The focus of this paper is on three questions: (1) What reading skills are important to social studies achievement? (2) How can these skills be operationally defined for research and practice? and (3) How can the application of such research findings be effected? Several sources of research and discussions on reading and its relation to content areas are cited. It is pointed out that required reading skills generally fall into the areas of comprehension, vocabulary, and study skills. Operationalizing definitions of skills is discussed and the conclusion reached is that to effect application of research findings to classroom practices, teachers must be involved in researching ideas to be applied in the classroom. A five-step applicative research model is described. The underlying concept in applicative research is explained as adapting a research idea to a limited and/or unique setting. The research findings must then be tested by replication with other groups. Figures and references are included. (WB)
Applying Research in Reading to Classroom Instruction in Social Studies

(Revised Copy)

Research-Teacher Education

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This discussion will focus upon three questions: (1) What reading skills are important to social studies achievement? (2) How can these skills be operationally defined for research and practice? (3) How can the application of such research findings be effected?

Reading Skills Important to Social Studies

Several sources of research and discussion on reading and its relation to content areas are available. A review of some of these sources will help to answer the question of what reading skills are important to social
studies. Four such references will be mentioned. Each of these varies in focus and scope.

Perspectives 12: A New Look at Reading in the Social Studies, edited by Ralph Preston (6) is one reference. The five articles included in this issue of Perspectives are all well-documented and seemingly thorough.

Two other sources are monographs of the ERIC/CRIER Reading Review Series. The first of these, Trends and Practices in Secondary School Reading, edited by A. Sterl Artley (1), was published in 1968. It is very inclusive, encompassing references to 184 research and discussion articles. Some of these have implications for reading and social studies. A similar monograph is scheduled for future publication, to be edited by James L. Laffey. Its title has not as yet been announced, but it will include reviews of research on reading as associated with five content areas and reactions to these reviews by noted authorities.

A fourth source of information on this topic is a series of three monographs, the first of which has been published, entitled Research in Reading in the Content Areas: First Year Report (4). This series will constitute year-end reports of a three-year project to investigate reading in content areas. (The project is funded through USOE and being administered under the aegis of Syracuse University.) Social studies is one of the specific areas given attention, though research in other areas may have obvious applicability to social studies. A major intent of these monographs is to provide concrete suggestions for teaching reading in content areas.

The substance of these sources is, in short, that comprehension, vocabulary, and a variety of study skills are important to social studies achievement. But to say just that is not very helpful to the classroom teacher. Such skills must be operationally defined, or put into terms which
facilitate their application. Several operational definitions have arisen out of the Syracuse University project and these can serve as examples of what is intended by the phrase "operational definition" of skills.

Operational Definition of Skills

The Syracuse University research project is actually a research and demonstration center to train secondary school reading consultants in programs for teaching reading in subject areas. Most of the work done has been in secondary classrooms in close cooperation with classroom teachers. Of particular concern have been the skills of reading comprehension and vocabulary development.

Comprehension has been operationalized in terms of "levels," including understanding what the author says, what the author means, and what application the content has for the reader. Reading guide material has been constructed based on this definition. Research on the effectiveness of its use will be reported in the second-year monograph (5). In essence, students have been asked to manipulate and judge material so as to understand important details, draw conclusions, and see application. The intent of the guides is to simulate the comprehension process as defined above. This puts comprehension in terms which have meaning for teachers and students.

Vocabulary development has been operationalized in terms of what has been called the "structured overview". This is described more fully in the monographs (4, 5). In short, selected vocabulary is arranged in a diagram. The diagram is constructed so as to show how the reading selection relates to the content area as a whole and how the ideas and concepts within the reading passage are interrelated. Viewed in these terms, vocabulary development can serve at least two functions. First, as overviews are studied prior to the reading-learning task, important vocabulary takes on specific
meaning for the learner. Second, comprehension is facilitated through an understanding of how the content of the reading selection is related to the reader’s previous knowledge and to the structure of the discipline.

Other operational definitions are undoubtedly possible for these and other skills important to social studies reading. The point is that such definitions are necessary for reading skills to have meaning in content areas such as social studies. The definitions have grown out of research, however, and may not be directly applicable without modification.

The Application of Research Findings to Classroom Practice

A popular lament of the past decade has been that despite the advance in sophistication of research technique, it is difficult to show any benefit which has accrued to classroom practice as a result of educational research. Fred Barnes (2) pointed out one reason for this a decade ago. He noted a basic fallacy in separating “researchers” and “teachers,” the one a “producer” of ideas, the other a “consumer.” A teacher not involved in research will not be directly affected by research. Stated more positively, teachers who are involved in research will be directly affected by research. As Bond and Dykstra said in discussing the 27 USOE First Grade Studies (3), teachers involved in the research found themselves in an excellent inservice training project. As a technique of applying research, doing research may have efficacy.

The obvious conclusion is to involve teachers in researching ideas to be applied in the classroom. The problem is that this has not always worked where it has been tried. The reason the technique has been less than successful stems from the traditional definition of research being used.

Stated as simply as possible, the traditional research paradigm has
involved three steps (cf., fig. 1). First, a treatment, or teaching procedure, is tried on one or more groups. Second, posttesting is used to evaluate the effectiveness of the procedure. Third, statistics are used to assess the confidence with which results of the evaluation can be inferred for similar settings. The question asked by inferential research is whether a procedure is applicable to all students in similar settings. For the purposes of inferential research, this paradigm is adequate. But as part of the teacher-training aspect of the Syracuse project, a different paradigm is evolving.

This new model (cf., fig. 2) is termed "applicative" research. Its purpose is to specify that a procedure is effective in one setting with specific students. Too often, inferential research goes into journal articles and then onto dusty book shelves. The applicative model, the paradigm in figure 2, is an attempt to direct research findings to classrooms rather than book shelves.

There are five steps in the procedure. The first step is to replicate, or try to apply the research idea and conclusions to a unique setting. An intimate part of this is the second step, however, where the attempt is to refine and revise, to improve and change, the idea and procedure to make it combine harmoniously with an existing curriculum. The question becomes not so much "Does the procedure work?" as "What can be done to make it work in this setting?"

The third step is evaluation. This must be free to take many forms. More formal research demands more formal measure, but to the classroom teacher, formal test results may be only a part of the picture. Discussion with students might be more appropriate. So might the overall "feeling" of the teacher, for if a teacher finds a method distasteful or too difficult
Fig. 2. A paradigm for the application of research to classroom practice.
to implement or displeasing to students, he cannot continue it, despite test results.

As a result of evaluation, a teacher may choose to continue or reject a procedure. Barring the latter, education is the next step. That is, those procedures found successful are "publicized" through demonstrations (taped or live), descriptions, workshops, etc. "Education" means, in this sense, exposure of the rest of the faculty to new, successful procedures.

The final step of the paradigm in Fig. 1 is adoption. There are comparatively few findings of research which may bear the test of replication so well as to merit wholesale adoption into a curriculum. This decision must be the last in a series of steps designed to test how well findings of journal reports fit into existing curricula. Some research belongs on dusty book shelves and should remain there. But for any research to be adopted, there must be freedom and encouragement for teachers to replicate, to try things out.

The suggestion here is a somewhat different way of looking at teaching and research. Viewed in these terms, teaching can become in part, one continuous process of research and refinement. The judge of educational research must ultimately be the teacher; the ultimate judgement ground, the classroom.

Summary

Three basic steps have been identified as necessary to the application of research in reading to classroom instruction in social studies. First, the teacher must decide what reading skills are to be taught as a part of social studies instruction. Comprehension and vocabulary development are
important, though not the only skills possible for development in this setting.

Once a skill has been selected for emphasis, the next step is to operationalize it. This is done by deciding what it is that a student would do when employing the skill and then designing exercises or activities which seem to simulate that skill.

The third step identified was replication. Replication refers to applying research findings to new settings, making researched procedures combine harmoniously with existing settings. The question for the classroom teacher becomes one of whether research findings are viable for specific students in unique settings.
References:


2. Barnes, Fred P. "We Are All Researchers," *The Instructor,* 69 (June, 1960), 6-7.


4. Herber, H. L. and D. R. Lashinger (Eds.) *Research in Reading in the Content Areas: Second Year Report.* Syracuse, N.Y.: Reading & Language Arts Center, Syracuse University, in press.


Fig. 1. A paradigm of inferential research.