R E P O R T R E S U M E S

ED 015 824 RE 000 239

THE READING PROGRAM SPANS THE TOTAL CURRICULUM.

BY- COOPER, J. LOUIS

PUB DATE MAY 67

EDRS PRICE MF-$0.25 HC-$0.56 12P.

DESCRIPTORS- *CONTENT READING, *READING SKILLS, *READING HABITS, *READING MATERIALS, STUDY SKILLS, STUDY HABITS, TEACHER PARTICIPATION, TEACHER RESPONSIBILITY, UNIVERSITY OF CONNECTICUT, STORRS, CONNECTICUT,

THE FOLLOWING QUESTIONS ARE ANSWERED TO SHOW THAT THE READING PROGRAM SPANS THE TOTAL CURRICULUM--(1) WHAT READING SKILLS ARE REQUIRED FOR READING IN THE CONTENT AREAS, (2) WHO SHOULD TEACH THESE SKILLS, AND (3) WHAT MATERIALS ARE NEEDED. SKILLS SHOULD BE GROUPED ACCORDING TO SKILLS FOR READING A SINGLE STUDY-TYPE SELECTION, SKILLS FOR SECURING INFORMATION FROM DIFFERENT SOURCES, AND SKILLS FOR READING SHORT, SPECIFIC SELECTIONS. THESE SKILLS SHOULD BE TAUGHT DURING THE REGULAR READING INSTRUCTION PERIOD AND APPLIED DURING THE CONTENT AREA PERIOD WITHOUT FURTHER ATTENTION EXCEPT FOR REFINEMENT AND FOR THE DEVELOPMENT OF THE HABIT OF USING THEM. MATERIALS TO BE USED SHOULD DELINEATE THE SPECIFIC SKILLS TO BE TAUGHT, PROVIDE WELL-ORGANIZED LESSONS FOR TEACHING THEM, SUGGEST SPECIFIC AREAS AND SITUATIONS FOR THEIR APPLICATION AND INTEGRATION, AND INCLUDE SELECTIONS OF APPROPRIATE CONTENT. FINALLY, PROVISIONS FOR THEIR APPLICATION IN A FUNCTIONAL SETTING MUST BE MADE BY THE CONTENT AREA TEACHERS. THE READING PROGRAM SPANS THE TOTAL CURRICULUM AND INVOLVES BOTH THE READING TEACHERS AND THE CONTENT AREA TEACHERS. THIS PAPER WAS PRESENTED AT THE INTERNATIONAL READING ASSOCIATION CONFERENCE (SEATTLE, MAY 4-6, 1967). (NS)

Dr. J. Louis Cooper
Professor of Education
Box U-33
University of Connecticut
Storrs, Connecticut 06268

THE READING PROGRAM SPANS THE TOTAL CURRICULUM
(Session VI: Reading in the Content Areas)

There is general agreement among authorities in the field of reading instruction that in any well-balanced reading program there are three essential types of training:

1. The program in the fundamentals of reading.
2. Guidance of reading in the content subjects, sometimes referred to as the program in the work-study skills.
3. Wide provision for both directed and independent recreatory reading, frequently referred to as the program in children's literature.

In most present-day reading programs a great deal of emphasis is placed on the first of these types of training throughout the elementary school. On the other hand, the other types of training often receive only token attention.

The program in the fundamentals of reading has as a major function the teaching of the mechanics of reading, that is, the process of decoding the printed symbols and reading them smoothly and fluently in both oral and silent reading situations. Throughout this program the uppermost problem is the establishment of basic skills and attitudes, and, particularly at the primary levels, the instructional load is heavily

flavored with experiences already familiar to the child. Hence the burden of new information is not a major factor.

At the intermediate levels the second type of training, reading in relation to the content subjects, becomes increasingly important. Here the child encounters texts in history or geography, an informative text in science, a basic text in arithmetic, and many others. Here he learns to use such sources as encyclopedias, dictionaries, reference books, library card catalogues, and such tools as tables of contents, indexes, study guides, charts, maps, graphs, tables, diagrams. This use is continued throughout the upper elementary grades and the secondary school, and the more highly specialized the subject matter becomes and the more highly departmentalized the program becomes, the more independence the learner is expected to assume for the use of these skills.

Reading in the content areas demands the basic skills that are common to all reading, those which are stressed in the program in the fundamentals of reading, but it also demands certain so-called study skills that are not necessarily essential for effective reading of story-type material. To some degree, materials in each of the areas such as the social studies, the natural sciences, mathematics, the literature make unique demands upon the reader. It is not too much to expect children to read successfully the directions for doing a science experiment, to interpret maps, to read graphs, to read and interpret arithmetic problems, to establish purposes for reading a study assignment, to make use of headings and other typographical aids, and to adjust their rate of reading to the nature of the material, if they have been brought up on nothing more than a steady diet of story-type materials?

Study-Type Reading and Special Skills Required

Since development of the skills for effective reading and study in the content subjects requires something more than the typical program of basic reading instruction as it is commonly known, one basic question comes to mind: Just what kinds of reading tasks are required for effective reading in the various subject matter areas?

It is difficult to classify into a few major categories all of the reading one must do in connection with the content subjects because each presents its own unique reading problems. Nevertheless, most such tasks will generally fall into one or more of the following categories:

1. Interpreting a single study-type selection, such as a chapter in a textbook.
2. Securing from a wide variety of printed sources information about a particular problem or topic.
3. Reading short, specific selections such as mathematics problems, directions for a science experiment, and the like, which require careful and detailed reading.

Each of these types of reading requires special skills. The best procedure for studying a chapter in a history or science book is quite different from the best process for reading several chapters in each of several books for comparative purposes or for extracting pertinent portions from several sources as they relate to a particular problem. It also differs from the process one would use if he were reading directions for doing an experiment, following directions in baking a cake, or solving a problem in arithmetic. If each of these types of reading requires special

skills, just what are they? In this regard, it should be noted that although each subject area presents certain unique reading problems, there is considerable overlapping among reading abilities in different subjects.

Special skills needed for reading a single study-type selection, — Although the use of a wide variety of reading materials and other learning aids is common practice in teaching the content subjects, most schools continue to use a basic textbook as the framework for such courses. Reading assignments are made from time to time in these basic texts and and children are expected to be able to read them with reasonable understanding.

In order to be able to cope with this type of reading, the pupil must acquire some systematic approach to reading, interpreting, and recalling the content of a single study-type selection, such as the SQ3R procedure or one of its many variations. Though these procedures differ slightly from one to another, all of them have the following basic ingredients:

1. A systematic preview of the selection for the purpose of establishing specific purposes for reading.
2. A systematic procedure for reading the selection, in which the reader reads one section at a time to find the answer to a major question or questions.
3. A series of steps for practicing immediate and delayed recall for the purpose of fixing in the mind of the reader pertinent portions of the material read.

Ordinarily, the special skills required for effective reading of a

single study-type selection are not acquired by the pupil on his own. Careful guidance must be provided until the procedure has been well established.

Special skills needed for securing information from a variety of sources.— In addition to having children read basic textbook materials, schools today place a good deal of emphasis on independent study and research. This kind of reading requires that the pupil secure information about a particular problem or topic from a wide variety of printed and other sources. In such reading, all previously mentioned basic reading abilities and study skills are needed, but these are not enough. Additional skills of three main kinds are required: (1) the skills of locating information, (2) comparing and evaluating the pertinent information from several sources, and (3) organizing this information for some particular purpose.

To find the material he needs, the pupil must be able to locate items in an index, table of contents, encyclopedia, card catalog, and various guides, atlases, almanacs, etc. Once he has found the appropriate references, he has to pick out from the whole that which is pertinent to his particular problem and evaluate this material in terms of how up to date it is and the validity of the source. He must then compare the pertinent information from the various sources to determine the extent of agreement or lack of it. Following the reading and evaluation of the material, the reader must organize these bits of information for a particular purpose.

Special skills required for reading short, specific selections.— In all subject areas there are many situations in which one must read directions and follow them to the letter. Examples are recipes in

cookbooks, directions for doing science experiments, directions for assembling a piece of equipment, and directions for operating a machine.

Unlike the reading one must do in textbook selections, one interesting thing about reading directions is that, although they need to be read carefully and for detail, frequently they do not need to be remembered. Another interesting fact is that few individuals can plead "not guilty" to the charge that we are a nation of instruction ignorers, despite the fact that we live in a world guided by directions and instructions. Since following directions is an important skill that many people have not mastered, the school reading program has a definite and clear-cut responsibility for teaching it.

Who Should Be Responsible For Teaching the Work-Study Skills?

Granting that there are special reading and study skills required for effective use of materials in the content subjects, who should be responsible for teaching these skills?

For many years some have said that it is the job of the special subject teacher to develop these skills as needed in the study of the subject. It has been assumed that the mathematics teacher, the science teacher, the social studies teacher will teach those reading skills essential for proper interpretation of the materials used in their courses. This theory, good though it may sound, simply has not been fruitful.

Quite clearly, since there is a great deal of overlap in the skills needed from one subject area to another, if every subject matter teacher

is expected to teach the skills needed for his particular area, there is likely to be needless repetition of some skills and perhaps a neglect of other important ones. This is particularly true in the case of programs where departmentalization is practiced. More often than not, however, the assumption that every subject matter teadher is a teacher of reading has resulted in the good old American custom of "passing the buck." Everybody's business becomes nobody's business.

Then, too, if the teacher is subject matter oriented, he may not recognize the specific skills to teach or just how to teach them so that the child will make the transfer to a functional application. Leaving the identification of the skills to be taught to the individual content subject teacher is likely to result in lack of sequential development of the necessary skills. Also, if study skills are to be taught as part of the dontent subjects, specific lessons for their introduction and development must be prepared by the teachers. Frequently, subject matter teachers lack the skill, time, energy, and proper facilities for the preparation of such instructional materials.

In the self-contained elementary school classroom where all the child's instruction is under the direction of one teacher, there is, of course, the possibility that these skills might be taught in their natural setting. Even here, however, there is the question of whether the skills should be taught in connection with the time allocated for each of the subject areas or during the time normally assigned for systematic reading instruction.

If we depend on the teaching of the essential interpretative skills in the subject matter classes, there is grave danger that the job won't

get done. The teacher who is involved in putting across the concepts of science or mathematics is likely to find his allegiance divided between the ends and the means to the end if the content must be interrupted to teach the special reading skills that may be needed at a particular moment. If the emphasis in the arithmetic class is put on how to read the problem, the problem itself may never get solved. If the emphasis in the social studies class is put on finding the author's pattern and use of headings or some related reading skill, the major concepts and problems involved may become secondary.

The position held here, therefore, is that the essential reading and study skills for effective study of content materials should, wherever possible, be developed at a time apart from that normally used for the content subjects and should then be applied during the content area period without need for further attention except for refinement and the development of the habit of utilizing the skills. This appears to be a necessary answer whether the teacher who teaches the reading is the same person or a different person from the one who teaches the social studies, or the arithmetic, or the science.

Materials for Teaching

The Study Skills

Although the point of view of the present writer is that the special skills needed for content area reading can best be taught during the regular reading instruction period, it must be recognized that the content of typical basal reading books is not particularly suitable for teaching many of the study skills. Reading matter used for the lessons and for practice exercises should be quite similar to the materials the child

is expected to use in his study of science, social studies, and mathematics. One cannot easily teach children the use of headings, the relationship of paragraph headings to center headings, and center headings to titles, if the book being used as a teaching tool makes little or no use of headings. Such is the case of the typical story-type basal reader. A text in reading which is all stories may teach the child to read a story, to recognize words, and to analyze vocabulary for pronunciation and meaning, but it does not teach him the special skills needed to read other kinds of materials.

This being the case, one might assume that the reading teacher would turn to the social studies, science, and mathematics books to find specific selections through which the special skills might be taught. This would be quite appropriate except that it would leave the reading teacher with the responsibility for identifying the skills to be taught, finding the appropriate materials to use in doing the teaching, and providing the variety of books needed. While this is possible in the self-contained classroom of the elementary school, it is time consuming and certainly not very convenient.

It appears that an appropriate solution would be for the reading teacher to have specially prepared materials in the form of a reading textbook, or a kit of carefully developed materials, or perhaps a series of programmed lessons, which would (1) carefully delineate the specific skills to be taught, (2) provide well organized lessons for teaching the skills, (3) include reading selections consisting of appropriate content, and (4) suggest specific subject areas and situations for the application and integration of the skills.

Application of Skills Required
For Reading Content Area Materials

It is imperative that the special study skills be taught, regardless of where or by whom. But the mere teaching of these skills is not enough. Provision must be made for the application of the skills in a truly functional setting. While it may be the major responsibility of the reading teacher to develop the initial understanding of the skills, it is just as surely the responsibility of the subject matter teacher to teach his subject in such a way that there is ample opportunity for children to use the various skills that have been taught to them.

One should not make the mistake of assuming that skills will be used just because they have been taught. For example, it is erroneous to assume that a child will brush his teeth simply because he has been given a toothbrush and a series of lessons on how to use it. We must, by some means or other, see to it that he develops the habit of brushing his teeth. So it is with the study skills. The subject matter teacher must set up situations which require the use of the special reading skills and provide guidance in using them until they are used with precision and until the habit of using them has been well established.

As reading assignments in textbooks are given, the teacher must make a special effort to help children apply those specific skills needed in reading a single study-type assignment. He must guide the children in setting up purposes for reading; aid them in finding the author's outline; remind them to be or the alert for signal words, statements of facts, and statements of opinion; insist that they make use of maps, graphs, charts; urge them to practice immediate and delayed recall; show them how they might vary the reading rate in a particular selection. And, the teacher must keep a constant

to see that the skills are put to use.

In addition to helping the children develop skill in the effective use of basic textbooks, subject matter teachers must also organize their course content into problems, units, or topics which require and stimulate the use of a variety of learning aids and which encourage wide reading from a number of different sources. In this connection, let us assume that in science a pupil has a particular problem to be solved or a question to be answered. He should be encouraged not to accept the views of a single author. He must be led to see that different sources do not always agree and that, by going to different sources, one not only gets different points of view but also more information than can be had from a single source.

To get the answer to a particular question or problem, the individual must first locate information about that problem, which usually requires a number of locational tools. Once the information has been located, the pupil must evaluate it in terms of how much of each source is pertinent to the particular problem. He has to evaluate the material from the standpoint of validity; that is, who wrote it, when it was written, the status of the author as a recognized authority,, evidence of author bias, etc. He has to compare the pertinent information from the several sources to determine the degree of agreement of lack of it; and he must draw conclusions based on these sources. In short, he must learn to read not to believe and take for granted, nor to accept or reject, but to weigh and consider. Finally, he must organize the information he has gathered from some particular purpose: to write a theme, to make a report, to prepare for an examination.

Under what better conditions could children develop a functional application of those skills needed for effective reading of content area

materials than in courses organized and taught in a manner which requires their use? The answer is obvious. It seems clear that if children are to become effective readers, the reading program must span the total curriculum and must involve both special teachers of reading and subject matter teachers alike, whether they be the same or different people.