual interests in reading and in other fields

8. Engage in free recreatory reading

9. Some children may help individuals and groups who need special attention

10. Plan and prepare activities in reading to be shared with the group, such as book teasers, selections to read orally, simple dramatizations, etc.

In a classroom where children are enjoying a number of challenging and interesting experiences, the problem of everyone having something worthwhile to do will not present serious difficulties. In situations of this kind it is largely a matter of efficient planning by teacher and pupils in utilizing the available facilties and making the most of the opportunities as they arise.

Reading Activities in Which Children of Several Levels of Ability May Engage

It has been reapeatedly stated that much of the reading program can be built around activities in which children of varying reading abilities may work together. In some classrooms all of the work in reading is carried on through activities of this type, and ability grouping is not used at all. The advantages of such plans are that (1) they help to eliminate feelings of inferiority and superiority which are difficult to eradicate entirely from ability

grouping plans, (2) they provide a common interest for the entire class which promotes a feeling of belonging together, and (3) they encourage the use of reading in real life-like situations. In many situations both ability and interest reading groups are used.

Perhaps the greatest difficulty, in organizing reading in such a way that the whole class may participate together, is lack of adequate library and supplementary materials. It is necessary to have books, magazines, booklets and the like on different subjects and several levels of reading difficulty. Where textbooks are the only materials for reading, very little can be done with this type of program.

The Library or Free Reading Period

Much of the reading done outside of school is of the free reading type, engaged in for pleasure and for securing information. In far too many schools this kind of reading is entirely neglected or at best receives little emphasis. Even in schools having a good supply of library books, it is not uncommon to find no time allotted in the daily schedule for reading them. They must be taken home and can be read in school only after other work is completed. Such a policy cannot be justified in dealing with as important a life need as that for free reading. Every school should provide a period for such reading in the weekly schedule. It would be impossible to say just how much time should be allowed for free reading, but certainly it would not be out of keeping with its importance to allot at least three hours a week in the intermediate and upper grades, with perhaps somewhat less time in the primary divisions.

The free reading period is not to be considered an undirected period. It is a time when children may follow their own choices in reading, but the teacher is ever on the alert to guide that reading, to help individual children, and to plan with the children the sharing of experiences gained through it. Suggestions for carying out free reading activities will be discussed under the following headings: (1) organizing materials, (2) stimulating interest, (3) assisting in the selection of books, (4) individual work with children, and (5) sharing reading experiences.

1. Organizing Materials for Reading.

The materials to be used for free reading should be located in the room where the reading is to be done. It is perhaps unwise to group books on the shelves on difficulty levels since such a practice

calls undue attention to the fact that certain children must read "easy books". A better plan is to group them according to fields of interest, such as books about animals, stories about the farm, things to do, etc. Caring for books and checking them in and out should be the responsibility of rotating pupil librarians. The more attractively books can be displayed the more likely children are to want to read them. A bulletin board on which are posted book covers and interesting reports and a library table, on which are placed books of special interest, will create a reading atmosphere and stimulate a desire to read.

2. Stimulating an Interest in Reading.

Discussion of stories read, interesting book reports, impromptu dramatizations of parts of stories and attractive displays, all help to stimulate interest in reading. Whenever books new to the children are brought into the room the teacher, or some of the pupils who know something about them, may show them to the class, commenting on the author, title, illustrations, or content and calling certain ones to the attention of children who may be particularly interested. Such simple salesmanship often results in almost every book being in immediate demand.

Classroom charts, showing the number of books read by each member of the class, are often used to motivate free reading. If such devices are used care should be exercised to see that the slow learner gets credit, book by book, for reading done on his level, regardless of the number of pages. It is most unfair and discouraging to the poor reader to see the blanks filled after other children's names while his remain relatively empty. It may be as great an achievement for one child to read a thirty page book as it is for another to read a book containing two hundred pages.

If a real interest in reading is developed, and if each child is assisted in finding books which appeal to him and which are easy enough for him to read, class charts are unnecessary for motivation. A more lifelike situation would be to encourage each child to keep an individual record of the books he has read which he may discuss with others and to which he may wish to refer from time to time. A record of this type is also of value to the teacher in keeping informed about the child's reading interests, habits and attitudes.

3. Assisting Children in Selecting Suitable Books.

The teacher must know his children if he is to guide their selection of books. He must not only know the ability level of each child, but the home background and interests as well. The teacher's job is one of helping the child find books which appeal to him and which are not too difficult for him to read, and at the same time those which will extend his understandings in connection with present interests and stimulate interest in new fields.

While the children are selecting books, the teacher should be on the job conferring with first one and then another. If a child has chosen a book which the teacher suspects to be too difficult, he may ask that child to come to the desk and read a page or two orally. If more than one word out of ten is not known or is miscalled, the book is probably too hard for free reading and an easier one should be found. If the child seems to want very much to read it he may be allowed to try. As soon as possible the teacher may move about the room, and ask each child to read a small portion from the book he has selected. This gives the teacher a check on the suitability of the material in terms of individual needs. It is unwise to force a child to give up a selection he has made, but often other books may be suggested and the child led to make a new choice.

4. Individual Work With Children.

A large part of the teacher's time during the free reading period will be spent in assisting children in selecting books, in checking on their selections, in discussing informally with individual pupils what they are reading and in helping with new words. By following this kind of procedure the teacher learns a great deal about what the children are reading and how well they are understanding and enjoying what they read. Furthermore, he is contributing to the development of the attitude that reading is fun and that talking with others about what one is reading is an enjoyable experience.

5. Sharing Reading Experiences.

Sharing experiences is as natural to most of us as breathing or eating. When we read something we especially like, we immediately want to tell someone about it. There is no good reason why two or three children cannot share experiences quietly as they read. Amusing episodes, exciting adventures, well written descriptions, and poetry sometimes call for immediate expression. In addition to this kind of sharing there should be a time for the whole group

to enjoy the experiences which others have had. Some of the many ways in which these experiences may be shared are:

a. Interesting reviews, covering the high points but not spoiling the story, or telling the story up to an interesting point and then suggesting that the book be read to find out what happened

b. Character sketches   (These may be made into a guessing game. A child describes a character from a well known book and the audience may guess who it is. Impersonation of book characters is a variation of this type of activity.)

c. Telling why a story was enjoyed

d. Illustrating a story with original drawings and explaining them to the group

e. Informal dramatizations

f. Radio skits

g. Puppet shows   (If the school already has a puppet stage and puppets or marionettes this becomes an excellent means of dramatizing parts of stories.)

h. Shadow pictures   (A sheet with a light on floor behind it is all the equipment necessary. Children pantomime parts of the story in front of the light and the shadows fall on the sheet. The audience may guess the story being played.)

i. Experiments and demonstrations from books on science or books telling how to make or do things

j. Nominating book heroes for a ''Hall of Fame''   (A place in the room is prepared for the names of book heroes and their pictures if they can be obtained. The children nominate their particular heroes and tell why they should be elected to the ''Hall of Fame''. The class discusses the nomination and elects those whom they consider worthy. The activity is particularly adapted to biographical reading.)

These are but a few of the many entertaining and worthwhile activities for sharing the experiences of the free reading period. Often two or more children who have read the same or similar books may work together in planning and carrying out experience sharing projects.

The free reading period should result in ability to understand appreciate and enjoy what is read, more discriminating standards of quality for what is read, deepened, broadened and extended interests in many fields and increased ability in sharing one's reading experiences with others. Much reading of interesting material on the child's ability level is one of the best ways of improving comprehension, vocabulary and rate of reading.

Reading Grouped Around Centers of Interest

Where suitable materials are available there is probably no better way of adapting reading to varying reading ability levels than by grouping reading about centers of interest, units or themes. Under this plan each child may read materials on the level of his ability without being placed in a special group, and may make his contribution to the whole class. The center of interest plan may be used for both recreatory and work type reading and it may involve reading orally as well as reading silently. It calls for the development and use of work type reading skills such as locating, selecting, evaluating, organizing and presenting information pertinent to a problem. The situation in which reading is done and reading skills are used is real and life-like and has purpose and meaning to the pupils. Often the teacher and children in planning the work find that it can be carried out best by dividing into smaller groups to study certain phases of the main problem. In schools having several grades with one teacher the opposite would be true. Several grades might be combined to form one interest group. These groups are formed on a basis of the interests of the children rather than ability to read. Small groups meet, plan their work, carry out their plans and pool their findings with those of other groups.

Descriptions of two activities in which reading was centered around class interests may serve to illustrate the possibilities in this type of program.

A sixth grade group became interested in hobbies through a stamp collection which one of the children brought to school. Class discussion disclosed that most of the children had a hobby of one kind or another. The teacher suggested that it might be interesting to find out more about the hobbies they had been discussing. The idea appealed to the children and plans were worked out for the beginning of the project. Committees were chosen to visit the school

and city libraries to search for material which could be borrowed, and several children said that they had books at home which they could bring. Groups were formed for each major hobby interest and a chairman was elected for each group. During the reading period these groups met and worked together in different sections of the room. Each group listed the things they wanted to find out about their hobby to serve as a guide for their reading. Many interesting things were discovered which were not on the original list. Each child kept a notebook in which he listed the new words which he met in his reading and notes on the information he found pertaining to the hobby his group was studying.[2] Many discussions took place in these groups and plans were continually being revised as new ideas were suggested. The teacher worked with all groups, assisting in finding books, contributing suggestions, helping in organizing material and participating in discussions.

When the children of a group felt that they had enough interesting information they asked to be allowed to make a report to the whole class. The geology group enlivened their report by displaying a collection of minerals and fossils which members of their group had brought to school. This suggested the idea of a hobby show. Other groups prepared exhibits of the work of their hobbies which added much interest to the work. As a culminating activity all of these exhibits were arranged in the room and the parents were invited to come to see them on a Friday afternoon. Each group told some of the most interesting things about their exhibit and answered questions asked by parents.

This activity is an excellent example of interesting, purposeful reading related to the lives of the children. Furthermore, the reading which these children did stimulated a desire to do something which resulted in the hobby exhibit.

An entirely different type of reading activity was carried out in a third grade. The children in this room enjoyed having stories read to them. One day when their teacher laid aside the book from which he had been reading aloud, one child asked, ''Why can't we read stories to each other?'' The idea appealed to the other children and to the teacher, so the activity was begun. The children first talked about the kinds of stories they liked and from this discussion several small groups were formed. Each group began to search for the kind of stories they had chosen. The teacher assisted

[2]Vocabulary development in meaningful situations and based on individual needs is a worthwhile supplement to other techniques which the teacher may use.

in the selection, leading the slow reader to find short, easy and yet interesting stories to read to the group. Each child was urged to prepare carefully the story he had chosen in order that he could read it well enough to interest the others in his group. Special attention was given to those whom the teacher felt might have trouble so that their contribution to the group's enjoyment might be successful. Some of the children practiced by reading the stories to their parents. When the children were ready to read, the groups met in different parts of the room and each child read his story to the others in his group.

Although this activity was completely unlike the project on hobbies previously described, it illustrates the same principles of materials on the level of the child's ability, interest, purpose for reading and sharing in a lifelike situation.

Oral Audience Reading Situations

Oral audience reading offers possibilities for children of different reading abilities to work together. In a small school several grade levels may enjoy together activities of this kind. There are certain principles which should be observed in oral reading situations where the purpose is to entertain or impart information to others. Some of these principles are:

1. The material to be read should be selected with the interests of the audience in mind.

2. Material should, in most situations, be new to the majority of the audience.

3. The material should be on the level of ability of the person who is to read it. Selections which are a little too easy are better than those which are too difficult.

4. The selection to be read should be of interest to the child who is to read it and should be chosen by him under the guidance of the teacher.

5. Each child who is to read for the group should prepare the selection in advance.

6. No child should be allowed to do a poor job of reading his selection. If the material is too difficult, assist him in finding something easier. If the preparation is inadequate postpone the reading and suggest ways of improvement.

7. The audience should not be permitted to severely criticize a reader. A few helpful suggestions given in a friendly spirit may be allowed, but the emphasis should be placed on enjoyment of what is being read.

The third grade activity described in the last section is an example of one kind of oral reading audience situation. There are other possibilities, some of which are:

1. Each child may choose and prepare a short story, poem, or article which he particularly likes, to read to the class.

2. The class may be divided into small groups, each group selecting, preparing and reading a story to the class. Poor readers in any group may be given a shorter part to read with special help from the teacher in preparing it, or they may be grouped together and guided in selecting an easy story.

3. Sometimes children like to take turns, in small groups, reading to each other from the same book.

4. Within ability reading groups, during the reading of a selection, oral reading may have a place. A child may read the part he likes best, a particularly vivid description or a passage in which the word arrangement is pleasing to the ear. Some selections are appropriate for choral reading. Oral reading should always be done for a purpose which the child understands and appreciates.

5. In many types of group or class work occasions arise for reading orally to give information on a problem, to prove a point, etc.

6. Reading minutes of meetings, reports and the like provide opportunity for oral reading.

Oral reading activities, rightly used, are rich in possibilities for learning to work together and for group appreciation and enjoyment.

Appreciation Activities

Several grade or ability levels may participate together in appreciation of poetry and some kinds of prose. In a one teacher school it is possible to find poems which appeal to children in the first three grades, others which will be enjoyed by the intermediate

grades and still others which will interest the older children. Grouping in this way not only helps in cutting down the number of short periods but by increasing the size of the group improves the teaching situation.

The following suggestions relating to appreciation may be of value:

1. Appreciation implies a happy sharing together of the things we like about any given selection.

2. The selection chosen should be within the experiences of the group. If parts of it are foreign to the children a background for understanding these parts will have to be developed.

3. The teacher may introduce the selection by relating it to the children's experiences.

4. The selection may then be read as a whole, probably by the teacher.

5. Much discussion, guided by the teacher, may follow the reading.

6. The whole selection or parts which have particular appeal may be re-read by the teacher and by various pupils.

7. Some children may wish to see if they can give certain parts from memory. Often a whole selection can be learned by most children in this way.

8. The appreciation activity may stimulate different types of expression in different children. Some may wish to learn the selection, others may want to illustrate it, and many may be challenged to write something of their own. A few may apparently not want to do anything. We should encourage individual expression but not try to force it.

Supervised Study Periods

Not all of the teacher's time should be devoted to planning and discussion with groups of children. A supervised study period in reading, when all children are working on various reading activities, affords a splendid opportunity for the teacher to learn more about the reading habits of his children, discover individual difficulties and give help in an effective manner. If the teacher is alert to the possibilities of this period it will be the busiest part of his day.

Reading Difficulty in the Content Fields

Many children who are not poor readers experience difficulty in understanding what they read in geography, history and science. There are several reasons for this. In the first place these fields are frequently rather far removed from the child in time and space. Second, many children lack a background of experience necessary for understanding in these fields. Third, there is a special vocabulary in these fields which causes difficulty. Fourth, too frequently texts in these subjects include so much material that none of it can be clothed with sufficient description and explanation to make it meaningful. Even with the best texts the teacher is faced with the problem of building a background with the children through experiences which will help them understand what they read. Excursions, pictures, movies, construction activities, diagrams, models, explanations, descriptions, etc., will help in clarifying ideas and developing concepts necessary to meaningful reading. The teacher will also need to make the textual material more real by relating it to the daily living of the children and supplementing it with much material from his own first hand and vicarious experiences.

Adapting to Individual Differences in Reading Ability in the Content Fields

Providing materials on the level of the child's reading ability in the reading class does not solve the entire problem. We still have to consider the reading which the child does in other fields or subjects. A fifth grade pupil whose reading ability is on the third grade level cannot read history, geography and science texts of fifth grade difficulty. To require this of him may break down all that we have tried to build up by giving him third grade material during the reading period.

If we have sufficient materials on many difficulty levels in social studies and science and if our program in these fields is organized on a unit basis, the problem is easily solved. We can give this fifth grade pupil easier books on the unit being studied from which he can make his contribution to the group. Even if our program is not organized in units we can still do this although perhaps not as easily. The pupil may not like to be given a different book when most of the fifth grade are using the same text, or his parents may object. Tact in handling the situation may achieve results.

Give this child an easier book, telling him that in it he will find some new and interesting things not found in the text, on which he may report to the class. Let him keep his text, look at the pictures, try to read it if he wishes, but eliminate all pressure that might force him to try to read it. Give him an opportunity to contribute from books he can read and from his experiences. Don't worry about fifth grade standards of achievement. Each child should achieve in proportion to his ability, considering also the other factors influencing progress such as interests, physical condition, home surroundings, previous school experiences, etc. We can rest assured that, if this pupil is reading materials on his level and is thus able to contribute to the group, he is growing more, both academically and socially, than if he were forced to try to read material beyond his ability to comprehend.

If it is impossible to get any books on the child's level which supplement the text it is probably better to give him a book on some other topic rather than to place him in a position where he feels that he has to read the text. He can still contribute in the class from his experiences, and it should be possible to arrange for a report on his reading even though it doesn't fit the topic being studied. As a last resort, having someone read the text to this child might be preferable to his attempting to read it for himself.

Adapting Reading to Varying Abilities in Schools Having Very Limited Reading Materials

What is to be done in schools lacking reading materials? As is pointed out in Chapter VIII it is usually possible to get some materials so that children needing easier books may have them. Where nothing but texts are on hand and it is impossible to get other materials, the teacher is confronted with a baffling problem. Should a child in the sixth grade whose reading ability is on a fourth grade level, be put into the fourth grade book to which he was exposed two years before? That would depend upon whether the child could be convinced that it was the best thing to do and upon the cooperation of the parents. In the event that he does go back to the fourth grade book, the teacher should make an effort to make the material interesting by presenting it in a new way and supplementing it with exercises and suggested things to do.

However, in the vast majority of situations something can be done to get at least a few materials which can be used with children

who need easier books. Where the teacher recognizes the need and really wants to meet it, a way can usually be found. (See Chapter VIII for suggestions as to ways materials may be obtained.)

Planning procedures in reading to meet the individual interests and varying abilities of the children composing the classroom group is not an easy task, but it is an extremely important one. The teacher who carries it through will be amply rewarded by witnessing the new enthusiasm with which children attack work that appeals to their interests and lies within the range of their abilities.
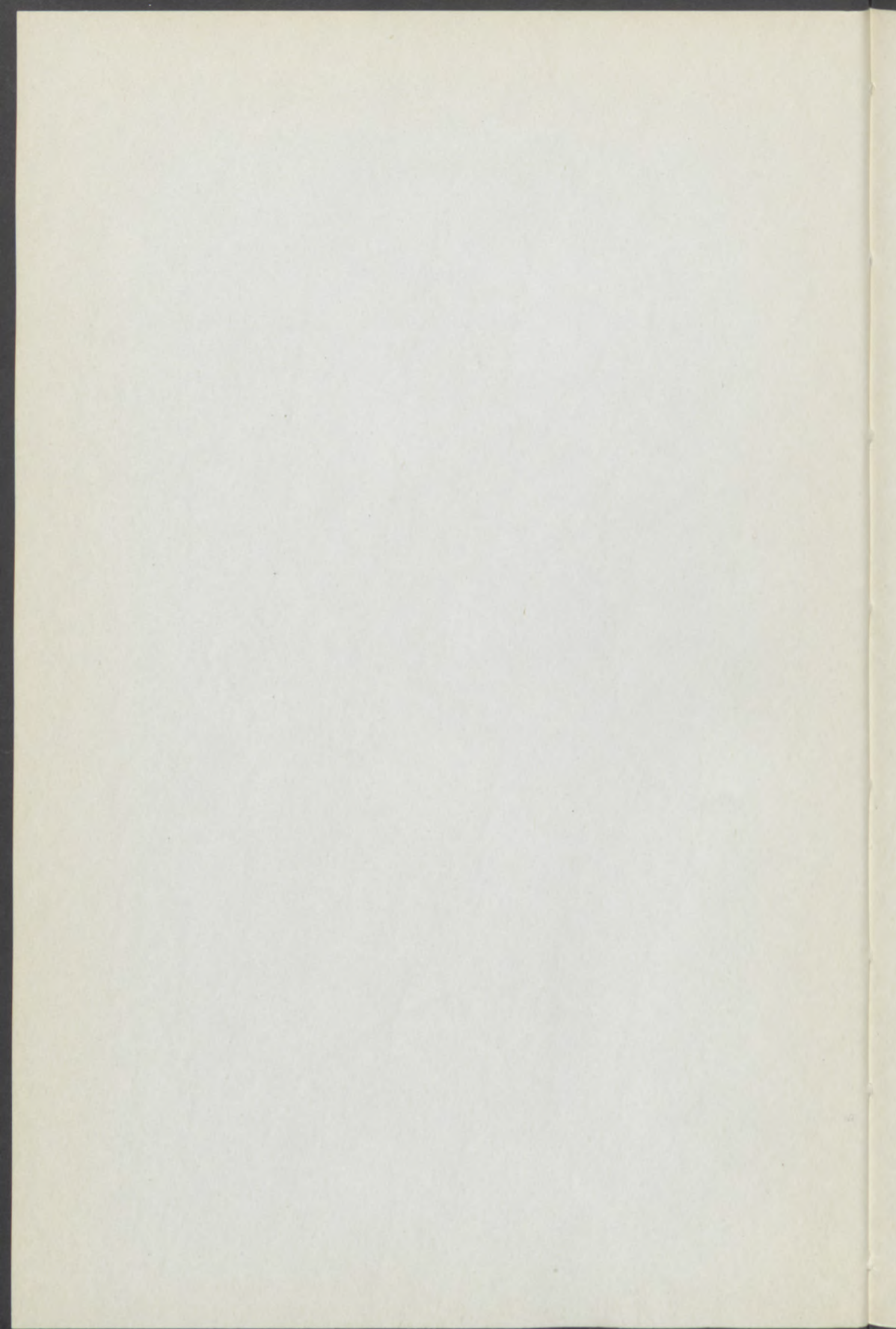
CHAPTER VI

MEETING THE READING NEEDS OF SUPERIOR AND SLOW-LEARNING CHILDREN

Throughout this bulletin the need for planning the reading program in such a way as to care more adequately for the wide variation in reading abilities found among children in the classroom has been stressed. Suggestions have been given as to administrative and classroom procedures which offer promise in meeting the individual needs caused by these variations. The superior child and the slow-learning child are but the two extremes of the entire problem of adapting the instruction in reading to levels of ability. Many of the suggested procedures are applicable to these two extremes. In this chapter we shall consider (1) which children comprise these two groups, (2) the needs of both types of children, (3) what can be expected of them, and (4) suggestions for work in reading with these groups.

Which Children Make Up the Superior and Slow-Learning Groups

In this discussion we are thinking of superior and slow-learning children in terms of intelligence as measured by reliable intelligence tests administered by competent examiners. It is clearly recognized, as has been repeatedly pointed out, that factors other than intelligence influence learning. These factors must be considered, but here we are chiefly concerned with the reading program for children at the two extremes of the intelligence scale. Remedial cases, which may be found at any level of intelligence, will be considered in the next chapter.

Any classification of children on a basis of intelligence is, of course, an artificial device. Some children we know to be decidedly superior intellectually. A child whose rate of mental maturation is 150 per cent of normal would certainly be so classified. Likewise a child whose maturation rate is 70 per cent of normal would come in the slow-learning group. With cases nearer the borderlines it is often impossible to say just where they belong, and it really doesn't matter, for what we are trying to do is adapt methods and materials to the abilities of the learner and not set up rigid intellectual classifications. In Table II on page 15, children whose maturation rates are 120 per cent of normal or above are considered in the

very superior classification and those whose maturation rates are 79 per cent of normal or less are classified as very retarded. Roughly, this classification will meet our needs for the discussion of superior and slow-learning children.

We must always use common sense in dealing with intelligence ratings of children. We must guard against putting too much faith in one test, especially a group test. If a child, rating low on a test, shows that he can do work above that which the test indicates, we naturally are not going to hold him back. Ordinarily we should not discuss a child's intelligence rating with his parents, at least not in terms of intelligence quotients. We must realize that tests, even when reliable, are only one source of information about the child. In getting the total picture we will utilize our own observations, the experience of other teachers, the contributions of parents and others who know the child, as well as the results of any tests which may have been given.

The Characteristics and Needs of Superior and Slow-Learning Children

Differences in characteristics and needs between superior and average children, and between average and slow-learning children are largely a matter of degree. All children possess many of the same characteristics but in varying amounts, all have basically the same needs but some can profit more from certain types of activities than others. With this thought in mind we can say that in general superior children can exercise a greater amount of self-direction, originality and initiative than slow-learning children. The program for the superior group should provide opportunity for exercising these qualities, whereas the program for the slow learners, will require more teacher direction. Both groups may learn to read in much the same way, but the superior children learn in less time and with fewer repetitions. Interest, purpose, pupil participation in planning and carrying out plans, wide reading and expression of ideas gained through reading are important in working with children on all ability levels. It would seem then, that we cannot say that here we have a superior group which needs this type of reading program, and there a slow-learning group which needs an altogether different one.

What Can Be Expected From Superior Children

Probably we do not expect enough in both quality and quantity of reading work from the superior children. It is not uncommon to find the reading age of a superior child falling below his mental age. If the reading age is not too far below the mental age perhaps we have no need to be greatly concerned. Superior children are often younger chronologically than many of the other children in the class group and have not had as long a time to gain the experiences which come through living. A beginning third grade child, eight years old, whose maturation rate is 150 per cent of normal will be twelve years old mentally. If his reading age were equal to his mental age he would be of beginning seventh grade ability in reading. That is too much to expect of a child who has been in school only two years. If his reading ability is fourth grade or above we would in most cases consider his progress to have been satisfactory. If his reading ability falls much below fourth grade level we should try to find out why his reading achievement is not better.

It is not sufficient to merely demand more from the superior child. If he is not achieving as we think he should, it is up to us to find out why. Perhaps the answer lies in a health condition, or in the home situation, and perhaps the school program has not been one to stimulate his interest or challenge his best effort.

What Can Be Expected from Slow-Learning Children

Often we expect too much from the slow-learning child. We still are inclined to think in terms of grade standards instead of individual capacities. A beginning third grade child, eight years old, whose maturation rate is 80 per cent of normal has developed a mental age of only six years and five months, or about the degree of mental maturity necessary to begin to learn to read. How completely absurd to expect that child to do third grade work. Table VII, taken from Kirk, *Teaching Reading to Slow-Learning Children*, gives the minimum and maximum reading expectancies for slow-learning children of successive chronological ages and maturation rates.[1] In regard to this table Kirk states:

"Table 9 may be used as a rough guide to determine whether or not children are reading up to their capacities. Although mental age is not a perfect indication of capacity to read, it is probably the best single indicator of capacity we now have.[2]"

[1]Samuel A. Kirk, *Teaching Reading to Slow-Learning Children*, p. 28.
[2]Table 9 to which Kirk refers is Table VII, in this bulletin.

TABLE VII

WHAT SHOULD BE EXPECTED OF SUCCESSIVE AGE AND INTELLIGENCE LEVELS

I. Q. (Rate of Maturation)	Age of Beginning Reading	Minimum and Maximum Reading Achievement to Expect at Completion of School
Below 50	14-16	Will learn only a few words Reading instruction futile
50-59	10-12	First to third grade
60-69	9-10	Second to fourth grade
70-79	8-9	Third to seventh grade

Suggestions for Work in Reading With Superior and Slow-Learning Children

It is impossible to compile a list of suggestions which apply only to one group. Many of the points listed for superior children are appropriate for slow-learning children and many of the principles for slow learners are applicable in some degree to the superior group. The principles under each heading which might be stressed most in planning a program for that group have been listed.

Superior Children

1. Should have access to interesting reading materials of many types, in a wide variety of fields, and on a difficulty level sufficient to challenge their abilities

2. May be grouped for certain types of reading work, but should participate in many other school activities with children on all levels of ability

3. May develop, under the teacher's guidance, a large part of their reading program around centers of interest, problems, units or themes

4. Should be given many opportunities for planning and directing their own work both as individuals and in groups

5. Should be stimulated to read deeply in the fields of their particular interests and widely in many areas

6. Should be encouraged to express in varied ways the ideas gained through reading

7. Should have many opportunities to share their reading experiences with others

Slow-Learning Children

1. Should have reading materials of easy difficulty with carefully controlled vocabulary and interesting content on a wide variety of subjects

2. May be grouped for part of their reading, but like the superior children, should participate in many activities with children of all ability levels

3. Should have a prolonged period of reading readiness experiences

4. Should not begin formal reading until they reach a mental age of between six and seven

5. Will need a great deal of motivation through:
   a. Relating their reading to their everyday lives
   b. Praising their successes
   c. Much discussion and building of background for reading a selection
   d. Insuring successful experiences by providing easy materials and adequate preparation for reading them

6. Will require many repetitions to fix sight words

7. Should meet words in a variety of situations

8. Should read much material having a closely related vocabulary on each level of reading difficulty

9. Should be permitted to progress slowly from one reading level to the next

10. Will need special instruction in methods of attacking new words, such as use of context clues and phonics

11. Need short reading units with definite teacher direction and guidance

Meeting the needs of superior and slow-learning children is but a part of the whole problem of adapting the reading program to varying levels of ability. The suggestions on ability grouping discussed in Chapter III and the classroom procedures described in Chapter V give suggestions which are applicable in meeting the needs of these groups. For detailed instructions for teaching slow-learners, the reader is referred to the bibliography in the appendix to this bulletin.
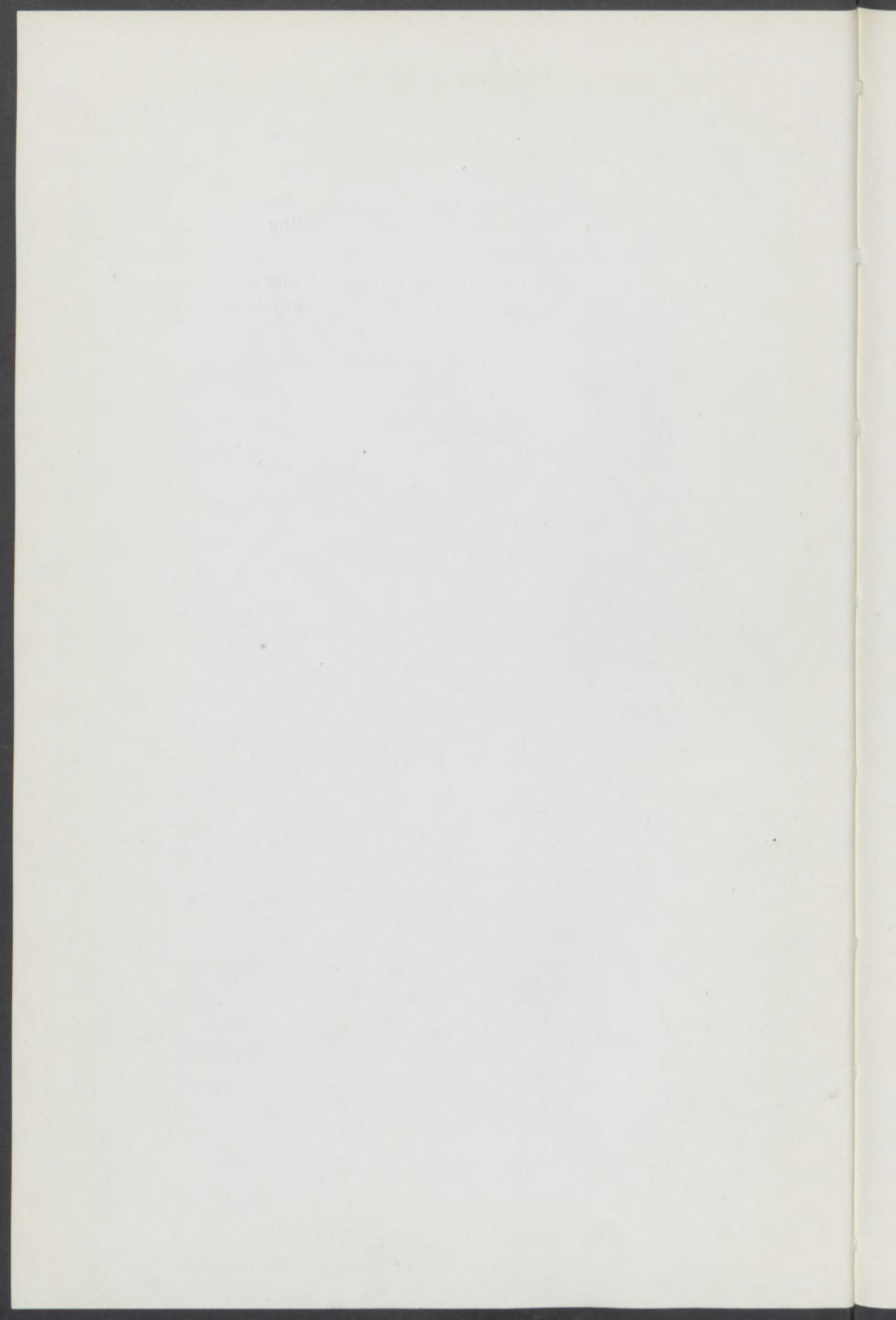
CHAPTER VII

REMEDIAL READING

Much interest has been shown in recent years in the problem of children who have difficulty in meeting the reading demands which the school places upon them, at all levels from first grade to college. Remedial reading is a frequently discussed topic among groups of school people. Whole books have been written on the subject and almost every writer in the field of reading has something to say about the problem. Many experimental studies have been conducted to determine the best procedures to use in overcoming reading disabilities.

From this study, investigation, writing and discussion of remedial reading we find certain questions arising. Among these questions are: (1) How is a remedial case different from a retarded reader or a slow-learning child? (2) What attitude should be taken toward remedial reading? (3) What are the causes of remedial problems? (4) How can these causes be discovered? (5) What are good administrative procedures in organizing work for remedial readers? (6) What materials are helpful in remedial work? (7) What procedures may be used effectively by teachers in helping remedial readers overcome their difficulties? (8) How valuable are remedial drills and exercises and how may they be used most effectively?

Many of these questions cannot be given definite answers. On the issues raised by them there is frequently a lack of agreement among reading specialists. Therefore, in discussing some of the questions it will be necessary to present different points of view and consider their implications. In suggesting remedial procedures the intention has been to include only those not open to serious criticism.

Which Children Are Remedial Readers

The word "remedial" indicates that something has gone wrong which needs to be changed or remedied. As applied to reading it means that a given child is having difficulty in reading due to certain causes which have interfered with the normal learning process. The causes of the child's difficulties may lie in himself,

in his home environment, in the school experiences which he has had, or as is frequently the case, in a combination of these factors. An example of a combination of causes of poor reading might be found in a child whose mental ability is a little below average, who has some vision difficulty, who attempted beginning reading without an adequate preparatory background, and whose parents are over-anxious about his school progress. Remedial procedures consist of removing and modifying, in so far as possible, the factors causing the poor reading. In the case just cited we would recommend to the parents that the vision difficulty be corrected, we would attempt to convince the parents that undue home pressure should be removed, and in school we would provide a reading program on the child's present level, developing a readiness for reading and going on from there as rapidly as the child's ability would allow.

A retarded reader is one whose reading age is somewhat below his mental age. How far below the mental age the reading age must fall before the reader is considered retarded in reading, depends upon the individual child. The reading age of a child of superior mental ability often falls below his mental age and unless the difference is great may not be cause for considering him retarded. A child below normal in mental ability may have a reading age above his mental age. The years in which a child has had opportunities for those experiences gained through living, as well as his stage and rate of mental development, affect his school learnings. The following formula is used in one large city school system for roughly determining whether or not a child is working up to capacity in reading:

$$\frac{(\text{mental age} \times 2) + \text{chronological age}}{3} = \text{satisfactory reading age (reading age obtained by use of standardized reading test)}$$

This formula takes into account both mental age and chronological age, the former being counted as two-thirds and the latter as one-third, in determining what is to be considered satisfactory reading achievement. Two examples may serve to illustrate the use of this device for determining approximately satisfactory reading achievement.

Example 1. Superior child:

Mental age—12 years (144 months); chronological age—10 years (120 months). Applying the formula: 144 months (Mental age) x 2 = 288 months. 288 months + 120 months (chronological age) = 408 months. 408 months ÷ 3 = 136 months or 11.3 years (reading age which would be considered satisfactory for this child).

Example 2. Slow-learning child:

Mental age—10 years (120 months); chronological age—12 years (144 months). Applying the formula: 120 months (Mental age) x 2 = 240 months. 240 months + 144 months (chronological age) = 384 months. 384 months ÷ 3 = 128 months or 10.7 years (reading age which would be considered satisfactory for this child).

A formula, such as the one illustrated, should not be taken as an infallible guide in determining which children are retarded readers. Mental age and chronological age are only two of the factors affecting learning. Health, home conditions and previous school experiences must be considered also. This formula is probably most usable above the third grade. It is not reliable in approximating satisfactory reading age with children whose rate of mental growth is extremely slow. However, in most cases, where a child's reading achievement falls far below the satisfactory achievement derived from the use of this formula, it would be well to look for causes which might underly this unsatisfactory progress. Such a child would be considered retarded and a remedial case calling for diagnosis of causes and procedures to eliminate them.

Some schools use a formula for approximately determining satisfactory reading achievement which considers chronological age and mental age to be of equal value. This formula is:

$$\frac{\text{chronological age} + \text{mental age}}{2} = \text{satisfactory reading age}$$

Regardless of what formula is used, or whether any formula is used, the important thing is to consider all of the factors influencing the learning of the child in determining whether his reading achievement is what should be expected.

A child, whose score on a standardized reading test is below the standard for the grade in which he is placed, is not necessarily a

retarded reader. Let us suppose that the child in Example 2 is in the seventh grade and that his reading age is 10.5 years, which is equal to about that of the average for the middle of the fifth grade. This is a year and a half below beginning seventh grade level. Yet this child cannot be considered retarded in reading and is not necessarily a remedial problem. *Reading age, in relation to the grade in which the child is placed, is not a valid criterion for determining whether or not that child is a retarded reader.*

A slow-learning child is one whose rate of mental growth is below average. Each year of chronological age does not add a full year of mental age. The gap between his chronological and mental ages increases as he grows older. Such a child, to reach each level of reading achievement, requires a longer period of time than the average child. The maximum level to which he may develop will depend upon the degree of his mental retardation, his physical condition, home environment and the type of instruction he is given in school. A slow-learning child whose achievement in reading, in relation to his mental and chronological ages, indicates that he has done all that could be expected of him, should not be considered retarded in reading and is not necessarily a remedial case.

A child who is mentally superior may be retarded in reading and considered a remedial problem. For example, a ten year old child, whose mental age is twelve, and whose reading age is nine and a half has certainly not achieved in reading what we should expect. He is definitely retarded in reading and since this retardation is caused by something, is a problem for study and remedial treatment.

It is possible for a child to have a reading age, which in relation to his mental and chronological ages, is quite satisfactory and yet show marked deficiencies in certain reading skills. For example, a child may read with good comprehension and yet lack those skills necessary for locating information. If the test used to determine his reading age does not include a section on locating information, or if this section is a relatively small part of the entire test, the reading age obtained will not be materially affected by lack of skill in this particular ability. This child is, nevertheless, in need of instruction in the skills necessary for finding information and in this respect may be considered remedial.

A child whose reading age, in relation to his mental and chronological ages, is definitely low, or a child who shows weaknesses in

specific skills or abilities in reading, should be carefully studied to discover the causes of his difficulties and a program to help eliminate those causes should be put into operation.

Attitudes Toward Remedial Reading

Remedial reading procedures should be considered in the light of the entire program in reading. As we succeed in planning a reading program more adequately adapted to the individual interests and abilities of children, the need for remedial reading will be reduced. The emphasis needs to be placed on preventing reading difficulties from developing. If children did not begin reading until they were ready for it and if after beginning they always progressed from one difficulty level to the next in accordance with their rate of mental growth, many of the serious remedial cases would be eliminated. There are, of course, factors influencing learning, such as home conditions, which are at least partly beyond our control. Perhaps it would be too optimistic to hope that eventually we would have no serious remedial problems.

Remedial problems should be approached from the point of view of finding the causes underlying them. Symptoms are sometimes clues to causes, and are often mistaken for the causes themselves. Lack of interest is a common symptom connected with poor reading. The cause of this symptom may go back to the child's starting to read before he was ready, or it may be due to uninteresting material, material that is too difficult, defective vision, lack of emotional adjustment or a multitude of other factors operating together. The attitude of finding the reasons why the child is not reading satisfactorily is essential to effective remedial work.

Causes of Remedial Problems

The causes of reading disabilities are many, complex and varied. Often no one factor can be singled out as the main cause of the difficulty, but rather a number of inter-related factors will be found at the root of the trouble. The *Factors Influencing Success in Reading* discussed in Chapter II and the *Factors Involved in Readiness for Reading* outlined in Chapter IV are directly related to the causes of remedial difficulties. We shall not outline these factors again but in discussing the causes of reading disabilities the relationship to them will be apparent.

Some of the Causes of Reading Disabilities

1. Failure to adapt reading methods and materials to the ability level of the learner

   Failure to provide work in reading which the child can do successfully is one of the chief causes of reading disabilities. The importance of developing an adequate readiness before beginning reading and of always providing materials on the level of the child's ability, has been repeatedly stressed throughout this bulletin. Confronting a child with tasks beyond his abilities results in the development of those attitudes which are characteristic of the remedial reader, namely, lack of interest in reading, lack of desire to learn to read, and a feeling of failure and hopelessness as far as reading is concerned. Usually the biggest job confronting a teacher in working with a remedial case is that of changing these attitudes.

2. Methods of teaching beginning reading which fail to develop the habit of reading for meaning

   Beginning reading methods which emphasize word calling, memorization, too much reliance on picture clues, phonetic analysis, etc., may be expected to result in many remedial problems.

3. Poor teaching on any level

   Failure to develop basic reading skills in meaningful situations hinders future progress.

4. Lack of interest and purpose in reading

   Children who have no interest in reading and no purpose for reading cannot be expected to make satisfactory progress.

5. Lack of adequate materials

   Satisfactory reading habits, attitudes, and skills cannot be developed where reading materials are limited to one or two texts.

6. Lack of adequate mental maturity for reading on any level

   This is one of the most important causes of poor reading and is definitely related to failure of the reading program to make provision for slow-learning children.

7. Physical disabilities

   Defective vision, hearing and speech may be contributing causes to reading disability. Malnutrition, poor physical condition, fatigue, etc., affect the child's ability to concentrate on reading activities.

8. Home conditions

   Children coming from homes in which life is a daily struggle for mere existence are handicapped in everything they do. Homes in which domestic strife is the rule are not conducive to the development of emotional stability in children. Inferiority complexes and feelings of insecurity grow out of the unsatisfied emotional needs of children and carry over into the school situation.

9. Social maladjustments

   The child who feels out of place in the social group and who adjusts poorly to social situations may experience difficulty in learning.

In connection with the causes of poor reading teachers often think of certain mechanical difficulties such as, inadequate sight vocabulary, poor eye movements, excessive vocalization, substitutions of words, reversals of letters and words, word by word reading, mispronunciations, omissions, pointing, etc. It is true that some or all of these tendencies are in evidence in the reading of poor readers. They are important and must be considered in remedial work. However, these disabilities are merely evidence of poor reading and not causes. The causes of many of the difficulties of this type go back to such things as too difficult materials, poor beginning methods of teaching reading, beginning reading without sufficient mental maturity and the like. In treating difficulties in the mechanics of reading the causes should first be determined. The remedial procedure may then involve going back and starting over, avoiding in the new program the things which first caused the disabilities to develop.

Finding the Causes of Reading Disabilities

In finding the causes of reading disabilities the teacher will need to draw on many sources for information. The following outline suggests information of value in determining causes of poor reading. In many cases it may be impossible to get all of the information

which would be desirable, but the more nearly we approach a complete picture of the child the more nearly we will be able to determine the factors underlying his reading disabilities.

Information Concerning the Child of Value in Determining Causes of Reading Disabilities

Factors to be investigated	*Possible sources of information*
I. Physical factors	
Vision	Doctors' and nurses' examination reports
Hearing	
Speech	Tests given by the teacher
Hand Preference	Teacher observations
(Forced change of hand preference is believed by some to cause reading difficulties)	Home visits by the teacher
	Conferences with parents
General health	
II. Home conditions	
Are the home conditions such as to promote a feeling of security on the part of the child, or, is there evidence of friction and discord harmful to the child's emotional growth?	Observation based on home visitation and conferences with parents by teacher, principal, nurse, social worker, etc.
Parents' attitude toward school	
III. Emotional and social maturity	
Adjustment to school, the teacher and the other children	Observation by teacher in the classroom and on the playground
Freedom from characteristics indicating lack of security, such as, timidity, showing off, bullying, cheating, etc.	Home visits
	Conferences with parents

| *Factors to be investigated* | *Possible sources of information* |

IV. Mental maturity

Mental age — Mental tests (preferably an individual examination)
Rate of mental maturation (mental age ÷ chronological age) — Observation of school work

V. School experiences, habits, and attitudes

Chronological and mental ages at time of beginning first grade reading (a child whose chronological age was six and whose mental age was five when he began first grade probably had difficulty in learning to read at that time)

School history — difficulties encountered, attitudes shown, work habits, procedures used by teacher, retentions and special promotions

Relation of reading ability to achievement in other school subjects

Mental test records
Records from previous teachers
Conferences with previous teachers
Conferences with parents
Conferences with child
Cumulative records
Achievement tests in reading and in other school subjects

VI. Symptoms indicating poor reading[1]

Lack of interest in reading; feeling that reading is impossible

Difficulties in reading
  Limited sight vocabulary
  Deficiency in word recognition techniques
    Inability to use visual, phonetic and context clues

General observations
Observation by teacher while child is reading individually to him (notes on number and type of errors will be valuable)
Analysis of diagnostic tests given to child
Oral reading to teacher

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[1]For a complete list of symptoms indicating poor reading and a discussion of them the reader is referred to the references listed in the bibliography in the appendix of this bulletin.

<table>
<tr><td><i>Factors to be investigated</i></td><td><i>Possible sources of
information</i></td></tr>
</table>

VI. Symptoms indicating poor reading—Continued
Slow word by word reading
Omission, insertion and substitution of words
Mispronunciations
Word calling without meaning
Reversal of letters and words
Beginning at wrong end of word or line
Poor eye movements
Excessive vocalization in silent reading
Oral reading without expression (may indicate lack of meaning)

Using this outline, a teacher may construct an individual case record form on which may be recorded under the proper headings the information obtained. A record of this type will be valuable in getting all of the information about the child in one place from which the probable causes of his disabilities may be obtained. A space might be left at the end of the record for indicating the tentative conclusions as to the causes of the child's difficulties. Another space might be provided for suggested remedial procedures, and a third space for notes on the effectiveness of these procedures and a record of the child's progress.

The busy teacher may well ask, ''Where do I find the time to collect and record this information and plan and carry out the remedial procedures?'' The only answer is that each teacher will have to do the best he can considering the conditions under which he is working. It may not be necessary in all cases to compile a complete case history. The important things are to know the child, find the causes of his reading difficulties and plan and carry out procedures which will aid in eliminating these causes. The most worthwhile things to do in removing the causes of reading difficulties are usually stimulating an interest in reading, proving to

the child that he can read, discovering his interests and providing material dealing with these interests on the level of his ability, helping him to overcome specific mechanical difficulties and making it possible for the child to see the progress he is making.

The teacher in the small school with only a few children has a wonderful opportunity to study the child who is having trouble in reading and work intensively with him. In the crowded classrooms of some of the larger systems opportunities for remedial work are not so favorable. Pupil helpers may be used under the teacher's direction, in carrying out certain types of work with the remedial cases. (See Chapter IV, pages 55 to 56, for suggestions on the use of pupil helpers.) It is possible in most situations to provide the child with material on the level of his ability and give some special help. This is a most important step in the right direction.

There are several diagnostic tests in reading, some of which can be used by the classroom teacher. These tests are of value in bringing to light symptoms of poor reading from which the underlying causes may often be located. Parts of some of the tests deal directly with factors which may cause reading disabilities. The teacher must be able to differentiate between symptoms and causes. It is extremely important that remedial work be aimed at removing the causes of poor reading rather than a mere surface treatment of symptoms.

Diagnostic tests usually come in packages of twenty-five with a manual of directions for giving the test and interpreting the results. Small schools having only one or two remedial problems, may not want to buy a complete package. Specimen sets, containing a manual and samples of the test, may be purchased for use in these situations. Some county superintendents are supplying diagnostic tests for special problem cases in their small schools, rotating the manual from school to school.

It is possible for a teacher to learn a great deal about the child's reading and the types of errors he is making without using diagnostic tests. A suggested plan for diagnosing a child's difficulties in reading is as follows: Choose a page or two of unfamiliar material which you think will be fairly easy and ask the child to read it orally to you. Take notes on the general nature of his reading and the errors which he makes. The outline on pages 89 and 90 under *Symptoms Indicating Poor Reading* may be used as a guide in taking these notes. Then have him read

material which is a little more difficult and note the difficulty encountered. Still more difficult material may be used. Continue the process until the material becomes too difficult for effective reading. A few questions may be used to check comprehension. From this procedure the teacher can roughly estimate the reading ability of the child. In addition he can get an idea as to the general nature of the child's reading and the kinds of difficulties he is encountering.

Speed and comprehension in silent reading may be checked by having the child read selections on which he is timed, followed by oral questioning to determine how well he understood what he read. Oral questioning is to be preferred to a written check-up for this purpose because it provides an opportunity to draw out the real degree of understanding of the selection which the child possesses.

A description of the diagnostic procedures used in an actual remedial reading case may help to illustrate the use of the outline given on pages 88 to 90. It will be remembered that in Chapter II, the school history of a remedial case named John was described to show the effects of failure to adapt the reading program to individual differences in ability. Briefly reviewing this history we find that when John's case was first studied he was in the fifth grade, his rate of mental maturation was 90 per cent of normal and his reading poor, even at the primer level. He had entered school at the age of six at which time his mental age was about five and a half. Book reading was begun almost immediately in the first grade, with unsatisfactory results. He was retained two years in the first grade and thereafter passed along from grade to grade.

A rather thorough attempt was made to find the causes of John's retardation in reading. His mental age at the time his case was studied was nine years which meant that he should be reading on at least a beginning fourth grade level but instead he was almost a non-reader. In addition to the facts already given, investigation of other sources brought to light the following valuable information:

1. A check on his school health record and a conference with his parents regarding possible health factors which might affect his work in reading gave no clues.

2. Several diagnostic and reading aptitude tests were given. They showed that John possessed the abilities necessary for learning to read, but that his actual reading was not above a first grade level. In addition the tests indicated the following difficulties:

   a. Lack of sight vocabulary

   b. Lack of ability to use word recognition techniques

   c. Lack of ability to read for meaning

   d. Slight reversal tendencies (The letters *d* and *b* and *p* and *q* were confused. *Was* and *saw* were frequently reversed, but if his attention was called to the error he could make the correction).

   These tests really gave no clues as to the causes of the reading disability. About all that they indicated was that he could not read, a fact which was already known. Certainly there was nothing in evidence to warrant the use of special remedial drill exercises.

3. The school history and some of the behavior characteristics have already been discussed in Chapter II.

4. A study of the home situation, with which several of John's former teachers were already familiar, revealed information pertinent to the problem. His father was one of those emotionally immature people who had never grown up. He was given to boasting of his own abilities and made a great show of authority by ordering the children about whenever anyone was present. John was continually scolded for not learning to read and an older sister who did very good work in school was constantly held up to him as an example. From the first grade on he had been required to work on reading at home, which he greatly resented as it encroached on his play time. These home study sessions frequently ended in a scene in which the whole family was likely to participate. To make matters worse, there was a grandmother living in the home who was partial to John's older sister and who took no pains to hide her disapproval of him. John's mother was the most stable person among the adults in the family, but was unable to follow her better judgment in dealing with John due to the combined pressure from her husband and his mother.

This description of John's home life is not complete, but enough has been given to indicate one very serious cause of his failure in reading. When we add to this situation the fact that when John started to school he lacked the mental maturity necessary for successful beginning reading, two of the causes of his disability in reading are clearly evident.

The remedial procedures consisted of finding John's interests, securing easy materials dealing with these interests and helping him to overcome his special difficulties. A complete description of what was done in John's case and the results which were obtained will be found in the section in this chapter on *Suggested Procedures in Helping Children to Overcome Reading Difficulties*, page 97.

Administrative Practices in Remedial Reading

There are two points of view in regard to administrative organization for remedial reading. Some educators feel that remedial work requires the services of a teacher who has had special training in remedial techniques. Children having difficulty in reading are taken from their regular classes for a part of the day and are grouped together to form special remedial classes. As soon as the difficulties are overcome the children are returned to their own groups.

This plan has the advantage of specialized teaching concentrated on the specific difficulties of a limited number of children. Some of the dangers involved are: (1) Children may develop a feeling of inferiority as a result of being segregated. (2) The remedial teacher does not know the children as well as their home room teacher and may not be able to see the reading problem in the light of all of the factors contributing to it. (3) As a result of not seeing the entire picture of the causes of the child's disabilities, mechanistic methods may be employed which treat symptoms and ignore causes. (4) When the child is returned to his regular room the teacher may not continue the remedial techniques and the child may slip back to his former habits.

Remedial teachers, who are aware of the dangers inherent in the remedial class setup and who see remedial work in its proper relation to the whole process of education, can avoid many of these difficulties. In many schools excellent results in overcom-

ing reading handicaps have been reported through work with children in special remedial classes.

Other educators feel that with the exception of extreme cases of reading disability it is better to do the necessary remedial work in the child's own room under the guidance of his regular teacher who is in a position to know his needs and difficulties. From this point of view remedial work is largely re-teaching those skills, habits and attitudes which the child has failed to acquire. It does not involve, except in extreme cases, special remedial devices, but rather the application of good teaching principles individualized to fit the special difficulties of the remedial readers. This procedure often consists of starting the child over on an easier level and developing those skills which he failed to acquire when he was previously exposed to that level of reading. Thus, an intermediate grade child having difficulty in word recognition, may need to be taught word recognition techniques which, in the case of the average child, were developed in the primary grades.

If remedial work is to be done in the child's classroom under the guidance of his regular teacher, it will be necessary for that teacher to know what skills, habits and attitudes are to be developed at each reading level and something of the methods by which such development is brought about. In other words he will need to know the objectives, methods and materials of the primary grades and how to adapt them to the interests and needs of the older child. Knowledge of what has gone before and what is to come after in the child's educational growth is essential to meeting the child's present needs.

Remedial work done in the classroom by the regular teacher has several advantages over the special remedial class. (1) It avoids to some extent the stigma which may be attached to children who are removed from the class groups. (2) The regular teacher knows more about all of the factors which may cause reading difficulties and so is in a better position to direct remedial work. (3) The regular teacher in schools having little or no departmental work may assist the child in overcoming his difficulties in all reading situations.

Regardless of which point of view is taken or what plans are used, in a good remedial program we will:

1. Find the difficulties which the child is having and as many of the underlying causes as possible

2. Work to remove the causes, or if they cannot be entirely eliminated, consider them in their relation to the whole problem

3. Develop an attitude on the part of the child that it is not a disgrace to have reading difficulties (Many people, even the teacher, may have reading weaknesses.)

4. Develop a desire on the part of the child to overcome his reading difficulties

5. Start at the child's present stage of reading development and, using materials of a reading difficulty suited to that level, reteach those necessary abilities which he has failed to acquire

6. Take advantage of the opportunities for reading in the daily living of the child, using these opportunities to create a desire to read and drawing on them for a part of the content of the child's reading

7. Discover the things in which the child is interested and provide attractive materials on his reading level dealing with those interests

8. Assist the child in keeping records of his progress and praise his achievements

9. Use drill exercises only when such devices fill a definite need in helping the child to overcome specific difficulties (When such procedures are used we will be sure that the child understands their purpose and is aware of the resulting progress.)

Materials for Remedial Reading

The kind of materials and the way in which they are used is important in remedial work. Many commercial materials are available for use with remedial problems and several methods are advocated by their originators as having given satisfactory results. Materials and methods of this type have often been tried out under favorable conditions where a great deal of individual attention could be given to the remedial problem. Under such conditions results may be obtained which would not be possible under less favored circumstances. Commercial remedial reading materials and methods may be of value for use in overcoming reading difficulties in some cases and not in others. Materials of this type

should be selected and adapted to fit the needs of each individual remedial case.

Essential to any remedial program are books interesting in content, attractively illustrated, on a wide variety of subjects and of easy reading difficulty. One of the difficulties encountered in remedial work has been to find books of easy difficulty which are of interest to older children. There is an increasing number of books of this type being published each year so that providing easy, interesting material is becoming less of a problem.[2] Many of the newer readers contain material in the lower grade books which is of interest to older children.

Some types of materials for use with remedial cases will need to be made by the teacher to fit individual cases. Word cards, picture dictionaries, booklets containing appropriate stories from old readers and children's magazines, chart stories, etc. are examples of such materials.

Suggested Procedures in Helping Children Overcome Reading Difficulties

Remedial problems in reading differ so widely in the nature and extent of the difficulties involved and in the causes lying back of them that it is impossible to prescribe methods which will fit all cases. These difficulties may range all the way from the child who needs help in only one thing, such as reading to note details, to the child who cannot read at all. Each remedial problem must be studied and procedures adapted to the needs of the individual. The principles on which a remedial program should be based, given on pages 95 and 96 of this chapter, may serve as a guide in planning remedial procedures. The methods described in this section and the suggestions given will, in many instances, need to be changed to meet the needs of the individual child as determined by a diagnosis of his difficulties and their probable causes.

Suggested Procedures in Teaching Non-Readers or Near Non-Readers to Read

It is not uncommon to find a child in the intermediate or upper grades who cannot read at all or who can read so little that

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[2]*Bibliography of Books of Easy Difficulty for the Recreatory Reading of Slow Learning Children* (Denver: Colorado State Library, 1940). Also see *Bibliography of Supplementary Books in Science and Social Studies* (Denver: Colorado State Library, 1940). Both free on request.

he would be classified as a non-reader. Occasionally a child is found who even at an advanced chronological age does not have the mental maturity necessary for learning to read. More frequently these non-readers have developed sufficient mental maturity to be able to learn to read at least on a lower grade level. (See Table VII, page 78, for reading achievement expectancies at different chronological age levels and different rates of mental maturation.) Occasionally a bright child, who has not learned to read, will be found in these grades.

Non-readers often have an antagonistic attitude toward reading, a deep rooted belief that they cannot learn to read and a feeling of inferiority as a result of their unsuccessful experiences in attempting to learn to read. Where such attitudes have developed, the first and hardest task of the teacher is to stimulate an interest in reading and a desire to learn to read.

Case Study of a Non-Reader

The case of John, whose story was first begun in Chapter II and the diagnosis of whose case is discussed in this chapter, illustrates procedures which may be used in helping non-readers to overcome the bad attitudes they have developed and begin to make progress in reading.

A teacher, who had never had John in school, but who knew the family and was interested in the problem, offered to work with him during the summer vacation. In preparation for the first meeting with John, the teacher selected several easy, well illustrated books on different subjects through which he hoped to arouse John's interest. When the books were shown to John he turned through them in a hurried and indifferent manner, quickly laid them aside and began to talk about other things. Trying another attack, the teacher let John talk, and by showing an interest in what he was saying and asking questions discovered that the thing he most enjoyed doing was fishing. Working on this lead, the teacher had a good fishing story to read to John the next day when he returned. John was much interested in the story and told some of his experiences on fishing trips.

The next step was to find an easy story about fishing which John could learn to read without too much preparation. Several pre-primers were examined before one

was found containing the desired story. On John's next
visit he was told that another good story about a fishing
trip had been found and was asked if he would like to
read it for himself. John's face lighted when fishing
was mentioned but fell at the suggestion that he read it.
"You read it to me", was his reaction. It was ex-
plained that if he wanted to enjoy many good stories he
would have to learn to read them himself as other people
didn't have time to read to him. The teacher also said
that he was sure John could read the story quite well by
learning just a few of the harder words first. John was
willing to try. The words in the story which the teacher
was fairly sure John didn't know had been printed on
cards. These words were pronounced, their meanings
discussed and their use in the story illustrated by sen-
tences. After this informal type of word drill John was
able to read the story with some help and was well pleased
by his accomplishment.

From this beginning John was led to read several pre-
primers before the summer was over. He learned the
letters of the alphabet, some of which he had not pre-
viously known, and began work on some of the sounds.
This type of work was used sparingly, the major emphasis
being on reading easy stories for fun. The teacher noted
that the reversal tendencies John had shown on the diag-
nostic test, seemed not to occur when he knew most of the
words in the story but were apt to appear if the words
had not been well learned before he started to read. A
list of the words which seemed hard to learn was kept,
studied, checked and a record of the number of these
hard words learned each day was entered on a card. Con-
siderable interest was shown in seeing how fast this score
could be made to go up.

By the time school started, John had discovered that
he could learn to read, he was showing some interest in
reading and could read fairly well on the pre-primer
level. His teacher at school was given a detailed account
of the work which had been done and was interested in
carrying on where his summer helper had left off. He
was given a new primer and workbook during the reading
period although he was with a group of sixth grade chil-

dren. Some of the other children were also using lower grade readers. The teacher took time to discuss the matter with all of the children pointing out to them that just as they were not all equal in ability to run, draw, sing, etc. so they were not all equal in the ability to read or do arithmetic. It was not difficult to get this idea across to most of the group, so that with the exception of a few individuals no difficulty was encountered. The teacher discussed the situation with these people privately and secured their cooperation.

After John had finished the primer he was given several supplementary booklets which were based on the vocabulary contained in the primer he had read. These he found quite easy to read and enjoyed more than any books he had previously read. At the end of the year, he was reading on the first grade level, and showed considerable improvement in his attitude toward reading and toward the children in the room.

It was impossible to improve the home situation which was the cause of a great deal of John's trouble. This may account in part for his not making as rapid progress as his mental age would seem to warrant. Another factor which may have slowed up his progress was that after he entered school in the fall the individual work was discontinued. His regular teacher had forty-four other children in the room and was not able to give him much attention. It was thought best, due to the home situation, to limit any home reading to easy stories read just for fun and handle the entire instructural program at school.

John's case illustrates very well certain important points in working with non-readers. In the first place some one must take time to find the child's interests and to stimulate a desire to read. The teacher with forty-five children may have to take out-of-school time to get the child started. If this is done great care must be used to avoid the child's feeling that he is being kept after school. Second, easy, interesting materials must be provided and the sight word vocabulary necessary for reading each story must be developed in an informal way before the

story is read. Third, the child should read much material on each level of difficulty. This material should, if possible, be based on a vocabulary similar to that developed in the basal reader for that level. Fourth, the child's difficulties should receive special attention. Fifth, he should be kept with his class group and a proper attitude toward his doing easier work built up with the other children. Sixth, the child should be assisted in keeping records of his progress and his achievements should be praised, but undue pressure for more rapid development both from the teacher or parents should be eliminated. Seventh, the teacher cannot always control the entire situation and neither can all of the contributing causes of the reading disability be removed. Therefore, progress may not always be in proportion to the child's mental ability. It is also well to remember that the effects of several years of unsuccessful experiences cannot be overcome in a short time. Patient, consistent work will be necessary if progress is to be made.

The question arises as to what will be done with John when he reaches junior high school age. That will probably depend on whether or not the junior high school to which he goes makes provision for cases such as his. If he stays in the system where he is now in school, in all probability he will go to junior high school with his class, where provision is made for retarded readers to spend a third of their day continuing elementary school reading and the remaining two-thirds in participating with the other children in such activities as music, art, physical education, shop, social relations classes, and other work which they can do successfully. If he moves to a system where no provision is made in junior high school for children retarded in reading, he may be retained in the elementary school. This would probably be unfortunate in John's case.

Experience Chart Story Approach with Non-Readers

Some teachers report success in approaching reading through experience chart stories. The teacher finds the interests of the child and leads him to tell about his experiences. Then, instead of finding easy stories about

the interests of the child, the teacher writes a short account of one of the experiences the child has related. This is printed on a sheet of newsprint or similar paper, and perhaps illustrated by a picture or drawing. The teacher may say to the child, ''Yesterday, I was so interested in what you told me about your pony that last night I wrote a story about it. Would you like me to read it to you?'' Usually the child will be interested. After the teacher reads the story the child may be encouraged to try. Since the content of the story is already familiar and the words and sentences similar to those used by him in telling it to the teacher he may be able to read it without difficulty. Through this approach reading from the beginning is a meaningful process, and the initial attempt is successful which increases his confidence in his ability to learn to read.

Instead of the teacher composing the story, the child may tell it and the teacher print on the chart what he says. Chart reading of this type may be continued until the teacher feels that the child is ready to be introduced to easy book reading. Booklets of these experience stories may be made and illustrated by the child. A list of words may be kept, studied and checked. The stories may be written with a vocabulary which will contain most of the words needed in reading the first book stories which are to be used later. In this way, when the child shows a desire to read from books, he will already have a sight vocabulary which will make his first book reading successful.

Developing Word Recognition Abilities with Non-Readers

The principles for developing word-recognition abilities are much the same for non-readers and remedial cases as for normal children, the main difference being that non-readers and remedial problems require special help and much additional practice in acquiring them. The first step in vocabulary development is the learning of the words which are used in the first book stories to be read. These are known as sight words and are learned and remembered by noting such things as the length of the word, the general configuration and

similarities and differences between words. Some sug-
gestions for developing beginning sight words have been
given in the previous discussion of procedures for teach-
ing non-readers to read. In building a sight vocabulary
the words should be introduced in meaningful situations
and used in reading soon after their introduction. New
words will need to be introduced gradually and many
repetitions of them should occur in the stories which
are read. Hearing the word and at the same time seeing
it is often an aid to learning and remembering. Oral
and visual presentation are valuable in introducing new
words.

In addition it will be necessary to provide for addi-
tional repetitions in work book exercises, word card
games, etc. Picture-word cards, with the word printed
below a picture indicating its meaning, are useful in
the beginning stages. Later, words without pictures may
be used. Picture dictionaries are constructed in the same
way except that a notebook or home-made booklet is
used instead of cards and the words are arranged in
alphabetical order. A variety of games may be played
using picture-word cards and word cards, and both the
cards and the picture dictionary may be used by the
pupil to find words he has forgotten when he meets
them in his reading.

The child may be taught from the beginning to
recognize words from the way they are used in the
sentence. When he miscalls a word in such a way as to
spoil the meaning he may be asked to read the sentence
again to see if it makes sense. When he meets a word
he does not know, the teacher may suggest that he read
the rest of the sentence and then see if he can get
the word.

As soon as the child begins to notice likenesses and
differences in the sounds of words and parts of words,
instruction in phonics may be begun. Familiar words
should be used to teach phonetic sounds in order that
the learning may be meaningful. This principle makes
it necessary for the child to have developed a sight
vocabulary of from 100 to 300 words before instruction

in phonics is begun. Phonetic principles, learned from known words, should be applied to unknown words. However, a child should not be asked to sound out those parts of words involving sounds which he has not learned. It is very important that the material to be read have few new words in relation to the total number of words used. If the child, in reading, has to attempt to sound out several words on each page, comprehension and interest will suffer. Reading to be meaningful and enjoyable must progress smoothly without many interruptions.

The child should be encouraged to use two or more word recognition skills in attacking new words. In meeting a new word the child may notice that it looks something like a word he already knows, but that it begins differently. He may sound the beginning, combining this with the known ending, thereby pronouncing the word. He may then reread the sentence to see if that word fits the general meaning.

In developing word recognition abilities, meaning must always be stressed. The danger in isolated word drill exercises is that the child may learn to say the words correctly without their stimulating meaningful associations in his mind. By introducing words which are in the child's spoken vocabulary and by using them in reading content which the child's background of experience will enable him to understand, mechanical word calling can be avoided.

Use of Remedial Drills and Exercises

Discovering the child's interests, stimulating a desire to read and providing attractive reading materials in the fields of the child's interests and on the level of his reading ability are the first and most important things to be done in remedial reading. After these things have been done and the child has started to read easy books, the specific difficulties in the mechanics of reading which the teacher's observation and diagnostic test have revealed often begin to disappear. Assistance from the teacher in helping the child to eliminate certain bad habits and form correct ones may

speed up progress. Such help should be based on the known needs of the child and will be largely individual in nature.

There is not space in this bulletin to list and discuss the numerous exercises and drills designed to help in eliminating errors in the mechanics of reading, which have been suggested by various writers in the field. There is little agreement among reading specialists in regard to the advisability of using many of these remedial techniques. The bibliography in the appendix of this bulletin lists books on reading in which will be found descriptions of remedial drills and exercises and presentations of different points of view concerning their use.

Certain of these drills and exercises may be of value for certain children, but may not prove effective at all in helping others. Use of such materials should always be based on a careful study of the needs of the individual child.

Remedial Reading Calls for Much Individual Work

It will be seen from the description of suggested remedial procedures that remedial reading demands much individual work on the part of the pupil and considerable individual help on the part of the teacher. The amount of time which the teacher will need to spend with a remedial case, will depend on the severity of the reading disability, how much the child desires to improve, the child's determination, work habits and many other factors. In the case of non-readers much individual attention is necessary, especially at the beginning of the remedial work.

The amount of time which the teacher can spend with remedial cases depends upon the number of children in the class and the outside-of-class obligations which he is required to meet. In some situations it may seem useless for the teacher to attempt remedial work. However, the results which are often obtained with remedial cases, even when given a small amount of individual attention, are ample reward for the best efforts of the teacher. These results are not only evidenced in improved reading, but in greatly improved attitudes toward school, the other children and life as a whole.

It is important that the teacher know the mental maturity level of the child with which he is working in order that too much time is not devoted to those cases offering little promise for improvement. A twelve year old child, whose rate of mental development is 60 per cent of normal probably has a mental age of not

more than seven years. Furthermore, he has probably reached the maximum of his mental growth. On the other hand a twelve year old child, whose rate of mental maturation is 80 per cent of normal has a mental age of about nine and a half and will probably continue to grow mentally for a few more years. The possibilities for progress in reading, as a result of remedial work, varies greatly for these two individuals and the teacher is justified in devoting much more time to the child whose possibilities for improvement are greater.

The teacher must not take a group mental test as an infallible guide to mental capacity. Even the best individual test given by an expert examiner, is not free from error. If the child shows that he can do more than the test indicates, he should have every opportunity to do so.

Remedial reading is not a specific method which may be used as a sure cure for reading disabilities. Rather, it is an approach to the reading difficulties which the child is encountering in which the whole child is carefully studied to determine the causes of his poor reading. After these causes are found, every effort is made to remove them, and the child is given a new start at the place where he is able to begin.

CHAPTER VIII

MATERIALS FOR READING

Lack of suitable reading materials is one of the biggest problems facing many schools in attempting to improve their program in reading. Some of the plans suggested in Chapter V demand a variety of books and cannot be carried out unless this reading matter is available. Suggestions are also given as to what may be done with very limited resources.

Often the inadequacy of the reading materials in a school is not so much a matter of lack of funds, but rather of how the funds are spent and how the materials are used.

It is not at all uncommon to find a small school with two or more sets of encyclopedias, an expensive machine showing how the universe operates, costly playground equipment, and practically no books on varying difficulty levels for supplementary or recreatory reading. Unfortunately, in many situations teachers are not consulted by the purchasing authority as to the needs of the school. However, this fact does not absolve us from all responsibility.

What reading materials should we have? In what ways can we organize for the use of available materials so that the children get the most benefit from them? These questions cannot be given definite answers, but a discussion of some of the points raised by them may offer suggestions.

Basal Reading Text

Should schools have a basal reading text? Many reading authorities say that they should, at least through the first three grade levels. Whether or not the basal series is continued through the entire elementary school would depend upon the philosophy of the people in charge of the school, the ability of the teacher to organize the reading program without a text, and the availability of adequate library and supplementary materials.

Providing thirty-five copies of the third grade basal reader for the thirty-five children in a group cannot be justified unless all of these children are reading on the third grade level. In an average group of third graders we would probably need copies of the basal

text on levels from first through third grades, the number of books on each level being determined by the needs of the group.[1]

Workbooks

Workbooks, prepared to accompany the basal reader in use, are a valuable reading aid, at least through the third grade level. Beyond the third grade level, in situations where the supply of library books is inadequate and funds for such purposes are insufficient, one might consider which would be of more value, workbooks in reading, or the money which they would require spent for other types of reading material.

Supplementary Readers

Supplementary readers, in addition to the basal series, should be considered a part of the entire supply of materials for the reading program. The content of many of the newer readers is such as to make them of value for use in other fields as well as in a regular reading period. They may be purchased singly for individual reading, or in sets of a few copies each for use with groups. Supplementary readers on several grade levels will be needed for use with any average grade group. An average fourth grade class will probably need second, third and fourth grade readers.

Library Materials

The reading needs of the child, both present and future, both in school and out, call for the use of many kinds of reading materials. There should be available in the classroom a wide variety of books, varying as to kind, content and reading difficulty. A good reference set, on an elementary level, dictionaries, an atlas and other sources of factual information are indispensable to a well-rounded reading program. A reference set and atlas do not need to be in every room but may be in one central library for the building.

Additional Reading Materials

There are many other types of materials which may be used individually or with groups of children. Some of these are pre-

[1]For a discussion of criteria for evaluation of textbooks see *Some Suggested Criteria to Guide in the Evaluation of Primary Readers* (Denver: Colorado State Department of Education, Elementary Division, 1940), Leaflet No. 4. Free on request.

pared by the teacher, some by the pupil, and some are purchased
and supplemented by the teacher with problems, questions, exer-
cises, or suggested activities. Such materials should promote growth
in reading skills, habits and attitudes, as well as increase the child's
background of vicarious experiences. The following suggest a few
materials of these types:

1. Individual seatwork materials such as word recognition
   cards, word dictionaries, work type reading exercises, etc.
   By having the pupil write on another sheet such materials
   may be used many times. Materials of this type may be
   valuable in giving individual pupils practice on skills in
   which they show weaknesses.

2. Stories from discarded books, magazines, newspapers, ad-
   vertising material and the like, mounted on oak tag or card
   board for individual reading. With the material may be
   included a few thought questions, problems, suggestions of
   things to do or hints to further reading. A place may also
   be included for each child to record his name and the date
   he read the card. Answers to questions may be available
   so that each child may check his own work.

3. Booklets on a variety of subjects and levels of reading diffi-
   culty may be placed on the reading table for individual
   reading. A number of companies publish such booklets
   dealing with science, social science and related topics. Sev-
   eral reading series have supplementary pamphlets to accom-
   pany them which can be purchased separately.[2]

4. Materials can be obtained free from industrial firms, travel
   agencies and chambers of commerce. A few of these ma-
   terials may be used for individual reading.[3]

5. Experience chart stories, accounts of excursions, activities,
   descriptions of interesting things brought to class, etc. com-
   posed by the group can be made into booklets and placed
   where the children can have access to them for free time
   reading.

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[2]*Bibliography of Supplementary Books in Science and Social Studies* (Colo-
rado State Library, op. cit.). Free on request.
[3]*Bibliography of Free Materials* (Denver: Colorado State Library). Free
on request.

Organization of Materials for Efficient Use

Any administrative organization of reading materials should provide for easy interchange among the rooms in the building. No teacher should regard the books in his room as the exclusive property of that room. Upper grade teachers often need books on a lower grade level and lower grade teachers may have children who need more challenging books on a higher level. A central clearing house for the books of a building or system may be organized through which teachers may get the materials they need. This does not mean that all books should be in one place, but rather that someone, perhaps the principal in a small school or the library teacher in a larger system, should know what is available and where such materials are to be found when they are needed. A list of such materials should be of value to teachers in planning their work in reading and in the content fields. Any plan which will facilitate the use of books within a school is worthy of consideration.

Securing Adequate Materials for Reading

Unfortunately some schools are not financially able to provide sufficient materials for a well-rounded reading program. Small schools may spend a proportionately larger amount for materials than larger schools and still not be adequately supplied. There are several possible ways of meeting this problem. Under the state law for organizing county libraries the county commissioners may levy a tax of one-tenth of one mill for a county library. This library serves all of the people of the county and schools may take advantage of its facilities. Only four counties have libraries organized under this law. Several county superintendents have started libraries in their offices. Different plans for financing these libraries are used. Under one plan the school boards of the county are invited to join in supporting the library. Each district pays into the library fund on a graduated scale based on the size of the schools participating. Teachers in schools supporting the library may check books from it for use with their children. The county superintendent, often with a committee of teachers to assist, selects and purchases the books. Supplementary readers, science and social studies materials as well as fiction are chosen on the basis of the needs in the county. This plan seems to work very well in the counties using it. Each school gets the use of several times the

number of books the money they paid into the fund would buy. Also each school has a much wider selection from which to choose.

In counties having no central library for schools it is possible for a number of schools conveniently located to organize a cooperative library of their own. One difficulty lies in finding someone to promote the project and keep it operating. The county plan is preferable in most situations.

The Colorado State Library loans books to individual schools and to county superintendents for redistribution. These books may be kept for a period of four months. The only cost to the borrower is postage one way. This rate is four cents for the first pound and one cent for each additional pound. If requests for books from this library are made early in the year and are accompanied by definite information as to type and grade level of books desired a satisfactory selection can be secured.[4]

Some counties and schools have been successful in putting on a library drive for funds and books. It is true that many books will be donated which are not suitable for school use, but it is equally true that many worthwhile and usable materials can be obtained in this way. A library project of this type can be planned in such a way as to be an excellent school and community enterprise.

There are probably few schools that could not, by united effort of school and community, improve the quality and quantity of their reading materials. As a last resort it is sometimes possible to find larger systems which have discarded readers which might be given to schools that can use them. Such materials, although far from what schools should have, are often better than no books at all.[5]

Schools in which parents supply the texts used are handicapped in getting readers on the level of ability of some of their children. For example, a child in the fifth grade whose reading ability is on a third grade level should have a reader of third grade difficulty. If the school furnishes the books it may not be difficult to secure such a book, but it may be another matter to persuade the parent to buy an easier reader. However, unless this is done, not much progress can be expected in that child's reading. It would also be better to get a reader of a series different from that previously used so that the material in it would be new to the child, and preferably

one not bearing a grade label. If the parent cannot be persuaded to buy such a book, the teacher should, if possible, secure easier books to use with this child for at least a part of his reading.

Adequate materials are a decided help in adapting a reading program to varying levels of ability. Certain procedures, such as organizing reading around units or centers of interest, cannot be carried on without them. Where materials are inadequate, different plans for caring for individual differences in reading ability will have to be used. The teacher who recognizes the problem and earnestly desires to meet it will find some means of at least improving the situation.

BIBLIOGRAPHY

1. Betts, Emmett A. *The Prevention and Correction of Reading Difficulties.* Evanston, Illinois: Row, Petersen and Company, 1936.

2. Dolch, Edward W. *A Manual for Remedial Reading.* Champaign, Illinois: The Garrard Press, 1939.

3. Durrell, Donald D. *Improvement of Basic Reading Abilities.* Yonkers-on-Hudson, New York: World Book Company, 1940.

4. Gates, Arthur I. *The Improvement of Reading.* New York: The Macmillan Company, 1939.

5. Harrison, M. Lucile. *Reading Readiness.* Boston: Houghton Mifflin Company, 1939.

6. Hildreth, Gertrude. *Learning the Three R's.* Minneapolis, Minnesota: Educational Publishers, Inc., 1936.

7. Kirk, Samuel A. *Teaching Reading to Slow-Learning Children.* Boston: Houghton Mifflin Company, 1940.

8. Lee, J. Murray and Lee, Dorris May. *The Child and His Curriculum.* New York: D. Appleton-Century Company, 1940.

9. McKee, Paul. *Reading and Literature in the Elementary School.* Boston: Houghton Mifflin Company, 1934.

10. Monroe, Marion and Backus, Bertie. *Remedial Reading.* Boston: Houghton Mifflin Company, 1937.

11. National Education Association. "Newer Practices in Reading in the Elementary School", *National Elementary School Principal,* Seventeenth Yearbook, Washington, D. C., 1938.

12. National Society for the Study of Education. "The Teaching of Reading: A Second Report", *Thirty-Sixth Yearbook,* Part I. Bloomington, Illinois: Public School Publishing Company, 1937.

13. Pennell, Mary E., and Cusack, Alice M. *The Teaching of Reading for Better Living.* Boston: Houghton Mifflin Company, 1935.

14. State of California. *Teachers' Guide to Child Development in the Intermediate Grades.* Sacramento, Calfornia: State Department of Education, 1936.

15. State of Colorado. *Course of Study for Elementary Schools.* Denver: Department of Education, 1936.

16. Stone, Clarence R. *Better Advanced Reading.* St. Louis, Missouri: Webster Publishing Company, 1937.

17. ————————————. *Better Primary Reading.* St. Louis, Missouri: Webster Publishing Company, 1936.

18. Storm, Grace E. and Smith, Nila B. *Reading Activities in the Primary Grades.* Boston: Ginn and Company, 1930.

19. Witty, Paul and Kopel, David. *Reading and the Educative Process.* Boston: Ginn and Company, 1939.