

DOCUMENT RESUME

ED 153 879

SE 024 296

AUTHOR Wiley, Karen B.; Race, Jeanne
TITLE The Status of Pre-College Science, Mathematics, and Social Science Education: 1955-1975. Volume III, Social Science Education. Executive Summary.

INSTITUTION Social Science Education Consortium, Inc., Boulder, Colo.

SPONS AGENCY National Science Foundation, Washington, D.C.; Ohio State Univ., Columbus. Center for Science and Mathematics Education.

PUB DATE 77
CONTRACT NSF-C-7620627

NOTE 16p.; For related documents, see SE 024 292-297; Contains numerous light and broken type

EDRS PRICE MF-\$0.83 HC-\$1.67 Plus Postage.

DESCRIPTORS Curriculum; *Educational Needs; *Educational Research; Elementary Secondary Education; Instruction; Reports; Research Reviews (Publications); *Social Sciences; *Social Studies; *State of the Art Reviews; Teacher Education

IDENTIFIERS *National Science Foundation

ABSTRACT

This is a summary of a final report which was based upon the review, analysis and summarization of literature related to pre-college science instruction, science teacher education, and needs assessment efforts. The summary contains a brief introduction, the purpose of the study, a brief description of the methodology employed, and selected findings from the final report. The findings are presented as summary statements extracted from each major section of the final report and keyed by page number to the original sections from which they were drawn. (Author)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

ED153879

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRO-
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIGIN-
ATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF
EDUCATION POSITION OR POLICY

THE STATUS OF PRE-COLLEGE SCIENCE, MATHEMATICS,
AND SOCIAL SCIENCE EDUCATION: 1955-1975
VOLUME III. SOCIAL SCIENCE EDUCATION.

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

Stanley Helgeson

EXECUTIVE SUMMARY

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC) AND
USERS OF THE ERIC SYSTEM."

Karen B. Wiley

with

Jeanne Race

Social Science Education Consortium, Inc.
Boulder, Colorado

1977

Supported by Contract NSF-C7620627 from the National Science
Foundation to the Center for Science and Mathematics Education, The
Ohio State University; Stanley L. Helgeson, Project Director.

224 2916

ERIC
Full Text Provided by ERIC

The material in this report is based upon work supported by the National Science Foundation under Contract Number NSF-C7620627. Any opinions, findings, and conclusions and recommendations expressed in this publication are those of the authors and do not necessarily reflect the views of the National Science Foundation.

INTRODUCTION

In the spring of 1976, the National Science Foundation contracted with the Center for Science and Mathematics Education (CSME) at The Ohio State University to conduct a survey of the literature on needs and practices in precollege science, mathematics, and social science education for the period 1955 through 1975. The Center subcontracted the social science portion of the project to the Social Science Education Consortium (SSEC).

SSEC's task was to identify, analyze, and summarize the literature produced between 1955 and 1975 concerning:

- 1) the state of and trends in practices in precollege social science education;
- 2) the effectiveness and efficiency of practices in precollege social science education; and
- 3) the state of and trends in perceptions of needs in precollege social science education.

The project was to take one year, from July 1976 through June 1977.

Procedures

Four procedural questions loomed large during the project:

- 1) whether to distinguish between social studies education and social science education, and if so, how;
- 2) what specific topics to consider within the broad three-point outline given above;
- 3) how to search the literature in order to identify all relevant documents; and

4) how to select specific documents for analysis or mention in the report.

Social Studies/Social Science. The definition of the field of social studies education has been a central and continuing problem for the profession. One of the major questions within this issue has been the extent to which precollege social studies education should be governed by or limited to the boundaries of the academic disciplines of the social sciences. (A lengthier discussion of the nature of the definitional controversy may be found in the early part of Section 4.0 of this report.)

Because this issue has been so important in the field, it was decided that this report must reflect the controversy. Hence, rather than limiting our review only to the literature dealing with social studies defined as social science education, we have taken a broad approach and dealt with social studies from multiple perspectives.

However, we have, where possible and appropriate, focused special attention on literature dealing with the social science aspects of social studies education. For instance, in Section 1.4, we have devoted extensive discussion to studies of the treatment of social science content and methods in social studies curriculum materials.

Specific Topics. The detailed working outline for the report has gone through numerous revisions in the course of the project. The rough outline developed at the very beginning of the project contained over 150 questions that we thought might be answered through our review of the literature. Examples of questions included on this initial "wish list" of things we would like to find out were: What are representative social studies program objectives? What is the relative emphasis on history and social science in the curriculum? What are the dominant instructional strategies in use? What sorts

of "fads" have there been in social studies over the years? How well tested are social studies materials prior to publication? What curriculum packages are most commonly used? How well financed is social studies in comparison to other areas of the curriculum? What are typical course patterns for social studies teacher training? What kinds of instructional methods are most effective? Most efficient? What kinds of people have been most active in making demands on the social studies curriculum? What kinds of administrative support and inservice training are typically provided by school districts for social studies teachers?

As we progressed through the review, a number of these initial questions were dropped on the grounds that they were trivial or only of tangential interest. Others were dropped because there was not literature dealing with them. (Sometimes these latter questions were, however, mentioned in the report in order to point out the absence of information on significant questions.) The major areas of concern that remained intact throughout the review and writing process were:

- 1) social studies curriculum scope and sequence
- 2) social studies instructional methods
- 3) social studies curriculum materials
- 4) social studies teacher education

We sought and found information on practices, effectiveness, and needs in all these areas.

Search Strategy. At the beginning of the project, a number of extensive, systematic searches were conducted on several data bases. As the project progressed and specific gaps within particular topics were identified, highly focused, systematic searches were conducted as needed. Also, as the project progressed--and especially near the end of the project--less systematic means

were used to "pinch hit" where systematic searches had not turned up documentation we thought might be available. For instance, we would follow up references in footnotes or phone someone considered to be an expert on a particular topic for suggestions of sources.

The extensive, systematic searches consisted of the following:

- 1) Computer search of the ERIC data base (includes Resources in Education and Current Index to Journals in Education)
- 2) Computer search of Dissertation Abstracts.
- 3) Computer search of Psychological Abstracts.
- 4) Computer search of Sociological Abstracts.
- 5) Manual search of Education Index
- 6) Manual search of all comprehensive reviews of research in social studies education
- 7) Manual search of all compilations of abstracts of dissertations in social studies education
- 8) Manual search of the journal Social Education

For a complete list of the search terms used in the four computer searches, see the appendix at the end of this report, beginning on page 538. Education Index was searched under all terms beginning with the words "social studies." Since the comprehensive reviews, the dissertation compilations and Social Education focused specifically on social studies documents, all items mentioned in them were considered relevant initially. (For a detailed listing of the reviews and the compilations, please see the discussion of sources in Section 2.2 of this report.)

The special-focus, systematic searches conducted as need arose during the project consisted of both computer and manual searches of the ERIC data base; manual searches of various handbooks, encyclopedias, and state-of-the-art monographs; and manual searches of the SSEC's collection of curriculum

materials and background comments in its Resource and Demonstration Center and archives.

A total of 1,033 usable items were produced by the initial extensive computer search of the ERIC data base. (Culling of duplications and irrelevant items from the initial printout reduced the original 1,677 to the 1,038 figure.) The computer search of Psychological Abstracts produced a total of 265 items, of which 155 were usable; of Sociological Abstracts, 81 items, of which 15 were usable; and of Dissertation Abstracts (which was searched only from 1973, since the compilations covered the previous period), 186, of which 85 were usable. Exact numbers of citations from the comprehensive reviews and the dissertation compilations are given in Section 2.2 of this report. We did not keep track of the numbers of items turned up in the more limited systematic searches and the unsystematic searches. Although the exact size of the total pool of documents identified cannot be determined, due to overlap among data bases and other problems, we would estimate that the total pool was four to five times the number of documents actually cited in the report; that is, the total pool would be approximately 2,000 to 2,500 documents.

Selection of Documents for Inclusion. We have attempted to indicate in each section of the report what types of documents were selected for mention in that section and what guidelines were used in choosing those documents and rejecting others.

In some sections, we have attempted to be exhaustive and mention all pertinent documents. For instance, in Section 1.4, we felt this report an appropriate occasion for compiling as complete a list as possible of all the textbook content analyses that had been done in the last 20 years. In Section 2.0, we deemed it absolutely necessary to include all comprehensive and special-focus reviews of research in social studies education from the last

20 years. And, in Section 4.0, it was considered important to identify all of the studies of the impact of "new social studies" materials. There have been so few studies of impact that every little bit of information available becomes important.

In other sections, we have attempted to present only representative documents. In most cases, this is due to the fact that there is simply too much literature to discuss or even mention each document separately. This is particularly true of the section on perceptions of needs in the social studies (Section 3.0).

One guideline that has been applied throughout this report is that the documents mentioned must be accessible. Readers must be able to obtain copies through a commercial publisher, ERIC, or some other ongoing agency. In a few cases we ran across "fugitive" documents that we put into ERIC; ERIC order numbers (ED numbers) are given for these and the documents that were already in ERIC in the entries in the reference list at the end of this report. In a couple of cases, fugitive documents that we wished to use could not be put into ERIC; in those cases, we have noted in the entry in the reference list how readers may obtain photoduplications of the documents.

Organization of This Report

This report is organized into four major sections. Section 1.0 describes the literature that surveys the state of actual practices in social studies education and changes in those patterns over the 20-year period. This section focuses on the "status" literature, as distinguished from the "research" literature—that is, studies attempting to discern relationships among variables. Section 2.0 takes up these questions of relationships, by examining research on the effectiveness and efficiency of social studies practices. Section 3.0 then

examines the problem of identifying needs in the social studies. And, finally, Section 4.0 takes a look at certain aspects of the "new social studies," which can be considered the major trend or movement influencing the field during the last 20 years. More specific information on the contents of each of these four major sections can be obtained from the detailed table of contents provided for this report.

In addition to the four major sections, there is a lengthy reference list containing full bibliographic information on each document mentioned in this report. There is also an appendix at the end of the report describing the search terms used in the computer searches.

Summary of Findings

One hundred fifteen "summary observations" have been listed at various points throughout this report. These comments are intended to present, in capsule form, a description of what the literature on precollege social studies education from 1955 to 1975 tells us. They are grouped at the end of each major section or subsection of the report, immediately following the narrative discussing and documenting them. The table of contents indicates the specific pages on which these summary observations may be found. Some readers may wish to read through the summary observations before (or instead of) reading the full report or specific sections.

Since 115 summary observations, each of one sentence or more, is still a lot of reading, we have attempted here to distill them further yet, in order to give the reader a preview of what is contained in this review of 20 years of social studies literature. The paragraphs below present the barest essentials only, for, while we have gained conciseness by this introductory summary, we have lost a certain amount of preciseness. It is highly recommended

that readers at least examine the end-of-section summary observations in addition to this brief overview of findings.

Summary of Literature on the STATE of Social Studies Practices

1) State of the Status Literature

Although there have been a fair number of studies examining the state of social studies practices at various times during the last two decades, we do not obtain a very clear picture of many aspects of practice from these studies. Probably the clearest status picture available is that concerning curriculum materials; numerous analyses of the content of materials have been done. We have a less clear picture of patterns of actual classroom practice and how they may or may not have changed over the 20-year period. And surveys of the state of teacher education practices give us very little information at all.

2) Curriculum Content

Although the scope and sequence of the social studies curriculum has remained basically stable in general outline over the 20-year period from 1955 through 1975, there have been a few noticeable shifts within that framework. Particularly noticeable has been the infusion of concepts and methodologies from the scientifically oriented social science disciplines. (See Section 1.2 for a more detailed set of findings and documentation.)

3) Instructional Practices

Studies of the extent of use of various kinds of social studies classroom practices at various points in time are rather limited. The studies that do exist indicate that, contrary to popular belief, the lecture method may not have been nearly so pervasive in the fifties and sixties



as has been claimed; a sizeable proportion of teachers employed multiple instructional techniques. Recent studies do not indicate clearly whether patterns of instructional methods have changed as a result of the "new social studies" and other educational innovations. (See Section 1.3 for a more detailed set of findings and documentation.)

4) Curriculum Materials

A substantial number of studies have analyzed social studies curriculum materials. The aspects of materials that have been analyzed most frequently are (a) their treatment of social science content and methods; (b) their treatment of specific concepts and themes (such as communism, violence, social change); and (c) their treatment of minority groups. Almost without exception, analysts of social science content and methods in social studies curriculum materials have concluded that there are inadequacies in treatment of the social sciences by textbooks. (See Section 1.4 for a more detailed set of findings and documentation.)

5) Teacher Education

Most studies of the academic preparation of social studies teachers have concluded that there are major deficiencies in their social science coursework. (Studies cited in Section 2.0, on effectiveness, however, call into question the value of additional coursework in the social sciences.) Surveys of course requirements in teacher training institutions indicate a slight trend away from the dominance of history and toward the inclusion of more social science courses; however, no such pattern is apparent in surveys of state certification requirements. (See Section 1.5 for a more detailed set of findings and documentation.)

Literature on the EFFECTIVENESS of Social Studies Practices

Research on Effectiveness

Studies educators have not been very much interested in or affected by. Only recently has research in the field begun to blossom. There are many complaints about the lack of a cumulative research base in this area. (See Section 2.2 for a more detailed set of findings and documentation.)

Curriculum Content

Very little empirical research has focused on questions about the relative effectiveness of different kinds of content in achieving the goals of the social studies. (See Section 2.3 for a more detailed set of findings and documentation.)

Instructional Methods

A large proportion of the effectiveness research conducted in the social studies falls under the heading of research on instructional methods and this focuses on various methods labeled "critical thinking," "problem solving," and the like. Most of this research shows no significant differences between critical thinking methods and so-called traditional methods. However, weaknesses in research design and weaknesses in the ability to interpret existing research may well be hiding real differences in effectiveness. Some telling results in regard to carefully defined techniques have been obtained from research. (See Section 2.4 for a more detailed set of findings and documentation.)

Curriculum Materials

There has not been a great deal of research on the effects of curriculum materials and there has been even less effort directed toward interpreting the research there is in this area. (See Section 2.5 for a more detailed set of findings and documentation.)

5) Learner Variables

Research on the effects of various learner variables (such as student attitudes, interests, abilities, and socioeconomic backgrounds) on learning in the social studies is rather spotty. There has been an interest in how children's developmental abilities affect learning in the social studies and a few researchers have been able to draw conclusions from this body of research; however, their findings have apparently not been put into practice by curriculum developers and teachers, as yet. (See Section 2.6 for a more detailed set of findings and documentation.)

6) "New Social Studies"

No attempts have been made to draw conclusions from the body of research surrounding the development of the "new social studies" project materials. (See Section 2.7 for documentation.)

7) Outcomes of Schooling

National achievement testing programs have produced trend data on social studies achievement at lower cognitive levels. These data indicate that students' knowledge of so-called basic information in the social disciplines, particularly history, is declining. National and state assessments efforts in social studies and citizenship have produced results in a wider variety of areas, including attitudinal outcomes of schooling; however, because assessment efforts are recent developments, trend data are not available here. The testing programs and assessments do not generally attempt to tie test results to possible causal variables in test-takers' backgrounds. However, a few studies have attempted to make such linkages and have generally found that gross variables, such as number of credit hours taken in social studies. (See Section 2.8 for a more detailed set of findings and documentation.)

8) Teacher Education

Social studies teacher education has become an important research interest only within the last decade. Cumulative findings in this area are few and suggest that, even though a variety of teacher training practices produce changes in teacher behavior, student behavior is not affected by the changed teacher behavior. Combining teacher training in academic content and instructional methods may hold the best promise for affecting student outcomes. (See Section 2.9 for a more detailed set of findings and documentation.)

Summary of Literature on NEEDS in Social Studies Education

1) Definition of Social Studies

Because the question of the purposes and boundaries of the field of social studies remains unsettled, it is difficult to pinpoint needs in any precise sense. All manner of needs--including some contradictory ones--have been claimed for the social studies.

2) Academic Freedom

One of the few things on which social studies educators seem to have been able to agree is that academic freedom and the difficulties of dealing with controversial issues in the classroom pose a problem of particularly strong significance for social studies teachers, due to the inherently "hot" nature of the subject matter.

3) Social Scientists' Perceptions of Needs

During the sixties, social scientists exercised a particularly strong influence on the social studies, attempting to infuse more and better social science content and methods into the curriculum.

4) Layperson's Perceptions of Needs

The influence of laypersons (people who are neither social scientists nor professional social studies educators) on the social studies has waxed and waned over the 20-year period from 1955 to 1975 and the demands of laypersons have displayed no consistent pattern from one period to the next.

(See Section 3.0 for a more detailed set of findings and documentation for all of the above conclusions.)

Summary of Literature on NEW SOCIAL STUDIES

1) Characteristics of the "New Social Studies"

There are many differing perceptions of what the characteristics of the "new social studies" are, although at least seven "core" characteristics seem to be generally agreed upon. (For a list of these characteristics and documentation, see Section 4.0.)

2) Criticisms of the "New Social Studies"

At least ten different categories of criticisms have been advanced against the "new social studies" over the last decade. (For a list of these categories and documentation, see Section 4.0.)

3) Impact of the "New Social Studies"

Some data on the impact of the "new social studies" are available. These show that the national project materials have not been widely adopted by school systems, but they do not shed light on other possible modes of influence, such as impact on the kinds of materials being developed by commercial publishers. (See Section 4.0 for additional discussion and documentation on impact.)