10-1-1979

Theory and research in social education 07/03

National Council for the Social Studies. College and University Faculty Assembly

Follow this and additional works at: http://scholarcommons.usf.edu/coedu_pub

Part of the Education Commons

Scholar Commons Citation
http://scholarcommons.usf.edu/coedu_pub/23

This Article is brought to you for free and open access by the College of Education at Scholar Commons. It has been accepted for inclusion in College of Education Publications by an authorized administrator of Scholar Commons. For more information, please contact scholarcommons@usf.edu.
THEORY AND RESEARCH
in Social Education

Vol. VII No. III Fall 1979

Hurst: Political Pablum: Democratic Role Models in Children's Picture Books

Shaver: The Usefulness of Educational Research in Curricular/Instructional Decision-Making in Social Studies

Clements: The Taxonomy of Educational Objectives: An Ethnographic Perspective on an Occupational Culture

A journal to stimulate and communicate systematic thinking and research in social education
Volume VII
Number III
Fall 1979

Theory and Research in Social Education is the quarterly official journal of the College and University Faculty Assembly of the National Council for the Social Studies. It is a general review open to all social studies educators, social scientists, historians, and philosophers. A general statement of purposes and style for manuscripts may be found at the end of the journal.

A subscription to Theory and Research in Social Education may be obtained by membership in the College and University Faculty Assembly of the National Council for the Social Studies. Back issues may be obtained for $4.00 each and institutional subscriptions are $20.00 per year. Write the editor for these orders.

Copyright 1979 by the College and University Faculty Assembly of the National Council for the Social Studies. All rights reserved.
T.R.S.E.

TABLE OF CONTENTS

1 Political Pablum: Democratic Role Models In Children's Picture Books
   Joe B. Hurst
   Several content analyses in recent years conclude that children's literature contains sexist, racist and ageist stereotypes. Such studies analyze illustrations, characterization, themes, plots and wording. In addition, content analyses of elementary social studies and language arts/reading tests can be found frequently in the literature of the last decade. To date there are no systematic content analyses of children's picture books, literature, textbooks, or basal readers that examine democratic or participatory role models. The major purposes of this study are to develop and test out in a pilot study a method for analyzing the "content" of children's books to determine the extent to which main and secondary characters demonstrate active participation in politics and make realistic decisions. In this way potential sources of political socialization and citizenship education could be identified and future research could focus on specific role models and their potential and actual effects.

21 The Usefulness of Educational Research in Curricular/Instructional Decision-making in Social Studies
   James P. Shaver
   The usefulness of educational research for curricular/instructional decision-making in social studies education is questioned on several grounds including the frequent lack of clearcut implications of findings for practice because of alternative value and factual assumptions, the lack of cumulative findings relevant to the "real life" of the school, the inadequate understanding of science as a knowledge-building endeavor that underlies much educational research, and the difficulty of making decisions about individual students based on "central tendency" findings. Research findings, it is suggested, do have heuristic value for teachers as sources of alternatives for instruction and for classroom research. Past studies may serve as a basis for further, more productive research in social studies education, but a thorough reassessment of research methods, strategies and aims is urged.

47 The Taxonomy of Educational Objectives: An Ethnographic Perspective on an Occupational Culture
   Millard Clements
   The basic question that motivates the present ethnographic exploration of The Taxonomy is this: What can we learn about the educational culture that produced this social artifact? As with any
ethnographic investigation, this research is concerned with empirical questions about the document itself. What can we learn from its language? Its description and accounts of its affairs? The matter it calls to our attention and explains? The matter that it ignores and avoids? What is the taken for granted world of Taxonomic Culture? This study is not a book review nor is it a debate about the logical, scientific or philosophical adequacy of the Taxonomy. It is an attempt to look at a residual document of a familiar culture as we have learned to look at the songs, stories, and myths of far away peoples. Looking at ourselves ethnographically encourages an "objectivity," a "neutrality" about beliefs and customs that is not our usual experience.

64 Book Review Section: Request for Reviewers, Review Criteria and Format

65 List of Reviewers
Several content analyses in recent years conclude that children's literature contains sexist, racist and ageist stereotypes. Such studies analyze illustrations, characterization, themes, plots and wording. In addition, content analyses of elementary social studies and language arts/reading texts can be found frequently in the literature of the last decade. To date there are no systematic content analyses of children's picture books, literature, textbooks, or basal readers that examine democratic or participatory role models.

The major purposes of this study are to develop and test out in a pilot study a method for analyzing the “content” of children's books to determine the extent to which main and secondary characters demonstrate active participation in politics and make realistic decisions. In this way potential sources of political socialization and citizenship education could be identified and future research could focus on specific role models and their potential and actual effects.

Children's Literature and Socialization

According to Stewig and Higgs (1973) one of the socializing agents in many American children's environments are the books parents—and later teachers—read with or to them. Their content analysis of several children's picture books focuses on sex-role stereotyping and the degree to which children's literature reinforces traditional male and female roles. They argue that “it has been clearly established by researchers that basic sex role identification begins in the earliest months of life, and is essentially complete by the time a child is five” (p. 46). However, the close relationship between sexist stereotypes (found extensively in the books they sample) and the actual sex role identification of young readers is assumed rather than tested and supported by scientific evidence.

In another content analysis of children's literature Carmichael (1977) presents and discusses specific examples of sexism in popular children's books. She too assumes that the presence of sexist stereotypes in children's books will lead to a change in or a strengthening of traditional
attitudes and roles. She concludes that aside from their aesthetic visual
delight and entertainment value, children's picture books portray
children, adults, animals and mythical creatures in a variety of ways,
and as a result "may" communicate and reinforce "productive and
decidedly unproductive" social attitudes and roles (pp.99-100).

These two studies and several other content analyses of sexist,
racist and ageist stereotyping in children's literature argue that there is
a "potential" danger that negative images are communicated and rein-
forced through text, pictures, plot, characterization and theme. Poten-
tial effects are emphasized here and throughout this study because of
the paucity of research evidence on the actual effects of reading on
children's attitudes towards themselves and other people.

Other studies point out the potential effects of reading sexist, racist
and ageist literature on children because children's books are "vehicles"
for the presentation and concrete illustration of important social values
to young children. For instance, Weitzman et al. argue that such books
provide to children "role models" of what they can and maybe should be
like when they grow up (see also Bem and Bem, 1975; Schnell and
Sweeney, 1976). According to these researchers picture books reflect
cultural values and the role models present in them may even serve to
"persuade" children to adopt those values (Weitzman et al., 1972, p.
1126).

Despite the wealth of evidence and criticism about sexist, racist and
ageist stereotyping in children's books of all kinds, there is "no concrete
evidence of the effects" of such literature on children (see Tibbetts,
1978). According to Kimmel (1970) the assumption that reading
material does affect young readers "is considered almost as an act of
faith among teachers, librarians, parents and publishers" (p.210).

There is research to support the view that reading can affect one's at-
titudes, values and development (see Kimmel, 1970; Schneyer, 1969;
Lundsteen, 1972; Shirley, 1973). However, the results of such studies
indicate that the effects are "extremely individual, personal, varied, and
unpredictable" as well as "uncertain" (Tibbetts, 1978, p.167).
Therefore, criticism of and suggestions for children's literature which is
"supposed to" suffer from sexism, racism and ageism are founded on the
assumption that what a child reads, or has read to her or him, affects
what he or she feels and believes about other people, and about herself
or himself.

At the same time, while making a plea for scientific evidence to support
claims about the effects of children's literature on young readers
Tibbetts raises the fundamental question about content analyses and
this lack of data. She argues that just because there is no concrete
analyses and this lack of data. She argues that just because there is no
concrete, conclusive evidence that children's books "harm" young peo-
ple and negatively affect their attitudes about other people, there are no
data that demonstrate that they do not, or that harm is not being done
Political Socialization and Children's Literature

One study (Hess and Torney, 1964) of the political socialization of children suggests that basic political orientations are formed very early in life, especially between the ages of three and thirteen. The authors of the study further conclude that children tend to maintain these orientations throughout their lives in the absence of very powerful environmental influences or cataclysmic events such as the assassination of a President or a major war.

Up until rather recently political scientists studying the political socialization of American youth have not studied how political behavior and attitudes are learned. According to Sigel (1970b) prior to 1970 there were "virtually no experimental and very few field studies that have recorded exactly how man proceeds step by step to acquire his political meanings, values and behaviors" (p. 3).

Since 1970 several studies have focused upon agents and the process of political socialization (see Adelson, 1971; Artherton, 1974; Atkin and Gantz, 1975; Beck and Jennings, 1975; Jennings and Ehman, 1976). The findings confirm that the family and school environments are primary factors in socialization.

The family influences children's political attitudes and behavior in many ways, and while being a major factor in political socialization family influences do not dictate how a child will act and believe. Party identification and participatory values are influenced by the family. For instance, studies of voting behavior suggest that participation in elections is related to being reared in a home where political discussion and activity were present. Party identification of parents and their children correspond highly (Jaros, 1973; Renshon, 1977).

Siegel (1970a) suggests that the family exerts a strong influence over the political orientations of children because (a) it plays a crucial role in providing physical and emotional needs; (b) it represents the earliest example of a system of social, moral and personal values and actions that the child experiences; and (c) it uses particular child-rearing practices to exercise authority and make decisions. Such feelings as trust, efficacy and loyalty are rooted in the family experience.

The role of the family in the socialization of a child is indeed an important one. Riccards (1973) summarizes this role in the following way:

The role of the family in the political socialization process is important, but it is not all-embracing. . . . The family does not mold the child's total personality and fix his attitudes forever. . . . However, the family lays the early foundations of partisanship, efficiency, self-esteem, information, trust and morality.

Lastly, the family is important in one other major way as well: it is located within a certain socioeconomic framework which has some effect on the child's political development. . . . placing the child in
a series of learning experiences which have direct consequences for
political socialization. (p. 48)

While evidence supports the strength of the family as a socializing
agent, no studies focus on the role of children's literature in political
learning or its contribution to the family or school environment.

Several content analyses of textbooks used in social studies find that
students are not exposed to political and social reality (see Massailas
and Hurst, 1978, p. 29; Massailas, Sprague and Hurst, 1975, ch. 12).
Most of the civics material in early elementary grades, for example, (1)
presents little factual information about the country or government, (2)
tends to be designed to inculcate feelings of loyalty and compliance and
(3) tends to justify and legitimize existing institutional arrangements
(see Goldstein, 1972; Anyon, 1978).

The author hypothesizes that children's literature contributes to this
lack of reality and factual information about our country and govern-
ment in what children read. Books children read and have read to them
at home and school are part of the overall environment there. Books
stimulate attending behavior and conversation (Riley, 1977) and
therefore might initiate discussion of politics and social issues. Books
also stimulate questions from young readers about a variety of things.

The purpose of this study, despite the lack of research evidence to
support a strong relationship between children's literature and basic
and political socialization, is to determine the extent to which role
models present might potentially contribute to children's learning
about the American political, economic and social systems. This study
has political, ethical and instructional implications as well. What
political attitudes and behaviors are presented in children's picture
books? How might they affect subsequent political action, thought and
attitudes? Do children's authors give a realistic and fair picture of
America and its diverse culture? Are racist, sexist, ageist and an-
tidemocratic role models present and what should be done with them?
How could children's literature be used as a tool in social studies and
citizenship education?

Citizenship Education As Active Participation

One aspect of political socialization that has received attention from
political scientists and social studies educators is active participation.
A vital, exciting emphasis in civic education is that of citizen decision
making and participation. Yet this focus of social education is often
"overlooked" in social studies curriculum and classrooms (Longstreet,
1978). "Decision making sums up in one powerful concept the variety of
processes which are of crucial importance to democratic citizenship, and
is, in this sense, to the social studies what discovery has been to the
sciences" (p. 19).
Several scholars advocate that the focal points of social and citizenship education ought to be active participation and decision making (see Engle, 1960; Shaver, 1965; Kalsounis, 1965; Banks and Clegg, 1973; Gillespie and Patrick, 1974; Newmann, 1975; Remy, Anderson, and Snyder, 1976; Massialas and Hurst, 1978). Berman (1978) argues that one is hard pressed to locate social studies curricula and classroom activities which focus on teaching the “delicate and difficult processes” necessary for making “tough decisions.” She further states:

we must provide settings in which processes of decision are analyzed, taught, and evaluated. From early grades through the remainder of schooling, children and youth need help in learning behavior associated with the decision making process . . . .

Wise decision making involves skills or information gathering or sifting. It involves skills in finding and evaluating the information critical to the decision . . . . (pp. 424-425)

Newmann (1975) suggests that civic education is education for “competence” in (1) attaining consequences citizens intend, (2) acting purposefully to influence one’s environment, (3) having some impact on public affairs consistent with one’s intentions, and (4) participating in the American democratic political process.

Another important goal of citizenship education is to “provide students with sufficient experiences in analyzing and action . . . so that they will develop habits of participation which will transfer into their everyday lives” (Gillespie and Patrick, 1974, p. 4). Education for citizenship and decision making involves action. Unless children carry out planned action, there is no way to assess the impact their decisions will actually have on others and the environment. Therefore deciding is not enough. “To be ethical, they must also do something about their decisions” (Chapman and Davis, 1978, p. 460).

**Figure 1: Types of Participation**

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inactive</td>
<td>No activity</td>
</tr>
<tr>
<td>Voting Specialist</td>
<td>Vote regularly does nothing else</td>
</tr>
<tr>
<td>Parochial Participant</td>
<td>Contact local officials about personal problems</td>
</tr>
<tr>
<td>Communalist</td>
<td>Contact officials on broad issues engage in cooperative group activity, vote</td>
</tr>
<tr>
<td>Campaigner</td>
<td>Heavily active in campaigns and vote</td>
</tr>
<tr>
<td>Complete Activist</td>
<td>Active in all ways</td>
</tr>
</tbody>
</table>
Newmann cites the findings of several scholars studying political participation including Schwartz and Verba and Nie. All the studies tend to point to low levels of political participation by American citizens. Verba and Nie define six distinct categories of participation (see Figure 1).

These six types of participation provide one basis for the analysis scheme used in this study. The illustrated, narrated and dialogue accounts of characters' behavior are coded in one of these categories.

**Participation Skills**

A second basis for the analysis scheme used in this study is the identification of characters' behaviors which represent the use of "particular skills and knowledge that enable them to examine prospectively and retrospectively the consequences of particular solutions" (Berlak, 1977, p. 4). Massialas and Hurst (1978) argue that participation skills imply action and demonstrate a number of cognitive, attitudinal, evaluative, normative and participatory competencies—exhibit other specific participation behaviors.

The cognitive skills include such operations as identifying and defining problems, forming hypotheses and alternative solutions, exploring their consequences, collecting and analyzing data, and making and applying generalizations. "Evaluative" skills relate to making judgments and recommendations. They include identifying issues, taking defensible positions, and grounding those positions. "Attitudinal" behaviors demonstrate such affect as being objective, showing political interest and trust, being efficacious and demonstrating cross-cultural awareness. "Normative" behaviors reflect important American ideals or values: empathizing, being fair, promoting equality, and applying justice. Finally, "participatory" skills form the basis of an "action-oriented laboratory" (Massialas and Hunt, 1978, p. 28) for real-life participation and decision making because they are competencies in "how to participate" in decisions affecting each student's own life. Participatory skills include proposing, mobilizing, organizing, cost/benefit analysis, bargaining, negotiating, rule making, and voting (Massialas and Hunt, 1978).

In addition, decision making involves the major steps of identification, examination, decisions (Meyer, 1978; Hurst, Weiss, et al., 1977) and evaluation (Hurst, Weiss, et al., 1977). More specifically, decision
making includes at least the following skills (Meyer, 1977; Hurst, Weiss, et al., 1977):

1) Define the decision to be made
2) Identify the goals
3) Define observable measures of the goals
4) Identify available alternatives
5) Collect and analyze information
6) Analyze the costs and benefits of alternatives
7) Rank the alternatives
8) Rethink the decision
9) Act
10) Evaluate actual consequences
11) Revise if necessary.

Viewed in this way, decision making is a logical process of choice from among available alternatives. Decision making can be "personal" or "social" in nature and can involve political, economic, social and/or environmental elements and consequences.

Another focus of this investigation is the identification of the extent to which characters' behavior reflects the use of these specific decision making skills. In other words, characters' behavior in the picture books sampled are recorded in three major sets of categories: (1) the six types of participation described by Verba and Nie (1972), (2) participation competencies outlined by Massialas and Hurst (1978), and (3) the above mentioned decision making skills. The specific procedures for identifying and recording these behaviors is discussed in the next section.

Methodology

One of the problems associated with content analysis is the systematic and objective selecting of a sample of communication messages to be coded and defining of categories to be observed. One way to deal with this issue is to select "direct dialogue," or quoted passages in children's literature as messages (Haas, 1971). In addition, observable characteristics and activities found in illustrations or contained in the author's descriptive narrative also provide a set of observable messages, or "content" to be analyzed. For purposes of this study the content included (1) all quoted passages, (2) each author's narrated descriptions of characters and their activities, and (3) the observable activities of characters in illustrations.

All social, political and decision making activities in illustrations, dialogue and narration were analyzed. In addition, the direct dialogue was studied in order to identify examples of decision making and par-
ticipation skills. In other words, each sentence of direct dialogue was analyzed and placed into one of the cognitive, evaluative, attitudinal, normative or participatory categories or into another set of categories including questions, exclamations, greetings, farewells, giving information, describing feelings, and statements of wants or wishes.

Each of the books in the sample was analyzed twice. First, the illustrations were studied and frequencies recorded for the number of political and personal decision making activities observed. Second, the quoted dialogue and narrative descriptions of activities and thoughts were studied. Frequencies of political and decision making activities and of particular skills were recorded.

Almost every school and public children’s library collection contains one or more copies of the Caldecott winning picture books. Each year one book is selected on the basis of the quality of its illustrations. Due to their award-winning status these books become a very select “recommended” list for all library collections. For this reason, the Caldecott Medal books for the past twenty years were selected as one-half of the sample.

In addition, a second group of twenty books was selected from a list of publications commonly found in most children’s library collections. This sample was selected randomly to represent non-Caldecott winners. This group included one Caldecott honorable mention but no winners, so there was no overlap in the two halves of the sample. Although the second group was not made up of one book published in each of the past twenty years as were the Caldecott winners, there were two published in 1958, ten in the 1960’s, and eight published from 1971 through 1978.

Frequencies were tabulated for each category of skills and activities. Particular attention was given to young and adult characters, who would most likely serve as role models of decision making and participation. Elderly characters, it was hypothesized, would most likely be pictured as passive spectators (Storey, 1977; Barnum, 1977) while animals might not be “modeled” by youthful readers.

Results

The results of this analysis are presented in five sections: (1) the frequency and types of political activities, (2) the frequency and types of political actors, (3) the frequency of decision making activities, and (4) the frequency and range of decision making and participation skills.

Political Activities: A Void

Table 1 represents the range and frequency of political activities found in the forty picture books analyzed. A very limited range and an almost total lack of active participation in any political activity is illustrated. Only one percent of the characters participated in parochial politics (e.g., going to police for help) while ninety-nine percent of the
major characters in the books were politically inactive, or at least they were never shown participating in any political activity. The lack of political participation and specific political activities represents a void in active political behavior which might potentially contribute imitative role models for children.

<table>
<thead>
<tr>
<th>Types of Participation</th>
<th>Specific Political Activities</th>
<th>No. of Times</th>
<th>People Involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inactive</td>
<td>Police arresting law breaker</td>
<td>3</td>
<td>5*</td>
</tr>
<tr>
<td></td>
<td>Spectators watching police</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Citizens catch a thief</td>
<td>1</td>
<td>not shown</td>
</tr>
<tr>
<td>Voting</td>
<td>Dancing for a new chief</td>
<td>1</td>
<td>not shown</td>
</tr>
<tr>
<td>Parochial Participants</td>
<td>Initiation ceremony for child entering tribe</td>
<td>1</td>
<td>not shown</td>
</tr>
<tr>
<td></td>
<td>Council meeting</td>
<td>1</td>
<td>10*</td>
</tr>
<tr>
<td></td>
<td>Testimony on own behalf at council meeting</td>
<td>5</td>
<td>10*</td>
</tr>
<tr>
<td></td>
<td>Riding in royal barge</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Soldiers firing a cannon</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Battle/war</td>
<td>2</td>
<td>7</td>
</tr>
</tbody>
</table>

*Includes arrest of a hippopotamus and total animal council meeting called by “King Lion.”

Table 2 presents the range and frequency of political actors. Again a very limited range marked the types of political actors included in the books studied. In no instance were there any significant political actors from the American democratic system at the local, state or federal levels. In fact, the only exposure youthful readers would have to be the American political system was to policemen arresting four robbers, and a hippopotamus, and a lady paying the damages to free the hippo from jail. The other “political actors” were kings, queens, warriors, elders, etc. from cultures outside the United States. None of these characters were shown carrying out any of their political roles or using political power.
Decision Underload

For the past decade Toffler (1969, 1974) has discussed "decision overload" or the state of having to make many decisions rapidly. According to Toffler reality for most Americans is made up of a never ending series of decisions which confront us. All too often these decisions are accompanied by both an abundance and scarcity of information. As illustrated in Table 3 characters in children's picture books are in a state of "decision underload."

Table 2: Range and Frequency of Political Actors

<table>
<thead>
<tr>
<th>Actor</th>
<th>No.</th>
<th>Actor</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>King</td>
<td>5*</td>
<td>Soldier/warrior</td>
<td>10**</td>
</tr>
<tr>
<td>Queen</td>
<td>2*</td>
<td>Police</td>
<td>3</td>
</tr>
<tr>
<td>President</td>
<td>0</td>
<td>Lawyers</td>
<td>0</td>
</tr>
<tr>
<td>Chief</td>
<td>1</td>
<td>Judges</td>
<td>0</td>
</tr>
<tr>
<td>Sultan</td>
<td>1</td>
<td>Mail person</td>
<td>0</td>
</tr>
<tr>
<td>Senators</td>
<td>0</td>
<td>Teachers</td>
<td>1</td>
</tr>
<tr>
<td>Congress People</td>
<td>0</td>
<td>Government worker</td>
<td>0</td>
</tr>
<tr>
<td>Mayor</td>
<td>0</td>
<td>Political aide</td>
<td>1</td>
</tr>
<tr>
<td>Local officials</td>
<td>0</td>
<td>Elders of the tribe</td>
<td>4</td>
</tr>
<tr>
<td>Governor</td>
<td>0</td>
<td>Wiseman</td>
<td>2</td>
</tr>
<tr>
<td>Military Leader</td>
<td>1</td>
<td>Sun god</td>
<td>2</td>
</tr>
</tbody>
</table>

*Including two male lions and one lioness  
**Does not include uncountable number involved in battles or in a parade

Very few decisions were made at all, virtually none of them political or democratic in nature. There are ten examples of children making personal decisions, but only one of these is representative of political, economic or social decision making, and it takes place in Mexico involving a Mexican girl.
Similarly, local, state, national or international issues are totally neglected in the books analyzed. War is included in three books, poverty in one, and robbery in three books. None of them are treated as social issues, only as part of the plot or character development, never as a major theme. There were no books that focused on any relevant issues (e.g., civil rights, conservation, equality, poverty, racism, unemployment or crime).

Examples of Decision and Participation Skills

Each of the one thousand, one hundred seventy-four (1,174) sentences selected as content was analyzed and coded in one of forty-five categories. In Table 4 the frequencies for several categories are reported. There are virtually no examples of decision making skills outside asking questions, sharing information or descriptions, and stating wants, wishes or needs.

<table>
<thead>
<tr>
<th>Skill</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify goals</td>
<td>1</td>
<td>.1</td>
</tr>
<tr>
<td>State alternatives</td>
<td>9</td>
<td>.8</td>
</tr>
<tr>
<td>Define observable measures</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Collect and analyze date</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Analyze costs and benefits</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Rank order alternatives</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Rethink decision</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Make decision</td>
<td>12</td>
<td>N/A*</td>
</tr>
<tr>
<td>Evaluate decision</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Change or revise decision</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>States wants, wishes, needs</td>
<td>32</td>
<td>2.7</td>
</tr>
<tr>
<td>Asks for alternatives</td>
<td>4</td>
<td>.3</td>
</tr>
<tr>
<td>Asks questions</td>
<td>216</td>
<td>18</td>
</tr>
<tr>
<td>Offering information or description</td>
<td>183</td>
<td>15.6</td>
</tr>
</tbody>
</table>

*Not in quoted dialogue, but in narrative and illustrations

In Table 5 the frequencies for several categories involving cognitive, evaluative, attitudinal, normative and participatory competencies are presented. Except for making proposals (proposing) about what to do or how to act, there are very few examples of participation skills in the books sampled. Particularly of interest are the low percentages in the “active” categories including the attitudinal, participatory and normative skills.

Throughout the books examined there were two hundred and eighty-six instances where “grounds,” or reasons and evidence could be provid-
ed for value positions, claims, hypothesis, and propositions. In only twenty-seven (9.4%) of these situations were grounds given by either characters or author. Thirteen (48.1%) of these grounds were projected or hypothesized positive or negative consequences while only four (14.8%) of the grounds provided stated facts or information gathered. In other words, factual evidence was used only occasionally to support or back up positions taken by characters in the books analyzed.

In Table 6 the frequency of concrete examples of additional "interpersonal skills" are presented. Freeing responses are defined as behaviors

<table>
<thead>
<tr>
<th>Skill</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>COGNITIVE:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defining problem</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Making hypotheses</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Exploring consequences</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Collecting and analyzing data</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Making, testing and applying generalizations</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>ATTITUDINAL:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being objective</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Showing political interest</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Showing political trust</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Being efficacious</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Demonstrating cross-cultural</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>PARTICIPATORY:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proposing</td>
<td>67</td>
<td>5.7</td>
</tr>
<tr>
<td>Mobilizing</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Bargaining</td>
<td>4</td>
<td>.3</td>
</tr>
<tr>
<td>Trading</td>
<td>11</td>
<td>.9</td>
</tr>
<tr>
<td>Negotiating</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Persuading</td>
<td>11</td>
<td>.1</td>
</tr>
<tr>
<td>Rule making</td>
<td>14</td>
<td>.2</td>
</tr>
<tr>
<td>Voting</td>
<td>2</td>
<td>.7</td>
</tr>
<tr>
<td>Supporting</td>
<td>11</td>
<td>.9</td>
</tr>
<tr>
<td>EVALUATIVE:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identifying an issue</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Taking a position</td>
<td>23</td>
<td>2.8</td>
</tr>
<tr>
<td>Grounding a position</td>
<td>27</td>
<td>2.3</td>
</tr>
<tr>
<td>NORMATIVE:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empathy</td>
<td>2</td>
<td>.2</td>
</tr>
<tr>
<td>Promoting equality</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Applying justice</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

that increase a speaker’s or actor’s autonomy to follow through on a particular message or behavior. Binding responses tend to do just the opposite—reduce one’s autonomy (Hurst and Kinney, 1979; Junge et al. 1972). Along with participation skills freeing responses represent examples of characters using interpersonal skills leading to personal independence. The data illustrate that aside from asking questions and sharing information that has influenced one’s feelings (8%) and directly reporting feelings (4%). In addition, giving an order (7.4%) was a frequent way of trying to influence others.

Table 6: Frequency of Interpersonal Responses

<table>
<thead>
<tr>
<th>Skill</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREEING (increasing autonomy):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paraphrasing</td>
<td>5</td>
<td>.4</td>
</tr>
<tr>
<td>Perception check</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Seeking information through questions</td>
<td>200</td>
<td>17</td>
</tr>
<tr>
<td>Offering information relevant to others</td>
<td>183</td>
<td>15.6</td>
</tr>
<tr>
<td>Sharing information that has influenced one’s feelings and thoughts</td>
<td>96</td>
<td>8</td>
</tr>
<tr>
<td>Directly reporting feelings</td>
<td>50</td>
<td>4</td>
</tr>
<tr>
<td>Offering new alternatives</td>
<td>9</td>
<td>.8</td>
</tr>
<tr>
<td>BINDING (decreasing autonomy):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Changing subject</td>
<td>3</td>
<td>.3</td>
</tr>
<tr>
<td>Explaining other’s behavior</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Advice/persuasion</td>
<td>4</td>
<td>.4</td>
</tr>
<tr>
<td>Vigorous agreement and approval on personal grounds</td>
<td>22</td>
<td>1.8</td>
</tr>
<tr>
<td>Denying other’s feelings</td>
<td>6</td>
<td>.5</td>
</tr>
<tr>
<td>Disapproval on personal grounds</td>
<td>7</td>
<td>.6</td>
</tr>
<tr>
<td>Commands/orders</td>
<td>88</td>
<td>7.4</td>
</tr>
<tr>
<td>Emotional obligations</td>
<td>9</td>
<td>.8</td>
</tr>
</tbody>
</table>

Conclusions

The picture books sampled provide a bland, passive view of American Society and its political and economic systems. Their illustrations, dialogue and narrative present virtually no role models of political activity, personal and social decision making, or participation competencies. Political actors are reduced to rulers in other lands and policemen. Only three instances of citizen action occur, all involving the arrest of a law breaker.

Adults and elderly persons are portrayed in roles and lives where no important decisions need to be made and no social action is required. These books are totally devoid of such common political actors as President, congress-people, mayors, governors and other officials (e.g., judges, local politicians, government employees). In only one case is the term “leadership” used, and that is in the case of the leader of a gang of
robbers. Even the rulers (e.g., kings, queens, sultan and chief) are pictured in social situations. The one exception to this is a king lion who calls a public council meeting and conducts a fact-finding trial into the death of a baby owl.

The method of analysis used in this study defines content in terms of quoted dialogue, author narrative, descriptions and observable behavior in illustrations. Employing this same method future research can extend the scope of this inquiry into democratic, or more accurately participatory, role models presented in picture books, elementary textbooks and basal readers, literature and a variety of printed educational materials. In addition, this analysis technique could be used with taped dialogues from television, movies, tapes and other media for children.

Further studies in this area need to seek evidence concerning the actual effects that reading material has on young readers' cognitive and affective development. Future research in political socialization might include content analyses, experimental designs and field studies examining the types of participation and the effects of exposure of children to democratic role models at home, on television, at school and in other settings.

One conclusion drawn from this study is that children's picture books need more realism, more decision making, more political action and actors, more social issues, and more citizen participation in their plots, themes and characterization. Much of the pressure for new efforts at upgrading the quality of children's literature in the elementary schools and community libraries is placed upon teachers and librarians. It is they who will need to order new books adding "democratic or participative criteria" to all the others they use to judge worthy literary publications. Both teachers and librarians should be encouraged to supplement available materials with creative activities and materials of their own to provide a more active, realistic view of life. College in-service and preservice training programs might focus on this and related issues in an attempt to assist elementary and secondary teachers and librarians meet this challenge.

Related Issues

It is not the author's desire to defend one model of democracy at this time. There are a number of definitions or views of democracy. For instance, Woodcock (1977) defines the word democracy as a "completely open society" where freedom is "emergent," but "never complete" and not just a political phenomena—where political power "is put into the hands of the People" (pp. 11-25). Wolfe (1968) criticizes liberalism for its (1) pluralism which favors groups already in power or existence, (2) tolerance which accepts primary groups and not unique individuals, (3) a lack of decision making about "matters of great social importance," and (4) a need for more direct democracy and ideals of community. According to Golembiewski, Moore and Rabin (1973) broader political and social participation "undoubtedly" results in a broader distribution of such things as services, goods, status and honor.
Newmann (1974) argues that the public school curriculum be structured in a way that each student develops "environmental competence" which is the "ability to act in accord with the intentions one has for making an impact in the environment" (p. 16). Behind his proposal are the basic values of the American democracy: human dignity, equality, freedom of choice, rationality, consent of the governed, active dialogue and participation, and justice.

Certainly children's picture books could present a variety of actions and systems that reflect both reality in America and such American ideals as tolerance and respect of individuals and groups, the worth and dignity of each human being, freedom, equality, fairness and justice. At least, children could read about even the most traditional forms of participation including voting, holding office, petitioning, protesting, active campaigning, and involvement in problem solving and decision making at many levels (e.g., personal, local, and national).

The author encourages authors, publishers, and purchasers of children's books to join an effort toward the publishing and reading of more realistic books which include different democratic views, forms and behaviors, especially one's reflecting active participation and decision making regarding personal and social issues. However, this need not be an effort at ethnocentrism and should include stories involving other types of political, economic and social systems which expose children to an international and intracultural perspective.

When one criticizes children's picture books on the basis of their unrealistic and bland, issueless image of American life, one confronts the basic dilemma between intellectual freedom and the goal of non-discriminatory materials for children. Taxel (1978-79) argues that the content of biased or discriminatory literary materials cannot be defended solely on the grounds that such challenges are threats to intellectual freedom. Long missing from the debate over literary content for children is the role that such content plays in the "continuation and re-creation of . . . discrimination in society" (p. 75). Similarly, one question is raised by this study: to what degree might children's literature which totally omits democratic behavior and decision making continue or re-create apathy and low efficacy.

The issue here is not censorship or taking books from library shelves. Those interested in the political socialization of young people for life in American society should be concerned about the void of democratic role models in children's picture books. Social studies teachers and librarians in schools can help supplement such picture books with other educational materials that include participatory models for children. Many librarians develop and use lists of "high quality" literature for children. One new focus might include realism, participation, decision making and democratic role models. Many new instructional programs emphasize real life decision making and active participation (Citizen Development Project, 1976; Berlack and Tomlinson, 1973-75; Unified Science and Mathematics for Elementary Schools, 1975; Nims Middle School Project, 1977; Women's Equity Project for Middle Schools, 1979;
These materials can be tested, adapted and used in more elementary and secondary school programs. Several of these programs involve students in real-life decision making and action throughout the school and community.

Finally, picture books and other literary works containing democratic role models can be used as instructional materials focusing students learning on active political behavior. Even those that lack active participation, decision making and social issues can serve as "springboards" into the study of realistic and unrealistic views of life in America and on our planet.

REFERENCES

Adelson, J., "The Political Imagination of the Young Adolescent," Daedalus 100 (Fall, 1971), pp. 1013-1050.


Bem, S.L. and Bem, D.J., Training the Woman to Know Her Place (Harrisburg, PA: Pennsylvania Dept. of Education, 1975).


Longstreet, Wilma S., "Decision-Making: The New Social Studies," Decision-


Woman's Equity Project for Middle Schools, "Middle School Materials for Improving Self Concept, Content Learning, Decision Making, and Democratic Participation," (Tallahassee: The Florida State University, 1979).

Although much of what goes on as educational research is ritualistic behavior—first to secure a graduate degree and then to meet academic mores and attain rank and tenure—many educational researchers do conscientiously seek results that will help practitioners improve students' educational experiences. Sometimes researchers anticipate that the results of a single study could have a major influence on schooling. More frequently, however, the expectation is that individual studies will somehow contribute to an accumulation of knowledge from which schooling decisions can be made. A few researchers are explicitly and actively concerned with building and verifying theory to be applied in making curricular/instructional decisions. Has the goal of building verified knowledge to influence practice been realized in social studies education research—or is it likely to be in the near future? The following discussion is focused on that question. The conclusion is not overwhelmingly positive.

Research and the Prescription of Practice

Persons in a number of roles make decisions about curriculum and instruction—the curriculum developer, the methods course professor, the social studies supervisor, and the teacher. One of the functions of the "intelligensia" of social studies education—the intellectual

'Pinar (1978) categorized curriculum researchers into three groups: "Traditionalists" who are basically atheoretical and concerned with producing research findings of direct help to practitioners; "conceptual-empiricists" who believe that improvement of practice will come through the application of theory that has been empirically verified; and, "reconceptualists" who are basically theory-oriented, with the hope that future conceptualizations will provide more fruitful perspectives for approaching schooling and research about it. I presume that most social studies education researchers fall explicitly in the first category, that a few would like to be in the second category, and that very few are in the third category.

In this paper, "curricular decisions" refers to decisions about appropriate teaching goals and the experiences to reach them. "Instructional decisions" are taken to be those about how to teach within some implicit or explicit curricular frame.
"leadership"—is to make pronouncements about curricular/instructional policy, to prescribe appropriate courses of action for schools and teachers. It is, however, the teacher who is the key to what happens to students in social studies (see Stake & Easley, 1978, especially Chapter 19). The teacher not only interacts with the students each day but, in our system of education, tends to be the arbiter of what happens in his or her classroom. Attempted innovations, such as team teaching, have not broken down the notion of the teacher as the central figure in a classroom domain that is not to be intruded upon lightly by others.

Teachers lack control of the budget, and so find it difficult to make curricular or instructional changes that cost money. But they do exert great power, as members of textbook selection committees and, even more importantly, through their freedom to determine what will happen day-by-day to the students in their classes. Illustrative of that power is the way in which teachers have frequently thwarted the best intentions of social studies curriculum reformers. A recent example of reform languishing at the classroom door is the "New Social Studies" movement of the 1960's (Shaver, Davis & Helburn, 1978; Weiss, 1978; Wiley, 1977, Sec. 4).

Educational "leaders" often try to rely on research findings and theoretical formulations in their prescriptive policy position statements. Individual classroom teachers also formulate curricular/instructional policy, although in much more restricted and much less self-conscious and public ways. But teachers seem to be little aware of educational research findings (see, e.g., Wiley, 1977, p. 9). The central question about the influence of research on educational practice can be restated as: Are social studies "leaders" justified in attempting to rely on research in prescribing practice? And, do the curriculum/instructional decisions made by teachers suffer because they are not aware of research findings and education-related theory? Answering these questions calls for consideration of: (a) the role of empirical data and theoretical formulations in policy-making, (b) the adequacy of the available empirical knowledge base for curricular/instructional decision-making in social studies, and (c) the appropriateness of current educational research orientations.

Findings, Theory, and Policy

A finding, set of findings, or an empirically-based theory may suggest quite divergent policy positions to different rational decision-makers, depending on the other empirical knowledge and on the values that each assumes. In social policy studies, the principle that empirical data or scientific theory does not necessarily prescribe policy seems to be well
established. Because we can build a neutron bomb does not mean that we should necessarily do so, any more than data showing that students in integrated schools do not learn better than those in segregated schools would mean that efforts to desegregate schools should be abandoned. There are serious value questions and other empirical questions to be weighed first.

The limited mandate of empirical knowledge and theory does not seem to be well understood among social studies "leaders," who still seem frequently to be caught up in the out-moded American tradition that "if it can be done, it should be done." The enthusiasm of some social studies educators (e.g., Galbraith & Jones, 1975; Beyer, 1976) for persuading teachers to use instructional techniques designed to enhance student development through the moral stages that Kohlberg has theorized would be a good example, if there were not such serious questions (e.g., Peters, 1965; Fraenkel, 1976, 1977; Ehman, 1977; Shaver, 1977; Lockwood, 1978) about the philosophical and empirical bases for both Kohlberg's theory and the instructional recommendations. 4

The tendency to let research findings and theory mandate prescriptions for practice has also been evident in some attempts in the United States to apply Piaget's work to schooling. Many educators have assumed that if there are developmental cognitive stages, then curricula and instructional techniques should be developed to move children through the stages as rapidly as possible. Piaget himself has referred to "the American question"—"Is it possible to speed up the learning of conservation concepts?" (Hall, 1970, p. 30). He indicated that a counter-question must be asked: "Is it a good thing to accelerate the learning of these concepts?" And, there are sufficient reasons, according to Piaget, to be hesitant about a positive response:

Acceleration is certainly possible but first we must find out whether it is desirable or harmful . . . perhaps a certain slowness is useful in developing the capacity to assimilate new concepts . . .

|B|lindly to accelerate the learning of conservation concepts could even be worse than doing nothing . . .

'It is easy for the proponents of such movements and the critics, such as myself, to overestimate the classroom activity generated by bandwagons such as Kohlbergian moral development, Rahts-Simon value clarification, or the discipline-centered teaching of the "New Social Studies". A couple of metaphors come to mind. One is social studies as an iceberg, with the tip—i.e., the activity—showing above the surface of the ocean, but with the mass of the iceberg—that is, the great majority of American schools and social studies teachers going on as before—largely unobservable and/or unobserved. The other metaphor is of social studies education as a deep lake with the wind rippling the surface. The innovations do ripple the observable surface of social studies education, but the great body of schooling below the surface remains largely undisturbed. The Case Studies in Science Education (Stake & Easley, 1978) and the NSF-sponsored National Survey of Science, Mathematics, and Social Studies Education (Weiss, 1978) provide confirming evidence for this view of surface change. The metaphors and the CSSE report also raise the question, Why are there so few scuba and deep sea divers—to extend the metaphors—in social studies education (or educational) research?
It is difficult to decide just how to shorten studies. If you spend one year studying something verbally that requires two years of active study, then you have actually lost a year. If we were willing to lose a bit more time and let the children be active, let them use trial and error on different things, then the time we seem to have lost we may have actually gained. (p. 31)

Social studies teaching, as with other aspects of schooling, takes place within a complex of value and factual assumptions that makes hazardous the prescription of practice based on research and/or current theory. A paper prepared by Judith Torney (1978) for a Symposium on Law and Humanities can be used to further illustrate this point. It should be made clear that Torney's paper has not been selected as a bad example. Actually, research findings are used rather carefully in the paper to develop a case for an educational prescription. Moreover, elements of Torney's argument are similar to other efforts to convince school practitioners that research findings have prescriptive implications for educational practice. For those reasons, her paper is an excellent vehicle for discussing the types of perplexities to which practitioners ought to be alert when presented with research or theory-based prescriptions.

Recommendations for modifying educational programs are often based on research findings that indicate comparatively low test scores for a group, or groups, of children. Early in her paper, Torney cites a study of students in ten nations to demonstrate that a "deficit" exists among American fourteen-year-olds—that is, that although they are more knowledgeable about domestic political institutions and processes than youth in some other countries, they are less knowledgeable about and interested in international political institutions and processes (Torney, 1978, pp. 3-4). She continues on to suggest that some of this "deficit" could be overcome through schooling.

Research findings about differential knowledge, assuming their validity, do not lead directly to the conclusion that there is a "deficit" and that it should be given attention, nor to proposals for the school's role in overcoming the "deficit." In this case, one must ask if international understanding and interest are as important educational aims as domestic political understanding and interest. Also, it would be pertinent to inquire whether attempts to increase international interest and knowledge might result in decreased domestic interest and knowledge. The first is, of course, a question of values and the latter an empirical question. This same line of reasoning could be profitably applied to other areas, such as the interpretation of National Assessment of Education Progress findings in terms of inadequacies in social studies education.

The use of research findings and theory from developmental psychology to prescribe educational practice has been alluded to above. The need to examine such applications carefully can be further illustrated with Torney's argument that the elementary school years are
an optimal period for helping students learn about international human rights. The argument rests on the notion of a "critical or optimal period" during which the "high degree of plasticity" in an organism makes the reorganization of behavior patterns relatively easy (p. 11). Acknowledging the difficulty of testing empirically the notion of plasticity, Torney goes on to cite "some research evidence which shows particular peaks of attitudes or abilities during the elementary school period [and which] can provide useful information about the psychological characteristics of children" (p. 11). The evidence has to do with the apparently rapid cognitive-social development of elementary-school-age children and an apparent "loss of attitudinal plasticity" at about age twelve to fourteen. According to Torney, different studies have found the growth and loss of plasticity to take place at somewhat different ages. But, she summed up:

The conclusion one may draw from research, even with differences in method and in the year in which change appears to be most rapid, is that the elementary school period is optimal for education about other nations, global issues, and international rights. (p. 15)

Even if the research is valid and there is sufficient similarity in the studies to warrant a summary of their findings, such a conclusion is questionable. A proposal to attempt to accelerate international social consciousness at the elementary age level must be met with Piaget's counter-question: "Is it a good thing to do?" Would such efforts, for example, interfere with the natural process of growth by not allowing adequate time for assimilation of the concept of culture and of varying cultural perspectives?

Torney's conclusion should also be considered in light of alternate explanations for the attitudinal plasticity findings she cites, such as possible institutional effects on youth. Assuming that following the elementary years there is loss of openness and plasticity in regard to other peoples and countries, is the loss due to an age-bound developmental process, as Torney seems to assume, or is the loss a function of the students' experiences in school? For example, could reduced openness and plasticity be the result of a change from interactions with largely person-centered teachers in elementary school to instruction by predominantly content-oriented teachers in secondary school? In other words, educational prescriptions from developmental psychology need to be scrutinized carefully for cause-and-effect assumptions. The findings Torney cites, if valid, might indicate that the elementary school years are the best time for education in international human rights, that renewed efforts are needed to revamp the school and the instructional environment at the secondary level, and/or some other alternative (such as K-12 coordinated efforts to deal with different, maturationally appropriate aspects of international rights—see, e.g., Berlak, 1977).

Along with Webster's New World Dictionary of the American Language (2nd college edition), I take "optimal" to mean the "most favorable or desirable; best." The usage in Torney's paper suggests the same meaning.
As an additional demonstration of the need for caution in making or accepting prescriptions for social studies education based on developmental theory, it can be argued that Piagetian theory provides a counter-argument to Torney’s proposal. That is, a full understanding of other countries and the concepts of international law and politics, as well as realistic empathy with people with whom one cannot have direct contact, seems to presume the abstract thinking abilities of Piaget’s Formal Operational Period. And youth, according to Piagetian theory, begin to enter that period at about age 11. Not only has Beard (1969, p. 98) pointed out that because of increased ability to consider different viewpoints, adolescent thinking takes on new flexibility, but Kohlberg and Gilligan (1971) have suggested that discovery of the reality of subjective feelings, including one’s own inner feelings, comes during adolescence with the emergence of abstract thinking. These developments seem essential to the abilities to see oneself from the perspectives of others and to put oneself in the positions of others—important prerequisites to the in-depth consideration of human rights in the context of lives unlike one’s own. This line of reasoning suggests that the years beyond age 11 or 12 might be an optimal time for teaching about international rights.

Until we know more about attitudinal plasticity and cognitive growth, and about the developmental and institutional contributions to them, the prescription of practice using the research in that area as a base seems at best a hazardous venture. And even if that research knowledge were firm, there are value questions and alternative empirical assumptions to be explicated and examined in arriving at warranted decisions about preferred educational practice.

Every attempt to go from research findings to educational prescription will not contain the same elements as Torney’s paper, and each such effort must be evaluated individually. The above discussion is meant to suggest types of questions that might be raised. They include queries about (a) the adequacy of the data base, both in the sense of the validity of particular findings and whether there are conflicting findings in the literature; (b) the adequacy of interpretation, in the sense of assumptions about action implications that might be countervailed not only by conflicting results but by findings that might be anticipated—e.g., in regard to the effects of certain types of learning experiences or institutional influences—or by construing theory differently; and (c) the adequacy of explication of value assumptions, especially in regard to potentially competing aims of education. The discussion has focused on developmental psychology, and it is not possible in an article to examine all areas of research relevant to social studies education. The presumption is, however, that answers to these types of questions will be instructive in evaluating schooling recommendations from other research domains. The plausibility of that premise seems clear.

Perhaps the most important question is one raised implicitly by the discussion. It has to do more broadly with strategies for relating research
findings to policy. Some of the implications will be dealt with in later sections on models for research, but a comment is in order here. University academicians in particular frequently want to conduct their research unfettered by specific action questions, and later draw inferences for practice from loosely related studies to be found in the literature. A contrasting strategy is to define explicitly the matters of policy or practice of concern and then gather data pertinent to the issues posed. The first strategy is often labeled fundamental research and the second applied research (e.g., Kerlinger, 1977), although the usefulness of that distinction can be challenged (Shaver, 1979). Reasoning from prior research findings and theory to recommended practice is tenuous because the studies used as the basis for inference have usually not been designed to meet directly relevant points of doubt about outcomes and populations. Full realization of the usefulness of research findings for policy purposes may only come with studies that follow rather than precede the careful statement of specific policy questions. Even then, the resolution of differing value claims will remain as a central issue in applying research results to policy decision-making (see, e.g., Bennett & Lumsdaine, 1975, pp. 18-19).

The intent of this section, then, has not been to imply that the potential relevance of research to practice in social studies education should be totally discounted, but to argue that the move from research findings and theory to educational practice should be approached with caution. Rarely will the prescriptive implications of a set of findings be unequivocal. The examination of underlying values and assumed facts should always intercede between data or theory and practice. And, if people are to develop policy recommendations from past research, questions ought to be raised about the adequacy of the supply of findings from which prescriptions for practice might be made. What is the present state of research knowledge about social studies education as a basis for curricular/instructional decision-making?

The State of Research Knowledge

Gage (1978b) has noted, although not with approval, that “most reviewers of research on teaching have concluded their reports by saying that past work has been essentially fruitless” (p. 229). Reviews in the area of social studies education research have largely come to the same conclusion, as Karen Wiley’s (1977) recent “review of prior reviews” indicates. Some of Wiley’s observations and conclusions include:

Many reviewers have expressed concern over the lack of a cumulative research base in social studies/social science education. (p. 165)

[Little or no research has focused on questions about the relative merits of different kinds of content (e.g., social science, public issues, chronological history) in achieving the goals of social studies. (p. 169)
This area of social studies/social science education research [effectiveness and efficiency of instructional methods and techniques] appears to be fairly chaotic, at least from the perspective of extant reviews, both comprehensive and special focus. Although a large portion of research falls under this heading, this research appears to have yielded few conclusions that one can endorse with much confidence and few guidelines for practitioners. (p. 171)

There has apparently been little research on the effectiveness of various types of curriculum materials... although there has been much research analyzing materials... and some research on the extent of use of various kinds of materials. (p. 197)

Wiley did not paint an entirely bleak picture. For example, she drew positive conclusions about research-based knowledge in the area of teaching for critical thinking (pp. 174-7) and in regard to "models for factual and concept teaching" (p. 192). Despite some optimism, however, the overall message is clear: There is generally a lack of consistent, cumulative, definitive research findings upon which to make curricular/instructional prescriptions in social studies education; or, conversely, teachers are losing little in decision-making power by their inattention to the research literature.

Is there, however, more of a research base in existence than is evident, because reviewers have not adequately addressed their task of integrating findings? Wiley thought so. She suggested that meaning and order might be teased out of the "numerous small, uncoordinated studies" that have been reported if reviewers would concentrate on limited topics, more often include findings from studies not done in social studies education, and not set chronological restrictions on the studies to be included in their reviews (pp. 156-7, 177).

Wiley is not alone in her view that if reviews were more adequately done, much meaning could be found in what are now apparently scattered, disparate bits and pieces of research. Feldman (1977) has referred to the "half-hearted commitment" among social scientists to reviewing and integrating the research literature. He maintained that this lack of concentrated effort "might account in part for the relatively unimpressive degree of cumulative knowledge" (p. 86). Gage (1978a, b) has also argued that the state of educational research knowledge is probably not as dismal as reviewers have indicated. Part of the problem, Gage maintained, is that the reviewers have relied too heavily on the statistical significance of findings and have not paid sufficient attention to consistency across studies. Jackson (1978) also has commented on the "important weaknesses in the currently prevailing methods of in-

"However, Wiley also refers to the "few scattered findings, which are tentative suggestions at best..." (p. 176).

Martorella (1977), to whom Wiley referred as a reviewer who has come to positive conclusions, indicated that "there are still more questions than answers" about the "instructional variables that have a significant effect upon cognitive outcomes" (p. 45).
tegrative reviews” in the social sciences and education (p. 37) and discussed the lack of well-defined methods, techniques, or procedures for conducting reviews (pp. 2-5).

Among the proposed solutions to the inadequate reviews of the past is the *post hoc* statistical analysis of the results from many individual studies as a means of sorting out and integrating findings. The cluster approach proposed by Light and Smith (1971), for example, involves the re-analysis of data from several studies to resolve contradictory findings. On the other hand, Glass’s (1976, 1978b; Smith & Glass, 1977) meta-analysis approach, advocated as “a rigorous alternative to the casual, narrative discussion of research studies which typify our attempts to make sense out of the rapidly expanding research literature“ (Glass, 1976, p. 3), does not involve the secondary analysis of raw data but the analysis of the results from many studies.

Meta-analysis is attracting considerable attention among educational researchers (several meta-analyses were among the papers presented at the 1979 Annual Meeting of the American Educational Research Association), and its promise for extracting knowledge from past studies merits careful scrutiny. In particular, because of the frequently lamented tendency of educational researchers to be over-reliant on statistical analysis (see, e.g., Shaver, 1979), it seems important to be cautious about assuming too easily that *post hoc* statistical analyses of masses of findings can solve our knowledge-building problems.

One of the strengths claimed for meta-analysis is that every study—published and unpublished, strong or weak design—in the area of interest is to be included in the analysis. The results of each study are expressed in a common metric to be subjected to further statistical analysis. This all-inclusive approach may also be a serious weakness (see Mansfield & Busse, 1978; Eysenck, 1978). Glass maintains that including virtually all studies is important because to eliminate even “the ‘poorly done’ studies is to discard a vast amount of important data” (Glass, 1976, p. 4; also, 1978b). Furthermore, Glass argues that “whether relatively poorly designed studies give results significantly at variance with those of the best designed studies” is an empirical question (1976, p. 4); and if design quality correlates with effects, it can be controlled in the statistical analysis of the findings (Glass, 1978b).

Important questions do remain, however, that have not yet been adequately addressed in the literature. In the first place, the relationship of design quality to study outcomes can be treated as an empirical question only if adequate information about design and procedures is available to make valid categorizations of studies along a design quality dimension. Most research reports provide minimal information about *a priori* design and procedures decisions; most provide little or no information about threats to experimental validity that occurred during the study. The lack of reported information to judge quality may be due to the difficulty of gathering such data in detail (even lack of awareness of the threats that occur during studies), the
lack of a tradition of complete reports, and/or publishing space constraints. For whatever reasons, the question of the adequacy of information in research reports for judging design quality is an empirical question that is itself worthy of investigation.

Until it can be established that the information generally presented in research reports is sufficient for determining whether serious flaws in design or procedures existed, users of meta-analysis need to be alert to another threat to the validity of meta-results. There is the possibility, because of shared research orientations among those working in a particular area or because of prevalent practical constraints on design/procedure options, that a common threat to experimental validity might permeate all or most of the studies in the area being reviewed. For example, Campbell and Boruch (1975) claim that because of biases due to the persistent lack of randomization, studies of compensatory education have resulted in undue pessimism about the effects of such programs. It could also be that different errors in different studies each biased the overall results in a common direction. (Jackson, 1978, p. 45, has also expressed these concerns.)

Users of meta-analysis face another problem common to all reviewers of the research literature: That is, there is a tendency for only studies with positive, statistically significant results to be published, which creates a bias in the literature available for integration (see Mansfield & Busse, 1978). Advocates of meta-analyses tend to alleviate this problem by insisting that unpublished as well as published reports be included in the review. Nevertheless, positive results are more likely to make it into print even in unpublished reports, such as papers presented to professional meetings.

Post hoc statistical analyses, such as meta-analysis, do hold promise for extracting knowledge from past studies. The validity and benefits of meta-results have not yet been established, however; and integrations of findings produced with meta-analysis should still be interpreted with caution (see e.g., Gallo, 1978). Moreover, it would be unfortunate if, despite Glass’s (1978b; Glass & Smith, 1978) specific rejection of the idea that the availability of meta-analysis justifies poor research, uncritical faith in such analyses as a means of building knowledge encouraged laxness in study design and execution. It would perhaps be even more unfortunate if, due to the dominate influence on educational research of concern for inferential statistics, the availability of post hoc statistical techniques for integrating findings diverted educational researchers from the challenge of developing and implementing more appropriate research strategies for building cumulative knowledge.

Regardless of the future of meta-analysis, one cannot be particularly positive about the current research base for curricular/instructional decisions in social studies education. There may be adequate research in some areas to provide a basis for further research thrusts. But there is a lack of evidence to support Wiley’s (1977) optimism that scattered, but valid and relatable findings are in the research literature waiting to be
given meaning as a basis for curricular/instructional decisions in social studies education.

**Appropriate Research Models?**

The lack of a research base for prescribing practice in social studies education raises the question of why the research activity in this field has been so fruitless. Reasons for the lack of productivity of educational research generally (Shaver, 1979) apply equally well to research in social studies education in particular. Part of the problem is that the bulk of the research in social studies education is carried out by doctoral candidates (Wiley, 1977, pp. 155-6) who frequently see their research only as a hurdle on the way to a degree and who are often supervised by professors who lack both commitment to research and understanding of research strategies and procedures. The consequences are that much worthless research4 is done and new generations of university professors are socialized in attitudes dysfunctional to the building of cumulative knowledge. A related and basic difficulty is the superficial understanding of science among educational researchers and an attendant uncritical emphasis on the "test of statistical significance" approach to research as exemplifying science.

*The test of significance approach.* One outcome of the test of significance approach to educational research has been the celebration of the trivial result. Many graduate students are socialized ("educated" certainly seems the wrong word) to believe that if a result reaches the mystical .05 level of significance it is important. Too rarely are they asked or helped to defend that level of significance, or any other, on grounds such as the potential costs and consequences of the decision to be made based on the results.

A related, but even more serious, deficiency is the frequent failure to encourage students to think in terms of the educational or practical significance of their findings. Statistically significant Pearson product-moment correlation coefficients are reported without computing $r^2$ to determine the percentage of variance in one variable accounted for by the variance in the other). Statistically non-chance relationships that are trivial educationally (an $r = .195$ is significant at the .05 level with a two-tailed test and 100 degrees of freedom; $r^2 = .038$—3.8% common variance) are discussed enthusiastically. Even less frequently is the correlation ratio ($\eta^2$), or a similar statistic, computed following an analysis of variance to estimate the proportion of the variance on the dependent variable accounted for by the categories of the independent variable.

The confusion of statistical significance with educational, or practical, significance is often compounded by the misinterpretation that statistical significance speaks directly to the effect of one's treatment in

4In particular, the heavy reliance by doctoral candidates on survey research (see Wiley, 1977, p. 166) that is frequently not well conceived for getting at interesting, worthwhile questions about curriculum and instruction needs to be examined.
an experimental or quasi-experimental study. Statistically significant differences between means are taken beyond the legitimate, if restricted, interpretation that the result is not likely to have occurred if the null hypothesis is true, at whatever level of significance the researcher has decided, consciously or not, to use. Or put somewhat more restrictively, a significant result should only be considered an improbable occurrence (given the accepted level of significance) as compared against a theoretical sampling distribution that is based on the assumption of the null hypothesis (an assumption which includes the random selection of samples). Moreover, there is little attention in research reports to the various rival hypotheses (see e.g., Campbell & Stanley, 1963) that need to be considered before concluding that a difference was produced by the treatment and not by one or more threats to experimental validity.

A typical example of drawing an inappropriate conclusion from statistically significant results can be found in the recent report of a study having to do with the "effects of coordinated environmental studies in social studies and science on student attitudes toward growth and pollution" (Hepburn, Shrum, & Simpson, 1978). No significant main effect (the independent variable was study of a social studies module, a science module, both modules, or no module) was found for Pollution test items, but there was a statistically significant (P < .01) effect for Growth test item means of both ninth and tenth graders. Comparisons of pairs of Growth item means indicated a somewhat confused situation: At the ninth grade level, the social studies-and-science group mean was significantly different from that for the control group, but not from those for the social studies-only or science-only groups. (The science-only group mean was also higher than that for the social studies-only group.) Although it was claimed that the social studies-and-science treatment produced the highest posttest means on the combined Growth and Pollution items (pp. 78, 82), no tests of significance were reported. Ironically, a conclusion of no differences seems more appropriate. At the ninth grade, the mean that ranked next to the social studies-and-science mean of 105.84 was the science-only mean of 105.16. At the tenth grade, the second-ranked science-only mean of 96.56 contrasted with a social studies-and-science mean of 97.19.

In light of the inconsistent results, it is questionable whether an indication of dependent variable variance explained by the independent variable would be helpful in interpretation. None was reported. However, the sums of squares for the analyses of covariance were provided, so that Eta² could be computed for the two significant main effects (E² = main effect sum of square ÷ total sum of squares—Ferguson, 1976, pp. 236-7). For the ninth grade, E² = .07 and for the tenth grade, .06. Is an inconsistent treatment effect that accounts for only 6 to 7% of the variance on a dependent variable educationally significant? Do the mixed results and the correlation ratios justify the following claim?

Results of this study support the notion that environmental
knowledge does influence environmental attitudes. Specifically, these results indicate that interdisciplinary instruction which is coordinated across social studies and science and which is mainly cognitive in approach, can promote positive attitude change. . . .

This suggests that environmental education should be part of both the science and social studies curricula of high schools. (p. 84. Italics mine.)

Such leaps from what appear to be trivial and even uninterpretable, if statistically significant, findings to curricular prescriptions are not uncommon in educational research reports.

The joy that comes from trivial but statistically significant results is often an aspect of another misunderstanding of scientific knowledge-building—that is, that only statistically significant findings are worthwhile. So graduate students worry not about how their studies tie into past research, but about whether their results will be significant (i.e., null hypotheses will be "rejected") and thus acceptable to their supervisory committees. The scientific notion of testing alternative hypotheses with crucial experiments and the accompanying importance of disproof to the building of knowledge (e.g., Platt, 1964) seem almost entirely foreign to educational research.

The mistaking of the test of significance approach for science is a fundamental confusion that may account for much of the fragmented nature of social studies research knowledge that is so often lamented (e.g., Wiley, 1977, 155-6). Another basic confusion underlies the common attempt to apply inferential statistics to "prove" the generalizability—i.e., the replicability—of results (see Carver, 1978). The theoretical sampling distributions underlying the statistical tests of significance used to establish generalizability, in the sense of the probability that one's results would be likely to reoccur, assume random sampling from target populations—a condition that can rarely be met in educational research. And, the models allow generalization only to samples drawn randomly from the same population and treated in exactly the same manner as the study sample. When a test of significance is computed without meeting the random sampling assumption, the meaning of the resulting probability statement is uncertain. Moreover, the misconception that statistical tests of significance allow researchers to make predictions about the likelihood that their results would hold up in future investigations may be a prime reason why educational researchers have not often used the essential scientific strategy of replication (see, e.g., Sidman, pp. 69-139) for establishing the reliability and generalizability of findings.10

9The potential triviality depends on such matters as the validity of the tests, the adequacy of the design (e.g., the failure to control length of time of exposure to instruction), the clarity of results, and whether the small percentages of variance accounted for are worthwhile, especially when weighed against their meaningfulness and the costs of implementing the study (e.g., financially and in terms of lost opportunities for other studies in the curriculum).
The problem then is twofold. First, inferential statistics are of limited use for building generalizable findings, even when the underlying assumptions are met. An inferential test does not prove that chance did not account for a statistically significant difference or correlation. Such a test does not tell the researcher what the probability is that the same results will occur when an experimental treatment is used again. An inferential test does not tell the researcher what the probability is that the research hypothesis is true (see Carver, 1978). Nor does an inferential test tell the researcher what results are important. In short, while inferential models are valid as a basis for obtaining probability statements, the conditions to which the statements apply are limited. Second, there are problems in the actual use of inferential statistics. Educational researchers tend not to design studies to meet the basic randomization assumptions underlying inferential statistics tests (Shaver & Norton, 1979). Even if they did, the limited applicability of inferential statistical models is typically ignored in drawing inferences from findings.

Carver (1978) has argued that the benefits are so slight and the misleading uses so rampant that tests of significance should be abandoned. That proposal may be too radical, if for no other reason than the difficulties individuals would encounter in deviating from current mores of educational research. Recognition of the limits of inferential statistics, an attitude of constraint in their interpretation, and consideration of alternative strategies for establishing effects and their generalizability, such as the replication of studies, are needed.

**Getting at realities.** The statistical inference approach to research, coupled with a positivist orientation, seems to have led educational researchers astray in other ways. Emphases on hypothesis testing, the operational definition of variables and their assessment in forms appropriate for statistical analysis, formal research designs to keep the researcher from contaminating his subjects and vice versa have led to research findings that are frequently sterile because they are abstractions, out of touch with schooling realities. Over the years, a number of writers have argued that a broader conception of appropriate educational research methods was needed and have suggested that the participant-observer, ethnographic type of approach offered a promising alternative (e.g., Shaver & Larkins, 1973, pp. 1254-8; Lutz and Ramsey, 1974; Cronbach and Snow, 1977, pp. 16-17, 390, 518; Wilson, 1977). It has only been recently that a major ethnographic study in social studies education has been reported.

In 1976, the Education Directorate of the National Science Foundation contracted for three studies of status and needs in science, mathematics, and social studies education. One of the studies was a

---

A more extended discussion of these points can be found in Shaver (1979). Also, see Cronbach and Snow (1977, pp. 16, 22-3, 51-530, 519). Carver’s (1978) discussion of the misleading uses of statistical tests of significance, especially how that use corrupts scientific method by making chance the prime alternative hypothesis, is worthy of careful attention.
rather traditional, if well-executed, national survey of teachers and school administrators (Weiss, 1978). Another included three twenty-year reviews of the research literature, one of which (Wiley, 1977) has been cited several times in this paper. The third was Case Studies in Science Education (CSSE), an ethnographic field study conducted at eleven sites across the nation (Stake & Easley, 1978; Stake, Easley et al, 1978). That report—both the individual case studies and the synthesis chapters—indicates the rich, strong perspectives on the realities of schooling and the factors that condition teaching and educational change that can come from such naturalistic studies (see Shaver, Davis & Helburn, 1978, for further comments).

The findings from CSSE suggest a major reason why the results of most social studies education research would not have much relevance for the decision-making of social studies teachers, even if there were more valid, cumulative, non-trivial findings. It is that the concerns of social studies teachers tend to be very different from those of the university professors who conduct and supervise most research in social studies education. Faced with the day-to-day demands of teaching in a schooling system which values the use of subject matter content for socialization—both to meet the demands of the school and for citizenship—teachers by and large are not much concerned with questions about such matters as the effects of inquiry teaching, how to teach critical thinking, and the content of textbooks that intrigue university professors. In fact, many of the curricular/instructional ideas advocated and investigated by university professors threaten the basic classroom management techniques of teachers, run counter to their reliance on the textbook as the authoritative source of knowledge and the central instructional tool, fly in the face of beliefs about the need to provide external motivation for children and to socialize them for later success in school, and are in opposition to a commitment, often unexplained, to the teaching of understandings from history and government not as ends in themselves, but as a means of promoting a positive image of our nation that is deemed to be an important basis for citizenship (see Stake & Easley, 1978, especially Chs. 12, 13, 16, 17; Shaver, Davis & Helburn, 1978).

The discrepancy in concerns does not, of course, indicate that the interests of the professors are wrong. But the utopian views of democratic political participation and of the school's role that dominate the thinking of university social studies educators do not provide an adequate basis for research if the purpose is to influence what happens in the majority of social studies classrooms.

Social studies education researchers must become more attuned to the realities of the classroom and to the validity of teachers' perceptions of these realities (Bloomfield, 1978) if their research is to be much used for prescribing practice. Better comprehension and greater appreciation of the teacher's position are requisite to the formulation of classroom-

\*For a summary of research that speaks to teacher's classroom needs, see Gage 1978b, p. 234).
relevant research, to effective efforts to enhance the rationale-building among teachers that might make them more sympathetic to professors' concerns, and to the development of means for the effective dissemination of findings thought to be pertinent to decisions about classroom practice. CSSE illustrates how case studies can be used fruitfully to get at classroom realities and teachers' perceptions. It also suggests areas to be considered as a basis for identifying meaningful research problems in social studies education. More attention is needed, for example, to the socialization role of the school as the society's formal educational institution and to questions about reasonable instructional demands on teachers in a setting of public, universal education. The factors that influence the experiences that social studies teachers provide their students—including the conservative effects of the models of non-inquiry provided by their own pre-college and college social science and history teachers, and the influences exerted on teachers by their school-community social systems—have also not been examined adequately.

The lack of concordance between classroom teachers' and university professors' conceptions of schooling also suggests that if educational research is to be relevant to the classroom, teachers must be involved more frequently as research collaborators, rather than as the subjects of research (Shaver, Davis, & Helburn, 1978; Gajewsky, 1978). In such a relationship, university researchers need not give up their scholarly roles as research specialists and hopeful extenders of knowledge (even theorists, in some instances). But to the extent that it is desired that research findings and potential accumulated knowledge will influence schooling, teachers must be involved in identifying problems that merit attention, in designing studies so that the appropriate population and environmental parameters are taken into account, in interpreting findings in terms of both "what probably really happened" and the implications for classroom practice, and in disseminating results (see, e.g., Kennedy, 1977; Shalaway & Lanier, 1978).

The involvement of teachers as research partners, along with reflection on the results from studies such as CSSE, might help to correct another error in orientation. The emphasis in social studies education research has been on investigating new instructional methods, new curricula, and ways to change social studies as practiced in the schools. Researchers have failed to recognize that much of what is going on in social studies classrooms may deserve praise, especially if one accepts as legitimate a non-reform, "needs and demands of society" perspective. Jackson and Kieslar (1977) made this point in regard to educational

---

12See Berlak (1977).

13Since this paper was originally written, I have become aware of extensive efforts at the Michigan State University Institute for Research on Teaching to include teachers in research as collaborators, and to consider the problems and benefits of such collaboration (e.g., Kennedy, 1977; Shalaway & Lanier, 1978). For those interested in that major effort, the Institute's Communication Quarterly will be worthwhile reading, as will some of the items on the Institute's list of publications. Write to IRT Publications, 252 Erickson, Michigan State University, East Lansing, MI 48824.
research generally. They argued that the orientation of educational researchers has been "excessively narrow," in part because of

the almost total absorption with the goal of improving practice and discovering better techniques. We seldom ask whether educators might now be doing as well as can be done in many aspects of their endeavor. We might pay more attention to the possibility that educators may deserve and benefit greatly from some external confirmation of the appropriateness of much of what they are now doing. (p. 15)

The proposal that teachers be brought into research as associates is not intended to imply that university researchers would never be justified in pursuing topics not deemed relevant, or even deemed threatening, by classroom teachers. "Cutting edge" research would still be needed, just as provocative challenging philosophizing is. But there should be greater clarity as to those areas of study that are not congruent with the concerns of classroom teacher, and more explicit recognition of the political, socio-psychological, and ethical issues that need to be considered in attempts to change teachers' concerns and implement findings with innovative import.

Even though the suggestion that more research be focused by the concerns of schooling practitioners is not meant to exclude other types of studies, it may be objected to by some as having potential for diverting the attention of educational researchers from scientific research, with an accompanying deleterious effect on the accumulation of knowledge. Kerlinger (1977), for example, has contended that the influence of educational research on practice in the schools has been diluted by a shift toward applied research and away from what he terms "basic, scientific" research. Such a claim may have a great deal of appeal to those who would like to do research unfettered by practical considerations, especially in light of the apparent payoffs from fundamental research in the physical sciences. But Kerlinger's assertion that applied research cannot be scientific (as well as his claim that evidence from medical research indicates that basic research would be more productive of sound schooling practices than would applied research) can be readily disputed (Shaver, 1979). For example, scientists such as George Gaylord Simpson (1962) have maintained that the approach of science can be appropriately applied to practical matters. In that sense, the applied-basic research distinction is a fallacy, and the reason for the lack of influence might be a misunderstanding of science, not its inapplicability to applied problems (Shaver, 1979).

Schutz (1979) has raised an equally fundamental issue. He argued that educational researchers tend to believe incorrectly that "research can be directly converted into educational practice" and that the only important disagreement is over whether there should be more basic or applied research. This belief, he maintains, has had the dysfunctional effect of focusing attention on the "why-for of science" and diverting attention from the "how-to of technology" (p. 6). Educational R&D bas-
ed on technological "know-how" and focused, first, on school programs and the adjustments needed to make them more effective and, second, on the means of transferring "the knowledge and technology acquired via the first process back into the control of schools" (Schutz, 1979, p. 7) is, Schutz claims, a much more potentially fruitful paradigm than the "scientific" one for inquiry that has the purpose of yielding "credible and creditable benefits to students, teachers, and administrators" (p. 3).

There are reasons to believe, then, that research more attuned to the needs that school people perceive and less dictated by belief in the benefits of the supposed remoteness of scientific researchers from real life concerns need not be less intellectually sound or less methodologically rigorous. Nor does a call for more such research mean that basic research should be abandoned (Shaver, 1979; Schutz, 1979, p. 7). On the other hand, the question of whether conventional scientific epistemology has utility in the study of human affairs, such as schooling, still demands serious attention. An important aspect of that question has to do with the type of knowledge we can expect to construct as educational researchers, even if we adopt an orientation more consistent with that of physical and biological scientists.

Is Verified Instructional Theory Possible?

A major reason for the inadequacy of social studies education research findings as a basis for the prescription of practice may be the overly simple model of instruction/learning that has dominated the design of studies. Most studies have compared one method of instruction against another with the hope of arriving at a general conclusion about efficacy (see, e.g., Hepburn, Shrum, & Simpson, 1978, for this traditional approach). Too rarely have complex interactions between instructional method, teacher characteristics, student traits, and situational factors been considered. This oversight probably accounts in large part for the inconsistencies in findings from one supposedly similar study to another, which certainly have limited the prescriptive power of the research. Even, however, when a generalization does seem to appear from research studies comparing methods, caution in prescribing practice is in order. As Snow (1977) commented:

[The evaluation question is always, "Did the instruction work well for the students?" That is, for each student, not just for the few who stand in the vicinity of the group average. And an instructional treatment that is best on the average may still serve some students poorly. (p. 13)]

Martorella (1977) made the same point, but even more emphatically:

1"The belief that scientists are motivated only by pure interests in building knowledge is of dubious validity. Even basic researchers are concerned with real life problems, such as how to alleviate the agonies of those suffering from disease. (See, e.g., Shaver, 1979, p. 8, in press, b.)
All research generalizations, no matter how extensive their external validity, reflect only statistical probabilities about individuals. . . . While research apparently continues to add to our knowledge about individuals in general, it tells us nothing about any given individual. It may even distort our perspective on a particular student. (p. 44)

Such statements have serious implications for the accumulation of knowledge, much less the development of general instructional theory, verified by research, which can be used as a basis for prescribing the experiences to be provided students in social studies classes.

Snow (1977) has argued that "general instructional theory... is a holy grail" (p. 15). If instructional theory is to be developed at all, in his view, it must be local—i.e., specific to particular subject matter, groups of students, and situations—as well as time-limited (see Cronbach, 1975, pp. 122-3). This view is in direct contrast to that of persons who advocate the "scientific" development of instructional theory—

[modeling] their work on physical science, aspiring to amass empirical generalizations, to restructure them into more general laws, and to weld scattered laws into coherent theory. (Cronbach, 1975, p. 125)

The difficulty Cronbach sees in applying the physical science theory-building model too literally is that

rarely is a social or behavioral [or educational] phenomenon isolated enough to have [a] steady-process property. Hence the explanations we live by will perhaps always remain partial, and distant from real events . . . and rather short lived. . . . Our troubles do not arise because human events are in principle unlawful; man and his creations are part of the natural world. The trouble is . . . that we cannot store up generalizations and constructs for ultimate assemble into a network. (Cronbach, 1975, p. 123)

Gergen (1973) has also argued that social psychological findings and principles are "firmly wedded to historical circumstances" (p. 315), which include the impact of research on society. As a consequence, he maintained:

[The] continued attempt to build general laws of social behavior seems misdirected, and the associated belief that knowledge of social interaction can be accumulated in a manner similar to the natural sciences appears unjustified. (Gergen, 1973, p. 316)

The question must be asked, then: Is schooling-learning behavior so complex and changing that traditional conceptionalizations of scientific theory-building can never lead to bases for practice. Or, is Victor
Weisskopf (1977), a physicist, correct in his implied optimism?

The study of social relations between individuals of a given species—be it animals or men—is still in its infancy. We are groping to find appropriate methods, concepts, and languages that will enable us to arrive at formulations and conclusions that have an objective validity comparable to the natural sciences. (pp. 409-10)\textsuperscript{16}

Certainly, the orientation of science and the implications for research strategies and methods in studying schooling in general, and social studies in particular, have not been adequately addressed by educational researchers. Science has made impressive strides in understanding the natural world and in providing bases for engineering achievements. Whether the scientific mode of the natural sciences is applicable to curricular/instructional research and, if so, which aspects and with what modifications, are questions that challenge the entire social studies educational research enterprise as it now operates.

\textbf{Summary and Conclusions}

The central question about which the preceding discussion has revolved is whether research in social studies education is useful to teachers, and to leaders in the field, in making curricular/instructional decisions. A number of reasons have been suggested for concluding that the research to date is not a particularly useful source of prescriptions for schooling practices in social studies. Teachers tend not be aware of the research; but even if they were, it is doubtful that it would be of great assistance to them. Research findings and/or theory frequently suggest alternative, even conflicting prescriptions for practice to different persons, based on their differing interpretations, factual assumptions, and value positions. Moreover, there are few reliable, cumulative findings about the effectiveness of curricula or instructional methods on which to rely.

The inadequacy of the research knowledge base is, it has been argued, in part due to a lack of understanding of science. One result has been the dominance of a statistical inference orientation in educational research, accompanied by confusion of statistical significance and educational importance and failure to replicate findings. In addition, researchers have tended not to address questions thought to be important by those operating in the "real life" of the school, or addressed them without technological savvy. The reality of the potentially complex interactions among various instructional, personological, and contextual variables has also been dealt with rarely, and the resulting simple analyses of central tendency cannot be sufficient for schooling prescriptions that apply to individual students—or teachers. In fact, the

\textsuperscript{16}See Cameron (1963) for a provocative argument that the basic premises of scientific experimentation as carried out by physical scientists are invalid for research into human behavior.
question was raised whether general instructional theory adequate to provide specific prescriptions for instruction might be not only currently nonexistent, but unattainable as well.

Does this analysis imply that social studies teachers and others concerned with curricular/instructional decisions in social studies should pay no attention to research results? No. But they should be extremely cautious in the use of research findings and summaries of findings. There may be a few areas in which fairly definitive answers are available (although they will rarely be directly applicable to individuals, I would suggest). Generally, however, the greatest benefits from the research literature will be heuristic in nature. Research reports may stimulate thinking about instructional and curricular alternatives, but choices among them or developments based on them ought to be tempered by the teacher or curriculum developer’s own experience-based judgements, as well as by the careful consideration of values and alternative empirical assumptions. The research literature may also help teachers and other curriculum developers to formulate research questions and strategies in order to gather data helpful for their local decision-making. It is not just that researchers need to become more attuned to the “real life” of the teachers, but that teachers should probably become more involved in doing research themselves (see, e.g., Shaver, in press, a).

Should university researchers abandon their efforts because they have not been particularly fruitful so far? No. In fact, despite its limited usefulness for prescribing practice in social studies, the research to date will, if carefully scrutinized, provide a portion of the basis for more fruitful future research. But if that future research is not to repeat the infertility of the past, the nature of the social studies—actually, the educational—research enterprise must be re-addressed. Such an effort is important if only to avoid the ongoing waste of human and financial resources.

In particular, attention must be focused on our assumptions, or lack of them, about how cumulative knowledge helpful in the guidance of practice can be built. We must ask and explore questions about the nature of science and those attributes of science that are applicable to educational research, about the functionality of our research strategies and methodologies for building cumulative knowledge, about the need for distinguishing science from technology as a basis for educational R&D, about the role of theory in education and the possibilities of developing the type of theory we desire. We must even ask whether our goals should really be any more than “to assess local events accurately, to improve short-run control” (Cronbach, 1975, p. 126), to “sensitize” people to potential influences on behavior and their relative importance (Gergen, 1973, p. 317), “to develop explanatory concepts, concepts that will help people use their heads” (Cronbach, 1975, p. 126). We must become more self-conscious about our enterprise, more searching, more doubting about our traditional orientations and procedural modes.
Some alternatives have been suggested—caution in the use and interpretation of tests of significance, more replication studies, the use of alternative research approaches such as participant observation, the greater involvement of teachers as research collaborators, an increased emphasis on approaching educational R&D as a technological, not a scientific, problem. However, the need for a patchwork of remedies for specific deficiencies is not the overarching theme of this paper, but rather the necessity of a reconstruction of the total cultural-intellectual tapestry (Bakan, 1967, p. 12) of educational research, and of research in social studies education in particular.

I am not optimistic that the major rethinking and reorientation that seems essential will occur. There are too many vested interests, and the power of the scientific-statistical Zeitgeist is too strong. If, however, even a sizable minority of social studies education researchers would begin to address systematically the types of questions raised by the powerlessness of educational research in the face of the demands of educational prescriptions, the self-conscious, rational development of investigative orientations and modes appropriate to education might emerge as the new Zeitgeist. We must, of course, consider the possibility that such efforts could bring us to the ironically humanistic conclusion that human relations, and social studies education in particular, are too complex, subtle, and value laden to be illuminated adequately through what are commonly regarded as scientific types of research.17

This article is based on a paper presented at the annual meeting of the National Council for the Social Studies, Houston, November 24, 1978, as recipient of the NCSS Citation for Exemplary Research in Social Studies Education, 1977. Comments on drafts of the paper by A. Guy Larkins, Glendon Casto, Irving Morrissett, and Karl R. White have been especially helpful.

REFERENCES


Gage, N. L. The yield of research on teaching. *Phi Delta Kappan*, 1978, 60, 229-235. (b)


Peters, Richard S. A reply to Kohlberg: "Why doesn't Lawrence Kohlberg do his homework?" *Phi Delta Kappan, 1975, 56, 678.*


Shaver, James P. The productivity of educational research and the applied-basic research distinction. *Educational Researcher, 1979, 8(1), 3-9.*

Shaver, James P. Designing teacher-conducted research. *Social Education, in press. (a)*

Shaver, James P. Toward the twenty-first century: Social studies goals for decision-making and research skills. *Journal of Research and Development in Education, in press. (b)*


The Taxonomy of Educational Objectives, The Classification of Educational Goals, Handbook I: Cognitive Domain, written by a committee of College Examiners, Benjamin S. Bloom Editor, Max D. Englehart, Edward J. Furst, Walker H. Hill and David Krathwohl was published in 1956. In the Foreword of this book the editor reports that the ideas about classification that are to be found in it were first developed in informal discussions at the 1948 meeting of the American Psychological Association. Today, the language, the style of writing educational objectives, and the general orientation of this book has become a conventional mode of discourse in the culture of professional education. The Taxonomy of Educational Objectives either has had an enormous influence on the thought and writing of professionals in education, or the orientation of the book vividly expresses the ethos of professional education.¹

The evidence for this influence or the illustration of this developing orientation may be found in the educational literature. In 1956 there was no listing for The Taxonomy of Educational Objectives in the Education Index. The book was identified with its editor, Benjamin S. Bloom. In the 1961-63 volume of the Education Index there was a listing

¹Some illustrations of how Taxonomic ideas have become conventional in educational discourse may be found in the following publications. Teaching Strategies for Social Studies: Inquiry, Valuing and Decision-Making by James A. Banks with Ambrose A. Clegg, Jr. makes an explicit use of Taxonomy in its approach to evaluation. See especially their chapter on “Evaluation Strategies.” Teaching in the Elementary School by Marcella H. Nerbovig and Herbert J. Klausmeir is a vivid illustration of Taxonomic notions. See for example their chapter on “Curriculum Organization and Planning.” Partners for Educational Reform and Renewal: Competency-Based Teacher Education, Individually Guided Education and the Multiunit School by George E. Dixon and Richard W. Saxe seeks the reform and improvement of U.S. Education on the basis of ideas that arise, out of the Taxonomic perspective. A good illustration of the importance attributed to these ideas may be found in their chapter “Behavioral Objectives, Criteria and Modules.” Objectives and Methods for Secondary Teaching by Walter Pierce and Michael Lorber is an approach to secondary teaching that explicitly and carefully follows taxonomic guidelines. Competency Based Teacher Education by Dan W. Andersen, James M. Cooper, M. Vere DeVault, George E. Johnson and Wilford A. Weber is a humane, abstract systems conception of education that in many ways is a triumph of the taxonomic view. Writings of the 60's and the 70's show the importance or the influence of ideas about knowledge, behavior and education that were first popularly expressed in Bloom's Taxonomy.

of the word “Taxonomy.” Readers were referred to “tests and scales,”
The 1964-65 volume of Education Index has the first listing of “Tax-
onomy of Educational Objectives.” Readers were referred to
Educational Classifications. Under that heading there are perhaps five
or six articles that relate to the “Taxonomy of Educational Objectives.”
The 1965-66 Index has the first use of “Taxonomy of Educational Object-
vives” as a title under which articles are listed. There were ten articles in
that first year. Although there were only six articles listed the next year,
the number of articles increased every year to the peak year, in the 1973-
74 volume, when 151 articles were listed. Since then each volume of the
Index listed over one hundred articles for each year.

Table 1: Taxonomy of Educational Objectives
Chronology of Listings in
Education Index

<table>
<thead>
<tr>
<th>Year</th>
<th>Articles Listed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1956</td>
<td>The Taxonomy of Educational Objectives is listed by its senior Editor, Benjamin Bloom</td>
</tr>
<tr>
<td>1961-63</td>
<td>Taxonomy—see biology classifications</td>
</tr>
<tr>
<td>1963-64</td>
<td>Taxonomy of Educational Objectives—see Test and Scales, Construction.</td>
</tr>
<tr>
<td>1964-65</td>
<td>Taxonomy of Educational Objectives—see Education Classifications. Four or five listings may possible be related to this topic.</td>
</tr>
<tr>
<td>1955-66</td>
<td>First use of Taxonomy of Educational Objectives as a label under which may be found a listing of articles. There were 10 articles listed.</td>
</tr>
<tr>
<td>1966-67</td>
<td>6 listed articles</td>
</tr>
<tr>
<td>1967-68</td>
<td>10 listed articles</td>
</tr>
<tr>
<td>1968-69</td>
<td>31 listed articles</td>
</tr>
<tr>
<td>1969-70</td>
<td>56 listed articles</td>
</tr>
<tr>
<td>1970-71</td>
<td>72 listed articles</td>
</tr>
<tr>
<td>1971-72</td>
<td>114 listed articles</td>
</tr>
<tr>
<td>1972-73</td>
<td>104 listed articles</td>
</tr>
<tr>
<td>1973-74</td>
<td>151 listed articles. The high year for listed articles.</td>
</tr>
<tr>
<td>1974-75</td>
<td>123 articles</td>
</tr>
<tr>
<td>1975-76</td>
<td>111 articles</td>
</tr>
<tr>
<td>1976-77</td>
<td>100 articles</td>
</tr>
<tr>
<td>1977-78</td>
<td>Over 100 articles</td>
</tr>
</tbody>
</table>

Now, thirty years after its conception and twenty-two years after its
publication it may be more important than ever to examine this classic
in educational thought. Not only is it extensively discussed in the
professional literature, it has become a mandated style of discourse in
many state departments of education through the establishment of performance based approaches to education. *Handbook II: The Affective Domain* (Krathwohl et al, 1964) was published in 1964, and efforts are being made today to conceptualize affective aspects of life and education in the style to be found in *Handbook I: The Cognitive Domain*. To examine this book is to probe an artifact that vividly expresses fundamental beliefs of educational culture.

The basic question that motivates the present ethnographic exploration of *The Taxonomy* is this: What can we learn about the educational culture that produced this social artifact? As with any ethnographic investigation, this research is concerned with empirical questions about the document itself. What can we learn from its language? Its descriptions and accounts of its affairs? The matter that it calls to our attention and explains? The matter that it ignores and avoids? What is taken for granted world of Taxonomic Culture? This study is not a book review nor is it a debate about the logical, scientific or philosophical adequacy of the *Taxonomy*. It is an attempt to look at a residual document of a familiar culture as we have learned to look at the songs, stories, and myths of far away peoples. Looking at ourselves ethnographically encourages an "objectivity," a "neutrality" about beliefs and customs that is not our usual experience.

*The Taxonomy* expresses important (one might even call them hegemonic) ideas in education. Those who use the vocabulary and argue in the style of *The Taxonomy* constitute a group of professionals who might usefully be called *The Taxonomics*. The Taxonomics profess educational ideas according to the mores and customs of Taxonomic Culture. It is the intention of this study to look at a document of Taxonomic Culture as one might look at an origin myth or a traditional tale of any ethnic culture.

Ethnographies have usually reported the ways of life of strange and far away people. Upper middle class white Western people have tended to study Polynesians, Micronesians, Melanesians, Africans and native peoples of the Western hemisphere. Many of these studies reflect wisdom, sympathy and profound respect for the ways of life of the people being studied. Such ethnographies are, however, noncontroversial in Western upper middle class white society. They are often studies of vulnerable people. Ethnographies of our own culture, however, are difficult both methodologically and politically. They are difficult methodologically because those who study and those who are studied share many elements of a common culture: it is difficult to notice the cultural premises by which one lives. Ethnographies are politically difficult because unless we study the super poor or vulnerable minorities we are likely to study people who do not wish to be studied and who do not care for "objective" accounts of their ways of life. Hopi Indians, for example, are not likely to engage in ethnographic studies of their own way of life. They know their way of life as we know ours. And yet, ethnographies may tell a people things about their way of life which
they might not be aware. Ethnographies of our own ways of life hold the promise and the risk of self-discovery.

The language and style of ethnographic accounts of far-away people often make the way of life of a people being studied appear to be strange perhaps even bizarre. There may be a deep truth to this perception: all cultural ways may be to some extent bizarre, perhaps even absurd. In the following conclusion of an ethnographic account of Nacireman (American spelled backwards) customs and mores, the risks of ethnography are exposed after the benefits have been reported:

Our review of the ritual life of the Nacirema has certainly shown them to be a magic-ridden people. It is hard to understand how they have managed to exist so long under the burdens which they have imposed upon themselves. But even such exotic customs as these take on real meaning when they are viewed with the insight provided by Malinowski when he wrote:

“Looking from far and above, from our high places of safety in the developed civilization, it is easy to see all the crudity and irrelevance of magic. But without its power and guidance early man could not have mastered his practical difficulties as he has done, nor could man have advanced to the higher stages of civilization.” (Spradley and Rynkiewien, 1975, p. 13)

This famous account of “Body Ritual Among the Nacirema,” written by Horace Minor, provides an example of the use of an ethnographic perspective. It is an early example of an effort to come to understand American ways of living in light of the interests and techniques of anthropological inquiry. Through ethnography we may experience our own culture in strange ways. In that strangeness we may learn new things about the culture within which we are imbedded. This examination of what might be called “A Tale of Knowledge According to YMONOXAT” may disclose obvious realities that we are not used to noticing.

“The Tale of Knowledge According to the Ymonoxat” relates the following:

Educational Objectives, stated in behavioral form, can be taxonomized. The taxonomy reflects a conception of hierarchy and a notion of simplicity and graduated complexity:

1. Knowledge (simple)
2. Comprehension

Horace Minor's article was originally published in 1956 in The American Anthropologist, Vol. 58 (1956) 503-507. The article, in a sense, was an elaborate joke: it provided an ironical account of ethnographic understandings. Anthropologists have tended to study far-away people because there is a little political hazard or controversy in the study of distant vulnerable people. In recent years American anthropologists have turned their attention to American society. The book, The Nacirema, is an illustration of this new tendency. If we are ever to understand U.S. society, ethnography will make an important contribution.
3. Application
4. Analysis
5. Synthesis
6. Evaluation (complex)

The development of the taxonomy is said to be based on four principles:

1. It should utilize educational distinctions.
2. It should be logical.
3. It should utilize understandings of psychological phenomena.
4. It should be descriptive. It should be value free, value neutral, avoid value questions.

In this proposal or song or myth of knowledge and education one may discover unstated beliefs of professional culture. In making the unstated explicit, in acknowledging the unacknowledged we may begin to examine and recreate the culture within which we live.

**Cultural Boundaries and Cultural Exchange**

Taxonomic Culture is concerned with or appears to be concerned with many different fields of knowledge. The following examples from “The Tale of Knowledge” reveal the diversity of this interest:

- The recall of major facts about particular cultures.
- Knowledge of physical and chemical properties of common elements and their compounds.
- An acquaintance with the more significant names, places and events in the news.
- Knowledge of propositions, of fundamental logical principles, or propositional functions and quantifiers of sets.
- To know major principles involved in learning.

As one can see with these examples and with the additional examples to be found in Tables 5 and 6 the Taxonomics make no distinctions among the different kinds of knowing: mathematics, natural science, and social knowledge are all to be found on the same lists. The great debate that began in the last century about the similarities and differences between the natural sciences and the social sciences is ignored.

Educational objectives, according to “The Tale of Knowledge,” involve without distinctions mathematics, science and social science. “The Tale” does not mention it, but all such statements relate to the work, life and creativity of various occupational cultures: historians, sociologists, philosophers, chemists, biologists among others. Each oc-
ocupational culture has a professional literature, celebrated heroes and traditional debates. A study of occupational cultures will reveal that there is a regular exchange of information, concepts, arguments and perspectives among historians, sociologists, philosophers and biologists among others. Many occupational cultures practice what might be called intellectual exogamy: They deliberately explore many fields of learning, many occupational cultures and relate the work of others to their own problems and conceptualizations.

Since the Taxonomics appear to be involved with the “products” of many different occupational cultures, it is of some interest to consider the extent to which the Taxonomics are in regular cultural exchange with other occupational groups. Are they, for example, in regular cultural exchange with historians? Philosophers? Sociologists? One could argue that it would be difficult to deal intelligently with history without taking into consideration the cultural achievement of that diverse occupational culture.

Some indications of cultural exchange in the “Tale of Knowledge” may be found in its footnotes. In any array of footnotes some writings are mentioned and some are ignored. Footnotes give some indication of what authors think is important and what authors think is unimportant. Footnotes are the tracks one leaves that reveal where one has been. What has been attended to and what has been ignored by the Taxonomics?

In order to explore cultural boundaries and cultural exchange, Taxonomic Footnotes were identified, examined and categorized. The results of this exploration may be found in Table 2, “Classification of Footnotes.”

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of Articles Cited</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological References</td>
<td>11</td>
</tr>
<tr>
<td>Testing and Measurement</td>
<td>11</td>
</tr>
<tr>
<td>General Educational References</td>
<td>8</td>
</tr>
<tr>
<td>Articles Written by the Authors</td>
<td>4</td>
</tr>
<tr>
<td>Webster’s New Collegiate Dictionary</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>35</strong></td>
</tr>
</tbody>
</table>

References to published literature
As Table 2 indicates, there were thirty-five references to published literature. Most of the articles cited expressed psychological orientations: there were eleven explicit psychological references; most of the testing literature was also of a psychological character. If one thinks of each citation as a cultural exchange with a professional or occupational group, then a clear pattern of boundaries and exchange may be identified. Taxonomic Culture is in regular intercourse with certain psychological communities and carefully avoids cultural exchange with all occupational cultures that are directly involved in what appears to be the substance of educational concerns: history, sociology, politics, anthropology, science among other occupational communities.

The culture that is revealed in the citations is intellectually endogamous. It excludes cultural exchange with occupational cultures that actually produce whatever knowledge “The Tale of Taxonomy” purports to consider. This discovery of endogamy provides an important clue to the character of the Taxonomics.3

Endogamy and Taxonomic Issues

“The Tale of Taxonomy” identifies six questions that may challenge the wisdom of its “Tale of Knowledge” (see Table 3). They call attention to major and minor anxieties of Taxonomic Culture. As the “Tale” explores these questions its style of argument, analysis and reasoning may be identified and examined.

Any such list of issues or anxieties both calls to attention those items being identified while it directs attention away from matters being ignored. Taxonomic Culture affirms:

that in educational matters one should think of behaviors (rather than people with their individual hopes and linguistic awarenesses).

that its basic principles should be educational, psychological, value free (rather than historical, sociological, political, ethical, or philosophical because these arenas of discourse have been excluded from Taxonomic Culture).

An examination of Table 3 reveals that the language used to defend or confront ostensible anxieties merely affirm its endogamous consensus. This writing is not designed as a cultural exchange with another occupational culture. It is an affirmation of cultural values addressed to those who share the faith.

3Educational programs that schools offer would appear to deal with what is known of history, science, sociology, mathematics, politics, art, and anthropology among other communities of learning that may be found in human societies. The Taxonomics avoid cultural exchange with all such communities and restrict their cultural exchanges to esoteric cultures in the psychological community. To deal with history, as the Taxonomics do, without cultural exchange with the literatures and communities of thought associated with Giambattista Vico, Benedetto Croce, R.G. Collingwood, Carl Becker, Jose Ortega y Gasset is to avoid struggle with the meaning of history that is the human experience. Taxonomic history, as taxonomic approaches to education, is an esoteric isolated community of thought disconnected from social, political and ethical struggles to make sense out of the human experience on our planet.
Table 3: Style of Argumentation, Orienting Issues

<table>
<thead>
<tr>
<th>Issue</th>
<th>Style of Argumentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would the taxonomy abort the thinking of teachers about educational matters?</td>
<td>Page 5: It was suggested that the Taxonomy could be most useful to teachers . . .</td>
</tr>
<tr>
<td>Would the taxonomy fragment educational purposes?</td>
<td>Page 6: Although this was recognized as a very real danger one solution appeared to be setting the taxonomy at a level of generality where the fragmentation would not be too great.</td>
</tr>
<tr>
<td>Why taxonomize behaviors?</td>
<td>Page 12: We are of the opinion . . . the student behaviors involved in these objectives can be represented by a relatively small number of classes. Therefore, this taxonomy is designed to be a classification of the student behaviors . . .</td>
</tr>
<tr>
<td>What principles should guide the development of the taxonomy?</td>
<td>Page 6: . . . it was agreed that taxonomy should be an educational-logical-psychological classification system.</td>
</tr>
<tr>
<td>Can educational goals be classified?</td>
<td>Page 18: . . . it was the view of the group that the educational objectives stated in behavioral form have their counterparts in the behavior of individuals. Such behavior can be observed and these descriptions can be classified.</td>
</tr>
<tr>
<td>Can a taxonomy based on a simple to complex principles be adequate?</td>
<td>Page 18: Our attempt to arrange behaviors from simple to complex was based on the idea that a particular simple behavior may become integrated with equally simple behaviors to form more complex behaviors.</td>
</tr>
</tbody>
</table>

The linguistic style is clearly the language of communicants talking with one another:

We are of the opinion . . .

It was agreed . . .

The solution appeared to be . . .

The agreement in which they have engaged is that it is possible and desirable to formulate educational ideas that concern history, science, literature, sociology and politics without cultural exchange with those communities that have produced the art, history and science with which they purport to deal.

"The Tale of Knowledge According to the Yomonoxat" and the Story of its Principles

Table 4 identifies what are stated to be Taxonomic Principles and
reports arguments that are given in their support. These principles explicitly exclude consideration of many highly relevant occupational cultures. They provide an aura of reason and analysis without its substance.

<table>
<thead>
<tr>
<th>Principle</th>
<th>Style of Argumentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>What educational considerations should guide the development of the Taxonomy?</td>
<td>Page 6: The first importance should be given to educational considerations.</td>
</tr>
<tr>
<td>What logical considerations should guide the development of the Taxonomy?</td>
<td>Page 13: ... we are of the opinion that the major distinctions between classes should reflect, the large part, the distinctions that teachers make among student behaviors.</td>
</tr>
<tr>
<td>What psychological principles should guide the development of the Taxonomy?</td>
<td>Page 6: ... every effort should be made to define terms as clearly as possible and to use them consistently.</td>
</tr>
<tr>
<td>What stance on the value/ethical/political should be taken?</td>
<td>Page 13: ... the taxonomy should be logically developed and internally consistent. Each term should be defined and used in a consistent way ...</td>
</tr>
<tr>
<td></td>
<td>... the taxonomy should be consistent with relevant and accepted psychological principles and theories.</td>
</tr>
<tr>
<td></td>
<td>... the taxonomy should be consistent with our present understanding of psychological phenomena.</td>
</tr>
<tr>
<td></td>
<td>Page 6: It was further agreed that in constructing the taxonomy every effort should be made to avoid value judgments about objectives and behavior.</td>
</tr>
<tr>
<td></td>
<td>Page 14: ... the classification should be a purely descriptive scheme in which every type of educational goal can be represented in a relatively neutral fashion.</td>
</tr>
</tbody>
</table>

An examination of the discussion and accounts relating to these principles reveals a stunning omission; three of the four principles are never formally stated:

There is no statement of guiding psychological principles.

There is no statement of educational principles.

There is no statement of logical ideas that are relevant to this taxonomy.

The Taxonomics argue that attention should be given to educational
considerations. What are they? How should they be considered? The Taxonomics endorse accepted psychological principles. None are suggested. None are explicitly used. The Taxonomics assert that their "Tale of Knowledge" is value free but in every feature of their tale they are endorsing and celebrating particular cultural values.

"The Tale of Taxonomy" provides no analysis, no consideration of the perspectives of other occupational cultures, no concern with careful definitions and rigorous argument. The Taxonomics have little interest in reason, involvement with worldly occupational cultures or persuasion. Their song of knowledge is a chant for the faithful, a liturgy of secular worship.¹

It would seem on the basis of a study of Table 4 that a social consensus regarding Taxonomic principles conceals basic irrationalities of this occupational culture. Principles are named but not stated. Unstated background beliefs rather than explicit principles structure the "Tale of Knowledge of the Taxonomics." If we begin to think of The Taxonomy as a liturgy designed to nurture and extend the faith of communicants and to preserve them from worldly temptation we may begin to discover its power and meaning.

"The Tale of Knowledge" and the Psychologicalization of Knowledge

The major cultural theme of the Taxonomics is a particular brand of psychology. More than half of the literature cited relates to psychological concerns. Both implicit and explicit psychological conceptions are expressed.

The Taxonomy affirms that it is based on "understood psychological phenomena." There is no identification of what these phenomena are nor what an understanding of them might be. A sense of the psychology of Taxonomic Cultur may be found in this language:

It may be helpful in this case to think of knowledge as something filed or stored in the mind. The task for the individual in each knowledge test situation is to find the appropriate signals and cues

Karl Mannheim, in his Ideology and Utopia argued that clearly acknowledging that ideas have social location is the beginning of any serious effort to reflect on the human situation:

Once we recognize that all historical knowledge is relational knowledge, and can only be formulated with reference to the position of the observer, we are faced, once more, with the task of discrimination between what is true and what is false in such knowledge. The question then arises: which social standpoint vis-a-vis history offers the best chance for reaching an optimum of truth? In any case, at this stage the vain hope of discovering truth in a form which is independent of an historically and social determined set of meanings will have to be given up. (page 71.)

If ideas have social location, then ideas about educational research, behavioral science, open education and Mastery Teaching may be made problematic and explored as any other social event may be investigated. A concern with ideology calls attention to taken-for-granted aspects of the social world that may be brought into consciousness as social artifacts of particular times and places.

56
in the problem which will most effectively bring out whatever knowledge is filed or stored. (p. 62)

Knowledge as defined here includes these behaviors and test situations which emphasize the remembering, either by recognition or recall, of ideas, material, or phenomena. The behavior expected of a student in the recall situation is very similar to the behavior he was expected to have during the original learning situation. (p. 29)

The taxonomic preoccupation with behavior, and the myth of hierarchy directs attention to memory and recall of arbitrarily selected elements of culture. Taxonomic culture, because it avoids exchange with other occupational communities, appears to perceive knowledge as arbitrary elements to be recalled upon selected occasions. Taxonomic culture appears to be a culture without politics, without social conflicts, without pain, without tragedy. It avoids worldly communities in which knowledge is usually thought to be socially located, humanly contrived and always revealing human interests.5

"The Tale of Ymonoxat" and its Taxonomy

It is clear that the "Tale of Taxonomy" makes no distinctions between the natural sciences and the social sciences. One can observe statements from either occupational culture randomly assorted:

Knowledge of biological laws of reproduction and heredity.

Understanding of some of the principle elements in the heritage of Western civilization.

To develop a knowledge of the principles of federalism.

To become familiar with plant illustrations of the principle laws of heredity and evolution.

5Hans Mayerhoff, in his Philosophy of History in Our Times, reviewed the development of the historicist perspective over that last hundred years and characterized it in the following way:

1. The subject matter of history is human life in all of its totality.
2. The aim of history is to portray unsystematic human variety (nations, peoples, cultures, songs, myths, thoughts) in their living expressions in the continuous process of growth and change.
3. The meaning of history does not lie in universal ideals or structures or principles. Its "meaning" is the diversity it describes.
4. Reason and rationality is a poor guide to understanding the irrational forces from which much of human variety derives.
5. Empathy is a fundamental technique of history, for historians (and all who would understand the human situation) must feel their way into the sense of life of other times, peoples and places.

The final result of this ambiance of though is the insight or the despair that history and the human situation is less rational, less intelligible than had been supposed. Moving accounts of particular times and places can be written, but they may not reveal the meaning or purpose of the transitory human experience on our planet.
Tables 5 and 6 provide additional examples of the lack of distinction between the natural sciences and the social sciences.

### Table 5: Knowledge of Specific Facts
**Illustrative Educational Objectives**

- The recall of major facts about particular cultures.
- The possession of a minimum knowledge about the organisms studied in the laboratory.
- Knowledge of biological facts important to a systematic understanding of biological processes.
- Recall and recognition of factual information about contemporary society.
- Knowledge of practical biological facts important to health, citizenship, and other human needs.
- Acquiring information about major natural sources.
- Acquiring information about various important aspects of nutrition.
- Recall and recognition of what is characteristic of particular periods.
- Knowledge of physical and chemical properties of common elements and their compounds.
- An acquaintance with the more significant names, places, and events in the news.
- A knowledge of the reputation of a given author for presenting and interpreting facts on governmental problems.
- Knowledge of reliable sources of information for wise purchasing.

An examination of Tables 5, 6, 7, 8, and 9 discloses another stark reality:

- Table 5: twelve items relating to natural science and social science.
- Table 6: eleven items relating to natural science and social science.
- Table 7: five items with none relating to either natural science or social science.
- Table 8: five items with none relating to natural science or social science.
- Table 9: three items with none relating to natural science or social science.

At the low levels of the hierarchy, random information could be listed however dubious its source. At the higher levels of the hierarchy no illustrations from the social sciences or the natural sciences was offered.

Tables 5 through 9 vividly demonstrate the disconnection between the Taxonomics and other occupational cultures. The plethora of miscellaneous statements at the low levels of the hierarchy illustrate a psy-
Table 6: Knowledge of Principles and Generalizations
Illustrative Educational Objectives

The recall of major generalizations about particular cultures.

Knowledge of propositions, of fundamental logical principles, or propositional functions and quantifiers, and of sets.

Knowledge of the principles of chemistry which are relevant to life-processes and to health.

Knowledge of biological laws of reproduction and heredity.

Understanding of some of the principle elements in the heritage of Western civilization.

Knowledge of the major principles of high school chemistry.

To know the implications of our foreign trade policies for the international economy and for international goodwill.

To know the major principles involved in learning.

To become familiar with the plant illustrations of the principle laws of heredity and evolution.

To develop an understanding of such basic biological principles as cell theory, osmosis, and photosynthesis.

To develop a knowledge of the principles of federalism.

Table 7: Production of a Unique Communication
Synthesis

Skill in writing, using an excellent organization of ideas and statements.

Ability to write creatively a story, essay, or verse for personal pleasure, or for the entertainment or information of others.

Ability to tell a personal experience effectively.

Ability to make extemporaneous speeches.

Ability to write simple musical compositions, as in setting a short poem to music.
might involve: knowledge or comprehension or evaluation. The "Tale of Knowledge" denies the human origins of knowledge and the human activities that always give it meaning.

**Table 8: Analysis of Elements**

**Illustrative Educational Objectives**

- The ability to recognize unstated assumptions.
- Skill in distinguishing facts from hypotheses.
- The ability to distinguish factual from normative statements.
- Skill in identifying motives and in discriminating between mechanisms of behavior with reference to individuals and groups.
- Ability to distinguish a conclusion from statements which support it.

The Taxonomics affirm principles they do not state and cannot apply. Their "Tale of Knowledge" is not rich with examples of reason, logical development, careful definition or reflective concern with the human sources of human knowledge.

The lack of cultural exchange between Taxonomics and other occupational cultures that was found in the footnotes is substantiated in the treatment of ideas. Probably the most important continuing debate in the social sciences (one ignored by the Taxonomics) is concerned with the nature of social knowledge. Is social science a science modeled on the natural sciences or is it some other kind of social and intellectual undertaking? Is a science that people may do to people the same thing as a science that people may do to things? At the very least this is a matter of discussion and debate that is over a century old. "The Tale of Taxonomy" provides no indication of awareness of this century long intellectual struggle and what it might imply for creating a taxonomy of social knowledge.\(^6\)

\(^6\)W. Dilthey (1831-1911) was one of the major philosophers who was concerned with the distinction between the natural and the social sciences. His conception of human studies, or cultural studies, or social sciences, is based on a distinction between physical sciences and human sciences. The sense of his argument can be discerned in these words:

Life, knowledge of life and the human studies are, thus, internally related and constantly interact. The basis of the human studies is not conceptualization, but total awareness of a mental state and its reconstruction based on empathy. Here life grasps life and the power with which these two basic processes of the human studies are accomplished is a necessary precondition if all their branches are to be adequate.

Here we notice a decisive difference between the physical sciences and the human studies. In the former, scientific thinking has become remote from our day-to-day contact with the external world and its original achievements are esoteric, but in the human studies a connection between life and science is retained, so that thought arising from daily life remains the foundation of scholarly activity.

Judging by internal standards, the ability to assess general probability of accuracy in reporting facts from the care given to exactness of statement, documentation, proof, etc.

The ability to apply given criteria (based on internal standards) to the judgment of the work.

The ability to indicate logical fallacies in arguments.

**“The Tale of Knowledge” and Value Neutrality**

“The Tale” calls attention to certain psychological preconceptions, calls attention to “behavior” as the vital concern of its culture, and excludes cultural exchange with worldly cultures and communities that are engaged with history, science, sociology, philosophy and other communities that confront the possibilities of human knowledge and human understanding. In spite of this deep, relentless value commitment, the Taxonomics claim to be neutral, descriptive, value free in their story of knowledge:

It was further agreed that in constructing the taxonomy every effort should be made to avoid value judgments about objectives and behaviors. Neutrality with respect to educational principles and philosophies was to be achieved by constructing a system which, insofar as it was possible, would permit the inclusion of objectives from all educational orientations. Thus, it should be possible to classify all objectives which can be stated as descriptions of student behavior. (p. 6)

A fourth principle is that the classification should be a purely descriptive scheme in which every type of educational goal can be represented in a relatively neutral fashion. (p. 14)

The taxonomics, as all historical cultures, hold beliefs about themselves and their affairs that do not explain and account for what they do. The value free affirmation serves to disguise from themselves and from others the ways in which they live. In this case, the Taxonomics, while making stunningly arbitrary value commitments, assert they are value free. To some extent all cultures exist through similar delusions. But delusions are hazardous to both individuals and to cultures. The delusions of the Taxonomics would be unimportant if it were a private matter of an isolated cultural group. The Taxonomics, however, are the major, perhaps the dominant force in U.S. education.

**Cultural Exchange**

This study of “A Tale of Knowledge According to the Taxonomics” suggests that the major educational cult or culture in the U.S.:
1. Practices a form of intellectual endogamy that excludes cultural intercourse with occupational cultures relevant to whatever education may mean in our country.

2. Engages in value commitments relating to psychological conceptions, behavior fixations, knowledge hierarchies that are implicit, unexamined, and essentially delusional.

3. Asserts a value neutrality in their affairs that serves to disguise their arbitrary value commitments.

4. Has created a conception of knowledge that is amenable to psychological manipulations but that is dissociated from actual struggles of human beings to know about and to some degree understand their world.

Taxonomic culture is a religious community with a common faith and a powerful liturgy.

The Taxonomics illustrate the search for bureaucratic solutions for human pains and tragedy. If knowledge could only be taxonomized, perhaps we would not have to live with moral ambiguity. If we could be value free, perhaps our rivers would not be dying of toxic wastes, perhaps the pains of poverty and race would be less severe, perhaps the pains of poverty and race would be less severe, perhaps international conflicts would be less murderous. The Taxonomics live in orderly world isolated from the disorder and moral ambiguity which is the fundamental experience of the human species.

The Taxonomics would guide our children. Their endogamy surely is not evil but the culture it produces and sustains is clearly delusional. Although societies exist through their shared delusions, delusions are an unsure basis upon which to struggle with the conflicts and sorrows of our species. It is curious, but not surprising, that "The Tale of the Taxonomics" is so appealing: It promises simplicities of an Age that never was; it promises an end to moral ambiguity; it promises an approach to education free of the labor and struggle that has produced whatever is lovely in human society. Although there are no recipes for confronting Taxonomic delusions, there is exogamy, blessed exogamy.

Another version of this paper was presented in a NCSS/CUFA symposium, November 22-25, 1978, Houston, Texas.

REFERENCES


Book Review Section

Request for Reviewers

Theory and Research in Social Education is initiating a section of reviews of books. Reviews are to provide a service to readers through the identification and examination of important books related to the varied interests of social educators in higher education. The expectation is that reviewers will critically evaluate selected current books to inform, stimulate, and provoke discussion on significant ideas, research and scholarly work.

We need assistance in identifying appropriate reviewers and books. Please include the following information about yourself or a colleague as a potential reviewer (on a 3” x 5” card):

NAME
Mailing Address with ZIP
Degrees Held and Fields of Study
Special Interests and Competency Areas for Reviews
Current Position

If you wish to identify books for review, please include Author, Title, Publisher, Publisher Location, Date.

Send reviewer cards and/or book identification to:
JACK L. NELSON
Graduate School of Education
Rutgers University
New Brunswick, N.J. 08903

Review Criteria & Format

Books should be of scholarly interest. Normally, text books designed for classes will not be reviewed with the exception of texts which appear to advance theory or research in the field. Books for review will normally be drawn from scholarly work in education, other social sciences, history, philosophy, research methodology and any writers whose ideas can contribute to the study of social education.

Reviews should be critical, incorporating adequate basic information on the substance and approach of the book, and including positive and negative evaluation of the work. Further, the reviewer should indicate, unless it is obvious, the importance of the book for social educators.

Format for the review manuscript: Length may vary from 1,000 to 2,000 words; manuscript must be typed, double-space on 8½” x 11” paper; format as follows at the top of the first page of the review:
Book Author's Name (Last Name first),
Title, City of Publication: Publisher, Date;
Total pages; list price (if known).
Reviewer's Name (Last Name Last)
Institution

Submit Review Manuscripts to: Jack Nelson, Book Editor
Responses address above.

Responses to published reviews should clearly identify the review and T&R issue in which it appeared. Responses should also be addressed to the Book Editor, and should not exceed 1,000 words, typed double-space.

LIST OF REVIEWERS

Akenson, James
Tennessee Technological University

Anyon, Jean
Rutgers State University-Newark

Armento, Beverly
Georgia State University

Barnes, Buckley
George State University

Carlson, Kenneth
Rutgers State University-New Brunswick

Cherryholmes, Cleo
Michigan State University

Clements, Millard
New York University

Cornbleth, Catherine
University of Pittsburg

Diem, Richard
University of Texas

Egan, Kieran
Simon Fraser University

Ehman, Lee
Indiana University

Eyler, Janet
Peabody College, Tennessee

Fox, Karen
Northwestern University

Fraenkel, Jack
San Francisco State University
Gillespie, Judith
Indiana University

Grotelueschen, Tom
University of Wisconsin-Whitewater

Hahn, Carole
Emory University

Hartoontian, Michael
Dept. of Public Instruction, Wisconsin

Hepburn, Mary
University of Georgia

Herman, Wayne
University of Maryland

Janz, Richard
University of Maryland

Jorkasky, Benita
State University of New York

Leming, James
Southern Illinois University

Lockwood, Alan
University of Wisconsin-Madison

Martorella, Peter
Temple University

McKeown, Robin
University of California-Riverside

Napier, John
University of Georgia

Nelson, Jack
Rutgers State University-New Jersey

Nelson, Murray
Pennsylvania State University

Newton, Richard
Temple University

Newmann, Fred
University of Wisconsin-Madison

Ochoa, Anna
Indiana University

Palonsky, Stuart
Rutgers State University-New Brunswick

Price, Gary
University of Wisconsin-Madison
Robinson, Paul
University of Arkansas

Schwab, Lynne
University of North Florida

Sesow, William
University of Nebraska

Smith, Bruce
University of Cincinnati

Stanley, William
Cranford High School, Cranford, New Jersey

Sweeney, JoAnn
University of Texas

Thomas, Benjamin
Princeton, New Jersey

Tucker, Jan
Florida International University

Van Sickle, Ronald
University of Georgia

Wehlage, Gary
University of Wisconsin-Madison

White, Jane
Silverspring, Maryland

Zirkin, Wayne
University of Wisconsin-Madison
Theory and Research in Social Education is designed to stimulate and communicate systematic research and thinking in social education. The purpose is to foster the creation and exchange of ideas and research findings that will expand knowledge about purposes, conditions, and effects of schooling and education about society and social relations.

Conceptualizations and research from all of the social sciences, philosophy, history and the arts are needed in clarifying thinking and practice in social education. Manuscripts are welcomed on topics such as those that follow:

- Purposes of social education;
- Models, theories, and related frameworks concerning the development, diffusion, and adoption of curricular materials;
- Instructional strategies;
- The relation of the social sciences, philosophy, history and/or the arts to social education;
- The politics, economics, sociology, social psychology, psychology, anthropology, philosophy, and/or the history of social education;
- Alternative social organizations and utilizations of the school for social education;
- Comparative studies of alternative models of social education;
- Models of and research on alternative schemas for student participation and social action;
- Relationship of different pre-and in-service patterns of teacher training to social education;
- Models of the utilization of objectives in social education and related research findings;
- Implications of learning theory, child development research, socialization and political socialization research for the purposes and practice of social education;
- The relationship of different independent, explanatory variables to educational achievements in the area of learning about society and social relations;
- The social organization, climate, cohesion of schools and other school characteristics as independent, explanatory variables predicting to general educational achievement.

Form for Submission of Manuscripts

In order to facilitate the processing of manuscripts, authors are asked to follow the procedures noted below:

1. Manuscripts should be typed with a dark black ribbon, clearly
mimeographed, or multilithed. Authors should avoid submitting ditto copies of articles unless clearly legible. Some corrections in dark ink will be accepted. Copies containing numerous corrections will be returned for retyping.

2. Four copies of each manuscript should be submitted. This will speed up the reviewing process and guard against loss of manuscripts.

3. Everything should be double-spaced including footnotes and references.

4. Since manuscripts will be sent out anonymously for reviewing and due to the fact that the abstracts will be published, the author's name and affiliations along with an abstract of approximately 100 words in length not exceeding 125 words should appear on a separate covering page. Information identifying the author, position, and institutional affiliation should appear on a separate page.

5. No responsibility is assumed for loss or injury to manuscripts submitted for publication.

Manuscript Style

1. When citations are made, the author's name, publication date, and page (where necessary) should be enclosed in parentheses and located directly in the text. The complete reference will be included in a "References" section at the end of the article. For example, "Another problem arises if inductive methods are used to teach a generalization. The generalization may be reified, treated as a fact, when all generalizations, empirical or theoretical, are, as Popper argues, only corroborated for the time being" (Popper, 1959).

2. Do not cite references by means of footnotes.

3. Only substantive footnotes should be sequentially numbered within the text and located at the end of the manuscript.

4. References should be alphabetized and located at the end of the manuscript. They should take one of the following forms:


5. Each table should be placed on a separate page and placed in a separate section at the end of the manuscript. Arabic numbers should be used for numbering tables; they should be numbered consecutively throughout the manuscript. Show where they belong in the text by the following note:

Table One About Here

6. Figures should be submitted in their final form. Use India Ink and place them on separate pages in a separate section at the end of the manuscript. Number them and locate them in the text in the same way as tables.

7. Send Manuscripts To:

Professor Thomas Popkewitz, Editor
Department of Curriculum and Instruction
225 North Mills Street
University of Wisconsin-Madison
Madison, WI 53706