1-1-1983

The meaning of "a curriculum" in contemporary practice.

Paul Maurice Williamson

University of Massachusetts Amherst

Follow this and additional works at: https://scholarworks.umass.edu/dissertations_1
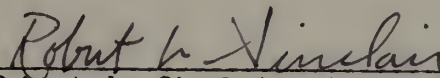
THE MEANING OF "A CURRICULUM"

IN CONTEMPORARY PRACTICE

A Dissertation Presented

By

PAUL MAURICE WILLIAMSON

THE MEANING OF "A CURRICULUM"
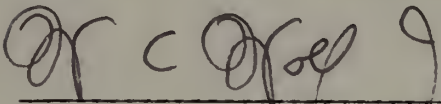
IN CONTEMPORARY PRACTICE
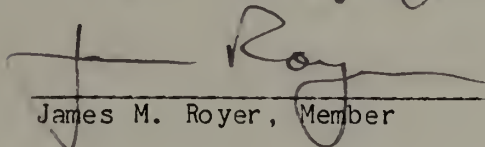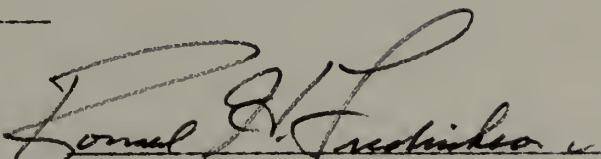
A Dissertation Presented

By

PAUL MAURICE WILLIAMSON

Approved as to style and content:

Robert L. Sinclair, Chairperson

William C. Wolf, Jr., Member

James M. Royer, Member

Mario Fantini, Dean
School of Education

ACKNOWLEDGEMENTS

Many people have supported and assisted me in this study, and I am sincerely grateful for their contributions.

Prof. Robert L. Sinclair served as my doctoral advisor and chair of the dissertation committee. His encouragement, advice, and support have been freely given, and he has provided me with many and varied opportunities to learn. I appreciate his confidence in me. Prof. William C. Wolf gave thoughtful and helpful responses to my work while in progress, always tempered with common sense and wit. Prof. James M. Royer has shown a wonderful ability to ask just the right question at just the right time and to frame theoretical problems clearly. Dr. Ralph W. Tyler was especially supportive in the formative stages of the study. His encouragement, example, and sage advice have influenced and heartened me greatly.

Ann Bussler, Gayle Lauradunn, Judy Rivard, and Susan Routhier spent long, tedious hours collecting the data for the study. Debbie Cushing was undaunted by the high piles of data sheets and keypunched the data quickly and accurately. It is no overstatement to say that without their efforts, the study could not have been completed.

Leonard Basile, Sandra Loehr, Patrice Nelson, and Kim Trimble participated in the pilot testing of the instrument and training program for data recorders. Their many fine suggestions and criticisms, along with those of Jeanne Masson Douglas, were very

iv

ABSTRACT

The Meaning of "A Curriculum" in Contemporary Practice

September 1983

Paul Maurice Williamson, B.A., University of Minnesota

M.Ed., Ed.D., University of Massachusetts

Directed by: Professor Robert L. Sinclair

The concept of "a curriculum" is central to the curriculum field, but the meaning of this concept remains problematic. The purpose of this study was to describe the meaning that "a curriculum" has in contemporary practice at the institutional level. A sample of 35 social studies curriculum guides from school systems in 17 states was subjected to content analysis to answer four questions: What decisions are included in a curriculum? Which decisions in a curriculum are related? Which decisions in a curriculum are most important? What information to aid teacher decision making is included with decisions?

Analysis assumed that educational programs consist of events ("curriculum events") and that the decisions necessary for the conduct of curriculum events are, therefore, the possible ingredients of a curriculum. Data were collected using the "curriculum event information unit" (CEIU) as the recording unit, a CEIU being any segment of a document containing one or more decisions for a specific curriculum

event. Data for 4,895 CEIUs support the following findings.

(1) <u>Content</u> is the only decision usually included in descriptions of curriculum events. Decisions for <u>intentions</u>, <u>action</u>, and <u>props</u> are also included in some documents but not in others. Decisions about <u>organizing center</u>, <u>actor specifications</u>, <u>conditions</u>, and the <u>organization</u> of events are rarely included. Decisions for <u>action</u>, <u>props</u>, and <u>actor specifications</u> are included more often in descriptions of small- rather than large-scale events. Two types of documents were found: those dealing solely with large-scale curriculum events, and those in which decisions for small-scale curriculum events predominate.

(2) The most closely related decisions are <u>action</u> and <u>content</u>. Decisions are considered related if they are present in the same CEIU.

(3) The two most important decisions are <u>organizing center</u> and <u>intentions</u>. Importance is defined functionally, as the power of a decision to organize and unify other decisions.

(4) Information to aid teacher decision making (i.e., <u>justification</u>, <u>priorities</u>, <u>options</u>, and <u>rules</u> for choosing among options) are rarely included with the decisions in a curriculum.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

C H A P T E R   I

INTRODUCTION

Problem

The concept of "a curriculum" is of central importance for cur-
riculum practice, theory, and research. For practitioners, "a curric-
ulum" is the object of their efforts; it is what they develop,
implement, or evaluate.   For researchers and scholars, "a curricu-
lum"--whatever it is--and its related phenomena define the substance
and boundaries of the field of study.   Furthermore, a host of
derivative concepts depend for their meaning on the root concept "cur-
riculum": "hidden curriculum," "curriculum evaluation," "curriculum
engineering," and so forth. However, more than sixty years after the
publication of The Curriculum by Franklin Bobbitt (1918), often
accepted as marking the emergence of curriculum as a legitimate field
of modern educational study, there is still "grave need for the
definition of the existent range of meanings that are to be associated
with the scope of events that belong to the curriculum field"
(Beauchamp, 1981, p. 82).

Symptomatic of this need are the profusion of conflicting terms
and definitions which greets educators who turn to the literature for

help in their work (Jacko & Garman, 1979), the lack of focus in the curriculum field as a whole (McNeil, 1978), the concern expressed by some over just what qualifies as curriculum research (Beauchamp, 1981; Johnson, 1976), and the attempt by some to "reconceptualize" the field (Pinar, 1975). Different uses for the term "curriculum," historical changes in meaning, and debate over the definition of curriculum all contribute to a state of confusion.

The word "curriculum" is used in different ways in education. One use is in the sense of a substantive phenomenon. When used in this way, one talks of a curriculum or the curriculum, usually referring to a plan of some kind, but sometimes to what actually goes on in classrooms and schools (i.e., the actual educational program, as implemented). To distinguish these uses, Goodlad and associates (Goodlad, 1979; Klein, Tye, & Wright, 1979) have used "formal curriculum" for plans and prescriptions about what should be done and "operational curriculum" for what actually occurs. A second use of "curriculum" is in the sense of a curriculum system, referring to "the personnel organization and the organized procedures needed to produce a curriculum, to implement it, to appraise it, and to modify it in light of experience" (Beauchamp, 1981, p. 61). A third use of "curriculum" is in the sense of curriculum as a field of study, an area of professional inquiry. Since the second and third uses of "curriculum" depend ultimately on the first, the meaning of "a curriculum" is of crucial importance to the field.

Not only is the term "curriculum" used in different ways, but the meaning of the term has changed over time. Egan (1978) traces the term from its original Latin use to the present, revealing an evolution from "time spent" to "content" to "methods." The latest period of change coincides with the emergence and development of the curriculum field. Until the early 1920's, the curriculum was generally thought of as a list of subjects to be taught, and their sequence, established by state education authorities, but during these years the locus of responsibility for curriculum development shifted to the local schools, illustrated by large-scale projects in Denver and St. Louis (Tyler, 1981). Under the influence of Bobbitt's seminal work, these projects reflected an analytical emphasis focusing on objectives and content (Caswell, 1978, p. 103). In the 1930's, however, attention turned increasingly to the activities and experiences of students in schools (Phillips, 1962; Caswell, 1978). This new viewpoint is exemplified by Caswell and Campbell's (1935) famous definition, "the school curriculum is held to be composed of all the experiences children have under the guidance of teachers" (p. 69).

The definition of curriculum has engendered a great deal of debate in the curriculum field; Tanner and Tanner (1975) review over twenty definitions of curriculum. The debate is complicated by different kinds of definitions. Scheffler (1960) identifies three types: stipulative (given for purposes of discussion), descriptive (the dictionary sort that describes how a word is used), and programmatic (the way things should be). Scheffler cites Caswell and

Campbell's definition (quoted above) as an example of a programmatic definition intended to extend the school's responsibility beyond the formal course of study to include the social and psychological development of pupils. With this categorization one can understand that so many definitions of curriculum can arise because they represent different doctrines about educational values and practices. However, in this regard, Soltis (1978) makes the excellent point that "while there can be no doubt that decisions of value must be made in education, and that some will be extremely crucial decisions, to make them by definition seems hardly to be the most rational approach" (p. 11; italics in orig.). Furthermore, the definition issue may be moot, for it seems that irrespective of the definition espoused, those who work in the curriclum field go on to consider various problems involved in producing a plan or design (Goodlad, 1960, p. 185). But by giving the impression of dealing with different phenomena, the definition debate has complicated rather than clarified.

Thus, practically from its inception, the curriculum field has been characterized as "sadly confused" (Harap, 1928, p. vi), and has more recently been pronounced "moribund" (Schwab, 1969, p. 1), "irresponsible" (Macdonald, 1971, p. 120), and ineffective: "I do not believe that those of us who work in the curriculum field have had much impact on the conduct of school practice" (Eisner, 1979, p. 5). In the face of such apparent confusion and dismay, those in the curriculum field are challenged to clarify for themselves and others the nature of their work, starting with the concept that must be the

keystone of all work in the field, "a curriculum."

Purpose of the Study

The concept "a curriculum" is central to curriculum practice and curriculum study, but the meaning of this concept remains problematic for the curriculum field. It is, therefore, the purpose of this study to describe the meaning of "a curriculum" in contemporary practice at the institutional level. Four specific research questions that guide the study are developed in the following explication. These are followed by a discussion of the two delimitations inherent in the purpose, "contemporary practice" and "institutional level."

Research question 1: What decisions are included in a curriculum?

As a substantive phenomenon, "a curriculum" is generally taken to mean a plan of some kind,[1] even in the paradoxical case when it may be otherwise defined (Goodlad, 1960; Kearney & Cook, 1960). The meaning of "a curriculum" can then be defined operationally by what is included in the plan, by its ingredients. A curriculum is the end-product of a decision-making process (curriculum development), and the

---

[1] Henceforth, the term "curriculum" will be used only in the sense of a plan unless otherwise noted.

resulting curriculum can be thought of as comprising a set of decisions.[2] Describing the ingredients of a plan can be done by specifying the decisions that are included.

It should be understood that in this study the interest in decisions lies in whether or not certain <u>kinds</u> of decisions are considered ingredients of a curriculum, and not the specific <u>content</u> of the decisions in any particular curriculum. For example, one would be interested in knowing that a decision specifying teaching method is considered part of a curriculum, but whether the method decided upon happened to be the discovery method, the lecture method, or some other method would be irrelevant in this study.

In this study, the search for decisions is based on an analysis of the nature of educational programs. The basic premise is that an

---

[2] The characterization of the results of curriculum development as a set of decisions is an integral part of Walker's (1971) "naturalistic model" of curriculum development. To Walker, the significant output of the process is the design, the abstract relationships among the decisions. He avoids calling the output a curriculum because he wishes to avoid thinking of a curriculum as an object, since "the curriculum's effects must be ascribed to events, not to materials" (p. 53). But while the point about effects is certainly valid, a shortcoming of Walker's model is that it does not specify what the decisions are <u>about</u>. If one is willing to say that the decisions are about an educational program, then Walker's model is compatible with the idea of curriculum-as-plan and complements the traditional (or "classical") view of curriculum development that centers on such tasks as specifying objectives, selecting learning opportunities and organizing them, and so on (e.g., Tyler, 1949). The classical model describes the substantive aspects of curriculum development--the decisions to be made--whereas the contribution of Walker's model is to describe the behavioral aspects of the process--how people go about making decisions. Here, the model uses the idea of deliberation, building on Schwab's (1969) work on the practical.

educational program consists of a set of events, here called "curriculum events." It follows that a curriculum (i.e., a plan for an educational program) consists of decisions for conducting and organizing curriculum events. The analysis of these decisions is developed fully in Chapter II.

Research question 2: Which decisions
in a curriculum are related?

Decisions for an educational program take on their full significance when they are related to other decisions in a coherent whole. Put simply, this research question amounts to finding out which of the decisions included in a curriculum go together.

Research question 3: Which decisions in
a curriculum are most important?

Some of the decisions included in a curriculum are likely to be more important than others. This question seeks to identify the decisions which are most central in a curriculum and those which are peripheral.

Research question 4: What information to aid
teacher decision making accompanies
decisions in a curriculum?

A curriculum--a plan--has no effect until it is implemented and students are actually engaged in the learning process. Except for self-instructional programs, the implementation of a curriculum is carried out by teachers. As teachers prepare to go about their work with specific groups of students, they make instructional plans (in

writing or mentally) that take into account not only the curriculum but also their own characteristics, the characteristics of the students, and factors in the environment (Clark & Yinger, 1980; cf., Beauchamp, 1981, p. 150). This question, therefore, aims to determine what kinds of "accessory information" are included with decisions in a curriculum to help the teacher interpret and translate the plan into action.

Summary of research questions. The purpose of the study is to describe the meaning of "a curriculum" in contemporary practice at the institutional level. This is undertaken by finding the answers to four related questions within a framework of curriculum decision making:

1. What decisions are included in a curriculum?

2. Which decisions in a curriculum are related?

3. Which decisions in a curriculum are most important?

4. What information to aid teacher decision making accompanies the decisions in a curriculum?

Delimitations

The term "contemporary practice" is both an important delimitation and a value statement. As a delimitation, contemporary practice restricts the study to present times and the realm of practice. It excludes, then, an historical approach, and it excludes as well investigation of the meaning "a curriculum" may have for those who theorize, conduct research, teach, or preach in the curriculum

field. As a value statement, it reflects a belief that greater attention must be paid to finding out how things really are in practice. There is a sense that too much of what has passed for curriculum theory would be better described as curriculum values, positions, or platforms (Foshay & Beilin, 1969; Johnson, 1967), and that the field would be better served by correcting for a general absence of funded knowledge based on research (Goodlad, 1969; Walker, 1973). Also, there is a shared working assumption that "improving schools requires knowing what is happening in and around them" (Goodlad, Sirotnik, & Overman, 1979, p. 174).

Curriculum decisions are made in different arenas or "levels of decision-making" (Goodlad, 1960; Goodlad & Richter, 1966). Goodlad and associates have used a system of four levels varying in remoteness from the learner: ideological (or ideal), societal, institutional, and instructional. A more recent formulation (Goodlad, 1979) also includes a personal level for the experiences of students, in an attempt to respond to attention on students "as potential generators and not merely passive recipients of curricular ends and means" (p. 345). This study is restricted to practice at the institutional level, which refers to school and district personnel working together to provide concrete guidance to teachers with respect to the educational program. The study includes, then, the meaning of "a curriculum" only as used in practice in school districts or individual schools, in cases where the schools in a district function autonomously. The study excludes the interpretation given in other

arenas by other agencies, such as regional educational laboratories, university curriculum centers, commercial publishers, or state board or local boards of education concerned with policy matters (societal level). It also excludes the interpretation made by individual teachers or teams of teachers in connection with their work with particular, identifiable groups of students (instructional level).

The choice of institutional level is based on several considerations. First, curriculum development at the local level is a long-standing practice. The locus of responsibility for curriculum development shifted from state education authorities to the local schools during the early 1920's, illustrated by large-scale curriculum development projects in Denver and St. Louis (Tyler, 1981). Second, local curriculum development continues to occupy a secure place in practice; teachers widely accept curriculum development as a local function, particularly on a district basis (Young, 1979, p. 114). Third, local curriculum development has enjoyed support in the curriculum literature, dating from the formative years of the field, exemplified by the position that

> no one but the teachers and other local education supervisors
> can select the particular enterprises which engage the
> interests of any given community itself to such a degree as to
> make these serve as the basis for detailed school projects.
> (Bonser, 1920, p.7)

Such support continues to the present time (e.g., Goodlad, 1979; Sinclair & Ghory, 1979a, 1979b; Tyler, 1981). Fourth, a study of curriculum decision making involving 407 people in five school systems revealed that many institutional-level decisions were not made

clearly, while others were made at the instructional level (Griffin, 1979). Knowing how "a curriculum" is understood at this level will be helpful in assessing the situation and improving practice.

General Approach

This study examines the meaning "a curriculum" has in contemporary practice at the institutional level. The approach taken in the study is to treat written curriculum documents as exemplars of what "a curriculum" means, and through a content analysis of those documents develop data that will describe that meaning. In this section, the approach is explained in general terms. Details of the research plan are provided in the section "Research Design" and the actual methodology is developed in Chapter III.

Use of curriculum documents

Studying the meaning of "a curriculum" through the analysis of curriculum documents rests on a fundamental assumption that the documents embody what the developers mean by "a curriculum." If one makes that assumption, then the documents may be used as a source of data for inferences about the understanding practitioners have.

The argument can be made that a curriculum (i.e., plan) doesn't have to be written down, and, in fact, personal experience in schools suggests that a lot of plans aren't, at least in any systematic fashion. But if it is true that one can have a plan without writing

it down, it is equally true that unwritten plans tend to be unstable, are difficult to determine, and in any case cannot be subjected to careful analysis unless first documented. Therefore, the stipulation is made in this study that a curriculum must be recorded in a written document. This stipulation restricts the study to what is known as the "formal" curriculum, and it excludes other perspectives from which a curriculum can be studied: "instructional," "operational," "experiential" (Klein et al, 1979), "hidden," or "emerging" (Sinclair & Ghory, 1979a).

There are distinct advantages to approaching the study through documented curricula. Curriculum documents are a stable and rich source of data. Many more questions can be asked of a document than would be tolerated by a person responding to a questionnaire or interview. One can ask questions of a document that could not be posed to human subjects because of the complexity of the question or the need for special, shared terminology. The use of documents is "unobtrusive" (Webb et al, 1966), thereby avoiding the influence of participation in research on the data obtained. Moreover, curriculum documents are readily available and accessible to researchers; that is not always the case with practitioners.

However, it can be argued that what counts in education is the "real" curriculum, what actually goes on in classrooms, and that since this may bear litle resemblance to whatever written documents may exist, one is therefore studying a "non-event" (Charters & Jones, 1973). Whether or not that is so is clearly the subject of another

study.   Nevertheless, written curricula are ubiquitous in education,
and whether they are used, abused, or ignored, it is worth knowing
what people are producing in an activity that consumes great amounts
of time, energy, and money. Also, what really goes on is only one
perspective from which to examine curricular phenomena, and it would
be a mistake to define a phenomenon as one's particular perspective on
it.   Finally, the transformation from plan to action and effects is
worthy of study in its own right, and understanding of that process
can only be enhanced by knowing more about the plans, for they are an
important factor in the process.

Content analysis

The research method used in the study is content analysis.
Content analysis has its roots in the study of mass communication,
particularly studies of newspapers, but it is now

> a general-purpose analytical infrastructure, elaborated for a
> wide range of uses. It is intended for anyone who wishes to
> put questions to communications . . . to get data that will
> enable him to reach certain conclusions. (Carney, 1972, p.
> 26)

A curriculum is a message from developers to implementers (teachers),
most often conveyed through the channel of a written document. This
may or may not be accompanied by support activities like inservice
training, introductory presentations, administrative support or
direction, and so on. The use of content analysis in this study,
then, follows a tradition of applications of the method wherein the
content of the message is "treated as an indicator (i.e., of causal

factors) rather than for its own sake. The central concern here is with developing insight into the producers of communications" (Berelson, 1952, p. 28), in this case the meaning they attach to "a curriculum."

There are certain circumstances which make content analysis especially appropriate. Among these are:

1.   When the source materials are complex, in large volume, and contain different kinds of subject matter (Carney, 1972, p. 64; Krippendorff, 1980, p. 30)

2.   When the framework for analysis is not necessarily shared with the originators of the communication (Krippendorff, 1980, p. 31)

3.   When analyzing how people see some aspect of reality: "This is the kind of thing which it does best, in fact" (Carney, 1972, p. 67)

These circumstances prevail in this study: curriculum documents vary in their contents and organization and are sometimes voluminous, the analysis involves a complex framework unlikely to be shared by curriculum developers, and the purpose of the study is to determine the general notion that practitioners have of a phenomenon.

As a method for examining documents, content analysis is effective for finding what is there, but it is equally effective at finding what is not there (Carney, 1972, p. 17), and in the present study what is not included in a curriculum is as important as what is.

Review of Related Research

This study examines the meaning of "a curriculum" in contemporary practice at the institutional level. It does so by treating written curriculum documents as exemplars of what people mean by "a curriculum" and using content analysis to describe the documents. It is appropriate, therefore, to relate this study to other studies of "a curriculum" and to other kinds of studies involving curriculum documents. There are far more studies in the latter category.

Studies of "a curriculum"

Empirical studies of what curricula are like are exceedingly rare.

Two large-scale studies of curriculum guides were conducted around 1950 by Merritt and Harap (1955); the studies were designed along similar lines to facilitate comparison and reveal trends. The second study involved 796 documents from 185 school systems throughout the United States, published in the period 1951-1953; the documents were obtained from the collections in the curriculum laboratories at the George Peabody College for Teachers in Nashville, Tennessee, and at the Iowa State Teachers College in Cedar Falls. The study focused on the type of system from which the guide originated, words used in the title, format, leadership in curriculum development, role of experimentation and research, introductory treatment, organization

into units of work, production of single units of work, use of community resources, adjustments for individual differences, evaluation of results of learning, subject area trends, and general bulletins.

Principal findings from the study (Merritt & Harap, 1955) may be summarized as follows:

1. Most guides came from city (68%) or state (24.5%) systems

2. More than half the documents used the word "guide" in the title. This was a marked increase from the earlier study (from 12% to 52%) and was interpreted to mean "an overwhelming acceptance of the view that the proper function of the instructional bulletin is to serve as an aid to be used voluntarily by the teacher, not as a prescribed course of study to be followed rigidly" (p. 6)

3. Documents ranged in length from 6 to 577 pages with 80 pages as the median length

4. Committees with heavy teacher involvement produced 82% of the guides

5. There were few indications of a continuous cycle of curriculum improvement

6. Research on learning was the most frequently cited data source for decision making (in 64 publications)

7. Statements of views and general objectives were generally lacking, indicating that "far too many guides were merely compilations of prepared teaching units or outlines of what was to be learned" (p. 16)

8.   Only 53% of guides were organized into recognizable units of work

9.   Evaluation of learning "continued to receive scant treatment" (p. 21)

The findings of the study cited above touch on different kinds of questions: characteristics of curriculum documents as documents, curriculum planning practices, and particular educational practices. Only the last four findings relate to the ingredients of a curriculum in terms of decisions, but neither comprehensively nor in detail.

Approximately twenty years later, Langenbach, Hinkemeyer, and Beauchamp (1971) conducted a study along similar lines, but focused more closely on the interpretation of a curriculum. In this case, the 1002 documents analyzed were selected from approximately 1500 submitted for exhibit at the 1969 National Conference of the Association for Supervision and Curriculum Development. Data were collected on ten "design characteristics" (type of binding, statements of goals, recorded history of production, instructions for use, content interpretation, inclusion of instructional strategies, subject matter design, evaluation scheme, number of pages, feedback correction provisions), four "curriculum engineering characteristics" (planning arena, personnel involvement, geographic region, grade designation), and "curriculum type" (general or the various school subjects). Analysis included breakdowns of design characteristics by type and by curriculum engineering characteristics.

Principal findings from the study (Langenbach et al, 1971) may be summarized as follows:

1. Most guides were prepared at the district level (82.8%)

2. Teacher representatives were involved in preparing 70% of the guides and consultants in 18.5%; none were created with total staff involvement and there was almost no trace of participation by lay citizens

3. A larger proportion of guides came from the east and midwest

4. Most guides were for a single grade (31.2%) or for a cluster of grades (28.2%) rather than for an entire level of schooling (i.e., K-6, 7-12) or spanning levels (K-12)

5. More than 65% of guides contained a statement of objectives, a content arrangement, suggested materials, and activities

6. Most guides organized subject matter by units or by topics, and few by processes or problem

7. About 60% of guides have flexible binding, considered an indicator of a concern for ability to make revisions as necessary

8. Guides with fewer than 152 pages were 81.6% of the collection

9. Roughly 60% contained some statement giving the history of the project

10. Nearly 86% of guides contained instructions for use, generally as a point of departure, rather than something to be followed directly

11. Directions or suggestions for teaching methods were included in 73% of the guides

12. More than 85% contained no evaluation scheme

13. No provision for feedback and correction was included in 85% of the guides

It should be noted that some of the items in the category "design characteristics" relate to the design of the document rather than to the curriculum decisions recorded in it. Those which relate to curriculum decisions are: statement of goals, content interpretation, inclusion of instructional strategies, subject matter design, and evaluation scheme. By contrast with the studies of Merritt and Harap (1955), Langenbach et al defined a set of values to measure each variable included. However, they report that they "had difficulty" with the category "content interpretation" but that

> this category has the greatest implication for curriculum design of all the categories used in the study, for it tells us more about curriculum definition as interpreted by persons who engage in the production of curriculum materials. (p. 14)

It is not entirely clear from their report what the source of difficulty was, but one may surmise that it has to do with a certain amount of overlap with other categories, confounding document characteristics with characteristics of the document's contents, and most importantly, perhaps, their attempt to create an additive scale for that category using elements that are not necessarily additive. Whatever the case, the present study extends the work of Langenbach et al by expanding and elaborating the part of their work related to curriculum decisions.

More recently, an analysis of state and district curriculum guides was carried out as part of "A Study of Schooling" (Klein, 1980). A group of 269 guides (122 state, 147 district) was obtained for the study from the districts and states cooperating in "A Study of Schooling." The guides were read and analyzed using a framework made up of categories from the curriculum framework used in "A Study of Schooling" (see Klein et al, 1979). In addition to guide-identification items, the framework included: purpose of publication, rationale for publication, who was involved in producing the guide, treatment of curricular elements (goals/objectives, materials, content, activities, methodology, evaluation, time, space), individualization, decision-making, prescriptive/suggestive, and special features. As is evident from this account of the framework, the study focused more directly on curriculum decisions than the others reviewed above.

The following conclusions are reported (Klein, 1980):

1. The guides were intended to influence classroom practice by providing ideas, specifying content, updating trends, inter-preting laws, policies, & requirements

2. Guides were usually written by committees of educators, but students, parents, lay persons, or other professionals were seldom involved

3. The guides reflect confusion in the field among goals, objectives, content, and activities

4. Behaviorism was emphasized in goals and objectives, and this element "was one of the most extensively developed in all guides"

(p. 5)

5. Discussion of materials was often very specific, even down to page numbers in texts

6. Content was treated extensively, usually on broad levels and often not differentiated from objectives and content

7. Activities/methodology was prevalent and often was very specific

8. Time, space, evaluation were all treated less extensively; individualization was neglected

9. Many guides were written as suggestions; prescriptive ones took the form of terminal or minimal objectives

10. Most guides did not encourage or expect feedback

11. District guides tend to be more specific than state guides, which are more philosophical

12. The life expectancy of guides is around 10 years

13. A cognitive emphasis predominated

14. "Teachers are provided relatively little help in planning curricula in a comprehensive, systematic way through curriculum guides. . . . It would seem that the guides probably function to perpetuate the status quo and the dominant trends in schooling." (p. 8)

15. "Neither district nor state guides were reported to have high influence on what they teach by the teachers in our sample" (p. 9)

Relationship: this study and previous studies. This study differs in important ways from the three reviewed above. These

differences involve the documents used, the framework for analysis, and methodology.

The documents for the three studies above covered various school subjects and levels of schooling. In two cases (Merritt & Harap; Langenbach et al), large, complete, intact collections were analyzed. In the third case (Klein), a collection was assembled by soliciting documents from specific districts and states. By contrast, this study is restricted to a small sample of documents for a single school subject drawn from curriculum guides published in microfiche collections.

The frameworks for analysis in the studies by Merritt and Harap and Langenbach et al included a variety of kinds of items and appear to have been developed ad hoc from inspection of the documents. Klein used a framework based largely on curriculum commonplaces supplemented by items on preferred educational practices. This study uses a framework based on an analysis of the nature of educational programs and the decisions necessary to conduct and organize curriculum events. As will become clear in the next chapter there are both similarities between Klein's framework and the one for this study and important differences, especially with regard to "activities."

The method used in the three studies reviewed above treated curriculum documents as wholes in that data were collected based on impressions and examination of entire documents. By contrast, the content analysis methodology used in this study generates data on individual segments of the documents. The difference is like the

difference between wide-angle and close-up lenses.

Other kinds of studies involving curriculum documents

There are many research studies involving curriculum documents, but most were conducted for some purpose other than examining the interpretation given to a curriculum. Since these studies are not directly relevant to this study, except to provide perspective, these are simply summarized in groups, rather than given a full review here.

Educational content of documents: descriptive studies. Two groups of studies have examined the educational substance of curriculum documents. This first group comprises descriptive studies (vs. evaluative studies; see Payne, 1969), generally in a single subject area. Studies in this group have pursued such questions as how ethnic groups have been treated in social studies over time (Nelson, 1977), how the teaching method "infusion" has been interpreted in career education (Raymond, 1980), whether the goals and priorities in provincial art curricula agree with those advocated in the art education literature (Moody, 1974), what types of instructional materials and activities are specified (Madon, 1970), and so on.

Educational content of documents: evaluative studies. This group comprises evaluative studies, generally for the purpose of disseminating information about exemplary curricula. These would, in fact, be better described as "surveys" rather than studies. Typically, data are not reported; only conclusions or a list of guides is provided. Included here is a series of reports from the Social

Science Education Consortium (e.g., Hedstrom & Haley, 1979; Hedstrom, 1980) and a series of reports from the Committee to Review Guides of the National Council of Teachers of English (e.g., Davidson, 1968; Dittmer, 1974; Winkeljohann, 1979). Other reviews in the group have surveyed home economics guides (Univ. of Illinois, 1980), values clarification (Olsen, 1977), special education (Ash, 1979; Billingsley & Neafsey, 1978), consumer education (Lungmus, Haley, Greenawald, & Forkner, 1980), and alcohol education (Milgram, 1975). Interestingly, several studies in this group have used the same instrument, the Curriculum Materials Analysis System (Stevens & Morrissett, 1968), but no data are reported, so it is impossible to aggregate findings across studies.

There are many studies of this type. Those cited above are illustrative of the group only, not a comprehensive list.

Teacher use of curriculum documents. A third group of studies involving curriculum documents has focused on teachers' use of the documents after they are distributed. The question most frequently investigated is whether or not participating in developing the guide leads to greater or more knowledgeable use of it (e.g., Heusner, 1963; Johansen, 1965; Lamont, 1964; Milstein, 1960; Nault, 1955). Findings from the studies are generally inconclusive or inconsistent. In my opinion they suffer from two serious shortcomings: the variable "use" has not been adequately conceptualized and the characteristics of the documents involved has not been taken into account.

A smaller number of studies in this group have tried to relate the extent or degree of utilization to other variables, such as level of teaching, degrees earned, age, sex, years of experience, and so on (Duet, 1972; Poll, 1970; Warner, 1975). Again, no conclusive findings are revealed across studies, except that biographical factors seem to have little effect in relation to teachers' use of curriculum guides.

Educational values. Studies in a fourth group have examined curriculum documents for what they can reveal of educational values.

Since not all school subjects are uniformly available in schools, Heyman (1979) conducted a content analysis of English and Canadian curriculum materials to investigate "how people talk about subjects with respect to their place in the school curriculum" (p. 1). He found differences among subjects: some were taken for granted but others, like Latin and the humanities, were justified explicitly. He also found that the ideological foundations of justification were ignored.

Five basic orientations toward curriculum have been identified (Eisner & Vallance, 1974; Eisner, 1979). Thomas (1979) analyzed the statements of philosophy and objectives contained in 30 Maryland high school curriculum guides in four subject areas published during 1958-1967 and 1970-1977 to determine the orientations reflected in them. He compared the two time periods and found an increase in the self-actualization orientation during the second time period.

Adherence to curriculum planning principles. McClintock (1970) evaluated 39 music curriculum guides from local school districts in

the states of the North Central Division of Music Educators National Conference for their adherence to principles of curriculum planning and music education as identified through a review of literature. The evaluation used 22 criteria in four categories: guide construction and revision criteria, format and physical features, curriculum planning procedures, and materials, equipment, and aids for guide users.

In summary, studies of curriculum documents have generally been for purposes other than examining how "a curriculum" is being interpreted. Those that have looked at the documents as curriculum exemplars have used a mixture of categories, sometimes confounding characteristics of the documents with the characteristics of the contents of the documents. The present study, then, extends inquiry in a relatively unexplored direction using more refined methodology and a theoretically oriented approach.

Significance of the Study

There are two principal outcomes of this study. The first is a description of "a curriculum" as it is interpreted in practice in local school districts. The second is a methodology for the descriptive analysis of curriculum documents, based on the idea that a curriculum comprises a set of decisions for curriculum events. The significance of these outcomes lies in the contribution they make or can make to important problems in curriculum theory, practice, and

research. It is in the area of curriculum theory that the study makes its greatest contribution.

Curriculum theory

There are two thorny problems for curriculum theory that can be better understood as a result of this study, the definition of curriculum and the role of the curriculum in the work of teachers.

Definition of curriculum. Many definitions of curriculum have been offered. However, many of those have been programmatic, in Scheffler's (1960) sense of the word, and have functioned largely as slogans for rallying support behind certain educational causes (Foshay & Beilin, 1969; Komisar, 1961). In any case, it seems that different definitions have little effect on the ensuing discussion, which usually turns to issues and problems involved in producing a plan, or design (Goodlad, 1960; Kearney & Cook, 1960). But even if one accepts that a curriculum is a plan of some kind, this leaves two related problems: identifying what goes into the plan and distinguishing the plan from other educational plans.

One solution that has been suggested in the curriculum literature is to use the distinction of means and ends. Under this view, curriculum is concerned with ends, and ends only (e.g., Beauchamp, 1975, 1981; Johnson, 1967); consideration of means is instruction. But this solution is unsatisfactory:

1. Many of the things called curricula contain specifications for materials, teaching methods, specific content, etc. which are

decisions about means not ends; this leaves a means-ends distinction not descriptive of reality

2. The argument has been made that ends and means are mutually determining (Schwab, 1969) and that ends often arise out of action and do not precede it (Dewey, 1930/1922; Eisner, 1975; Macdonald, 1965; March, 1972)

3. Means-ends language is said to lead to a dehumanizing school-as-factory mentality in which students become raw materials to be processed through the learning opportunities to meet certain specifications (i.e., objectives)(Huebner, 1966)

4. As a practical matter, studies of teacher planning have found that many teachers plan around activities and pupils, not objectives (McCutcheon, 1980; Yinger, 1973; Zahorik, 1975)

An alternative to a means-ends distinction is a strategy-tactics distinction analogous to the use of those terms in the military. Using this solution, curriculum would be the overall strategy and include decisions in broad strokes. The kind of plans that teachers make as they refine the strategy for their work with specific students would be tactics and would be known by some other name, probably instructional plans or lesson plans; at any rate, they would not be curriculum. So far, a strategy-tactics distinction has not been clearly formulated in the curriculum literature, although English and Steffy (1982) have recently introduced it in the context of a "management tool," and they talk of "curriculum-as-strategy" and "curriculum-as-

tactics."

The description provided in the present study of how "a curriculum" is interpreted by developers in local school districts serves as data to illuminate this issue. This, of course, is the main point of the study.

Role of a curriculum. A curriculum is commonly said to be a point of departure for teaching. But exactly what does that mean? One way to gain purchase on this question is by analyzing a curriculum in terms of the constraints, mandates, opportunities, and options established by the decisions included in the curriculum. This leads to inferences about how the developers intended it to be used. Again, this study provides data for making that kind of analysis.

Both these problems are discussed at length in Chapter V.

Curriculum practice

Curriculum practice involves three processes: curriculum development (producing a curriculum), curriculum implementation (using it), and curriculum evaluation (assessing its worth). There are contributions from this study to both development and evaluation.

Curriculum development. This study provides a framework of possible curriculum decisions and identifies certain kinds of information that may accompany those decisions. If nothing else, this framework can assist curriculum developers by suggesting possibilities for their consideration. Also, the findings as to what is being included--and left out--speak to the issue of why guides don't seem to

have much influence on teachers' work (see Klein, 1980). In this same area, the findings should be of interest to teacher educators; there are implications for those who teach about curriculum.

Curriculum evaluation. The methodology of the study provides a way to make a systematic and detailed analysis of curricula in terms of the decisions included or omitted. This may be useful in identifying needed improvements in a curriculum (formative evaluation), comparing curricula, and in judging the adequacy of a curriculum.

Curriculum research

Certain curriculum problems can be researched more effectively by drawing on this study. Five of these are suggested below.

Definition of a curriculum. This study can be replicated with different populations of guides, different subject-matters, and so on. In this way, a pool of data can be built up, and the overlap of findings from different studies will identify the core of meanings that are associated with "a curriculum."

State of the curriculum development art. This study provides data and a methodology for investigations into the state of the art, so that such assessments can be based on empirical data.

Teacher use of guides. Previous studies of teachers' use of curriculum guides have not taken into account that guides can differ greatly in the information and guidance they provide the teacher. As a result, the findings of these studies are difficult to interpret.

For example, a finding that teachers don't use guides is meaningless if the guides in question are poor ones. This study provides a methodology that can be used to incorporate this variable into the research design.

Implementation. A curriculum is inevitably transformed as it is interpreted and put into action and ultimately perceived by learners. The framework from this study can be used to generate and analyze data about these transformations.

Levels of decision making. The method used here can be applied to curriculum decision making at other levels. One could, for example, use it to examine state curriculum guides, or for the analysis of teachers' instructional decisions, or to study curricula developed at regional educational laboratories, and so forth. If studies were done of different levels using the same framework, then comparisons could be made, clarifying the relationships between levels.

Research Process and Design

The purpose of the study and the general approach to it have been described in earlier sections. This section describes the research design, beginning with the overall plan of action and moving to the technical components of the design. Full details on the methodology are presented in Chapter III.

Overall plan of action

Research activities for this study fell into three phases.

Phase 1 was a pilot study devoted to the development and refinement of research tools and procedures. In this phase, the analytic framework, recording instruments and instructions, and procedures for training data recorders were prepared and subjected to repeated testing, evaluation, and revision. The materials used in the study are in their fourth revision.

The aim during this phase was to ensure that the method could be taught to others and would produce data as reliable as possible. Unless the categories, instructions, and instruments can stand on their own, the reliability of the data is suspect, and "one must wonder, indeed, what kind of contribution a study can make that only the author can replicate" (Krippendorff, 1980, p. 74).

Phase 2 was devoted to data collection and processing. During this phase the sample of documents to be analyzed was drawn, data recorders were recruited and trained, and data were recorded. All data were then keypunched for computer analysis.

Phase 3 was devoted to a critical analysis of the results. An important aspect of this phase was exploring surprises and anomalies in the data to detect things like recorder errors.

Sample

The curriculum documents analyzed in this study were drawn from those on file in two microfiche collections, Selected Curriculum

<u>Guides</u> <u>in</u> <u>Microfiche</u>, published by Kraus International Publications[3] of Millwood, New York, and ERIC <u>Documents</u> <u>in</u> <u>Micro-fiche,</u> published by the Educational Resources Information Center (ERIC). Both collections are nationwide in scope, although they differ in how documents are obtained. The Kraus collection is made up of guides exhibited at the Annual Meetings of the Association for Supervision and Curriculum Development, but many guides exhibited are not published because permission cannot be obtained from the developers. Documents in ERIC, on the other hand, are generally there by virtue of being volunteered by their authors. Although documents are evaluated, standards are quite liberal. These collections are surely a biased population (if someone didn't think a curriculum guide was a good one, it wouldn't have been sent in). Thus, by drawing from these collections one gets, probably, a sample of the best of current practice.

A sample of 39 documents was drawn from the population, of which 35 were eventually coded for the study. The sampling procedure was designed to select one elementary social studies curriculum guide from each different school district represented in the population.

---

[3] At this writing, Kraus is acquiring rights to the <u>Curriculum</u> <u>Development</u> <u>Library</u>, formerly published by Fearon-Pitman. The merged collections will then be known as the <u>Kraus</u> <u>Curriculum</u> <u>Development</u> <u>Library</u>.

Instrumentation

The "Curriculum Decisions Inventory" is the instrument devised for this study. It is described fully in Chapter III and reproduced in Appendix D. The "Recorder Training Program" is a self-instructional program supplemented with coaching to prepare individuals to use the CDI. The RTP is described in Chapter III and excerpts are reproduced in Appendix E.

Preview

The chapters which follow develop the study in detail. Chapter II sets out the framework of ideas and processes involved in the study. The methodology is described in Chapter III, with details on all technical aspects of the study. Chapter IV presents the findings of the study, and in Chapter V conclusions based on the findings are stated. Several appendices are devoted to supplemental material; references to these are made at appropriate points in the chapters.

C H A P T E R   I I

FRAME OF REFERENCE

Chapter II establishes the frame of reference for the study, the structure of ideas and processes involved. The study examines the meaning "a curriculum" has for practitioners at the local school level. It does so by conducting a content analysis of locally-produced curriculum documents on the premise that these embody their developers' conception of what "a curriculum" is.

The process of content analysis involves three principal operations: asking questions about some phenomenon of interest, generating data by coding some source material, and drawing inferences from the data to answer the questions. Posing questions, in effect, identifies certain variable properties of the phenomenon for which values are not known. Since these are the "object of the game," they are referred to here as <u>targets</u>. The targets for this study have already been identified as research questions in Chapter I (see p. 8) Generating data is done by dividing the source material (in this case, curriculum guides) into smaller <u>recording units</u> and measuring certain variables of the units. Drawing inferences requires a set of rules--analytic constructs--that tell how to use the data to decide about the targets.

The kind of questions posed about the phenomenon, the way source materials are coded for data, and the formation of analytic constructs all grow out of existing knowledge and assumptions about the phenomenon; i.e., the analyst's theory. Since this undergirds the entire process, it is referred to here as theoretic foundations.

The frame of reference outlined above includes several interrelated elements represented graphically in Figure 1. These elements are developed below in four main sections. The propositions that form the theoretic foundations of the study are set out in the first section. The second section reiterates the targets (research questions) and relates them to the theoretic foundations. The third section section identifies the recording unit and variables used for coding the content of recording units. The fourth section specifies the analytic constructs linking data and inferences.

In formulating the analytic system for this study, fifteen existing systems for analyzing curriculum and/or curriculum documents were selected for close examination. In the end, these provided little help with the theoretical and practical problems involved in creating the system for this study, so only specific contributions are acknowledged in the text of this chapter. However, a brief general review of the systems may be found as Appendix A.
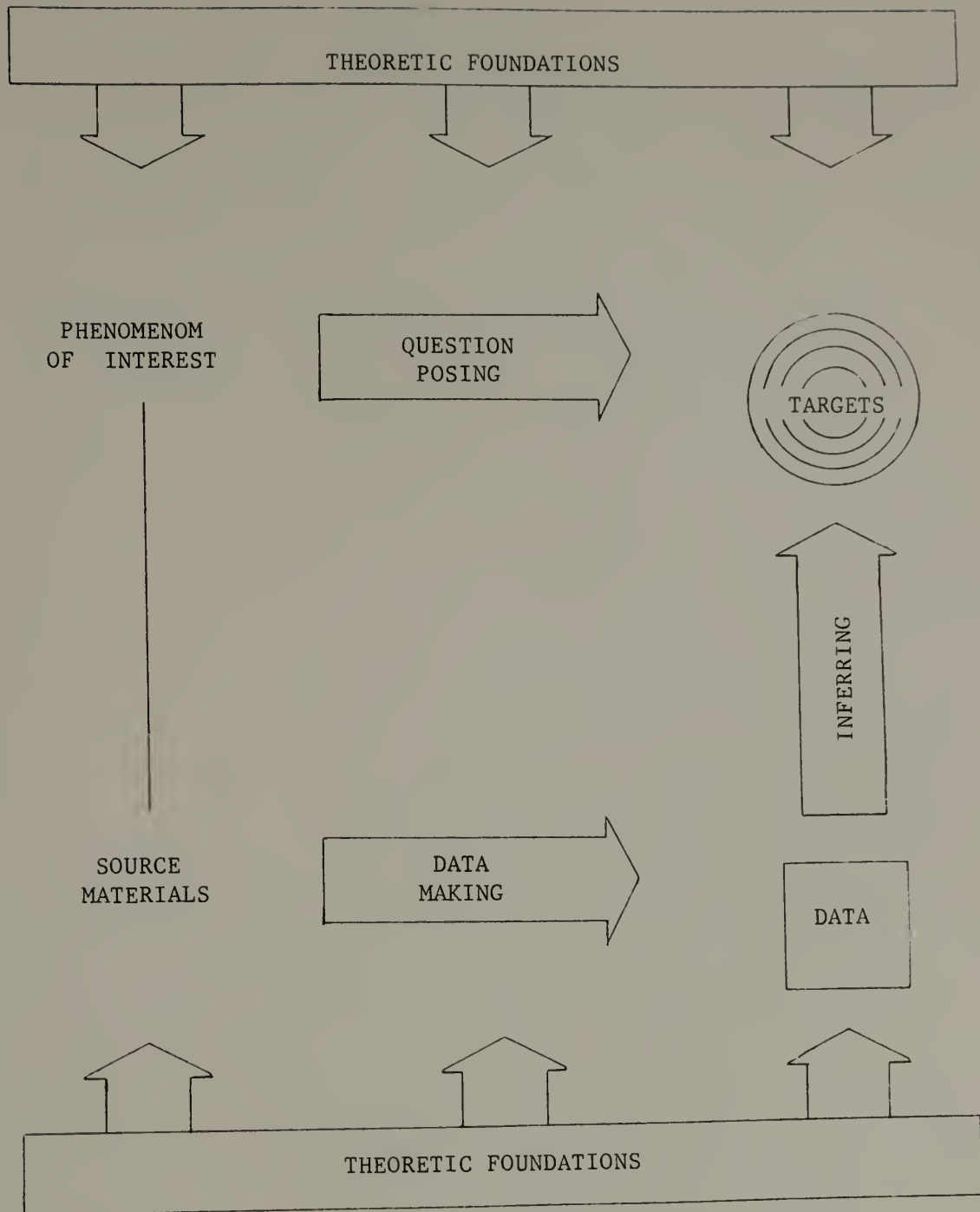
Fig. 1. Frame of reference. See text for explanation.

Theoretic Foundations

The central problem for any analytical system is to capture and illuminate the essential nature of the phenomenon being studied by separating it into component parts and examining them. It follows that the usefulness and meaningfulness of a system depend in large measure on the conceptualization of the phenomenon and its parts that underlies the system. If this understanding is faulty, the results of analysis may be trivial or misleading or may miss the point entirely. Hence, these underlying ideas should be exposed to scrutiny, or "the analyst is in the position of exploring unknown territory with un-reliable yardsticks and a faulty compass" (Gordon, 1967, p. 25).

The propositions that form the theoretic foundations for this study are stated below. These make explicit the ideas that are the basis for inquiry. Each proposition is followed by commentary that explains it and grounds it, whenever possible, in the literature of the curriculum field.

1.0 An educational program is composed of curriculum events.

Educational programs are realized by creating situations in which something happens that is meant to contribute to the education of the learner: a field trip to a working farm, putting on a play, reading a story or a book, taking a biology course, writing a paper, performing experiments, constructing models, etc. Simply put, these

are _events_, and the term "curriculum event" (Duncan & Frymier, 1967) is used here to distinguish these educational events from other kinds of events. Intuitively, we recognize that some curriculum events are much "bigger" than others (i.e., vary in _scale_) and that large-scale events, like courses, are made up of several smaller-scale events. In the literature, curriculum events are referred to by various names: activities, learning activities, learning opportunities, learning experiences, etc.

What must be emphasized in this proposition is the idea of _events_ as the _components_ of a program. This idea has been developed extensively by Duncan & Frymier (1967) who liken curriculum events to the molecules of a substance and refer to them as "curriculum molecules." The idea has also been suggested by Macdonald (1973) and Herrick (1950). Viewing curriculum events as the components (i.e., building blocks, pieces, units, etc.) of a program differs from almost all other theoretical formulations, where events do not occupy such a _central, integrating position_ in the scheme of things. (This point will receive further clarification in the discussion of the next proposition.)

   1.1 A curriculum event has seven elements: organizing center,
       actors, action, content, intentions, props (optional),
       and conditions.

"Elements" can be understood in the usual way, as the basic, irreducible parts of something. The term extends the chemical metaphor introduced above: just as substances are composed of "mole-

cules" which in turn are made up of basic "elements," so are curriculum events—the molecules of an educational program—made up of more basic parts; namely, the elements identified in this proposition.

Specifically, I am making two claims: (1) that all curriculum events are made up of these elements and (2) that these elements are present in all curriculum events (with the exception of "props" which are optional). I am not, however, claiming that all these elements are present in plans for curriculum events (i.e., curricula); what is in those plans, is, after all, what the study seeks to determine.

Organizing center is the focal point around which a curriculum event is organized. Organizing centers have been referred to as "catch-hold points" (Goodlad, 1959; Goodlad & Richter, 1966) and "centers of attention" (Herrick, 1975; Macdonald, 1973). The crucial thing about an organizing center is that it focuses or directs the attention of the learner. Organizing centers may be ideas, exhibits, places, people, questions, topics, books, problems, etc.

Actors are the participants in a curriculum event. At least one actor, a learner, is necessary, but most curriculum events also involve a teacher under whose direction the event is staged. The actors may be required to meet certain specifications as to characteristics or prerequisite competencies, and may be organized in particular groupings.

Action is "what happens" in a curriculum event. The action may consist of a series of steps or operations and involves specific behaviors by the actors.

Content is the subject matter of the curriculum event. Content consists of information, concepts, generalizations, ideas, principles, values, processes, etc. (Zais, 1976, p. 324). Content is the "something" that is being taught and learned.

Intentions are the educational aims (i.e., ends, purposes) which impel a curriculum event. Curriculum events are staged "on purpose"; i.e., for some reason. The intention may be to promote specific desired outcomes in the learner, and the curriculum event is believed to do so effectively. Or, the intention may be to engage the learner in some process that is believed to lead to desirable outcomes but which may be diverse or unpredictable. Thus, intentions may be framed in terms of ends (outcomes) or means (process). Intentions may also be framed in terms of the pedagogic role to be played by the curriculum event, as in "to review the causes of the Civil War." Intentions framed this way state what the event is supposed to do for the student.

Props are the things used during curriculum events by learners and teachers (actors). Props is a generic term that encompasses what are commonly known as "instructional materials," "materials," "teaching aids," etc. Props are an optional element, since a curriculum event can be staged without them.

Conditions are the circumstances or requirements under which a curriculum event takes place. Three principal conditions may be identified: time allocation, the arrangement and use of space, and specifications as to needed facilities (i.e., special kinds of rooms,

buildings, or sites).

All these elements are brought together in a curriculum event, represented graphically in Figure 2. The lines connecting the elements are meant to indicate that the elements form a coherent whole and, ideally, are mutually consistent. The wavy line bounding the event suggests that events are "pliable," and their nature depends on their elements. The nature is determined to a great extent by the choice of organizing center, since it serves as the focal point of the event.
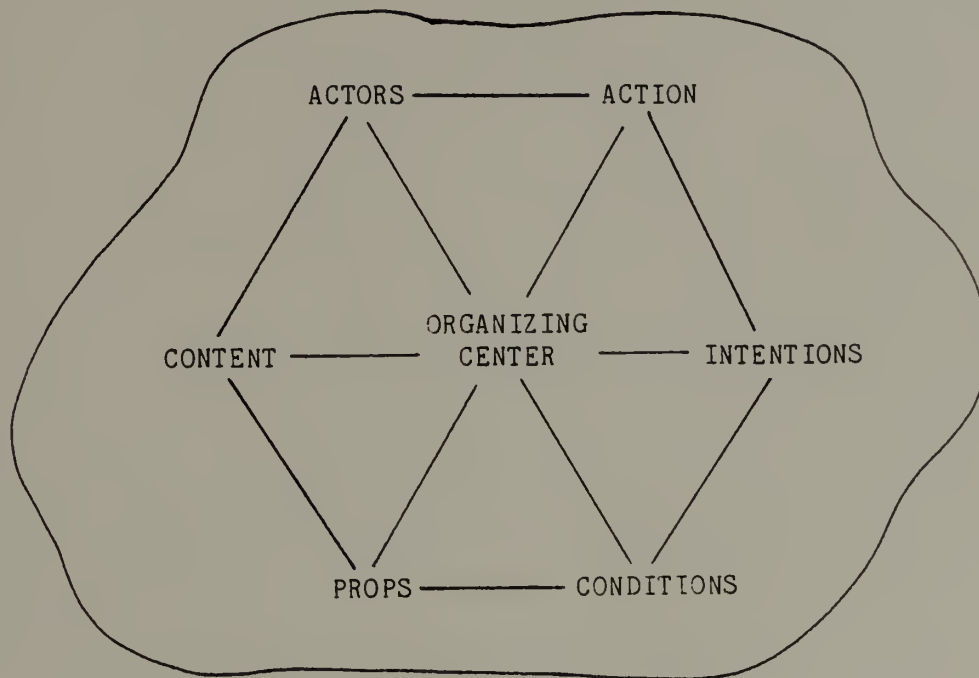
Fig. 2. A curriculum event. Curriculum events are the components of an educational program. Curriculum events have seven interrelated elements.

The elements identified and defined above as making up curriculum events are separable; each can be isolated. But the elements, considered separately, tell very little about an educational program, for it is only when the elements are brought together that their full significance becomes clear. To use the chemical metaphor, molecules of water have two elements, hydrogen and oxygen, but when these elements are isolated, they no longer have the properties of water. It is this line of reasoning which supports the contention that events are the smallest meaningful part of an educational program (see Duncan & Frymier, 1967, p. 182; Macdonald, 1973, p. 40). This does not deny the utility of elements as jumping-off places for analysis or planning, but it does suggest that until these elements have been fashioned into events, one hasn't jumped very far.

This view of curriculum events as the basic components of a program is different from most theoretical formulations where events (usually called "activities," or "learning opportunities") tend to be just one among several components or elements, rather than that which integrates the others (Table 1). That is, most schemes do not distinguish between components of the program and elements of the components. In this regard, a great deal is owed to the work of Duncan & Frymier (1967) whose analysis is based on "curriculum events" (or "curriculum molecules") with three essential elements: "actors," "artifacts," and "operations." However, there are differences: their "artifacts" includes both elements "content" and "props" here, but is more oriented toward subject matter; their "operations" is broader

TABLE 1

THE COMPONENTS OR ELEMENTS OF A CURRICULUM AS
IDENTIFIED IN SELECTED CURRICULUM LITERATURE

Beauchamp (1975) .... Culture content
Goals and/or specific objectives
Statement of purposes and direc-
tions for use of the curriculum
Appraisal scheme

Goodlad, Klein & Tye (1979) ...... Goals and objectives
Materials
Content
Learning activities
Teaching strategies
Evaluation
Grouping
Time
Space

Saylor, Alexander &
Lewis (1981) .... Goals and objectives
Curriculum design
Instructional modes
Evaluative processes

Taba (1962) .... Aims and objectives
Content and learning experiences
Evaluation

Tanner & Tanner (1975) .... Objectives
Subject matter
Methods and organization
Evaluation

Zais (1976) .... Aims, goals, and objectives
Content
Learning activities
Evaluation

---

than the element "action" for they take it to imply intent, here treated as a separate element.

    1.2 Curriculum events vary in scale from macro-curriculum events to micro-curriculum events.

    1.21 Large-scale curriculum events consist of a series of smaller-scale curriculum events.

These propositions formalize observations made above; namely, that some curriculum events are "bigger" than others and that large-scale curriculum events are made up of smaller-scale ones. Therefore, curriculum events may be ordered along a continuum of scale from macro-curriculum events to micro-curriculum events. This is easier said than done, for on a continuum everything is relative, and establishing and naming reference points along it is somewhat arbitrary. The scale of curriculum events for this framework is shown in Table 2. The scale draws on terms and definitions from a compilation of Standard Terminology for Curriculum and Instruction in Local and State School Systems (Putnam & Chismore, 1970). The scale is anchored on one end by the total program of studies and on the other by the activity. These are the largest- and smallest-scale curriculum events, respectively, considered useful for this study.

Program of studies (or simply "program") refers to a total educational offering of a school. Elementary schools typically have only one program for all students, whereas secondary schools may offer several, e.g., college preparatory, business, or vocational. These different programs may be called curricula, as in "college preparatory

TABLE 2

A SCALE OF CURRICULUM EVENTS

Program of Studies ..... "A combination of related courses and/or self-contained classes organized for the attainment of specific educational objectives. . . ." (p. 42)

Course .... "An organization of subject matter and related learning experiences [i.e., curriculum events] provided for the instruction of pupils on a regular or systematic basis, usually for a pre-determined period of time. . . ." (p. 47)

Unit of Instruction .... "A major subdivision of instruction within a course . . . provided for a self-contained class or for other pupils. Generally composed of several topics, a unit of instruction includes content and learning experiences developed around a central focus such as a limited scope of subject matter, a central problem, one or more related concepts, one or more related skills, or a combination of these." (p. 267)

Topic of instruction ... "An identifiable segment of a unit of instruction." (p. 267)

Activity .... A discrete, non-episodic, curriculum event, generally taking place during one class or instruction period.

Note. Quoted definitions are from Putnam & Chismore, 1970.

curriculum."

Courses are the large-scale events which make up a program, generally lasting for a school year or one of its main divisions (semester, quarter, etc.). Courses may be based on (i.e., have as their organizing center) specific subjects (e.g., geography, hand-

writing, spelling), broad fields (e.g., social studies, language arts, earth sciences), activity centers (e.g., sand table, housekeeping corner, library), or a core of integrated problems or interests. The kind of organizing center for courses is used to name the program's design. Depending on who's counting, there appear to be between three and five basic designs. Saylor, Alexander, and Lewis (1981, p. 206) identify five; namely, those based on: (1) subject matter/disciplines, (2) specific competencies/technology, (3) human traits/processes, (4) social functions/activities, (5) individual needs and interests/activities.

Units of instruction (or simply "units") are relatively large-scale events which are the main divisions of a course, developed around some limited aspect of the course. For example, an English course may have units on poetry, drama, the short story, and novel.

Topics of instruction (or simply "topics") are relatively small-scale events which are identifiable divisions of a unit. For example, in an English course, a unit on poetry may have as topics different types of poetry.

Activities are the smallest-scale curriculum events included in this framework. An activity is a simple, discrete curriculum event. It may be part of some larger-scale event (it almost always would be) but does not itself contain smaller-scale events. An activity generally takes place during one class or instructional period. For practical purposes, an activity is a "lesson."

Four points should be made about this scale. First, it is
subject to further subdivision; for example, a "course sequence" could
come between program and course. Second, the only theoretically-
necessary points on the scale are the endpoints, although as a
practical matter it's difficult to imagine a school's program
consisting only of activities not organized into larger-scale events.
Third, curriculum events of different scale differ in duration and
complexity, not in their elements; i.e., large-scale curriculum events
have the same elements as smaller-scale ones. Fourth, the scale of
curriculum events corresponds to the "levels" of "organizing
structures" discussed in the curriculum literature (e.g., Tyler, 1949,
pp. 98-99). However, the scale of curriculum events avoids the
necessity of talking about "organizing structures" separately from
"learning experiences" (i.e., curriculum events) for the larger-scale
curriculum events are the organizing structures.

1.3 The arrangement of curriculum events defines the
     structure of the program.

1.31 Structure has two dimensions: temporal and hierarchical.

An educational program consists of many curriculum events which
must, of necessity, be arranged somehow. This is achieved by
organizing curriculum events into larger-scale events (hierarchically)
and over time (temporally). Hierarchical organization has already
been described (1.2 and 1.21). Temporal organization reduces to two
basic choices: concurrently (at the same time) or successively (one

after the other). These are the familiar "horizontal" and "vertical" aspects of organization discussed in the literature. The arrangement of curriculum events defines the structure of the program. Naturally, the arrangement of curriculum events also arranges the elements of the curriculum events.

Structure can be described in terms of the hierarchical and temporal positioning of curriculum events within it. Structure can also be described in terms of the nature of the relationship between curriculum events.[1] In this study, however, analysis of structure is limited to positioning of curriculum events.

> 1.4 Curriculum events perform different functions in an edu-
> cational program; in general, these are: planning, teach-
> ing, and evaluating.

Function is the part the curriculum event plays in the program. Three general functions can be distinguished: planning, teaching, and evaluating. Planning events are those used to create or modify plans for future curriculum events; for example, a class session in which teacher and students identify topics to study, form committees, etc. Teaching events are those which are used to help the student learn. This function encompasses events which introduce, provide practice, instruct, review, etc. Evaluating events are those used to assess

_____

[1] Posner and associates (Posner, 1974; Posner & Nyberg, 1975) have developed a conceptual scheme and methodology for analyzing structure, especially sequence, based on two dimensions: temporality and commonality of elements.

student learning, before instruction (diagnosis) or after it.

    2.0 A curriculum is a plan for the educational program of a school, or for a part of the program.

    Corollary: A curriculum is a plan for a set of curriculum events.

This definition is a fundamental premise of the framework. Although the "definition of curriculum" has engendered a great deal of debate in the curriculum field, Goodlad (1960, p. 185) has pointed out that whatever definition may be espoused, those who work in the curriculum field end up by dealing with various problems involved in producing a plan. In this sense, the definition of curriculum is not at issue. The real issues of the debate are what the plan should be (i.e., the nature of the program), how it should be determined, and by whom. These are really questions of educational values and practices, not of definition, except in the sense of "programmatic definitions" (Scheffler, 1960).

There are, of course, many kinds of plans, so the definition includes the qualification that a curriculum is a plan for an educational program. It is further stipulated that the educational program be of a school. This stipulation is not essential to the definition: education, after all, takes place in many places besides schools, and the plans for the educational programs of libraries, museums, businesses, families, and other educative agencies may also be considered curricula. The stipulation is included, however, to reflect the predominant focus in the curriculum field on school

programs and to indicate that these other curricula are beyond the bounds of the present inquiry. Some theorists (e.g., Beauchamp, 1975, 1981) insist that the word curriculum can be properly used only in relation to the total program. However, in customary usage, one may hear the term used for almost any more-or-less independent part of a total program; for example, the mathematics curriculum, the third-grade curriculum, the third-grade mathematics curriculum, etc. Thus, there is heuristic value in admitting the use of curriculum for parts of a program as well as for the total program, even though this complicates matters.

This proposition (a definition) is the key to the analytic framework, for it suggests analysis based on the nature of an educa-tional program rather than on some prior notion of what a plan for a program (i.e., a curriculum) does, may, or should entail. The rationale is quite simple: if a curriculum is a plan for an education-al program, then the nature of an educational program defines the potential substantive ingredients of a plan. In short, the proposition establishes an independent basis of analysis. This means that curricula can be compared not only to each other but also to what is understood about educational programs.

The corollary definition follows logically: if an educational program is composed of curriculum events (1.0) and a curriculum is a plan for an educational program (2.0), then a curriculum is a plan for a set of curriculum events.

3.0 Curriculum development is the process of producing a cur-
riculum.

3.1 The product of curriculum development is a curriculum,
which comprises a set of decisions about curriculum
events, their elements and arrangement.

A curriculum is a plan for an educational program (2.0) and the
process of creating such a plan is curriculum development. The
process is known in the literature by other similar terms as well:
curriculum planning, curriculum construction, curriculum building,
curriculum designing, etc.

Since an educational program consists of a set of curriculum
events (1.0), curriculum development can be understood as making
decisions about curriculum events. The end-product (output) of the
process, then, is a set of decisions (Walker, 1971).

3.2 The method of curriculum development is deliberation.

Making decisions is a matter of making choices from among
possibilities, and the possibilities for an educational program are
virtually without limit. In practice, these decisions are made by
deliberation (Schwab, 1969, p. 20; Walker, 1971, p. 54) and are based
on ideas of what ought to be, on what is personally or collectively
valued: "Schooling is a process of encountering what society thinks
one _ought_ to learn, not what there _is_ to learn. There is _no
objectively discoverable curriculum_ to be found 'out there'"
(Macdonald, 1971, p. 121; italics in orig.). In the sense that cur-
riculum development involves determining a collective course of

action, it is a social and political process.

3.21 The driving force of curriculum development is the desire
for justifiability.

Walker (1971) identifies the "animating principle" in deliberation as "the desire for defensibility, for justifiability of decisions. The curriculum designer wants to be able to say that he was constrained either by circumstances or by his principles to decide as he did" (p. 55; see also Scheffler, 1958).

Three "data sources" are usually cited as providing justification for curriculum decisions: the learner, society, and accumulated knowledge (see, e.g., Saylor, Alexander, & Lewis, 1981, p. 116; Tyler, 1949). Other important bases of justification are beliefs about how people learn ("learning theory") and what is good and desirable in educational programs ("philosophy of education"). In Walker's (1971) model, values and beliefs are called a platform: "the platform includes an idea of what is and a vision of what ought to be, and these guide the curriculum developer in determining what he should do to realize his vision" (p. 52). Values and beliefs pervade curriculum practice and underlie decisions, whether expressed or not.

3.3 Curriculum development occurs in different arenas (levels
of decision making): ideological, societal, institution-
al, and instructional.

Curriculum development activity goes on in different arenas or at different "levels" (Goodlad, 1979; reviewed in Chapter I, p. 9).

Although not originally meant to be interpreted hierarchially, "there is, to a degree, an hierarchical character to the existing decision making structure. . . . Legislators do not intend for the educational bills they pass to stop with their own peer group" (Goodlad, Klein, & Tye, 1979, p. 51). Whether or not decisions made at "higher" levels filter down and are followed is open to question; research suggests that they may not (see, e.g., Griffin, 1979; McClure, 1979). Whatever the case, in the final analysis all decisions not made in and accepted from some other arena must, by default, be made by teachers in the instructional arena. It is for precisely this reason that the question of which decisions are included in a curriculum has such significance for school practice.

4.0 Curriculum implementation is the process of using a curriculum to conduct an educational program.

Corollary: Curriculum implementation is the process of conducting curriculum events.

A curriculum is a plan (2.0), and curriculum implementation is the process of putting the plan into action. Since a program consists of curriculum events (1.0), implementation can be understood as conducting curriculum events. The implementation of a curriculum is instruction (Saylor et al, 1981, p. 10).

4.1 Curriculum implementation is mediated by teacher instruc-
     tional planning.

4.11 A curriculum is only one input to teacher planning.

As teachers prepare to go about their work with specific groups
of students, they make instructional plans, either in writing or
mentally, that take into account not only the curriculum but also
their own characteristics, the students' characteristics, and factors
in the environment (Clark & Yinger, 1980; cf., Beauchamp, 1981,
p. 150).   A great deal depends, of course, on what decisions are
already accounted for in the curriculum and how constrained the
teacher is, or feels, to follow them. What's important about this
point is that except for self-instructional programs, curricula are
translated and transformed by the teachers who implement them; it is
inevitable.

Summary

A summary of the propositions of the theoretical foundations is
provided as Table 3.

TABLE 3

THEORETIC FOUNDATIONS: SUMMARY OF PROPOSITIONS

1.0 An educational program is composed of curriculum events.

    1.1 A curriculum event has seven elements: organizing center, actors, action, content, intentions, props (optional), and conditions.

    1.2 Curriculum events vary in scale from macro-curriculum events to micro-curriculum events.

        1.21 Larger-scale curriculum events consist of a series of smaller-scale curriculum events.

    1.3 The arrangement of curriculum events defines the structure of the program.

        1.31 Structure has two dimensions: temporal and hierarchical

    1.4 Curriculum events perform three general program functions: planning, teaching, evaluating.

2.0 A curriculum is a plan for the educational program of a school, or for a part of the program.

    Corollary: A curriculum is a plan for a set of curriculum events. (From 1.0 and 2.0)

3.0 Curriculum development is the process of producing a curriculum.

    3.1 The product of curriculum development is a curriculum, which comprises a set of decisions about curriculum events, their elements, and arrangement.

    3.2 The method of curriculum development is deliberation.

        3.21 The driving force of curriculum development is the desire for justifiability.

TABLE 3--Continued

3.3 Curriculum development occurs in different arenas (levels of decision making): ideological, societal, institutional, and instructional.

4.0 Curriculum implementation is the process of using a curriculum to conduct an educational program.

Corollary: Curriculum implementation is the process of conducting curriculum events (instruction). (From 1.0 and 4.0)

4.1 Curriculum implementation is mediated by teacher planning.

4.11 A curriculum is only one input to teacher planning.

Note. The propositions stated here are those necessary and useful for the study. They are not, and should not be construed as, a full statement of the author's conception of curriculum or educational programs.

Posing Questions

Posing questions is the starting point for content analysis, as for all research, since everything else depends on what you want to find out. In this case, the phenomenon of interest is the meaning that "a curriculum" has for practitioners in local schools and school districts. Four specific research questions were identified in Chapter I (see p. 8) concerning the decisions that go into a curriculum, the way those decisions fit together, and what kinds of information accompany the decisions. These are the "targets" (Krippendorff, 1980, p. 27) of the study. Each specifies some property of the

phenomenon to be inferred, and these properties can be thought of as the dependent variables of the study, or "target variables." The purpose of this section is to make the underlying target variables explicit and to link each of the targets (i.e., research questions) with the relevant ideas in the theoretical foundations.

Question 1: What decisions are included in a curriculum?

This study starts from the assumption that a curriculum is a plan for an educational program (2.0). This suggests that a useful way to look at a curriculum would be in terms of the set of decisions inherent in an educational program. That set of decisions would provide what content analysts call a "maximal version" (Carney, 1972, p. 162) of decisions that <u>might</u> be included in a curriculum; i.e., in a plan for a program.

Accordingly, several propositions were put forth concerning the nature of an educational program: educational programs consist of curriculum events (1.0) which have seven elements (1.1), vary in scale (1.2), occupy a position in the structure of curriculum events (1.3), and perform different functions in the program (1.4). These propositions define a set of decisions inherent in an educational program that can be visualized as the matrix shown in Figure 3.

The first target question, then, amounts to asking which decision cells in the matrix are included in a curriculum. The

SCALE OF CURRICULUM EVENTS

	Program	Course	Unit	Topic	Activity
ELEMENTS Organizing Center					
Intentions					
Content					
Action					
Props					
Actors					
Conditions					
STRUCTURE Hierarchy of events					
Concurrent events					
Sequential events					
FUNCTION					

Fig. 3. Matrix of decision points for an educational program.

underlying target variable is <u>inclusion</u>, and this first target is really a series of questions taking the form

Is (decision cell) included in a curriculum?

Question 2: Which decisions in a curriculum are related?

In the discussion of the elements of a curriculum event (1.1), it was pointed out that the elements of curriculum events could be isolated for analysis or during planning. It was also suggested that the full significance of any decision really comes from being combined with others in a coherent whole.

Question 2 asks which decisions included in a curriculum are related. For purposes of this analysis, decisions are considered related if they are present in the same recording unit.[2] The underlying target variable is <u>relatedness</u>.

Question 3: Which decisions in a curriculum are most important?

Certain decisions in a curriculum are certain to be more important than others. For this analysis, importance is defined functionally in terms of the organizing power of a decision; i.e., the more a decision functions to organize and tie other decisions together, the more important it is considered to be. Defining importance this way was suggested by Rokeach's (1968) definition of

---

[2] Because of this, a recording unit that preserves the connections within the document is crucial.

centrality of a belief in a belief system (read "decision" for "belief"):

> We define importance solely in terms of connectedness: the more a given belief is functionally connected or in communication with other beliefs, the more implications and consequences it has for other beliefs and, therefore, the more central the belief. (p. 5)

Thus, what's involved here is which decisions organize the biggest clusters of decisions. The underlying target variable is importance.

Question 4: What information to aid teacher decision making accompanies decisions in a curriculum?

The decisions in a curriculum are the result of a deliberative process (3.2) for which the animating principle is the desire for justifiability (3.21). The decisions are made in light of particular educational values, beliefs, aspirations, and circumstances. Implementing a curriculum--putting the plan into action--is mediated by teachers' instructional planning (4.1), which is affected by factors besides the curriculum (i.e., program plan) that the teacher is working with. Effectively, the teacher is the final arbiter and decision maker about what actually goes on in an educational program. What is of interest in this question is what kinds of information are included in a curriculum that would aid the teacher in making final decisions.

Four kinds of information can be identified as aids to decision making, drawing on decision theory as applied to curriculum decision making (Hughes, 1962). The justification, or reasoning behind the

decisions, would enable the teacher to consider the decision in light of common circumstances, values, and purposes. An indication of _priority_ among the items decided would help the teacher know what to stress, what could be safely passed over, etc. A set of _options_, or alternatives, to what is specified would provide flexibility and enable the teacher to adapt to circumstances without having to create alternatives from scratch. Finally, _rules_, or guidelines, for how to choose among options would aid the teacher in matching learners with learning opportunities most appropriate for them. These kinds of information have been dubbed "accessory information" in this study.

As with the first question, the underlying variable here is _inclusion_, except that in this case it concerns accessory information included _with_ decisions, not the decisions themselves.

Summary

The target questions and variables of the study may be summarized as follows:

1. What decisions are included in a curriculum?

    Target variable: inclusion.

2. Which decisions in a curriculum are related?

    Target variable: relatedness.

3. Which decisions in a curriculum are most important?

    Target variable: importance.

4. What information to aid teacher decision making accompanies

    decisions in a curriculum?

Target variable: inclusion

Generating Data

Generating data to use in content analysis involves solving two practical problems: how to divide up documents for analysis and how to describe or measure these units. The first of these is the problem of defining a <u>recording unit</u>; the second is the problem of specifying the <u>variables</u>. Each of these is taken up below.

Recording unit

Recording units are the analyzable parts into which a document is divided, the pieces to be described or measured. Holsti (1969) describes a recording unit as "the specific segment of content that is characterized by placing it in a given category" (p. 116).

The purpose of this study imposes certain requirements on the recording unit. First, it must preserve the conceptual integrity of the source material. The study seeks to determine how practitioners think about "a curriculum," so the recording unit has to capture "whole chunks" of their thinking. Second, it has to distinguish between relevant and irrelevant material in the document. "A curriculum" is assumed in this study to be a plan for an educational program (1.0), so the material that is of interest is that which can be reasonably construed as a part of a <u>plan</u>: "any detailed method, formulated beforehand, for doing or making something" (<u>Webster's</u>,

1980, s.v. "plan"). Thus, the material in the recording unit has to concern some decision for one of the curriculum events making up an educational program. That is, the information has to be classifiable into one or more of the cells in a column of the matrix presented in Figure 3 (p. 59). For example, a section of a document that just describes how the curriculum came to be developed would be irrelevant for this study, and should not be coded.

Different kinds of recording units are available for content analysis (see Carney, 1972, pp. 158-167; Holsti, 1969, pp. 116-117; Krippendorff, 1980, pp. 60-62). The purpose of this study requires that the recording unit must be a thematic unit. A thematic unit is "a conceptual entity: an incident, thought-process, or viewpoint which can be seen as a coherent whole" (Carney, 1972, p. 159).

The recording unit devised for this study is the "curriculum event information unit" (CEIU). A CEIU is a segment of a curriculum document which contains one or more decisions for a given curriculum event.

Operationally, CEIUs vary in size, depending on the scale of the curriculum event in question. When the event is a course, the CEIU may encompass many pages. On the other hand, if the event is an ac- tivity, the CEIU may be only a portion of a page. It is entirely possible that practitioners may think of decisions for curriculum events in relative isolation, so a CEIU may include a single decision.

While the boundaries of CEIUs have to be determined conceptually, cues may be taken from the lay-out of material in the

document; a CEIU may coincide with a segment set off with a distinctive heading, a row in a table, an entry in a list or outline, or material presented in a distinctive physical pattern on the page. Because CEIUs are determined conceptually, coding of the documents has to be done by people with considerable understanding of the concepts involved in order to make reliable judgments. Therefore, a training program for data recorders was developed as part of the study (see Chapter III and Appendix E).

Variables

Data for content analysis is generated by characterizing the contents of individual recording units in the source material. Each attribute described (measured) is a variable, and during recording, each variable is assigned a value, either an open-ended one or one from a prescribed set. The variables measured in this study, and the values they may take, are summarized in Table 4.

Drawing Inferences

The intellectual task in content analysis is to draw inferences about the targets of the analysis from the data that have been generated. This calls for, essentially, a theory of how data relate to the phenomenon under study. The presumed relationships are analytic constructs which in simplest form can be understood as IF-THEN statements where data appear as the independent variable and the

TABLE 4

VARIABLES AND VALUES

CEIU location

    Document identification number

    Page numbers where CEIU begins and ends[a]
        (open)

    Type of section in document where CEIU is located
        Based on: (1) whole events (2) isolated elements (3) other

Classifications of the curriculum event referred to
    (variables used for contextual analysis)

    Scale
        (1) program (2) course (3) unit (4) topic (5) activity

    Function
        (1) planning (2) teaching (3) evaluating

    Curriculum event decision which dominates CEIU
        (1) organizing center (2) intentions (3) content (4) action
        (5) props (6) actor specifications (7) conditions

Presence of curriculum event decisions

    Elements: organizing center, intentions, content, action, props,
    actor specification, conditions
        (1) present (0) not present [for each element]

    Structure: identification of subordinate events comprised in the
    curriculum event, temporal position in structure
        (1) present (0) not present [for each structure decision]

Presence of accessory information

    For each decision: justification, priority, options, rule
        (1) present (0) not present

    For curriculum event as a whole: priority
        (1) present (0) not present

---

    [a]Used for computing physical size of CEIU.

target variable appears as a dependent variable (Krippendorff, 1980, pp. 27, 99). The purpose of this section is to specify how data and target variables are linked in this study.

1.   What decisions are included in a curriculum? (Inclusion)

The relative frequency of a decision in the source material is used as an index of inclusion. Thus, if a decision occurs with high relative frequency, it is considered included; if a decision occurs with low relative frequency, it is considered not included.

2.   Which decisions in a curriculum are related? (Relatedness)

Relatedness is defined here as presence within the same recording unit; two decisions found in the same recording unit are considered related. The relative frequency of a decision pair in the source material is used as an index of relatedness. Thus, if a decision pair occurs with high relative frequency, the decisions are considered highly related; if a decision pair occurs with low relative frequency, the decisions are considered not related.

3.   Which decisions are most important? (Importance)

Importance is defined functionally by the ability of a decision to organize and tie together other decisions. The number of other decisions organized is used as an index of importance. Thus, a decision which organizes a large number of other decisions is considered more important than one which organizes fewer decisions.

4. What kinds of information are included with decisions in a curriculum? (Inclusion)

Relative frequency for the occurrence in the source material of accessory information is used as an index of inclusion. Thus, information occurring with high relative frequency is considered included; information occurring with low relative frequency is considered not included.

<div align="center">Summary</div>

A set of propositions comprising the theoretic foundations were set out in this chapter and related to the targets of the study. Variables on which data were collected were specified, and the analytic constructs that link these data to the targets were stated.

The operationalization of the study is taken up in Chapter III, where the instruments and procedures are described in detail.

CHAPTER III

METHOD

Chapter III develops the procedures and instruments for carrying
out the study, building on the frame of reference established in
Chapter II. But while the emphasis in Chapter II is on the
conceptual, the emphasis here shifts to the technical. Details are
provided in this chapter on the source and sampling of documents for
analysis, instrumentation, training of data recorders, the data
recording process, and the analysis of data. The chapter closes with
a discussion of the issues of reliability and validity.

Documents

Sources

The curriculum guides analyzed in this study are drawn from two
collections of education documents published in microfiche. Selected
Curriculum Guides in Microfiche, published by Kraus International
Publications, consists of curriculum guides exhibited at the annual
meetings of the Association for Supervision and Curriculum
Development. Guides are submitted to the exhibits in response to

calls by the Association. The publisher requests permission to reproduce every guide exhibited and, with very few exceptions, publishes every guide for which permission can be obtained (Kraus, Note 1). However, it is obvious from inspection of ASCD exhibit catalogs and the catalogs for Selected Guides that many of the exhibited guides are not in the microfiche collection.

ERIC Documents in Microfiche includes all kinds of non-journal education literature submitted to the Educational Resources Information Center (ERIC) and announced in Resources in Education (RIE), a bibliographic journal. Although ERIC does solicit documents through conferences, professional organizations, universities, etc., most documents in the collection are there by virtue of being volunteered by their authors or other responsible persons. ERIC does evaluate documents before entering them in the data base, but ERIC's selection policy is quite liberal, and about half the documents submitted are accepted (ERIC, Note 2).

Both collections are, therefore, essentially self-selected and are almost surely biased, although their representativeness cannot be estimated. However, there is precedent for conducting this kind of study using an intact, volunteered population (e.g., Langenbach et al, 1971), and there are distinct advantages as well. First, because the documents are published in microfiche, they are convenient and accessible for research. This applies not only to research in the first instance but also to replication or follow-up. Second, the documents come from across the nation, so findings from the research

are not limited to some particular area. Third, compared to all curriculum guides, those in the collections are probably biased toward high rather than low quality (realistically, no one will submit a document unless it is thought to be pretty good). Thus, by drawing from these collections one probably gets a sample of the best of current practice. Fourth, both collections are important resources: ERIC was established by the National Institute of Education as a national repository for educational documents, and ASCD is the primary professional organization for curriculum practitioners. Knowing what the guides in these collections are like is worthwhile in its own right. These advantages are considered to outweigh the limitations imposed by a self-selected population.

The choice of these two particular collections was a practical matter. There are really only three published collections large enough to provide an adequate data base for research, the third being the Curriculum Development Library, published by Fearon-Pitman. Each of these was analyzed to determine its suitability as a source for the study (see Appendix B for a report of these analyses). However, despite certain attractive qualities, the CDL had to be ruled out on grounds of practicality: the CDL is not currently owned by the University of Massachusetts Library, making access unduly difficult. The decision to use both Selected Guides and ERIC Microfiche was a matter of numbers: neither collection by itself contains enough of the

desired kind of guides from enough different school systems.[1]

Population

The population of curriculum guides identified for this study consists of all documents from ERIC Microfiche and Selected Guides satisfying the following criteria:

1.   The document is a curriculum; i.e., a plan of some kind intended to assist teachers in conducting the educational program of a school

2.   The document is for the elementary level of schooling

3.   The document is for social studies

4.   The document is comprehensive; i.e., covers the social studies program for one or more grades

5.   The document was produced at the institutional level; i.e., by a local school district or by an autonomous school

6.   The document was produced in 1972 or after or, if undated, was entered in the collection in 1972 or after.

Criterion 1 excludes articles or reports about curricula, student instructional materials, bibliographies or catalogs of curricula, statements of policy, and so on.

---

[1] The original plan was to use only guides from ERIC Microfiche, based on a preliminary computer search which produced over 300 "hits" for elementary social studies curriculum guides. But as Appendix B makes clear, when the document resumes were actually retrieved, the number of useable documents was unacceptably low, and alternatives had to be sought.

Curriculum theory rests on the assumption that its concepts and principles apply to curriculum work in general and do not depend on the particular subject matter of the curriculum nor on the level of schooling. Nevertheless, there is some evidence from previous studies of curriculum documents (Klein, 1980; Langenbach et al, 1971; Merritt & Harap, 1955) that there are differences between documents for different school subjects and levels. These differences may be for reasons totally unrelated to the interpretation of "a curriculum," so criteria 2 and 3 are introduced to control for those effects. In the long run, of course, one will want to do comparative studies, and the core meanings of "a curriculum" will be those which emerge in common. The choice of elementary social studies reflects for the most part the interests and values of the researcher. Criterion 2 excludes documents that pertain only to secondary schooling, but not those for the elementary level that also include the secondary level.

Criterion 4 excludes from the population the many documents in the collections that are topical. The reasoning here, based on exper- ience, is that topical guides are likely to differ from more comprehensive guides, and one then runs into an "apples-and-oranges" problem.

The rationale for the restriction in criterion 5 was given earlier (see Chap. I, p. 9). This criterion excludes state curriculum guides as well as those from other agencies such as regional educa- tional laboratories, commercial publications, and so forth.

Criterion 6 defines the term "contemporary." Choosing a year is essentially an arbitrary matter; 1972 demarcates a ten-year period and falls within the range of dates in both collections.

These criteria were applied to the documents in the two collections, using information provided in printed indexes, supplemented in some cases by inspection of the actual documents. This produced a study population of 64 guides from 39 different school systems in 19 different states. ERIC Microfiche furnished 16 guides (8 districts) and Selected Guides provided 48 guides (31 districts). There were no duplications between collections. A list of the documents comprising the study population is provided as Appendix C.

Sample

A sample of 39 documents was drawn from the study population by using the following strategy:

1. Draw one document for each different school system

2. If there is more than one document for a given school system, select a guide covering more than one grade over a guide covering a single grade

3. If there is more than one document after (2), select randomly from among those remaining.

Rule 1 controls for the fact that school systems are disproportionately represented in the population. While most systems have only one or two guides in the population, a few have more, and two systems have seven each. Also, it seems reasonable to assume that

all the guides from a given system would reflect pretty much the same underlying conception of "a curriculum," and one should do as well as another.

Rule 2 selects the broader documents from among those present. The reasoning here is that the broader document is more likely to contain the most essential ingredients. That is, the more there is to cover, the more likely less-essential elements will be stripped away. In actuality, this rule had to be applied infrequently.

Rule 3 simply provides a way to make the final choice without introducing bias from conscious or subconscious consideration of ex-traneous factors like document length, grade-level, etc. In sampling, this rule generally came into play when a system has several guides in the population, one for each grade or level of schooling.

The sample documents are identified in the population list (Appendix C). One of the documents was later discovered to be a student workbook, not a curriculum guide, and was rejected. Three more documents were dropped from the study for practical reasons,[2]

---

[2] These documents had not yet been coded when the time period that the recorders had agreed to work came to a close. At that point, the recorders' schedules could not have been changed easily because of other commitments, and, in any case, the recorders were fatigued and additional demands could not be made reasonably. With so much data already collected (nearly 5000 CEIUs), it was felt that a point of diminishing returns had been reached.

leaving a final set of 35 documents from school districts in seventeen states scattered across the nation.[3]   All were published between 1971 and 1981, although one-third came from just one year, 1979. Most cover more than one grade, usually beginning with kindergarten; nearly half cover the entire K-12 span.[4] The guides range in length from 22 to 558 pages, the median length being 74 pages; together there are 4226 pages in these 35 guides.

Sampling is a crucial issue in content analysis, as in other kinds of research, but the content analysis literature offers little guidance on the question of sample size, except to say that "the necessary sample size may vary depending upon the kinds of questions being asked of the data, the degree of precision with which they must be answered, and the nature of the data" (Holsti, 1969, p. 132). Thus, the sample of 39 documents was a "best guess" about an adequate and manageable sample.

---

[3] California (2 guides), Connecticut (1),   Georgia   (1), Illinois (2), Maryland (3), Michigan (1), Minnesota (1), Missouri (1), New York (1), Ohio (9), Pennsylvania (2), Tennessee (1), Texas (1), Virginia (2), Washington (3), and Wisconsin (1).

[4] K-3 (2 guides), K-4 (1), K-6 (6), K-8 (2), K-12 (16), 1-2 (1), 1-7 (1), 4-6 (1), and single grades 1, 2, 3, 5, and 6 (1 each).

Instrumentation

The "Curriculum Decisions Inventory" (CDI) is the data-making instrument devised for this study. Its function is to enable recorders (coders) to produce analyzeable data from source materials. This is accomplished by translating information from and about the source materials into standard and formal terms, the "data language" for the variables and measures used in the analysis. The recording process involves more than simply transferring information from one place to another; information is also actually created by describing and measuring the source materials. Thus, it is appropriate to think of the recording process as "making data from observations or text" (Krippendorff, 1980, p. 71).

Description

The CDI consists of four parts: a cover sheet, instructions for recorders, instructions for keypunching, and data sheets. A complete CDI may be found in Appendix D.

The CDI cover sheet contains administrative information necessary for efficient and proper handling of the data. Administrative information includes such things as identification of the revision status of the instrument, number of pages in the completed instrument, and a record of the steps and individuals involved in recording and processing the data. This housekeeping information allows one to know quickly whether the data are complete,

what has been done by whom, and what remains to be done.

The instructions for recorders provide direction and guidance about the recording process. The instructions do not, however, teach or explain the terms and measurements used in the instrument. It is assumed that recorders using the CDI have first completed successfully the "CDI Recorder Training Program" described below. Instructions for keypunching direct the entry of data on IBM cards for computer processing.

Two kinds of data sheets are used in the CDI. The first is used for document identification and description. Bibliographic information, the source of the document, and certain characteristics of the document, such as length and organizational structure, are recorded here.

The second kind of data sheet is used for recording data on individual curriculum event information units (CEIU), the recording unit defined for this study (see Chap. II, p. 64). Each sheet contains space for four records, and as many of these sheets are used as necessary, since there is one record for each recording unit in the document. For each CEIU, the following information is recorded: (a) location of the CEIU in the document, (b) classifications of the curriculum event referred to in the CEIU according to scale, function, and which element decision is dominant in the CEIU, (c) presence or absence of a decision for each of the elements of a curriculum event and the structuring of curriculum events, and (d) presence or absence of four kinds of accessory information for each decision. (The

variables and values have already been identified; see Table 4, p. 66).

To reduce errors in handling data, the sheets incorporate certain design characteristics, following the suggestions of Krippendorff (1980, pp. 83-84). Labels are used for variables and multiple-choice options. Most items require only a "1" for "present" or a "0" (or blank) for "not present." Although this design requires more space for each record and results in greater costs for the instrument, it is less confusing and less demanding for recorders. The items in the instrument are arranged so that keypunching can be done directly from the data sheets, without an intermediate transcription. This reduces errors in data handling.

Development

The CDI is in its fourth revision and reflects suggestions from colleagues and the results of pilot testing of the instrument and related Recorder Training Program. The most important changes have been to Data Sheet 2. Earlier versions were printed six to a page with the page in its normal orientation. This was economical, but it necessitated printing so small that it could not be read. Earlier versions also included items for describing the form in which intentions and content were stated and for indicating whether action included an explicitly-described developmental progression. These made the form very complex and required distinctions that were often hard to make, even for the researcher, given all the ambiguities and

inconsistencies in "real" documents. Three of the decisions (actors, conditions, and position) are actually clusters of decisions, and earlier versions had items for both the whole cluster and each of the decisions in the cluster. To simplify the form, cluster summary items were dropped out, since they could be computed easily from the individual items in the cluster.

In the present revision, recorders are required to make a written response for each decision, either "1" (for "present") or a "0" (for "not present"). Items for accessory information, on the other hand, require a written response only if the information is present; if not present, the item is simply left blank. The idea was to have recorders respond to each decision item in writing to encourage an active search for all decisions. It was thought that before marking a definite "not present," the recorder would perhaps double check and would be less inclined to overlook something. However, writing in all those zeroes greatly increases recording time and makes the task even more tedious than it already is. This definitely should be reconsidered for future revisions.

Recorder Training

Recorders using the CDI must have three competencies in order to produce reliable data. First, recorders must be able to identify recording units within the source material, determining where each begins and ends. Second, recorders have to understand and be able to

apply the concepts and specialized vocabulary -- the data language --
used in the instrument to code the recording units. Third, recorders
have to be familiar with the CDI instrument itself and the procedures
to follow in using it. The CDI Recorder Training Program (RTP)
develops these competencies. The RTP was developed and tested using
experienced techers as recorders. While others without teaching
background could probably be trained to use the CDI, it might require
more extensive, and perhaps different, training materials than those
described below, owing to the specialized documents and concepts
involved.

Description

The RTP takes the form of self-teaching printed materials which
are supplemented with limited coaching. This makes the training
program standardized and replicable. The RTP takes about seven hours
to complete, and most trainees have preferred to spread the training
time over at least two days. There are three parts to the RTP:
Instruction Booklet, Response Booklet, and Annotated Key.

The Instruction Booklet is the heart of the RTP. It is made up
of five sections, each with a different purpose. The first section
provides general background in the form of a brief statement of the
basic ideas behind the CDI. The second section introduces the data
language, the concepts and vocabulary used in the instrument. This is
done with a series of teaching and testing frames much like those in
programmed learning materials. The third section introduces Data

Sheet 2 and the recording procedures used in the CDI. Practice is provided using excerpts from curriculum guides not included in the study sample. The use of material from documents like those to be coded ensures that the trainee's skills are adequate to the actual task. In this section, the recording units are marked. This makes a complex process easier to learn and simultaneously provides instruction on the identification of recording units. The fourth section focuses on how to identify CEIUs. Practice is provided, again using excerpts from actual guides. In this practice set, however, the boundaries are not marked; only one of the decisions in the CEIU is flagged, and the recorder-trainee must determine the boundaries. The last section introduces the complete CDI, and provides additional practice. In this last set, no help is provided, and the trainee must do everything involved in the use of the CDI. The complete RTP Instruction Booklet is over 100 pages long; excerpts may be found as Appendix E.

The recorder-trainee works through the Instruction Booklet, responding to frames and coding the practice materials. Responses are written in the Response Booklet. From time to time, the trainee is directed to compare responses with the "right answers" in the Annotated Key. This gives immediate feedback and additional instruction on the standard meanings of the data language. By keeping track of the trainee's performance from section to section, the increasing success rate can be plotted, and the trainees who will make suitable recorders can be identified. Recorder performance can be assessed using a

test-standard design, described below in the discussion of reliability.

Development

The RTP is in its fourth revision, based on suggestions from colleagues and the results of pilot testing. It became obvious early in the development process that the data language could be taught and learned effectively through explanatory passages combined with practice/test frames as in programmed instruction. Experienced teachers (the preferred data recorders) who looked at and tested the materials found the ideas familiar, if not all the specific vocabulary.

On the other hand, teaching and learning how to identify CEIUs was fraught with difficulties. First, some people find it strange or unsettling to think of large-scale curriculum events as events. Second, the boundaries of a CEIU have to be determined conceptually, by isolating the document segment that pertains to a given curriculum event, and this often requires ignoring irrelevant features, such as the way information for the event may be broken up into smaller clusters that stand out visually on the page.

Third, sometimes decisions apply to more than one event. Many curriculum guides use a column format like the one illustrated in Figure 4. Readers, especially teachers, interpret this arrangement to mean that entry 1 under "objectives" goes with entries 1-3 under "learning experiences," and one must agree. Decisions that apply to

OBJECTIVES	CONTENT	LEARNING EXPERIENCES	RESOURCES
Entry 1 . . .	Entry 1 . . .	Entry 1 . . .	Entry 1 . . .
		Entry 2 . . .	Entry 2 . . .
		Entry 3 . . .	
Entry 2 . . .	Entry 2 . . .	Entry 4 . . .	Entry 3 . . .
. . . .			

Fig. 4. Typical curriculum guide layout with shared decisions.

more than one event are "shared." Shared decisions pose a dilemma for the coder. In a logical sense, entry 1 under "objectives" defines a cluster of activities ("learning experiences"), which is exactly what has been defined as a "topic of instruction." But, to treat it as one would (a) suggest greater deliberate hierarchical structuring than is probably warranted and (b) leave the individual activities bereft of content and intentions decisions, for those would have been accounted for in the "topic." To say that intentions and content were not specified for those activities would clearly misrepresent the document. Accordingly, the practice followed in this study is to count as "topics" only clusters of activities clearly differentiated by the developers with a distinctive name, number, or graphic signal and to code "shared decisions" (those that apply to more than one event) each time they apply. Early versions of the CDI included a set of codes to indicate shared decisions, but it made the system too

cumbersome and the codes had to be dropped. The consequence of shared decisions is that CEIUs may overlap. To complicate matters, curriculum guides appear in different formats and are sometimes ambiguous and inconsistent.

Because of the difficulties in learning to identify CEIUs, two important changes were made in the RTP. First, it was broken into more and shorter sections with smaller learning steps between them. Thus, trainees progress from a section where CEIU boundaries are physically drawn in to one where boundaries are absent but a decision within the CEIU is flagged as a cue, and finally to a section where no cues are given. Second, limited one-to-one coaching was added to the program. In this way trainees could be given the reassurance they need and many of the contingencies and subtleties of the system can be covered without making the printed training materials any more cumbersome and intimidating than they already appear.

Data Recording

Recorders

Data were generated by four paid recorders recruited from the substitute teacher list of a local school. Recorders were recruited from this group because they were both available and had at least some teaching experience. None had participated in the development phase of the study, so the project could be approached with neither

advantage nor disadvantage stemming from knowledge of earlier versions of the instrument and training program.

Each recorder completed the RTP over a two- or three-day period. Performance on the RTP was checked and evaluated before each recorder was allowed to begin recording. The results of that check are reported below in the discussion of reliability.

Three potential recorders began the RTP but withdrew before completing it, offering various reasons. The obvious lesson to be learned from this experience is that one should over-recruit as a hedge against withdrawals and to create a pool of recorders from which one could select the best.

Recording process

The documents in the sample were placed in random order for coding, and coding began with the first document on the randomized list. Whenever a recorder finished one document, the next one on the list was assigned.

Recorders were provided with a loose-leaf notebook in which to keep the CDI while working on it. This prevented data sheets from getting out of order or lost. Completed instruments were immediately removed from the notebook and put in large envelopes for checking and further processing.

Recording was done over a two-week period; recorders worked different numbers of hours and followed somewhat different schedules (their choice). Because the documents were on microfiche and a reader

was required, recorders often worked in the same general area but communicated very little with each other except for social chit-chat and occasional consultation about a particularly troublesome document.

The recording process places heavy mental and physical demands on the recorder. Long hours at a microfiche reader are hard on the eyes in any case, and were made more so in this case because of the poor quality of reproduction of some documents (e.g., light, blurry, or tiny print). In a few documents, the pages had been filmed while turned in all different directions, making it necessary to read sideways or even upside down at times (the machines were not equipped so the fiche carrier could be physically reoriented to compensate). Reading the document and categorizing the information in it require close concentration, especially since attention must shift constantly from the screen down to the data sheet on the table and back up to the screen again without losing one's place in either. Finally, the sheer tedium of the task simply cannot be overstated.

The time needed for recording varied, depending on the recorder and the document. These four recorders worked at overall rates ranging from 29 CEIUs per hour to 55 CEIUs per hour. All together, the coding of 4895 CEIUs took approximately 110 hours and involved the reading of 4226 document pages.

Data Analysis

Data for this study were generated by coding the contents of 35 curriculum guides using the curriculum event information unit (CEIU) as the recording unit. It must be emphasized that the data were collected on these individual segments of the documents, not on the documents as wholes. Therefore, the number of data cases per document varies, depending on how many CEIUs were found. This fact has to be taken into account in analyzing data, either by weighting cases or by using statistics which are unaffected by unequal numbers; for example, proportions.

The data lend themselves to analysis at different levels. At the lowest level, the CEIU is the unit of analysis. Analysis at higher levels uses summary (aggregate) statistics computed from the values for the individual CEIUs in the aggregation group. For many purposes, the document is an appropriate unit of analysis, inasmuch as the document as a whole can be taken as one case of curriculum practice. The data also permit analysis according to the scale or function of the curriculum event referred to in the CEIU; this can be done either within or across documents.[5] However, when working with higher-level units of analysis, one has to be aware of possible

---

[5] In fact, so few CEIUs were found in which the curriculum event had a function other than teaching that no analysis according to function was made.

distortions that may arise from unequal numbers of CEIUs per document.

The specific analyses used are described in Chapter IV in the context of the research questions and findings to which they apply. In general, these involve computing relative frequencies for single variables, cross-tabulating joint relative frequencies for pairs of variables, and building simple indices from sets of variables.

Reliability

Reliability assesses the extent that the research procedures produce results that represent variation in the phenomenon being studied and are not artifacts of the specific research situation or individuals involved. In content analysis, reliability is a function of the recorder's competence, the clarity of the categories and coding rules, and ambiguity in the source materials (Holsti, 1969, p. 135). Since the source materials are largely beyond control of the researcher, efforts to increase reliability focus by necessity on the coders, categories, and coding rules and procedures.

The usual techniques for assessing reliability depend, finally, on measuring discrepancies over a fixed number of individual items. In the present case, however, a very large part of a recorder's performance consists of identifying the units to be coded. Any reliability score calculated for a controlled set of units could be utterly misleading. Reliability is usually described by a single coefficient. In this case, the data are for logically distinct

variables, and a single coefficient would mask important differences among the variables. For these reasons, reliability has been approached in a different manner.

The substantive question is whether independent recorders using the CDI produce the "correct" data, "correct" being the same as the data that would be produced by the developer of the instrument. The approach to that question focuses on document profile scores rather than on individual recording units,[6] taking as profile scores the proportion of recording units in which each of the following curriculum event decisions was coded "present": organizing center, intentions, content, action, props, actor specifications, conditions, subordinate events and position. By using proportions instead of raw frequencies, problems that arise from the fact that a recorder may not find exactly the same number of recording units can be overcome. Assessing reliability, then, amounts to comparing the document profile scores produced by a recorder with the corresponding scores produced by the researcher for the same document. This is a test-standard design for accuracy (Krippendorff, 1980, p. 131). The assumption made is that the researcher's profile scores, the standard, are correct.

Two proportions can be tested to see if the difference between them is statistically significant, much as two means can be tested (Ferguson, 1976, pp. 173-175; Hinkle, Wiersma, & Jurs, 1982, pp. 230-

---

[6] This follows and extends the approach taken by Posner & Nyberg (1975) in developing a scheme for analyzing content sequence.

232). The standard error of the difference between two proportions is estimated by the formula

$$S_{p_1 - p_2} = \sqrt{pq \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}$$

where p = ($f1$ + $f2$)/($n1$ + $n2$) and q = $1 - p$.

To test the difference between two proportions, the observed difference is divided by the estimate of the standard error of the difference to yield the test statistic z:

$$z = \frac{p_1 - p_2}{S_{p_1 - p_2}}$$

The value of z can be interpreted in terms of the normal curve, where 1.96 is the critical value for significance at the .05 level. If z exceeds 1.96, the null hypothesis is rejected in favor of the alternate hypothesis that the two proportions are statistically different.

Tables 5 and 6 show the performance of the four data recorders used in this study on practice sets 2 and 3 of the RTP. The left column of each table shows the standard profile scores for the set. The other columns show the profile scores for each recorder along with the estimated standard error of the difference and the value of z for the observed difference. When the recorder's score exceeeds the standard, z is positive; when the recorder's score is less than the standard, z is negative. The difference between the two sets is that in set 2 the CEIUs are identified for the recorder, although the boundaries are not drawn, whereas in set 3 no cues are provided, and

TABLE 5

RECORDER PERFORMANCE ON RTP PRACTICE SET 2

	Standard	Recorder No. 1	Recorder No. 2	Recorder No. 3	Recorder No. 4
Organizing center	.20	.33 .15 1.29	.20 .14 0	.13 .12 .58	.13 .12 .58
Intentions	.67	.53 .18 -.78	.47 .18 -1.11	.73 .17 .35	.57 .17 0
Content	.60	.20 .18 -2.22*	.67 .17 .41	.73 .17 .76	.67 .17 .41
Props	.40	.60 .18 1.11	.47 .18 .39	.33 .18 -.39	.47 .18 .39
Actor specifications	.13	.06 .11 -.64	0 .09 -1.44	.13 .12 0	.13 .12 0
Conditions	.13	.13 .12 0	.13 .12 0	.13 .12 0	.13 .12 0
Subordinate events	0	0 0 0	0 0 0	0 0 0	0 0 0
Position	.20	.20 .15 0	.06 .12 -1.17	.13 .14 -.50	.20 .15 0

Note. Numbers in each cell are, top to bottom, profile score, standard error of difference, z for observed difference.
*p < .05

TABLE 6

RECORDER PERFORMANCE ON RTP PRACTICE SET 3

	Standard	Recorder No. 1	Recorder No. 2	Recorder No. 3	Recorder No. 4
Organizing center	.31	.26 .13 -.38	.15 .13 -1.23	.29 .12 -.17	.16 .12 -1.25
Intentions	.15	.39 .13 1.85	.20 .11 .45	.29 .11 1.27	.40 .13 1.92
Content	.19	.61 .14 3.00*	.65 .15 3.07*	.54 .13 2.69*	.32 .12 1.08
Action	.46	.57 .14 .79	.60 .15 .93	.39 .13 -.54	.44 .14 -.14
Props	.38	.48 .14 .71	.25 .14 -.93	.35 .13 -.23	.24 .13 -1.08
Actor specifications	.08	.04 .07 -.57	.10 .08 .25	.03 .06 -.83	.03 .08 0
Conditions	.27	.04 .11 -2.09*	.05 .11 -2.00*	.25 .12 -.17	.28 .13 .08
Subordinate events	.31	.17 .09 1.56	.05 .06 -4.33*	.04 .05 -5.40*	.04 .05 -5.40*
Position	.27	.13 .12 -1.17	.05 .11 -2.00*	.25 .12 -.17	0 .10 -2.70*

Note. Numbers in each cell are, top to bottom, profile score, standard error of difference, z for observed difference.

*p < .05

the recorder must both identify the CEIUs and code their contents.

Inspection of the tables reveals that recorder performance varies a lot, with values of z ranging from near 0 to over 5. If Table 6 is considered, three of the four scores for content and subordinate events are statistically different from the standard, and two scores are statistically different for conditions and position. In all the other cases, the observed differences between the recorder's score and the standard score are not statistically significant (at .05 level).

Failure to reject the null hypothesis, however, is not the same as proving that the null hypothesis is true. There is always the possibility that it is false, even though the value of z does not fall in the rejection zone at the tails of the distribution. This is the Type II error. If one wanted to be more sure of being able to detect cases where the null hypothesis is false, alpha could be set at some value greater than .05, thus increasing the power of the test. This would narrow the acceptance region. For example, if alpha were set to .2, then 1.28 would be the critical value of z. The chances of detecting cases where the null hypothesis is false would be enhanced, but the risk of rejecting the null hypothesis when it is true would be correspondingly increased.

The substantive issue in evaluating recorder performance is how close is close enough, and there is no way to decide that statistically. Given the exploratory nature of this study, the performance of these recorders seemed "close enough," although one

wishes that their scores were closer to the standard for several variables. Some comfort can be taken from the observation that in content analysis, one must often make a trade-off between reliability and the usefulness and significance of the results; the more complex the questions and units involved in the analysis, the more difficult it is to achieve high reliability (Berelson, 1952, pp. 173-174; Carney, 1972, p. 48; Holsti, 1969, p. 142; Krippendorff, 1981, p. 130). Given this situation, it is recommended that content analysis be guided by the question at hand: "It is no good producing volumes of impeccably extracted data if, in order to do so, the question has to be redefined so that it no longer asks what it was originally supposed to ask" (Carney, 1972, p. 48; see also Holsti, 1969, p. 12).

Validity

When a content analysis is done for descriptive purposes, "content validity is normally sufficient" (Holsti, 1969, p. 143). Content validity can be understood as a measure of how well an instrument samples the situations or subject matter involved (Cronbach, 1971, p. 444).

The issue, here, is whether the decisions measured in the CDI are, in fact, decisions that are inherent in conducting educational programs. In an effort to ensure that they are, the literature of the curriculum field was drawn on extensively in developing the study, and

the links with the literature were made explicit in the Theoretical Foundations (see Chapter II). An additional, albeit very informal, indication that the concepts are valid is the reaction of those who participated in the pilot testing and data collection. Since all were experienced teachers, they were asked for their reaction to the ideas involved. None raised any objections to the concepts (although some took issue with the vocabulary) and all agreed that the decisions were part of their work, to some degree.

Summary

Chapter III has dealt with the technical aspects of the study. The population and sample of source material, the data collection instrument, recorder training procedures, the data collection process, and procedures for analyzing data were all described. The reliability of the data and the validity of the variables being measured were considered briefly.

Chapter IV presents the findings of the study for each of the research questions.

Reference Notes

1. Kraus International Publications, Millwood, New York. Personal communication, December 3, 1982.

2. ERIC Processing and Reference Facility, Bethesda, Maryland. Personal communication, December 3, 1982.

C H A P T E R   I V

FINDINGS

Four questions have guided inquiry into the meaning that "a cur-
riculum" has in contemporary curriculum practice in local schools and
school districts: What decisions are included in a curriculum? Which
decisions in a curriculum are related? Which decisions in a curricu-
lum are most important? What information to aid teacher decisions
making accompanies decisions in a curriculum? Chapter IV presents the
findings of the study, beginning with a look at the nature of the data
and a discussion of the curriculum event information unit (CEIU) used
in recording data. With this background, the research questions are
then taken up in turn.   For each, the data analysis is explained
briefly, and the findings are presented. The chapter concludes with a
summary of findings and a general discussion.

The Data

The findings presented here are based on the analysis of data
generated by coding the contents of 35 social studies curriculum
guides. The guides were drawn from those in two microfiche collec-

tions, Selected Curriculum Guides in Microfiche and ERIC Documents in Microfiche. The sampling procedure and the composition of the sample have already been described (see p. 74ff.).

Data were generated using the curriculum event information unit (CEIU) as the coding unit. Briefly, a CEIU is a segment of a curriculum guide containing one or more decisions about a particular curriculum event (see p. 64). In practice, the recorder reads along in the guide until there is a reference to some particular curriculum event (i.e., to the program as a whole, a course in the program, a unit of study in a course, a topic of instruction in a unit, or an activity). The recorder then collects data on the information given for that event. There are as many CEIUs in a document as there are consecutive references to different curriculum events.

With two exceptions, the guides were coded in their entirety.[1] The number of CEIUs found in the documents varies, ranging from 6 to 1100, with a median of 86.[2] In all, 4,895 CEIUs were coded in the 35 documents. A density measure was calculated for each document (number of CEIUs/number of pages). CEIU density varies from .21 CEIUs/page to 10.7 CEIUs/page. A density of .21 means

---

[1] Coding of two very long guides was stopped after approximately half the pages had been coded, because of limitations of time and personnel.

[2] The highest number of CEIUs coded in any one document is actually 578. However, this document is one of two partially-coded documents, and extrapolating for the entire document gives an estimate of 1100.

roughly one CEIU for every five pages; a density of 10.7 means almost 11 CEIUs for every page. For all documents, .75 is the median density. CEIU density and length of the document are essentially unrelated (Pearson correlation coefficient = -.124, $\underline{p}$ = .239).

The size of a CEIU varies, depending on how much information is given about the curriculum event in question and how that information is arranged in the document. Most of the CEIUs found are relatively small, occupying one page or less of the document (76% of CEIUs). Another 15% of CEIUs extend over two pages, and another 4% spread over three pages. In all, 96% of the CEIUs found are three pages or less in size. However, CEIUs <u>can</u> extend over many pages; the largest CEIU found is 47 pages long. CEIUs over one or two pages in length usually involve lists (e.g., a list of objectives for a course) or an unusual format (e.g., a narrow column over many pages).

In all, data for 4,895 CEIUs were generated. Of these, 111 (2%) of the CEIUs were for programs, 570 (12%) for courses, 169 (4%) for units of instruction, 378 (8%) for topics of instruction, and 3,666 (75%) for activities (missing: 1 case). Planning is the function of 18 (.4%) of the curriculum events referred to in these CEIUs, teaching is the function of 4,797 (98%), and evaluating of 78 (2%). (Missing values: 2 cases.)

It must be emphasized that the data for the study were collected on individual segments of the documents (CEIUs), not on the documents as wholes. In order to use the <u>document</u> as the unit of analysis, aggregate statistics must first be computed from the data on the CEIUs

in the document.

What Decisions are Included in a Curriculum?

An educational program consists of a set of events, and for each event, decisions must be made about its elements and its position in the structure of the program. The question here is which of those decisions practitioners in local schools include in the plan for the program; i.e., in the curriculum.

For each CEIU, the presence or absence of a decision for organizing center, intentions, content, action, props, actor specifications, conditions, subordinate events, and position was recorded. Three of these decisions (actor specifications, conditions, and position) are actually composites that summarize a cluster of more-specific decisions; the composites are considered present if any of the constituents is present.

Simply counting up how many times each decision was present in all of the CEIUs gives a rough idea of which decisions are included, and Table 7 reports these frequencies. Interpretation of the table is straightforward; for example, a decision for organizing center was found in only 144 (2.9%) of the CEIUs. The table's usefulness is limited, however, because it is based on the individual CEIU, and documents with many CEIUs are disproportionately represented. Therefore, we move to the document as the unit of analysis.

TABLE 7

FREQUENCIES FOR PRESENCE OF CURRICULUM EVENT DECISIONS

	Count (n=4,895)	Percent
Elements		
Organizing center	144	2.9
Intentions	2,331	48.6
Content	3,234	66.1
Action	3,354	68.5
Props	2,020	41.3
Actors[a]	374	7.6
Teacher characteristics	161	3.3
Student characteristics	26	.5
Student grouping	197	4.0
Conditions[a]		
Time allocation	51	1.0
Space	8	.2
Facilities	107	2.2
Structure of Curriculum Events		
Subordinate events	42	.9
Position[a]	514	10.5
Event order	512	10.5
Concurrent events	3	.1

[a] Composite decision. Considered present when any of its constituent decisions (indented below) are present.

A set of profile scores was computed for each document, taking as the profile score for a decision the proportion of CEIUs in the document in which the decision was present. The profile scores range from 0 (never present) to 1.0 (always present), and these become the

data for document-level analysis, correcting as they do for unequal numbers of CEIUs. (Proportions can be misleading when based on few cases, but only four of the documents in the sample had fewer than 15 CEIUs.) If one is interested in a single document, the profile scores can be interpreted readily or plotted for graphic display.

The distributions of the profile scores for the 35 documents in the sample are shown in Figure 5 as "box-and-whisker plots" (see Tukey, 1977, p. 39ff.). The whiskers extend to the minimum and maximum
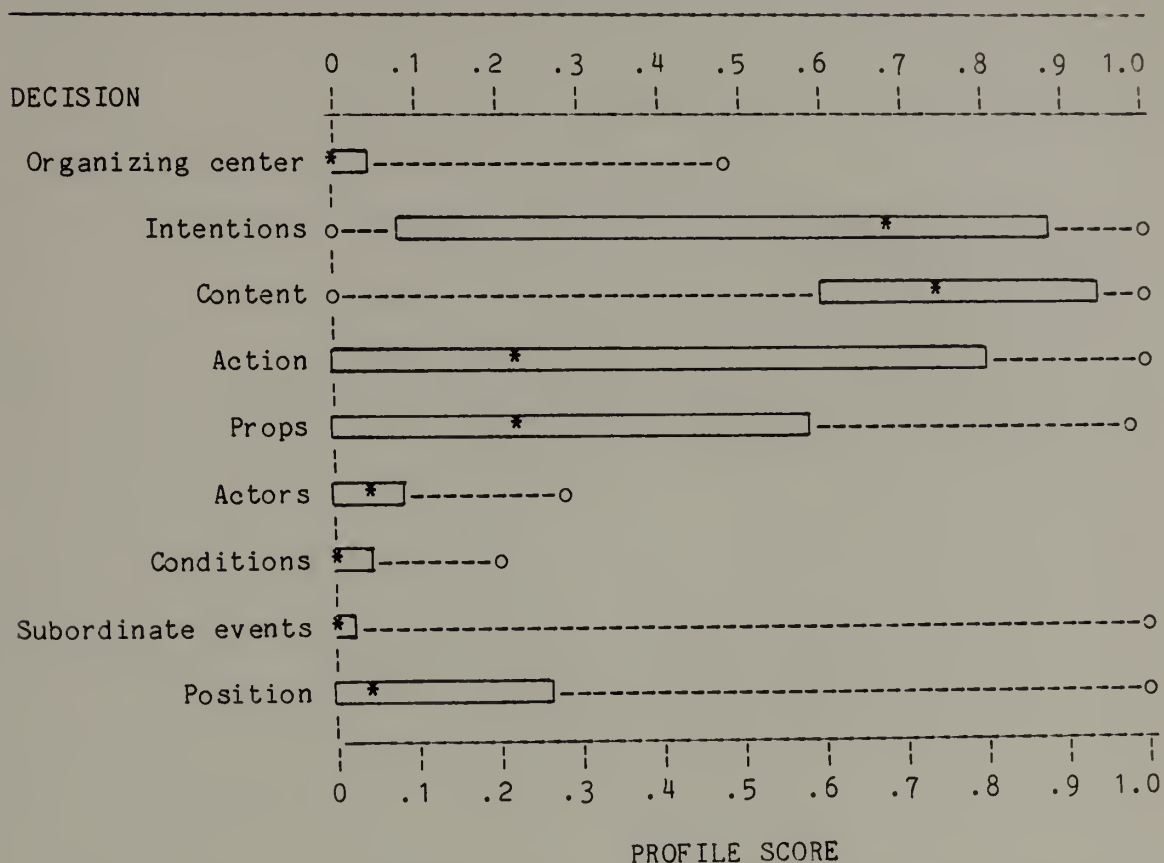
Fig. 5. Distributions of decision profile scores for sample documents. A document's score on a decision is the proportion of CEIUs in which that decision is present.

scores, and the distance between the ends of the whiskers shows the range. The box encloses the middle 50% of the scores, extending from the lower to the upper quartile of the distribution. The asterisk in the box marks the median, and its relative position in the box indicates skew in the distribution. The length of the box can be interpreted as an indication of central tendency, since the more tightly bunched scores are around a midpoint, the shorter the box.

The display reveals great variability across documents. The scores for intentions, content, action, props, subordinate events, and position are distributed over virtually the entire possible range. There is a certain logic in that: if the developers of a curriculum are consistent about which decisions to include, the profile scores will be either very high or very low; an intermediate profile score results when a decision is included only part of the time. The shapes of the distributions suggest that the decisions fall into three inclusion categories: usually, rarely, and sometimes included.

The "usually included" category has only one decision, content. The median profile score for content is around .7, and the profile scores tend to cluster around the median, indicated by the short box (interquartile range).

The decisions "rarely included" are organizing center, actors, conditions, subordinate events, and position. Each has a median profile score at or near zero, and the scores are clustered tightly around the medians.

The "sometimes included" category consists of decisions for
intentions, action, and props. The long box (i.e., large
interquartile range) suggests that these scores are polarized, and
that is the case, as shown in Figure 6. Thus, these decisions tend to
be included or omitted in a consistent way.

Another aspect of the question of which decisions are included
is the scale of the curriculum events for which decisions are being
made. Table 8 reports the proportion of CEIUs within each document
for five different-scale curriculum events. The variation from

```
                           0                  10                 20
PROFILE SCORES             |_____|_____|
                           |
Intentions       0 - .2    |***************************
                .2 - .4    |**
                .4 - .6    |******
                .6 - .8    |**********
                .8 -1.0    |**************************
                           |
Action           0 - .2    |**********************************
                .2 - .4    |**********
                .4 - .6    |**
                .6 - .8    |******
                .8 -1.0    |********************
                           |
Props            0 - .2    |*************************************
                .2 - .4    |**********
                .4 - .6    |**********
                .6 - .8    |************
                .8 -1.0    |****
                           |
                           |_____|_____|
                           0                  10                 20
                                   NUMBER OF DOCUMENTS
```
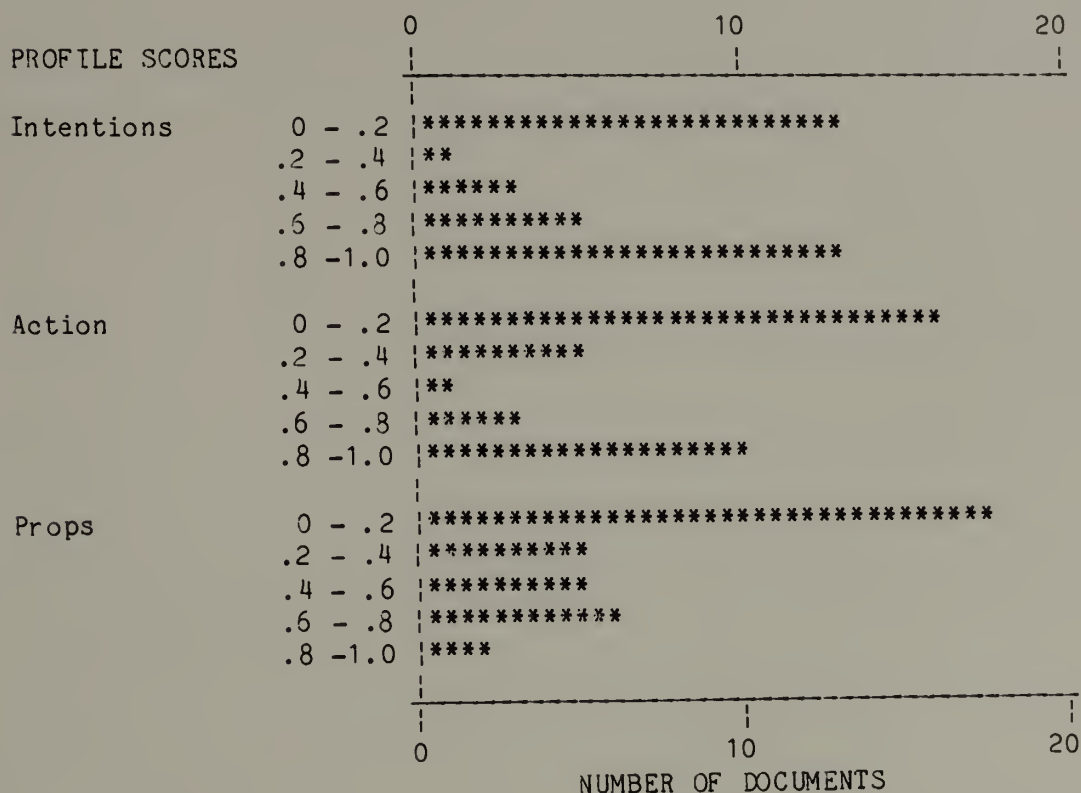
Fig. 6. Histograms for selected curriculum decision profile
scores.

TABLE 8

PROPORTION OF CEIUS FOR DIFFERENT-SCALE
CURRICULUM EVENTS BY DOCUMENT

Document	N of CEIUs	Program	Course	Unit	Topic	Activity
2	227	0	.10	.02	.06	.81
3	512	0	0	.03	0	.97
5	27	0	1.00	0	0	0
6	265	.01	.09	0	0	.90
7	76	0	1.00	0	0	0
8	21	.05	.91	0	0	.05
9	32	.72	.28	0	0	0
10	247	.01	0	0	.13	.36
11	35	.14	.26	.60	0	0
12	235	0	.17	0	0	.83
13	137	0	.02	.13	0	.85
14	97	0	.35	0	.06	.59
15	141	.01	0	0	.43	.56
16	23	0	1.00	0	0	0
17	147	0	.01	0	0	.99
18	26	0	.08	.12	.81	0
19	86	.2	.09	.07	0	.72
20	424	.01	.09	.08	0	.82
21	14	.14	.86	0	0	0
22	185	.20	.05	.01	.58	.16
23	578	.01	.03	.02	0	.94
24	265	0	.02	0	0	.99
25	30	.10	.90	0	0	0
26	18	.06	.94	0	0	0
27	21	.05	.95	0	0	0
29	6	0	1.00	0	0	0
30	96	0	.03	.14	.04	.79
32	20	0	1.00	0	0	0
33	183	0	0	0	.12	.88
34	12	0	1.00	0	0	0
35	46	.20	.80	0	0	0
36	13	0	1.00	0	0	0
37	119	0	0	.08	.77	.15
38	59	.07	.15	.48	.31	0
39	471	0	.05	0	0	.94

document to document is striking, but a pattern does emerge. There appear to be two general types of documents. In one type, all or nearly all the CEIUs refer to large-scale curriculum events (course or program). There are 14 documents where course and program CEIUs account for 95% or more of the CEIUs. The other type includes CEIUs for both large- and small-scale curriculum events. In almost all of this type the small-scale curriculum events are activities, rather than units or topics.

In order to make comparisons of the decisions included for different-scale curriculum events, profile scores were again computed, this time for each of the different-scale curriculum events: program, course, unit, topic, and activity. These profiles are presented in Table 9. Note that these profiles were computed across documents, so the profiles are influenced by documents with a large number of CEIUs for any given scale of curriculum event.

The two most common decisions in CEIUs for programs, courses, and units are intentions and content, but not always in the same order. For topics, the two most common are content and action, and for activities, action and content.

Comparing profile scores across scale, there are two decisions which vary systematically with scale. The scores for both action and props increase with smaller-scale curriculum events.

To make the data from Table 9 more vivid, the table was simplified by replacing the numerical values with symbols. The new table (Table 10) makes abundantly clear that very few decisions are

TABLE 9

PROFILE SCORES FOR DIFFERENT-SCALE CURRICULUM EVENTS

	Program (n=111)	Course (n=570)	Unit (n=169)	Topic (n=378)	Activity (n=3,666)
Organizing center	.01	.01	.04	.02	.03
Intentions	.78	.41	.72	.44	.48
Content	.25	.69	.50	.78	.66
Action	.14	.04	.11	.47	.85
Props	.12	.23	.33	.51	.44
Actors[a]	.14	.01	.01	.01	.10
Teacher char.	0	0	.01	0	.04
Student char.	.07	0	0	0	.01
Student grouping	.09	0	0	.01	.05
Conditions[a]	0	.06	.04	0	.03
Time	0	.06	.04	0	0
Space	0	0	0	0	0
Facilities	0	0	0	0	.03
Subordinate events	.01	.04	0	.05	0
Position[a]	.15	.46[b]	.26	.06	.05
Order	.15	.46	.26	.06	.05
Concurrent events	0	0	0	0	0

[a] Composite decision. Considered present when any of its constituent decisions (indented below) is present.
[b] Spurious result, caused by coding rule.

specified consistently in CEIUs for events of any scale, and that many decisions are rarely specified.

As a follow-up to this analysis, a "completeness" index was calculated for each CEIU by simply counting up how many of the nine decisions (organizing center, intentions, content, action, props,

TABLE 10

DECISIONS INCLUDED FOR DIFFERENT-SCALE CURRICULUM EVENTS

	Program	Course	Unit	Topic	Activity
Organizing center					
Intentions	* * *	*	* *	*	*
Content	*	* *	*	* * *	* *
Action				*	* * *
Props			*	* *	*
Actors					
Conditions					
Subordinate events					[a]
Position		*[b]	*[b]		

Note. *=present in 25-50% of CEIUs, **=present in 50-75% of CEIUs, ***=present in 75-100% of CEIUs.
[a] Not applicable. Activities are the smallest-scale curriculum events.
[b] All position decisions concern order, vs. concurrent events.

actor specifications, conditions, subordinate events, and position) were present in the CEIU. The breakdown of completeness scores by scale of curriculum event is reported in Table 11. The table confirms that more decisions are included for small-scale curriculum events

TABLE 11

COMPLETENESS RATINGS FOR DIFFERENT-SCALE CURRICULUM EVENTS

	Program (n=111)	Course (n=570)	Unit (n=169)	Topic (n=378)	Activity (n=3,666)
Mean Rating	1.60	1.95	2.00	2.34	2.65
Minimum Rating	1	1	1	1	1
Maximum Rating	5	4	4	5	6
Relative Frequencies (Pct. of CEIUS)					
Rating = 1	66.7	35.8	33.1	45.0	9.6
Rating = 2	13.5	40.2	36.7	9.0	34.4
Rating = 3	11.7	17.0	27.2	18.8	38.7
Rating = 4	4.5	6.8	3.0	22.0	15.3
Rating = 5	2.7	0	0	5.3	1.5
Rating = 6	0	0	0	0	.3

than for large-scale ones, but that few decisions are ever present. Half the CEIUs had only 1 or 2 decisions, and CEIUs with 3 decisions or fewer account for nearly 85% of the cases. The largest number of decisions found in a CEIU is 6, and that in only 11 of the 4895 CEIUs.

Which Decisions in a Curriculum Are Related?

The previous question dealt with the inclusion of curriculum event decisions, without respect to relationships among them. This question shifts attention to relationships between decisions. Put simply, which decisions go with which? For purposes of analysis, two decisions are considered related if they are present in the same CEIU.

This question can then be approached by examining the relative frequencies for the co-occurrence of pairs of decisions.

Table 12 reports the results of a cross-tabulation of each curriculum event decision with each of the others. The top number in each cell is the count for the number of CEIUs in which the pair of decisions (at left and top) were both present in the same CEIU. For example, decisions for organizing center and intentions were both present in the same CEIU 108 times. The number below the count is a row percent; it answers the question, If the decision on the left is present in a CEIU, in what percent of the CEIUs is the decision at the top also present? For example, in CEIUs where intentions were specified (left), a decision about organizing center was also present 4.5% of the time. The table is asymmetrical with respect to the row percents; i.e., the row percents for the pairs (intentions, organizing center) and (organizing center, intentions) are not the same. Thus, the row percents should always be interpreted with the decision at the left independent. The bottom number in each cell is a table percent. It gives the percent of all CEIUs in which the decision pair was present. For example, action and content were both present in 44.7% of all CEIUs. Note that the table is symmetrical with respect to table percents, so one-half the table is redundant. In the cells on the diagonal--each decision paired with itself--the count simply reports the overall frequency of the decision, and the table percent reports the percentage of all CEIUs in which the decision was present. The row percent for the diagonal cells may be ignored. The most

TABLE 12

FREQUENCIES FOR CO-OCCURRENCES OF CURRICULUM EVENT DECISIONS

	Orgc	Int	Cont	Actn	Props	Actrs	Cond	Subev	Posn
Organizing	144	108	99	88	47	16	5	0	1
Center	100.0	75.0	68.8	61.1	32.6	11.1	3.5	0	.7
	2.9	2.2	2.0	1.8	1.0	.3	.1	0	.0
Intentions	108	2381	1440	1560	957	206	50	33	341
	4.5	100.0	60.5	65.5	40.2	8.7	2.1	1.4	14.3
	2.2	48.7	29.5	31.9	19.6	4.2	1.0	.7	7.0
Content	99	1440	3234	2187	1238	255	107	18	228
	3.1	44.5	100.0	67.6	38.3	7.9	3.3	.6	7.1
	2.0	29.5	66.2	44.7	25.3	5.2	2.2	.4	4.7
Action	88	1560	2187	3354	1522	305	116	20	212
	2.6	46.5	65.2	100.0	45.4	9.1	3.5	.6	6.3
	1.8	31.9	44.7	68.6	31.1	6.2	2.4	.4	4.3
Props	47	957	1238	1522	2020	97	55	17	240
	2.3	47.4	61.3	75.3	100.0	4.8	2.7	.8	11.9
	1.0	19.6	25.3	31.1	41.3	2.0	1.1	.3	4.9
Actors	16	206	255	305	97	374	19	0	8
	4.3	55.1	68.2	81.6	25.9	100.0	5.1	0	2.1
	.3	4.2	5.2	6.2	2.0	7.7	.4	0	.2
Conditions	5	50	107	116	55	19	165	3	15
	3.0	30.3	64.8	70.3	33.3	11.5	100.0	1.8	9.1
	.1	1.0	2.2	2.4	1.1	.4	3.4	.1	.3
Subordinate	0	33	18	20	17	0	3	42	31
Events	0	78.6	42.9	47.6	40.5	0	7.1	100.0	73.8
	0	.7	.4	.4	.3	0	.1	.9	.6
Event Position	1	341	228	212	240	8	15	31	514
	.2	66.3	44.4	41.2	46.7	1.6	2.9	6.0	100.0
	.0	7.0	4.7	4.3	4.9	.2	.3	.6	10.5

Note. Cells in the table show count, row percent, and table percent. Row percents should be interpreted with the decision on the left independent.

TABLE 13

MOST FREQUENTLY RELATED DECISIONS

Rank	Decisions	Percent of CEIUs
1	Action (and) Content	45
2	Action (and) Intentions	32
3	Action (and) Props	31
4	Intentions (and) Content	30
5	Props (and) Content	25
6	Intentions (and) Position	7

Note. Percents based on 4,895 CEIUs.

frequently found decision pairs are reported in Table 13. Four
decisions are involved in almost all co-occurrences: action, content,
intentions, and props. This is not surprising, since these are the
only four decisions found in appreciable number. Given the
frequencies for the decisions, the results of this analysis were
predetermined, for the most part. However, one can easily imagine
that the analysis could be very revealing given a different set of
decision frequencies.

A CEIU can contain up to nine curriculum event decisions,
although no more than six were ever found in this study. If decision
were added to a CEIU in a consistent order (i.e., if the decisions
were cumulative), one could predict which decisions would be present
by knowing how many decision were there. The data were analyzed to
see if the decisions were cumulative. Two attempts were made to form

Guttman scales, first with all CEIUs, then with CEIUs grouped according to scale. The results of these attempts are shown in Table 14. The decisions form a valid Guttman scale only for CEIUs for topics, with the decisions in the following order: (1) action, (2) content, (3) intentions, (4) props, (5) actor specifications, (6) position, (7) conditions, (8) organizing center, and (9) subordinate events. The fact that decisions for topics are scaleable is probably not of great importance for the study, since only 10 of the 35 documents had CEIUs for topics, and of the 378 CEIUs for topics, 70% came from just three documents. Thus, what this analysis shows more than anything is that the makers of those three documents were consistent in their decision making.

TABLE 14

COEFFICIENTS FOR GUTTMAN SCALEABILITY OF DECISIONS

	Coefficient of Reproducibility	Coefficient of Scaleability
All CEIUs	.8384	.1950
Program	.8919	.0609
Course	.8756	.2864
Unit	.8659	.2243
Topic	.9383*	.6823*
Activity	.8643	.2471

* Meets criterion for a valid Guttman scale: reproducibility $\geq$ .9, scaleability $\geq$ .6 (Nie et al, 1975).

Which Decisions in a Curriculum Are Most Important?

The importance of a curriculum event decision has been defined functionally, in terms of its power to organize and tie together other decisions (see p. 60). Recorders classified each CEIU according to which decision was dominant; i.e., the one from which the others follow. For recording purposes, the decision stated first was considered dominant. In column format, this would be the decision at the left, and in top-to-bottom layouts, the dominant decision would be the one at the top (within the CEIU, of course).

A rating of importance for each decision was calculated by taking the average number of other decisions present when the decision was dominant. Thus, the rating takes values from 0 (no other decisions present) to 3 (all other decisions present); for this data, the maximum is 5, since the most complete CEIUs had only 6 decisions. Table 15 displays the curriculum event decisions in order of importance. The decision with the highest importance rating is organizing center. This means that when a decision for organizing center is dominant in the CEIU, there are more other decisions brought together in the CEIU than when any other decision is dominant. Ironically, organizing center was seldom the dominant decision (in less than 1% of the CEIUs), ranking sixth by frequency of use. Content, the one decision usually included in a curriculum, has a relatively low importance rating. This means that, although the decision is usually present, it is seldom used to unify other

TABLE 15

CURRICULUM EVENT DECISIONS IN ORDER OF IMPORTANCE

Rank		Importance Rating	Frequency as Dominant Element
1	Organizing center	2.24	37
2	Intentions	1.82	1983
3	Actors	1.67	67
4	Props	1.40	547
5	Content	1.40	1189
6	Action	1.04	1056
7	Conditions	1.00	13

Note.   Importance rating is the average number of other decisions present when the element is dominant.

decisions.

A note of caution: the data on dominant element and the results of this analysis should be regarded as extremely tentative. First, the identification of the dominant element was based on the relative positions of the decisions in the CEIU, not on logical contingencies. Second, the phenomenon of shared decisions (see p. 83) affects the identification of the dominant element, since shared decisions tend to be at the left or top of the page.

What Information to Aid Teacher Decision Making
Accompanies the Decisions in a Curriculum?

Four kinds of information were identified that were believed useful to teachers using a curriculum to make decisions during instructional planning. Specifically, these were: justification (explanation or rationale for a decision), priority (indication of relative importance) options (alternatives to a specified decision), and choice rules (guidelines or rules for choosing among given options).

The presence or absence of these kinds of "accessory" information with each of the nine curriculum event decisions was recorded, along with whether the curriculum event as a whole had been assigned a priority in the program.

A priority for the event as a whole was found in 644 (13.2%) of the CEIUs. When these were broken down according to the scale of the curriculum event, it was found that 499 (77.5%) of the CEIUs were for activities and another 111 (17.2%) were for courses. Together, these account for nearly 95% of the cases. The large number for courses comes probably from secondary school courses, rather than the elementary courses, for at the secondary level courses are often designated as "required" or "elective." Similarly, activities are often labeled as "enrichment" or "supplemental."

As for the rest of the accessory information items, Table 16 reports the frequencies found for each kind. In the table, the

TABLE 16

FREQUENCIES FOR INFORMATION TO AID TEACHER DECISION MAKING

	Decision Freq	Justifi- cation	Priorities	Options	Rules[a]
Organizing center	144	0	1 (.7)	0	0
Intentions	2,380	9 (.4)	5 (.2)	0	0
Content	3,233	1 (.0)	16 (.5)	4 (.1)	0
Action	3,353	2 (.1)	57 (1.7)	134 (4.0)	1 (.7)
Props	2,020	1 (.0)	1 (.0)	15 (.7)	0
Actors	374	3 (.8)	1 (.3)	23 (6.1)	0
Conditions	165	0	0	2 (1.2)	0
Subordinate events	42	0	0	0	0
Position	514	0	240 (46.7)	1 (.2)	0

Note. Parenthesized values are relative frequency in percent, based on the number of CEIUs in which the decision was present.

[a] Rules are conditional upon options; percents are based on number of CEIUs in which options were present.

percentages may be interpreted as answers to the question, If the decision at left is present, in what what percent of the CEIUs is the accessory information also present? The best that one can say from the data is that, with one exception discussed below, accessory information is rarely included. The greatest frequencies are for options accompanying decisions for action (4%) and actors (6%), but for practical purposes those are trivial.

The exception is the large frequency for priority for a position decision (47%). It's possible to imagine this combination, but experience with curriculum guides would lead one to expect it rarely. Therefore, the CEIUs in which this information was coded present were

identified. It was discovered that seven different documents were involved, but 72% of the cases were from a single document. Furthermore, 96% of the cases had been coded by a single recorder. These two facts suggest either an exceptional document or recorder error. The document with most of the cases was examined, but no information could be found that could reasonably be interpreted as priority for position decisions. Information was found that could be interpreted as options for position (e.g., a course that could be taken in grade 10, 11, or 12). Therefore, it is likely that the high frequency for priority of position decisions is attributable to recorder error and may be ignored.

Discussion

A crucial issue in interpreting the findings of any research is to what extent the data represent real variation in the phenomenon being studied and are not artifacts of the research process and the individuals involved. It would be nice to say that the findings reported above came from an impeccably rigorous and proven research procedure. Alas, that cannot be said, and several factors can be identified that have influenced the data and, consequently, the findings. Therefore, it's appropriate to look at these factors and their effects before reviewing the findings and drawing general conclusions.

Decision definitions

The definitions for the curriculum event decisions are not equally strict. The decision organizing center, for example, is strictly defined as an explicitly-stated question or problem to which students are to direct their attention and learning efforts. By contrast, almost any expression of subject matter counts as content, whether it takes the form of a detailed outline or just a general topic. Similarly, intentions subsumes a wide variety of statements, whether in terms of student outcomes, process, or pedagogical function.

Of the decisions, content and intentions are defined most generously in terms of what can be counted. The effect of these liberal definitions is to inflate the observed frequencies for these two decisions, particularly.

Shared decisions

A great deal of material in curriculum guides is laid out in columns, typically with headings that are variations on "objectives," "content," "learning experiences," and "resources." The entries in these columns seldom correspond one-to-one. It is usual to find several entries under "learning experiences," for example, for every one under "objectives." It's quite clear, especially to teachers, that the objective, then, is meant to apply to the several activities (see also, p. 83). The decision was made in this study to count such "shared decisions" each time they applied. Shared decisions are

almost always content, intentions, and--less often--props. Further-more, shared decisions almost always relate to activities (vs. larger-scale curriculum events). The effect of multiple coding of shared decisions is to inflate the observed frequencies, especially for intentions and content in activities.

Ambiguity in source materials

Some of the material in curriculum guides is clear and specific. but a great deal--varying from guide to guide, of course--is ambiguous. In all candor, it must be said that it's often hard to tell what goes with what and what is really meant. Many of the entries are extremely brief; for example: Show a film about the Civil War. The dilemma for coding is deciding how much information is necessary before it counts. Drawing hard and fast guidelines for this issue is exceedingly difficult. The effect of this is to introduce more recorder subjectivity into the data.

Recording process

Recording of data for this study was done from curriculum guides reproduced on microfiche. This fact posed several problems. (1) The quality of reproduction was not always high, and some documents were simply hard to read. (2) Several guides were designed for a double-page format; i.e., opposite pages form one big page. However, the available microfiche readers could not accommodate two frames at once, so constant manipulation of the film carrier was necessary in these cases. (3) Some of the fiche had the pages oriented in all different

directions, forcing recorders to read sideways frequently and to turn the fiche around from time to time. (4) Recorders had to shift their attention constantly from the screen down to the data sheets and back to the screen again.

The effect of all these problems is to introduce errors from losing one's place, not seeing relevant information because it's in different frame, etc. However, there is no reason to suppose that this affects any part of the data more than any other.

Recorder performance

Data for the study were recorded by four paid data recorders who had undergone a seven-hour training program. These recorders differ in their understanding of the categories and their ability to apply them consistently. The results of the training program (see pp. 92-93) reveal that the recorders tended to over-estimate certain decisions, especially content.

Another factor in recorder performance is what may be called "recorder set." One aspect of recorder set is the tendency to fall into a pattern of responses, especially when coding a long series of CEIUs which are written in a uniform style and format. Two kinds of errors result: coding things present that aren't there, but usually are, and missing things that are there, but usually aren't. Another aspect is the tendency to forget about looking for certain kinds of information that are not frequently encountered. This may have affected the coding of accessory information, especially. Experience

shows that accessory information isn't very often present, and the recorders were not required to make physical responses for those variables unless the information was present (otherwise, the items were left blank). The effect of recorder set probably is to depress the frequencies for accessory information and for seldom-found decisions.

The point of the preceding discussion is that the data generated in this study have to be interpreted with some caution. However, the data are not rendered useless. The very problems cited above are evidence in their own right about the quality and nature of the source materials, and are not just methodological inadequacies.

Summary

Four questions have guided inquiry: What decisions are included in a curriculum? Which decisions in a curriculum are related? Which decisions in a curriculum are most important? What information to aid teacher decision making accompanies decisions in a curriculum? The findings reported in this study are based on the analysis of data for 4,895 CEIUs coded from 35 social studies curriculum guides produced by local school districts in 17 different states. The curriculum events described in 75% of the CEIUs were activities, while larger-scale curriculum events accounted for much smaller percentages: topics of instruction, 8%, units of study, 4%, courses, 12%, and programs, 2%.

Almost all CEIUs were for curriculum events with teaching as their function (98%), rather than planning (.4%) or evaluating (2%).

What decisions are included in a curriculum?

Profile scores on nine curriculum event decisions were computed for each document, using as the score for each decision the proportion of CEIUs in the document in which the decision is present. The distributions of these profile scores show great document-to-document variation; indeed, scores for several decisions spread over the entire possible range from 0 to 1. The one decision usually included in a curriculum is content, with .7 as the median profile score. Decisions for organizing center, actors, conditions, subordinate events, and position are rarely included. Profile scores for these decisions approach zero. Decisions for intentions, action, and props are included systematically in some documents, but hardly at all in others. Profile scores for these decisions tend toward the extremes.

The data were also analyzed with breakdowns by scale of the curriculum event referred to in the CEIU. Profile scores were calculated for each different-scale curriculum event, across documents. Variation among curriculum events of different scale was noted, but it seldom followed a discernible pattern. The decisions most frequently included for programs, courses, and units were intentions and content, although these two decisions alternated being higher. For topics, the most frequently included decisions were content and props, while for activities the most-frequently found decisions were action and

content.

The number of decisions included in a CEIU increases slightly from large- to small-scale curriculum events. However, in absolute terms, the number remains very small: half of all CEIUs had only one or two decisions, and nearly 85% had three or fewer.

Which decisions in a curriculum are related?

Decisions are considered related if they are present in the same CEIU. The decisions most frequently paired with other decisions are content, intentions, action, or props. However, since the frequencies for these decisions were so large in comparison to the frequencies for all other decisions, this finding was largely predetermined and essentially confirms the overall pattern of frequencies.

The data were analyzed to see if the decisions could be used to build a Guttman scale (i.e., cumulative). A valid Guttman scale could be produced only for CEIUs referring to topics of instruction. However, further analysis revealed that only ten documents had CEIUs for topics, and that just three documents accounted for 70% of the CEIUs for topics. Thus, this finding says more about the internal consistency of those three documents than about any special property of decisions for topics of instruction.

Which decisions in a curriculum are most important?

Importance is defined functionally, as the ability of a decision to organize and unify other decisions. A rating of importance was

computed for each decision, taking as its value the average number of other decisions present when the decision was the dominant one in a CEIU. The most important decision is organizing center, with an importance rating of 2.24. Ironically, a decision on organizing center is seldom included in CEIUs and is seldom dominant when it is. Intentions is the second-most important decision. These results are considered highly tentative.

What information to aid teacher decision making accompanies decisions in a curriculum?

Four kinds of accessory information were coded: justification for a decision, setting of priorities, options to a specified decision, and rules or guidelines for choosing among options. These kinds of information were rarely found. Of them, the most frequently found is options, accompanying decisions for actors (6% of time) and action (4% of time); all other frequencies are nil or negligible.

C H A P T E R   V
SUMMARY AND CONCLUSIONS

Summary

The concept of "a curriculum" is central to curriculum practice, theory, and research, but the meaning of this concept remains problematic for the field. The purpose of this study was to describe the meaning that "a curriculum" has in current practice at the institutional level. One use of "a curriculum" is for an educational plan of some kind, and this study was restricted to that use. Operationally, the meaning of "a curriculum" can be defined by what is included in such a plan. Four specific questions guided inquiry: What decisions are included in a curriculum? Which decisions in a curriculum are related? Which decisions in a curriculum are most important? What information to aid teacher decision making accompanies decisions in a curriculum?

The framework of foundational ideas brought to bear on these questions starts with the premise that eductional programs consist of events ("curriculum events"), which vary in scale from "activities," through "topics of instruction," "units of instruction," and "courses," to the "program" as a whole, the largest-scale curriculum

event.   Large-scale curriculum events are made up of smaller-scale curriculum events. Therefore, the decisions required for curriculum events   and   their organization constitute the set of possible ingredients for a curriculum.

A sample of 35 elementary social studies curriculum guides from different school systems in 17 states was drawn from documents in ERIC Documents in Microfiche and Selected Curriculum Guides in Microfiche (Kraus Intl.) and subjected to content analysis. Data were collected on each document using the "curriculum event information unit" (CEIU) as the recording unit, a CEIU being any segment of a document containing one or more decisions for a specific curriculum event. That is, each segment of the document that pertains to a different curriculum event is a CEIU. The analysis of data for 4,895 CEIUs found in these documents supports the following findings.

Content is the only decision usually included in descriptions of curriculum events. Decisions for intentions, action, and props are also included in some documents but not in others.   Decisions about the organizing center, actors, and conditions for the event are rarely included, nor are decisions relating to the structure of events in the program.   The sample documents are of two distinct types: those in which all or nearly all CEIUs are for large-scale curriculum events (14 documents), and those in which CEIUs for small-scale events predominate (21 documents).   The decisions included in CEIUs for different-scale curriculum events vary, but not in a systematic way.

The decisions most often related are content, intentions, action, and props. Decisions are considered related if they are present in the same CEIU. However, this finding essentially confirms the overall pattern of observed frequencies, since all other decisions were found in such small relative frequencies.

The most important decision is organizing center, followed by intentions. Importance is defined functionally, as the power of a decision to organize and unify other decisions. Ironically, organizing center was seldom used as the unifying decision. In any case, very few decisions for a curriculum event were ever brought together in the sample documents: half the CEIUs had only one or two decisions, and nearly 85% had three or fewer.

Information to aid teacher decision making is rarely included with the decisions in a curriculum. The specific kinds of information coded were justification for a decision, specification of priorities, options or alternatives to a decision, and rules or guidelines for choosing among options. All were found in negligible frequencies.

Implications for Curriculum Practice

The purpose of this study was to describe the meaning that "a curriculum" has in practice in schools and school districts. The findings of the study lead almost unavoidably to the conclusion that "the meaning" doesn't exist. No common interpretation was found, neither in terms of the scale of the curriculum events included nor in

terms of the decisions specified for those events. The documents were of two types, distinguished by the predominance of large-scale or small-scale curriculum events. Although decisions about content were found in a high proportion of curriculum event descriptions, there was little consistency as to the inclusion of other decisions. Few of the curriculum event descriptions included more than two or three decisions, in any case. And one must remember that the relative frequencies for the most-commonly found decisions have probably been inflated by the liberal definitions used in the study instrument. Thus, the picture that emerges is of widely-varying practices and descriptions of curriculum events which provide a minimum of information.

It would be unfair to judge curriculum decision making in school districts solely on the basis of these documents. A curriculum, and the guide in which the curriculum is specified, typically emerge from a process involving groups of teachers and others. To those who have participated in that process, the documents are undoubtedly more meaningful than they are to outsiders. It is often suggested that the value of the documents lies in the process of producing them--with all that that entails--rather than in the documents themselves, and that is probably true. Also, the decisions inventoried in this study were felt to be the set of possible decisions, and it should not be assumed that the set of decisions represents an idea of what ought to be in a curriculum.

Nevertheless, the written curriculum documents produced by a school district are an expression of the institution's values and vision for education. In that context, one can't help becoming concerned about the ambiguity and confusion inherent in so many of these documents. The reason for that concern can be simply stated: the teacher is the curriculum decision maker of last resort. In the absence of clear institutional decisions about a collective course of action, teachers are left, by default, to make curriculum decisions on their own.

Research has found that curriculum guides are only one of several inputs to teachers' instructional planning (Clark & Yinger, 1980) and that the influence of curriculum guides on what teachers actually do is low to moderate (Klein, 1980). Given the data generated in this study about what is included in curriculum guides-- or more to the point, what's not included--this is not surprising.

All this suggests that curriculum practice would be improved by attending to the question of what constitutes a good plan, or even an adequate one. I believe that progress can be made if three ideas are kept foremost in our minds: (1) that educational programs consist of events, (2) a curriculum is a plan for events, and (3) the teacher who implements a curriculum is a decision maker. By focusing on events and on the curriculum as a tool for teacher decision making, greater clarity and effectiveness could both be achieved, in my opinion. A trap to avoid, in this regard, is confusing a curriculum--plan--and the document in which it is recorded--guide. This is important

because there may be any number of things that would be valuable to include in a document, but which would not consititute a plan for action.

Implications for Curriculum Theory

A question that has received a great deal of attention in the curriculum field is the "definition" of curriculum. Even if one accepts the general idea that a curriculum is a plan of some kind, one is left with two problems: identifying what goes into the plan and distinguishing the plan from other educational plans.

One solution suggested in curriculum theory is to use a means-ends distinction. Under this view, curriculum is concerned with ends, and ends only. Considerations of means is instruction. The data generated in this study are relevant to this solution. The documents analyzed include decisions about more than ends (i.e., "intentions"). Decisions about content, props, action, and so on all concern means. If curriculum theory is to be at all descriptive (vs. prescriptive), then contemporary practice must be taken into account.

An alternate solution to the means-ends distinction is to use a strategy-tactics distinction. Under this view, a curriculum could include a full range of decisions, but the decisions would be made on a broader scale. A curriculum would be distinguished from other kinds of educational plans by the scale of the curriculum events it dealt with and the degree of detail. In terms of the data generated here,

there is a group of documents (one-third of the sample) that deal almost exclusively with large-scale curriculum events. That, however, leaves two-thirds in which decisions about small-scale events predominate. Thus, the match between present reality and this distinction also leaves something to be desired.

A great deal of attention in the curriculum field has been given to curriculum processes (i.e., curriculum development, curriculum implementation, curriculum evaluation) but relatively little to "a curriculum" as a substantive phenomenon, the thing that is being developed, implemented, and evaluated. This is reflected in the literature, where one is hard pressed to find descriptions of a curriculum, beyond discussion of what were called here "elements." One has a sense that some in the field eschew such matters as "technical problems," yet the data from this study reveal that curriculum practice is in need of attention. If curriculum as a field of study is to have an effect on the quality of education, it seems almost inescapably necessary that at least some in the field turn greater attention to the practical.

Implications for Curriculum Research

This study differs from others in the use of the "curriculum event information unit" as the data recording unit. By contrast, other instruments and methods have dealt generally in document-level data. The CEIU holds promise for curriculum research, for it links

conceptually the information in written documents with what actually goes on in educational programs--events. It provides a way to look at decisions in the context of other decisions.

The CEIU can be used as a recording unit without using exactly the same variables used in this study. One might want, for example, to examine content decisions in more detail, and in that case the variables would concern various properties of content decisions. Data could still be collected in terms of content for specific curriculum events, i.e., using the CEIU as the recording unit.

One methodological problem that deserves attention before the CEIU is used in other research is that of sampling within documents. In lengthy documents with many small-scale curriculum events being described, the sheer volume of data can be overwhelming. Therefore, some way to sample CEIUs within a document should be found. Also, the whole problem of "shared information" and multiple coding needs to be re-examined. The present instrument is not very sensitive to the relationships between CEIUs, and this internal structuring may be a very important part of a curriculum.

Suggestions for Further Research

This study raises several possibilities for further research. Three of these are outlined briefly in this section.

1. Teacher use of guides. As pointed out earlier, there is evidence to suggest that curriculum guides exert low to moderate influence

on what teachers actually teach. Previous studies of teachers'
use of curriculum guides have not taken into account the fact
that guides can differ greatly. As a result, the findings of
these studies are difficult to interpret. If, however, the
quality of the document were introduced as a variable--through
the use of profile scores for the document--this would provide
valuable information about what kinds of documents are really
effective in the work of teachers. There would then be an
empirical basis for suggesting that documents should contain
certain kinds of information. An alternative route that would
lead to a similar outcome would be to start with documents known
to be used and effective and others known not to be. Analysis of
these documents would produce profiles that could then be
compared.

2.   Validation of the theoretical framework. A framework of ideas
outlining the nature of educational programs was used as a
foundation for the analysis carried out in this study. The
framework was constructed by relating ideas drawn from various
aspects of the curriculum literature. It includes, specifically,
a set of decisions believed to be inherent in all curriculum
events. An interesting way to validate that formulation would be
by conducting a series of ethnographic interviews with teachers
to determine if those decisions are in fact part of curriculum
events and the extent to which teachers are conscious of them as
decisions.

3.   Curriculum implementation. Curriculum implementation involves a series of transformations and interpretations as the teacher moves from the curriculum to instructional plans for specific groups of students. The set of decisions used in this study can be used to trace the exact nature of those transformations. These data could then be used to explore the idea of teacher-as-decision-maker. We need to know much more about what decisions teachers make when, and on what basis. Knowing this would make it possible to design more effective curricula.

This study has sought to determine the meaning that practitioners in local school systems attach to the concept of "a cur-riculum." This was accomplished by examining the kinds of decisions included in a sample of curriculum guides produced by local school systems from across the nation. The study has important implications for curriculum theory, practice, and research, and several of these have been outlined above. Beyond these, the study takes on additional significance when the problem is put into a broader context.

Schools today face at least two important challenges: schools are now expected to provide appropriate educational opportunities for a more-diverse student population than ever before, and schools must educate students for life in a rapidly-changing society increasingly dominated by technology. To meet these challenges, school programs will have to change; in short, new curricula must be developed. This

study suggests that as educators attempt to respond to these challenges, the issue of institutional decision making must be addressed. Educational programs are collective enterprises and require, therefore, clear collective--institutional--decisions. Careful attention must be given to the practical question of which decisions to make at the institutional level and which are best left to individual teachers. Optimally, one would want a set of institutional decisions that simultaneously describe a clear collective course of action and enhance the ability of teachers to make sound decisions that are compatible with it. To arrive at such a point clearly requires that we begin to think about "a curriculum" in a richer and more sophisticated way.

REFERENCES

Ash, P. National special education curriculum guide survey. Final report (draft). Indianapolis, IN: Indiana Department of Public Instruction, Division of Special Education, 1979. (ERIC Document No. ED 181 697)

Beauchamp, G. A. Curriculum theory. 3rd ed. Wilmette, IL: Kagg, 1975.

Beauchamp, G. A. Curriculum theory. 4th ed. Itasca, IL: Peacock, 1981.

Berelson, B. Content analysis in communication research. Glencoe, IL: Free Press, 1952.

Billingsley, F. F. & Neafsey, S. S. Curriculum/training guides: A survey of content and evaluation procedures. AAESPH Review, 1978, 3, 42-57.

Bobbitt, F. The curriculum. Boston: Houghton Mifflin, 1918.

Bonser, F. G. The elementary school curriculum. New York: Macmillan, 1920.

Carney, T. F. Content analysis: A technique for systematic inference from communications. London: B. T. Batsford, 1972.

Caswell, H. L. Persistent curriculum problems. Educational Forum, 1978, 43, 99-110.

Caswell, H. L. & Campbell, D. S. Curriculum development. New York: American Book, 1935.

Charters, W. W., Jr. & Jones, J. E. On the risk of appraising non-events in program evaluation. Educational Researcher, 1973, 2, 5-7.

Clark, C. M. & Yinger, R. J. The hidden world of teaching: Implications of research on teacher planning. Paper presented at the Annual Meeting of the American Educational Research Association, Boston, Mass., April 1980. (ERIC Document No. ED 191 344)

Cronbach, L. J. Test validation. In R. L. Thorndike (Ed.), Educational measurement. 2nd ed. Washington, D.C.: American Council on Education, 1971.

Davidson, D. Trends in curriculum guides. A report to the profession from the NCTE Committee to Review Curriculum Guides. English Journal, 1968, 57, 890-897.

Dewey, J. Human nature and conduct. Reprint ed: New York: Modern Library, 1930. (Originally published 1922)

Dittmer, A. E. The English curriculum: Design/program/trends. English Journal, 1974, 63, 72-74.

Doll, R. C. Curriculum improvement: Decision making and process. 3rd ed. Boston: Allyn & Bacon, 1974.

Duet, C. P., Jr. The relationship of teacher participation on curriculum committees to implementation of curriculum guides and materials (Ed.D. dissertation, University of Georgia, 1972). Dissertation Abstracts International, 1973, 33, A-4793. (University Microfilms No. 73-5684)

Duncan, J. & Frymier, J. Explorations in the systematic study of curriculum. Theory into Practice, 1967, 6, 180-199.

Egan, K. What is curriculum? Curriculum Inquiry, 1978, 8, 65-72.

Eisner, E. W. Instructional and expressive objectives. In M. Golby, J. Greenwald, & R. West (Eds.), Curriculum design. New York: Wiley, 1975.

Eisner, E. W. The educational imagination: On the design and evaluation of school programs. New York: Macmillan, 1979.

Eisner, E. W., & Vallance, E. (Eds.). Conflicting conceptions of curriculum. Berkeley, CA: McCutchan, 1974.

English, F. W., & Steffy, B. E. Curriculum as a strategic management tool. Educational Leadership, 1982, 39, 276-278. Everitt, B. S. The analysis of contingency tables. London: Chapman & Hall; New York: Wiley, 1977.

Ferguson, G. A. Statistical analysis in psychology and education. 4th ed. New York: McGraw-Hill, 1976.

Foshay, A., & Beilin, L. A. Curriculum. In R. L. Ebel (Ed.), Encyclopedia of educational research. 4th ed. New York: Macmillan, 1969.

Goodlad, J. I. The teacher selects, plans, organizes. In Learning and the teacher. 1959 Yearbook. Washington, D.C.: Association for Supervision and Curriculum Development, 1959.

Goodlad, J. I. Curriculum: The state of the field. Review of Educational Research, 1960, 30, 185-198.

Goodlad, J. I. Curriculum: State of the field. Review of Educational Research, 1969, 39, 367-375.

Goodlad, J. I. (Ed.). Curriculum inquiry: The study of curriculum practice. New York: McGraw-Hill, 1979.

Goodlad, J. I., Klein, M. F., & Tye, K. A. The domains of curriculum and their study. In J. I. Goodlad (Ed.), Curriculum inquiry: The study of curriculum practice. New York: McGraw-Hill, 1979.

Goodlad, J. I., & Richter, M. N. The development of a conceptual system for dealing with problems of curriculum and instruction. Los Angeles, CA: University of California & Institute for the Deveopment of Educational Activities, 1966. (ERIC Document No. ED 010 064)

Goodlad, J. I., Sirotnik, K. A., & Overman, B. C. An overview of 'A study of schooling'. Phi Delta Kappan, 1979, 61, 174-178.

Gordon, I. J. Inside instructional materials with yardstick and compass. EPIE Forum, 1967, 1, 24-28.

Griffin, G. A. Levels of curricular decision making. In J. I. Goodlad (Ed.), Curriculum inquiry: The study of curriculum practice. New York: McGraw-Hill, 1979.

Harap, H. The technique of curriculum making. New York: Macmillan, 1928.

Hedstrom, J. E. (Ed.). Data book of social studies materials and resources. Vol. 5. Boulder, CO: Social Science Education Consortium & ERIC Clearinghouse for Social Studies/Social Science Education, 1980. (ERIC Document No. ED 180 858)

Hedstrom, J. E., & Haley, F. (Eds.). Social studies materials and resources data book. Vol. 4. Boulder, CO: ERIC Clearinghouse for Social Studies/Social Science Education & Social Science Education Consortium, 1979. (ERIC Document No. ED 166 120)

Herrick, V. E. The concept of curriculum design. In V. E. Herrick & R. W. Tyler (Eds.), Toward improved curriculum theory. Supplemental educational monographs, no. 71. Chicago: University of Chicago Press, 1950.

Herrick, V. E. Strategies of curriculum develoment. Ed. by D. W. Andersen, J. B. Macdonald, & F. B. May. Westport, CT: Greenwood Press, 1975. (Reprinted from the edition published by Merrill, 1965).

Heusner, H. C. A study of the utilization of curriculum guides as related to selected factors in their planning and construction (Ed.D. dissertation, Wayne State University, 1963). Dissertation Abstracts International, 1964, 25, 322-323. (University Microfilms No. 64-5101)

Heyman, R. D. Talk about school subjects: A sociological view. Curriculum, media, & instruction occasional paper, no. 3. Edmonton: University of Alberta, Faculty of Education, 1979. (ERIC Document No. ED 184 196)

Hinkle, D. E., Wiersma, W., & Jurs, S. G. Basic behavioral statistics. Boston: Houghton Mifflin, 1982.

Holsti, O. R. Content analysis for the social sciences and humanities. Reading, MA: Addison-Wesley, 1969.

Huebner, D. Curriculum language and classroom meanings. In J. B. Macdonald & R. R. Leeper (Eds.), Language and meaning. Washington, D.C.: Association for Supervision and Curriculum Development, 1966.

Hughes, P. Decisions and curriculum design. Educational Theory, 1962, 12, 187-192.

Jacko, C. M., & Garman, N. M. A search through the curriculum maze. NASSP Bulletin, 1979, 63, 91-97.

Johansen, J. H. An investigation of the relationships between teachers' perceptions of authoritative influences in local curriculum decision-making and curriculum implementation (Ph.D. dissertation, Northwestern University, 1965). Dissertation Abstracts International, 1965, 26, 3127. (University Microfilms No. 65-12109)

Johnson, M. Definitions and models in curriculum theory. Educational Theory, 1967, 17, 127-140.

Johnson, M. Needed research: Emphasis on the future. <u>Educational</u> <u>Leadership</u>, 1976, <u>33</u>, 505-508.

Kearney, N. C., & Cook, W. W. Curriculum. In C. W. Harris (Ed.), <u>Encyclopedia of educational research</u>. 3rd ed. New York: Macmillan, 1960.

Klein, M. F. <u>State and district curriculum guides: One aspect of the formal curriculum</u>. A Study of Schooling: Technical report no. 9. Los Angeles, CA: University of California, Graduate School of Education, 1980. (ERIC Document No. ED 214 879)

Klein, M. F., Tye, K. A., & Wright, J. E. A study of schooling: Curriculum. <u>Phi Delta Kappan</u>, 1979, <u>61</u>, 244-248.

Komisar, B. P. The logic of slogans. In B. O. Smith & R. H. Ennis (Eds.), <u>Language and concepts in education</u>. Chicago: Rand McNally, 1961.

Krippendorff, K. <u>Content analysis: An introduction to its methodology</u>. Beverly Hills, CA: Sage, 1980.

Lamont, A. H. The effect of teacher participation in preparing curriculum materials on subsequent use of the materials (Ed.D. dissertation, SUNY/Buffalo, 1964). <u>Dissertation Abstracts International</u>, 1965, <u>26</u>, 1993-1994. (University Microfilms No. 64-9801)

Langenbach, M., Hinkemeyer, M. T., & Beauchamp, G. A. <u>An empirical analysis of curriculum design</u>. [1971] (ERIC Document No. ED 045 582)

Lungmus, D., Haley, F., Greenawald, G. D., & Forkner, J. <u>Consumer education sourcebook</u>. Boulder, CO: Social Science Education Consortium & ERIC Clearinghouse for Social Studies/Social Science Education, 1980. (ERIC Document No. ED 180 861)

Macdonald, J. B. Myths about instruction. <u>Educational Leadership</u>, 1965, <u>22</u>, 571-576, 609, 611, 613-618.

Macdonald, J. B. Responsible curriculum development. In E. W. Eisner (Ed.), <u>Confronting curriculum reform</u>. Boston: Little Brown, 1971.

Macdonald, J. B. Organizing centers as alternatives to behavioral objectives. <u>National Association of Business Teacher Education Review</u>, 1973, 38-42.

Madon, C. A. An analysis of curriculum guides recommended for Black
     history and related social studies programs in selected cities
     of the United States (Ph.D. dissertation, Fordham University,
     1970).   Dissertation Abstracts International, 1971, 31,
     A-3419-3420. (University Microfilms No. 71-32)

March, J. G. Model bias in social action.   Review of Educational
     Research, 1972, 42, 413-429.

McClintock, P. T. An examination of curriculum guides in music with
     reference to principles of curriculum planning (Mus.Ed.D. dis-
     sertation, Indiana University, 1970). Dissertation Abstracts
     International, 1971, 31, A-4204. (University Microfilms No.
     71-4508)

McClure, R. M. Institutional decisions in curriculum.   In J. I.
     Goodlad (Ed.), Curriculum inquiry: The stdy of curriculum
     practice. New York: McGraw-Hill, 1979.

McCutcheon, G. How do elementary school teachers plan? The nature of
     planning and influences on it. Elementary School Journal,
     1980, 81, 4-23.

McNeil, J. D. Curriculum--A field shaped by different faces.   Educa-
     tional Researcher, 1978, 7, 19-23.

Merritt, E., & Harap, H.   Trends in the production of curriculum
     guides: A survey of courses of study published in 1951 through
     1953. Nashville, TN: George Peabody College for Teachers,
     Division of Surveys and Field Services, 1955.

Milgram, G. G.   Analysis of alcohol education curriculum guides.
     Journal of Alcohol and Drug Education, 1975, 20, 13-16.

Milstein, A. The effect of teacher participation in curriculum guide
     development upon selected classroom teaching practices (Ed.D.
     dissertation, Stanford University, 1960). Dissertation Ab-
     stracts International, 1960, 20, 4350. (University Microfilms
     No. 60-1348)

Moody, M. M. An analysis of the goals and activities recommended by
     Canadian provincial elementary art curriculum guides, compared
     with each other, and with recent art education literature
     (Ed.D. dissertation, University of Oregon, 1974). Disserta-
     tion Abstracts International, 1975, 35, A-4988-4989. (Univer-
     sity Microfilms No. 75-4519)

Nault, W. H. A study of certain factors relating to the use teachers
in selected cities make of their elementary school social
studies guides (Ph.D. dissertation, Teachers College, Columbia
University, 1955). Doctoral Dissertations, 1954-1955, no. 22,
186.

Nelson, M. Ethnic studies programs: Some historical antecedents.
Social Studies, 1977, 68, 104-108.

Nie, N. H., Hull, C. H., Jenkins, J. G., Steinbrenner, K., Bent, D. H.
SPSS: Statistical package for the social sciences. 2nd ed.
New York: McGraw-Hill, 1975.

Olsen, T. Values education in the junior high school: ERIC/RCS
report. English Journal, 1977, 66, 88-91.

Payne, A. The study of curriculum plans. Washington, D.C.: National
Education Association, 1969.

Phillips, R. C. A historical study of the concept curriculum (Ph.D.
dissertation, Northwestern University, 1962). Dissertation
Abstracts International, 1963, 23, 3223-3224. (University Mi-
crofilms No. 63-1335)

Pinar, W. (Ed.). Curriculum theorizing: The reconceptualists.
Berkeley, CA: McCutchan, 1975.

Poll, D. The study of selected factors related to the implementation
of centrally prepared curriculum guides (Ph.D. dissertation,
Northwestern University, 1970). Dissertation Abstracts Inter-
national, 1971, 31, A-3181-3182. (University Microfilms No.
71-1941)

Posner, G. J. The extensiveness of curriculum structure: A conceptual
scheme. Review of Educational Research, 1974, 44, 401-407.

Posner, G. J., & Nyberg, D. G. The development and validation of a
method for analyzing content sequences (MACS). Paper
presented at the Annual Meeting of the American Educational
Research Association, Washington, D.C., March-April 1975.
(ERIC Document No. ED 127 328)

Putnam, J. F., & Chismore, W. D. (Eds.). Standard terminology for
curriculum and instruction in local and state school systems.
State educational records and report series: Handbook VI (U.S.
Department of Health, Education, and Welfare: Office of
Education and National Center for Educational Statistics).
Washington, D.C.: U.S. Government Printing Office, 1970.

Raymond, C. D. Career education infusion: A review of selected curriculum guides for the middle school. Information series, no. 211. Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education & National Center for Research in Vocational Education, 1980. (ERIC Document No. ED 193 531)

Rokeach, M. Beliefs, attitudes, and values: A theory of organization and change. San Francisco, CA: Jossey-Bass, 1968.

Saylor, J. G., Alexander, W. M., & Lewis, A. J. Curriculum planning for better teaching and learning. 4th ed. New York: Holt, Rinehart, & Winston, 1981.

Scheffler, I. Justifying curriculum decisions. School Review, 1958, 66, 461-472.

Scheffler, I. The language of education. Springfield, IL: Thomas, 1960.

Schwab, J. J. The practical: A language for curriculum. School Review, 1969, 78, 1-23.

Sinclair, R. L., & Ghory, W. J. Curriculum as environments for learning: A practical meaning and model. Paper presented at the Annual Meeting of the American Educaitonal Research Association, San Francisco, CA, April 1979 (a). (ERIC Document No. ED 170 221)

Sinclair, R. L., & Ghory, W. J. Views from the margins: Practical premises and modest priorities for curriculum improvement. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA, April 1979 (b). (ERIC Document No. ED 170 228)

Soltis, J. F. An introduction to the analysis of educational concepts. 2nd ed. Reading, MA: Addison-Wesley, 1978.

Stevens, W. W., Jr., & Morrissett, I. A system for analyzing social science curricula. EPIE Forum, 1967-1968, 1, 10-15. (Reprinted in Curriculum Theory Network, 1968, 1, 28-36)

Taba, H. Curriculum development: Theory and practice. New York: Harcourt Brace, 1962.

Tanner, D., & Tanner, L. Curriculum development: Theory into practice. New York: Macmillan, 1975.

Thomas, B. C. A content analysis of instructional objectives 1958-1977 in Maryland curriculum guides according to Eisner and Vallance's curriculum approaches (Ph.D. dissertation, University of Maryland, 1979). Dissertation Abstracts International, 1979, 40, A-3098. (University Microfilms No. 79-26522)

Tyler, R. W. Basic principles of curriculum and instruction. Chicago: University of Chicago Press, 1949.

Tyler, R. W. Curriculum development since 1900. Educational Leadership, 1981, 38, 598-601.

University of Illinois at Urbana, Department of Vocational and Technical Education. Planning for comprehensive, sequential home economics curriculum. Final report. Springfield, IL: Illinois State Office of Education, Department of Adult, Vocational, and Technical Education, 1980. (ERIC Document No. ED 189 404)

Walker, D. F. The process of curriculum deveopment: A naturalistic model. School Review, 1971, 80, 51-65.

Walker, D. [F.] What curriculum research? Journal of Curriculum Studies, 1973, 5, 58-72.

Warner, T. R. An investigation of the utilization of curriculum guides in a state-wide career education program in Louisiana (Ed.D. dissertation, University of New Orleans, 1975). Dissertation Abstracts International, 1976, 36, A-4240. (University Microfilms No. 75-29854)

Webb, E. J., Campbell, D. T., Schwartz, R. D., & Sechrest, L. Unobtrusive measures: Nonreactive research in the social sciences. Chicago: Rand McNally, 1966.

Webster's new world dictionary of the American language. 2nd college ed. New York: Simon & Schuster, 1980.

Winkeljohann, R. (Ed.). Recommended English language arts curriculum guides K-12 and criteria for planning and evaluation. Urbana, IL: National Council of Teachers of English & ERIC Clearinghouse on Reading and Communication Skills, 1979. (ERIC Document No. ED 176 332)

Yinger, R. J. A study of teacher planning: Description and model of preactive decision making. Research series, no. 18. East Lansing, MI: Michigan State University, Institute for Research on Teaching, 1978. (ERIC Document No. ED 160 605)

Young, J. H. Teacher participation in curriculum decision making: An organizational dilemma. Curriculum Inquiry, 1979 9, 113-127.

Zahorik, J. A. Teachers' planning models. Educational Leadership, 1975, 33, 134-139.

Zais, R. S. Curriculum: Principles and foundations. New York: Crowell, 1976.

APPENDICES

APPENDIX A

149

APPENDIX   A

REVIEW OF SYSTEMS FOR ANALYZING CURRICULUM

Designing   a   system   for   analyzing   curriculum   presents   many
theoretical and practical problems to be solved. Naturally, one wants
to get as much help as possible and avoid re-inventing the wheel when-
ever   possible.   Accordingly,   the curriculum literature was searched
for existing systems from which to draw.

Fifteen   systems   were   selected   for   detailed   study   and   are
included in this review. Initially, only general-purpose systems were
to be considered, but since so few of these   could   be   located,   some
intended   for   particular   applications,   such   as   a   certain   school
subject, were also included, provided that "many" of the items   seemed
applicable   in general. Systems for analyzing students' instructional
materials were generally excluded, except for two: one because   it   is
based on curriculum variables, the other because it alone deals with a
critical methodological problem. Also excluded were systems   used   in
dissertation   studies   as   these are not generally available except by
purchase and, in any case, are almost always tied to particular school
subjects or narrow research interests.

General Characteristics

These fifteen systems were published in journals, books, and microfiche between 1955 and 1981, but most appeared in a flurry over six years from 1967 to 1973, following a period of intense curriculum development activity throughout the nation. The salient characteristics of the systems are summarized in Table 17, and as the table reveals, they are a diverse lot, both inherently and in presentation.

Actually, it's generous to characterize many of these as "systems," with all that that implies. Some systems are in the form of instruments. These, however, range from a dozen items on a single-page form to nearly ninety items spread over many pages. The items may be questions, statements, or standards; there may be rating scales, multiple choices, or no response options at all. Similar to these are two systems comprising guidelines or recommendations, without formalizing them into an instrument.

Other systems had to be reconstructed by working backwards from the findings in research reports. Still others are simply discussed and the variables or elements of the systems identified. The variables may be formalized in a model or outline, or just embedded in the discussion. There may be only three or four elements or over 400, and the discussion may be brief or extend over many pages.

Among the systems are two that have been used in large-scale or continuing research and evaluation. The model presented by Klein, Tye, and Wright (1979) is the framework used for the curriculum

TABLE 17

SYSTEMS FOR ANALYZING CURRICULUM

Reference (1)	Publication Format (2)	Intended Application (3)	Specification (4)	Purpose of System (5)	Theoretical Basis (6)	Unit of Analysis (7)
Armstrong & Shutes, 1981	Journal (3 pp.)	Curriculum documents	Instrument: 12 standards with 6-point scale. Explanation and illus. questions for each.	Evaluation	Undescribed	Unspecified
Borden, 1979	Journal (2 pp.)	Curriculum designs & materials	Instrument: 25 statements for +/- response. Table for summary profile. Explanation.	Evaluation	Undescribed	Unspecified
Duncan & Frymier, 1967	Journal (20 pp.)	Curriculum	System of 3 main components (elements, events, space-time)	Description	Described	"Curriculum event"
Easley, Jenkins, & Ashenfelter, 1967	Journal (6 pp.)	Science materials	4 Major descriptors; display of sample results	Description	Described	"Assignable unit"
Gordon, 1967	Journal (5 pp.)	Instructional materials	Approx. 19 variables mentioned in discussion	Description (unclear)	Described	Unspecified
Klein, 1980	Microfiche (85 pp.)	Curriculum guides	19 Headings in outline of framework, drawn from model in next entry. (Research report)	Description	See next entry	Unspecified
Klein, Tye, & Wright, 1979	Journal (5 pp.)	Curriculum	405 Cells in 3-D matrix (5 perspectives x 9 commonplaces x 9 qualitative factors)	Description	Described	Unspecified
Langenbach, Hinkemeyer, & Beauchamp, 1971	Microfiche (34 pp.)	Curriculum documents	15 variables with values (Research report)	Description	Issues discussed	Unspecified
Lazar & Kokaska, 1970	Journal (3 pp.)	Special educ. guides	Instrument: approx. 61 questions. Brief introduction.	Evaluation	Undescribed	Unspecified
Lungmus, Haley, Greenawald, & Forkner, 1980	Microfiche (11 pp. of appendix)	Consumer educ. guides	Instrument: 43 questions most with 7-point response scale, some with sub-questions. (Appendix to annotated bibliography)	Evaluation	Undescribed	Unspecified
Merritt & Harap, 1955	Bouk (45 pp.)	Curriculum guides	Approx. 42 variables mentioned in text. (Research report)	Description	Undescribed	Unspecified
Payne, 1969	Bouk (40 pp.)	Curriculum documents	Approx. 28 guideline questions interspersed in explanation	Description & Evaluation	Undescribed	Unspecified
Stevens & Morrisett, 1968	Journal (6 pp.)	Social sci. curricula	28 Sub-headings in 6-category outline. Text suggests further sub-divisions.	Description	Undescribed	Unspecified
Tyler & Klein, 1968	Journal (? pp.)	Curricula & instructional materials	25 Recommendations in 7 categories. Background discussion.	Evaluation	Undescribed	Unspecified
Zenger & Zenger, 1973	Book (n3 pp.)	Curriculum guides	Instrument: approx. 67 statements with rating scale. 2 parallel forms.	Evaluation	Undescribed	Unspecified

component of "A Study of Schooling in the United States" under the direction of John Goodlad (see Goodlad, Sirotnik, & Overman, 1979). With 405 cells in its three-dimensional matrix, the model is the most complex of those reviewed. Klein's (1980) report is a technical report from that study and is based on selected variables of that general model. The "Curriculum Materials Analysis System" (CMAS) outlined by Stevens and Morrisett (1968) grew out of efforts by the Social Science Education Consortium (in Boulder, Colorado) to describe the materials in its resource center. The CMAS has been used to analyze and select materials for a series of reports by the Consortium on exemplary social studies materials, beginning in 1971 and continuing with annual supplements since 1979 (e.g., Hedstrom, 1980; Hedstrom & Haley, 1979). Other uses of the system are also reported (Knight & Hodges, 1969). The CMAS has been "adapted" by Lungmus et al (1980) for consumer education materials.

Having made several observations about the systems in general, we turn now to specific theoretical and practical problems.

Purpose for the System

Payne (1969) points out that curriculum analysis can be done for two different purposes, to describe (What is this like?) and to evaluate (Is this good?). The importance of this is that the purpose affects what one asks of the document and what standards are imposed on it. Both purposes are represented among the systems being

reviewed. But while there are more descriptive than evaluative systems among the fifteen, it should be noted that almost all systems excluded from review were evaluative; there are, in short, very few descriptive systems (corresponding to the paucity of descriptive research, as noted in Chapter I). It should also be noted that although few of the systems explcitly specified purpose, it was always easy to determine from inspection of the items.

Theoretical Basis

An analytic system, whether for evaluation or description, seeks to capture and illuminate the essential nature of the phenomenon being studied by separating it into parts and examining them. It follows, then, that the success of a system depends on the conceptualization of the phenomenon and its parts that underlies the system. If this understanding is faulty, the results of the analysis may be trivial or misleading or may miss the point.

Despite the importance of knowing the theoretical underpinnings of a system, very few of the systems reviewed include a statement of the system's theoretical basis (see Table 17, col. 6). To be fair, one should be extremely cautious in drawing conclusions from this fact, as there are several possible explanations. But in reading through the systems, one gets the distinct impression that many are more compiled from literature reviews, brainstorming, and the like than designed on the basis of a coherent theoretical framework.

In cases where a discussion of theoretical underpinnings is provided, there are considerable differences. Gordon (1967) identifies three sets of interrelated variables in curriculum: "pupil characteristics," "instructional situation characteristics," and "goal characteristics." Klein, Tye, and Wright (1979) also identify three sets of variables: "perspectives of curriculum," "commonplaces," and "qualitative factors." These are arranged to create a three-dimensional matrix of 405 cells. The commonplaces (i.e., goals, activities, materials, etc.) correspond generally to Gordon's instructional situation characteristics and include his goal characteristics. Langenbach, Hinkemeyer, and Beauchamp (1971) discuss two theoretical issues (the definition of curriculum and the dual usage of the word "design" in the curriculum literature) without setting out a complete framework. Their data, however, are clearly organized into three categories: "design characteristics," "curriculum engineering characteristics," and "curriculum types." Many of the design characteristics are what Klein et al identify as commonplaces, otherwise commonly known as "elements" or "components" of curriculum. In all three systems, the theoretical support consists largely of identifying categories of variables.

By contrast, Duncan and Frymier (1967) provide an extended discussion of the problem of analyzing curriculum and develop a system that distinguishes between the "elements" of curriculum and the "units" (i.e., pieces) of a curriculum. They consider curriculum to have three essential elements: "actors," "artifacts," and "opera-

tions." These combine and interact as a "unit" of curriculum which they call a "curriculum molecule" or "curriculum event." Curriculum events exist in relation to other curriculum events in "curriculum space-time" (pp. 180-183). Thus, elements, events, and space are the basic constructs of the system, and each can be classified and described in various ways. Duncan and Frymier argue that the curriculum event is "probably the most meaningful unit of curriculum to study" (p. 182). They reject the idea of basing analysis on individual elements:

> It seems that classifying curriculum events according to the nature of the elements (actors, artifacts, and operations) is about equivalent to classifying chemical compounds according to their elements. If, for example, everything containing hydrogen were classified in the same group, water (H_2O) and sulphuric acid (H_2SO_4) would be classified together. For most purposes, such a classification unequivocally misses the point--it is the nature of the composite that is meaningful. (p. 189)

On this issue, Duncan and Frymier stand alone, both in raising the issue and taking an explicit position. All the other systems are based on simple variables, generally considered separately (only an occasional item concerns two variables in relationship). I find Duncan and Frymier's argument persuasive, and the framework for this study draws heavily on their system.

Unit of Analysis

Analysis consists of separating something into parts and examining these in detail. A critical problem for the analyst, then,

is to determine what these parts are, i.e., to designate the units of analysis. In the specific case of analyzing curriculum documents, however, this really involves determining two units: first, the units of a curriculum, and second, the units of a document.

Of the fifteen systems reviewed here, only two provide an explicitly defined unit of analysis. Duncan and Frymier (1967) identify the "curriculum event" as the unit of analysis for a curriculum (reviewed above). No other system explicitly defines such a unit. As for the unit of analysis for a document, Easley, Jenkins, and Ashenfelter (1967) designate the "assignable unit." An assignable unit is "the smallest unit which a teacher could reasonably consider for selection in making student assignments" (p. 18); for example, a section of a chapter with a separate heading, a laboratory exercise in a workbook, or a set of discussion questions. Easley et al report that such assignable units can be "readily identified in elementary school textbooks" and that as many as forty may be found in a chapter (p. 18). Descriptors have been developed for describing these assignable units in science materials. Two are for pedagogical style: nature of the student activity involved and the method of presentation. Other descriptors characterize the scientific content of the assignable unit as well as such things as the presence and type of illustrations, portrayal of minority group persons, etc. Although designed for elementary science instructional materials, the system has been included here because it is the only system which addresses the methodological problem of unitizing a document.

What of all the rest? Guidance to the analyst about where to look, what to look at, and what to look for, if any is given, is implied in the item. Generally this is some curriculum element or some document section. But as examination of the representative items in Table 18 reveals, for many items it is not at all clear what the analyst should attend to or what evidence to use. One comes to the conclusion that these are, by and large, not really systems for the process of analyzing, but systems for organizing and recording the judgements or findings that result from the process. The systems leave largely unanswered the problems of how to go about the analysis, what data to collect or generate, and how to use it in making judgments. At best, the systems tell <u>what</u> to decide, but offer little help in <u>how</u> to decide. Considering that curriculum documents sometimes run to 200, 300, or even more pages, the apparent assumption that this is unproblemmatic is, in my view, clearly unwarranted. However, the absence of provisions for carrying out the analysis is consistent with Gall's (1981) observation that "educators sometimes make the mistake of judging a set of curriculum materials before understanding what the materials are and how they work" (p. 41).

Variables and Measures

From mere inspection of the fifteen systems, it was obvious that they included many different variables and ways of measuring them. But comparisons were difficult because of the varied formats (see

TABLE 18

REPRESENTATIVE ITEMS FROM ANALYSIS SYSTEMS

Evaluative Systems

"Legitimacy of the document"
    Scale: "Totally inadequate" (1) . . . (6) "Exceptionally strong"
    (Armstrong & Shutes, 1981, p. 201)

"Provisions are made to insure the presence of learning skills"
    (Borden, 1979, p. 42)

"Does the author view curriculum building as a continuous process?"
    (Lazar & Kokaska, 1970, p. 99)

"To what extent is the rationale well developed and clearly stated?"
    Scale: "Not at all" (1) . . . (7) "Great extent" (Lungmus et al,
    1980, p. 121)

"The value of objectives must be substantiated" (Tyler & Klein, 1968,
    p. 7)

"Relates philosophy, objectives, and content to each other"
    Scale: "Excellent, good, acceptable, poor, not included, not
    applicable" (Zenger & Zenger, 1973, p. 42)

Descriptive Systems

"Space"
    Values: "Broad references," "specific needs identified,"
    "guidelines given," "nothing" (Klein, 1980, p. 14)

"Arena"
    Values: "School," "district," "county," "state" (Langenbach,
    Hinkemeyer, & Beauchamp, 1971, p. 30)

"Activities"
    Values: "Highly lifelike," "moderately lifelike," "little or no
    lifelikeness" (Merritt & Harap, 1955, p. 17)

"Does the plan provide the outline for organization and sequence of
    the course or curriculum area?" (Payne 1969, p. 11)

"What are the author's theories of learning, teaching, and curriculum
    construction?" (Stevens & Morrisett, 1968, p. 13)

Table 17, col. 4). Therefore, it seemed desirable and necessary to first recast the items of the systems into a common format.

To reformat the items, a framework was devised consisting of four "slots":

1. Category. Is the item included in some section or category of items? If so, what?[1]

2. Referent. What is the item about?

3. Standard of measurement. How is the referent to be measured (evaluated, assessed, described, etc.)?

4. Values. What possible values (scale, descriptions, etc.) can be assigned?

Worksheets were prepared with space for identifying the system at the top and four columns headed "Category," "Referent," "Standard," and "Values." As each item was read, it was recast into this framework and entered on the worksheet, retaining the original language as much as possible. The information on the worksheets was then transferred to a computer file and analyzed with the program Key Words in Context (KWIC; Control Data, n.d.). KWIC creates an alphabetical list of all keywords in the data and prints out the list along with the context in which each keyword appears (a keyword is any word, except for words the user specifically directs the program to ignore).

———————————————

[1] This information later proved useless and was ignored.

The preceding paragraph grossly oversimplies the process, of course. The process of re-forming the items was fraught with difficulty: items might be ambiguous, elements might be missing, a single item might contain multiple referents or multiple standards, etc. Also, computer processing actually involved several iterations to standardize things like plurals, endings, etc. and to add a standardized set of "cover terms" to bring together different terms for the same thing.

Two concordances were created: (1) referents, with citations, any similar terms subsumed under the referent, and standards of measurement; (2) standards, with values. Lists of the basic referents and the standards are presented in Tables 19 and 20.[2] While the list of referents defies easy classification, some categories can be discerned: curriculum commonplaces (e.g., activities, objectives, materials), document features and parts (e.g., acknowledgements, comment space, page format), curriculum processes and participants (e.g., curriculum development, dissemination, curriculum revision) general identifiers and descriptors (e.g., ERIC number, grade level, title), educational content and practices (e.g., decision making skills, individualization, record keeping), and qualities (e.g., appropriateness, comprehensiveness). To create a workable taxonomy, however, would be a study in itself.

---

[2] The complete concordances are available from the author.

TABLE 19

BASIC REFERENTS FROM FIFTEEN SYSTEMS
FOR ANALYZING CURRICULUM

Acknowledgements
Activities
Appendix
Appropriateness
Articulation
Assignable unit
Attitudes
Audience of document
Audiovisual aids
Audiovisual equipment
Background materials
Barriers
Bibliography
Class size
Comment space
Community
Community expectations
Community resources
Comprehensiveness
Content
Contents of document
Cost
Curriculum development
Curriculum evaluation
Curriculum events
Curriculum revision
Curriculum spaces
Date of publication
Decision making
Decision making skills
Decisions
Demographic variables
Description
Developers
Dissemination
Document
Editing
Editions
ERIC number
Facilities

Feedback provisions
Format, page
Geographic origin
Glossary
Goals
Grade level
Grouping
Headings
Illustrations
Implementation
  specifications
Independent study
Index
Individualization
Instruction
Instructional methods
Instructional theory
Introduction
Learning behaviors
Learning skills
Learning theory
Mastery learning
  methods
Materials
Means and ends
Objectives
Operations
Organization of program
Organizing elements
Overview of program
Personnel
Philosophy
Place of publication
Planning arena
Policy for grading
Policy for reporting
  to parents
Policy for testing
Preface

Priorities
Procedures and
  regulations
Program
Psychomotor skills
Publisher
Questions
Rationale
Reading materials
Reading requirements
Record keeping
Reference material
Resource materials
School
School-community
  linkage
School laws
School services
Skills, entry level
Skills instruction
Space
Student evaluation
Student role
Student specifications
Subject
Table of contents
Teacher evaluation
Teacher planning space
Teacher preparation
Teacher role
Teacher specifications
Teacher training
Teaching behaviors
Technical manual
Time
Title
Title page
Valuing activities
Writing style

TABLE 20

STANDARDS OF MEASUREMENT FROM FIFTEEN SYSTEMS
FOR ANALYZING CURRICULUM

Adaptability	Direction	Orientation
Adequacy	Distinguishability	Predominance
Alterability	Diversity	Prescriptiveness
Appropriateness	Explicitness	Presence
Availability	Extent	Range
Balance	Flexibility	Readability
Basis	Frequency	Recency
Bias	Importance	Scope
Clarity	Inclusion	Soundness
Coherence	Interestingness	Specificity
Completeness	Justification	Status
Conciseness	Legitimacy	Terminology
Consistency	Merit	Time perspective
Credibility	Number	Useability
Differentiation	Order	Usefulness

Summary

The fifteen systems for analyzing curriculum reviewed here differ greatly, both in form and substance. Both evaluative and descriptive systems are represented. Few make clear the theoretical underpinnings of the system; most, in fact, seem to be an eclectic collection of items rather than a coherent, theory-based system. A crucial problem for the analyst is to designate the units of analysis, but only two of the fifteen attend to this problem. Whatever direction is given about what to examine is usually embedded in individual items. These items have over 150 different referents (over 100 basic referents) for which there is no easy classification scheme,

although certain categories are apparent.

From the above, one must conclude that existing systems for analyzing curriculum do not offer much help in developing a coherent and rigorous analytic system. There has been too little attention to the conceptual and methodological issues involved. The diverse population of referents from individual items suggests that there is little consensus about the variables to examine in analysis.

This sorry state of affairs notwithstanding, there are some important contributions to curriculum analysis to be found among these systems:

1. Payne (1969) reminds us that one should be clear whether analysis is for evaluative or descriptive purposes.

2. Klein, Tye, and Wright (1979) provide a conceptual framework for descriptive analysis.

3. Duncan and Frymier (1967) identify the "curriculum event" as the most meaningful unit of curriculum to study. The distinction between the "units" (i.e., components) of a curriculum and the "elements" of those units clarifies an often confusing aspect of curriculum talk.

4. Easley, Jenkins, and Ashenfelter (1967) identify the "assignable unit" as the unit of analysis for elementary science materials. (Stevens & Morrisett [1968] called this a "brilliant contribution" [p. 11].) While the unit itself is not suitable for curriculum documents, their definition and discussion of the qualities of a unit provide useful starting points for specifying

a unit more appropriate to curriculum documents.

References

Armstrong, D. G. & Shutes, R. E. Quality in curriculum documents. Educational Leadership, 1981, 39, 200-202.

Borden, C. Analysis of curriculum designs and materials. Educational Technology, 1979, 19, 41-42.

Duncan, J. & Frymier, J. Explorations in the systematic study of curriculum. Theory into Practice, 1967, 6, 180-199.

Easley, J. A., Jr., Jenkins, E. S., & Ashenfelter, John W. A scheme for the analysis of elementary science materials. EPIE Forum, 1967, 1, 16-21.

Gall, M. D. Handbook for evaluating and selecting curriculum materials. Boston: Allyn & Bacon, 1981.

Goodlad, J. I., Sirotnik, K. A., & Overman, B. E. An overview of 'A study of schooling.' Phi Delta Kappan, 1979, 61, 174-178.

Gordon, I. J. Inside instructional materials with yardstick and compass. EPIE Forum, 1967, 1, 24-28.

Hedstrom, J. E. (Ed.). Data book of social studies materials and resources. Vol. 5. Boulder, CO: Social Science Education Consortium and ERIC Clearinghouse for Social Studies/Social Science Education, 1980. (ERIC Document No. ED 180 858)

Hedstrom, J. E. & Haley, F. (Eds.). Social studies materials and resources data book. Vol. 4. Boulder, CO: ERIC Clearinghouse for Social Studies/Social Science Education and Social Science Education Consortium, 1979. (ERIC Document No. ED 166 120)

Klein, M. F. State and district curriculum guides: One aspect of the formal curriculum. A study of schooling: Technical report, No. 9. Los Angeles: University of California, Graduate School of Education, 1980. (ERIC Document No. ED 214 879)

Klein, M. F., Tye, K. A., & Wright, J. E. A study of schooling: Curriculum. Phi Delta Kappan, 1979, 61, 244-248.

Knight, M. M., & Hodges, J. O. Curriculum Materials Analysis System: A summary of experience. Social Science Education Consortium Newsletter, 1969, No. 7, 1-8. (ERIC Document No. ED 041 794)

Langenbach, M., Hinkemeyer, M. T., & Beauchamp, G. A. An empirical analysis of curriculum design. (ERIC Document No. ED 045 582)

Lazar, A. L., & Kokaska, C. J. Curriculum guide evaluation: TMR and EMR programs. Journal for Special Educators of Mentally Retarded, 1979, 6, 99-101.

Lungmus, D., Haley, F., Greenawald, G. D., & Forkner, J. Consumer education sourcebook. Boulder, CO: Social Science Education Consortium and ERIC Clearinghouse for Social Studies/Social Science Education, 1980. (ERIC Document No. ED 180 861)

Merritt, E., & Harap, H. Trends in the production of curriculum guides: A survey of courses of study published in 1951 through 1953. Nashville, TN: George Peabody College for Teachers, Division of Surveys and Field Services, 1955.

Payne, A. The study of curriculum plans. Washington, D.C.: National Education Association, 1969.

Stevens, W. W., Jr., & Morrissett, I. A system for analyzing social science curricula. Curriculum Theory Network, 1968, 1, 28-36.

Tyler, L., & Klein, M. F. Recommendations for curriculum and instructional materials. Curriculum Theory Network, 1968, 1, 2-10.

Zenger, W. F., & Zenger, S. K. Writing and evaluating curriculum guides. Belmont, CA: Lear Siegler/Fearon, 1973.

APPENDIX B

APPENDIX   B

PUBLISHED COLLECTIONS OF CURRICULUM DOCUMENTS

Locally-produced curriculum documents are an important resource for and record of educational practice, of interest to teachers, administrators, teachers in training, scholars, and researchers, among others.   But these documents are what librarians call "ephemera" or "fugitive literature." They are usually printed in limited number and not widely distributed outside the school or district where they are produced. They are often short-lived, and when they have served their function, they are simply discarded en masse. Thus, they remain largely inaccessible to all but those who are the direct audience or producers of the documents.

What if one wants to access and examine a large number or wide variety of such documents? Unless one is prepared to identify and acquire the documents himself--a formidable task--one has had until recently to rely on collections such as those held by some school districts, teacher centers, and especially teacher-training colleges and universities. Now, however, curriculum documents are also available in three collections published and distributed in microfiche: Curriculum Development Library, Selected Curriculum Guides in

Microfiche,[1] and ERIC Documents in Microfiche, the latter including education literature of all types, not just curriculum documents. The availability of microfiche collections is--or should be--a boon to practitioners and especially researchers, for whom the collections provide an accessible, convenient, organized, and growing data base.

Appendix B is a supplemental review of these three collections which were analyzed to determine their suitability as a source of documents for this study. The results of the analysis are interesting in their own right, for they reveal what one will find--or not find, as the case may be--when one goes looking for curriculum documents. The review is in two sections: the first describes the collections in general, the second reports on a search for locally-produced elementary social studies curriculum guides in the collections.

The Collections

Curriculum Development Library

The Curriculum Development Library (CDL) has been published in annual editions since 1978 by Fearon Reference Systems, a division of Pitman Learning, Inc., of Belmont, California.[2] The CDL consists of

---

[1] The Curriculum Development Library has since been purchased by the publishers of Selected Curriculum Guides in Microfiche. The combined collections will now be published as the Kraus Curriculum Development Library by Kraus International Publications.

[2] See previous note.

microfiche reproductions of current curriculum guides "solicited from school districts and curriculum libraries throughout North America" and printed indexes. Documents are selected "which will be of use to the widest audience as a model for curriculum development efforts," and "the most important single criterion applied to each guide is its potential usefulness to the teacher, teacher-in-training, curriculum development team, and/or researcher" (CDL: Cumulative subject index, 1981, p. iv).

Each document is assigned an identifying number consisting of an alphabetic subject category code (from 22 now in use), a grade level (the lowest applicable grade level if the guide is for more than one), and an acquisition number within that subject and grade; e.g., "SOC 1-027" would be the 27th document acquired in the Social Studies/-Social Sciences category for grade one. This coding system enables microfiche from the various editions to be interfiled by subject and within subjects by grade level.

Two kinds of indexes are available for the CDL. The Cumulative Subject Index (CSI) contains abbreviated document resumes for all documents in the CDL, arranged by subject and grade level. In addition to bibliographic information (title, developer, year published, number of pages, etc.), resumes include a set of "Key-Words" that indicate the specific skills or knowledge included in the guide, and an "Educational Content Designation" that indicates the percentage of the guide devoted to such things as "subject matter in-formation" for the teacher, "worksheets," "student activities," "in-

structional objectives," and the like (CDL: CSI, 1981, pp. v-vi).

The Key-Word and Abstract Index (KAI) applies only to the 1981/82 edition. Within subject categories, documents are referenced by key-words, enabling the user to find all documents that pertain to specific skills and knowledge. Key-word entries are followed by abstracts (resumes) for that subject category (CDL: CSI, 1981, p. iv).

Selected Curriculum Guides in Microfiche

Selected Curriculum Guides in Microfiche[3] has been published in annual editions since 1970 by Kraus International Publications of Millwood, New York. The collection consists of microfiche reproductions of curriculum guides exhibited at the annual meetings of the Association for Supervision and Curriculum Development. Kraus requests permission to reproduce all guides exhibited and reproduces all for which permission can be obtained (Kraus, Note 1), "with the aim of giving coverage to as many aspects of the current primary and secondary educational scenes as possible" (Selected guides 1980 [catalogue], [p. 1]).

Each document is assigned an acquisition number; e.g., "1281" would be the 1281st document in the collection. Numbering is continuous from one edition to the next. Before numbers are assigned, however, documents are sorted into school subject categories (23 now in use) and then into levels (general, elementary, middle, and

------

[3] Now published as Kraus Curriculum Development Library.

secondary) so that all documents for each subject and level are together in the edition. The editions, however, do not interfile, but follow one another in the collection, so that guides for each subject are found in several places.

A catalogue (brochure) for each edition is issued by the publisher in which guides are listed by subject and within subjects by level. The entry for each document shows only acquisition number, developer, and title. There is no other index.

ERIC Documents in Microfiche

Educational Resources Information Center (ERIC) is an information system operated since 1966 by the National Institute of Education, U.S. Department of Education. ERIC collects, indexes, and disseminates all types of print materials that deal with education. Documents may be submitted by any individual or organization. ERIC also solicits documents from conferences, resource centers, colleges and universities, etc. Curriculum documents are only one of many kinds of material in the system.

Each ERIC document is assigned an identifying acquisition number preceded by "ED" for nonjournal documents and by "EJ" for journal articles; e.g., "ED 178 302" and "EJ 246 131." Most nonjournal documents are reproduced in microfiche and are available in libraries and resource centers, filed numerically by ED number.

ERIC documents are abstracted and indexed extensively according to educational level, type of publication, subject matter, author,

title, institution, special identifiers, etc. Abstracts and indexes are published in two monthly bibliographic journals, Current Index to Journals in Education (CIJE) and Resources in Education (RIE), for journal and nonjournal literature respectively. Both are cumulated semiannually or annually and may be searched by computer.

Comparisons

To facilitate comparisons among the collections, several characteristics of the Curriculum Development Library, Selected Curriculum Guides, and ERIC Microfiche collection are summarized in Table 21.

Probably the most significant similarity among the three is that all are self-selected collections. That is, documents make their way into all three by virtue of being voluntarily submitted by the author(s) or other responsible individuals. Although documents are also solicited, the decision to submit a document rests ultimately with the author. These are surely biased collections, biased toward high rather than low quality. (Realistically, no one will submit a document unless it's thought to be pretty good.) Thus, the guides in the collections are not representative of all guides, and one must be cautious in generalizing on the basis of guides in these collections.

There are important differences among the three collections in size, homogeneity, and organization. The CDL and Selected Guides are both relatively small, homogeneous, organized collections. The ERIC Microfiche collection contains documents of all kinds organized only

TABLE 21

CHARACTERISTICS OF COLLECTIONS OF CURRICULUM GUIDES
PUBLISHED IN MICROFICHE

	ERIC Documents in Microfiche	Selected Curriculum Guides	Curriculum Development Library
Publisher or Sponsor	National Institute of Education (NIE)	Kraus International	Fearon-Pitman
Publication schedule	Continuously, since 1966	Annually, since 1970	Annually, since 1978
Current number of guides	26,756[a]	2,484[b]	2,816[c]
Geographic scope	National	National	National
How documents are obtained	Submitted by any individual or organization; solicited through prof. groups, universities, etc.	From guides exhibited at annual conferences of ASCD	Solicited from school systems and curriculum libraries
Type of documents in collection	All types of education literature	Curriculum guides only	Curriculum guides only
Organization of microfiche	Order of acquisition	By edition; within edition by school subject and level	By school subject and grade. Editions are interfiled.
Printed indexes	Resources in Education (RIE), issued monthly; includes abstracts; may be searched by computer	Publisher's catalogue; issued annually; no abstracts	Cumulative Subject Index (CSI), issued annually; includes abstracts; Key-Word and Abstract Index (KAI), begun with 1981/82 ed.; includes abstracts
Retrieval modes	Author, title, subject matter, institution, educational level, publication type, identifiers	School subject, level	School subject, grade, subject matter "Key-Words"

[a]Guides only, as of December 4, 1982, determined by computer search for documents assigned publication type codes for genral (050) and teaching (052) guides. Before 1979, subclasses of guides were not distinguished, and guides of all sorts were assigned code 050. On the same date, all documents in microfiche numbered 217,116; guides, therefore, account for approximately 12% of ERIC microfiche documents.

[b]Through 1981 edition.

[c]Through 1981/82 edition.

in order of acquisition. Thus, while there are many more documents to choose from in ERIC, this is offset by difficulty of retrieval. Documents cannot be located in ERIC without using the indexes, and because ERIC indexes each document so thoroughly, many leads, paradoxically, prove disappointing. Thus, for the user who just wants to examine guides for a particular subject and level, the CDL and Selected Guides are both far more convenient than ERIC. For more complicated or specific interests, however, the CDL and ERIC collections may be more useful because of superior indexing.

A Search

In connection with this study, the Curriculum Development Library, Selected Curriculum Guides in Microfiche, and the ERIC Microfiche collections were searched for locally-produced, elementary social studies curriculum guides from 1972 onward (an arbitrary cut-off date for the study). Observations about the search process and results reveal additional characteristics of the collections.

Search process

The searches in CDL and Selected Guides were conducted manually and were unproblemmatic. In the case of CDL, the Cumulative Subject Index (CDL: CSI, 1981) provided in ten pages resumes for all social studies/social sciences guides for grades K-6 in the collection, and these had only to be read to identify the desired documents.

Similarly, the search of Selected Guides was done through the publisher's catalogues, but in this case the actual microfiche had sometimes to be consulted because the catalogue listing was not sufficiently informative, showing only microfiche number, developer, and title.

The ERIC Microfiche collection, on the other hand, was searched by computer (BRS, Note 2). One advantage of a computer search is that descriptors can be combined or treated logically so that, for example, one can search for documents listed under both "social studies" and "elementary education." This cannot be done manually except by locating entries in more than one index simultaneously or by checking the document resumes after using one index. Another advantage is that certain information in the document resumes can be searched only by computer (e.g., publication type codes before 1979) because no printed indexes are available. The great disadvantage of a computer search is that it typically retrieves many citations for things you don't want (see below).

The search strategy involved four phases: (1) identify all RIE documents dealing with elementary social studies, (2) eliminate certain types of documents definitely not wanted, (3) try to pick out of the remainder those likely to be curriculum guides, and (4) choose those from the last ten years. Details of the actual search are provided in Table 22, along with the results.

The third phase of the strategy is the difficult one. ERIC assigns every document at least one of 34 publication/document type

TABLE 22

ERIC SEARCH DESIGN AND RESULTS

Search Query[a]	Results[b]	Comments

Phase 1: Identify elementary social studies documents in RIE

1. SOCIAL-STUDIES AND ED.AN.	4922	"ED.AN." selects RIE only
2. ELEMENTARY-SCHOOL-CURRICULUM OR ELEMENTARY-EDUCATION	24955	Includes both RIE & CIJE
3. 1 AND 2	1049	Elem. soc. studies in RIE

Phase 2: Eliminate unwanted types of documents

4. 3 NOT STATE-CURRICULUM-GUIDES	1027	
5. 4 NOT "055".PT.[c]	1025	Non-classroom guides
6. 5 NOT "051".PT.	981	Instructional materials

Phase 3: Select curriculum guides from remaining documents

7. 6 AND (CURRICULUM.MJ,MN. OR CURRICULUM-GUIDES)	214	
8. 6 AND "050".PT.	209	General guides
9. 6 AND "052".PT.	107	Teaching guides
7. 6 AND TEACHING GUIDES	176	
11. 6 AND UNITS-OF-STUDY	286	
12. 7 OR 8 OR 9 OR 10 OR 11	561	Eliminate multiple "hits"

Phase 4: Select documents from last 10 years

13. ..LIMIT/12 YR GT 71	354	I.e., 1972 on. Total number of RIE documents most likely to be elementary social studies curriculum guides

[a] Queries shown in format for search through Bibliographic Retrieval Services. The results of queries can be combined or used in subsequent queries; for example, query 3 means "How many from query 1 are also in query 2?"
[b] Results are for search made on June 1, 1982.
[c] ".PT." indicates Publication Type code.

codes (Thesaurus, 1980, pp. xiv-xv). The 05- series of codes is for guides: general (050), classroom use/learner [i.e., instructional materials] (051), classroom use/teacher [i.e., teaching guides] (052), and non-classroom use (052). Unfortunately, codes for specific subclasses of guides were not used before 1979, so all kinds of guides were coded as "general" (050). To complicate matters further, the numbered codes themselves were not implemented until the early 1970's, so some documents have no "pubtype" code at all. ERIC also assigns descriptors to characterize the subject matter and sometimes the form of documents. For example, the descriptor "curriculum guides" may be used to indicate that a document is about curriculum guides (i.e., subject) or is a curriculum guide (i.e., form). ERIC policy is that descriptors used for form are assigned as minor (vs. major) descriptors (Thesaurus, 1980, p. xv). Among the documents retrieved in this search, however, descriptors used for form were not consistently applied as minor descriptors, as shown in Table 23. In any case, there is no certain way to distinguish between a minor descriptor assigned for form and one assigned because it is a subject of the document, albeit a minor subject. The implication of all this is that it is difficult to design a search that will yield only documents that are curriculum guides. (The same problem is encountered when searching for other types of documents; e.g., bibliographies, literature reviews, research reports, etc.)

How successful was the search in selecting curriculum guides? The 354 document resumes retrieved were inspected to see how many

TABLE 23

ERIC USE OF DESCRIPTORS FOR DOCUMENT FORM

	Frequency of Use in 354 Citations	
	Minor Descriptor	Major Descriptor
Curriculum	13	9
Curriculum guides	56	40
Teaching guides	95	14
Units of study	85	65

could be reasonably considered curriculum guides. Of the 354 documents, 280 (79%) were, in my opinion, curriculum guides of one sort or another. The remainder were teacher education materials (5), bibliographies (8), instructional materials (12), method handbooks (12), and reports, papers, and speeches (37). By contrast, Selected Guides included only two non-guide documents among the elementary social studies documents, and CDL only seven. In the former instance, both items were instructional materials; in the latter case, two were method handbooks, one was instructional material, and three were of undeterminable nature from the resumes.

An additional requirement for the study was to select curriculum guides produced by local schools or school districts. For this reason, the descriptor "state curriculum guides" was used in the search to eliminate state-level guides (only 22 were eliminated in this way). Beginning in 1979, ERIC has implemented a field in the

document resume for "governmental status" which can take three values: federal, state, and local. The field would have been of great value in this search if it had been implemented for all the years in question. However, it also appears from casual inspection of document resumes that the field is still not assigned for many documents, so use of the field in a search would yield unpredictable results. Of the 354 documents retrieved, then, 115 (32%) were from local education authorities; only two of these came from individual schools. The remainder of the documents came from state agencies (76), universities and colleges (67), national agencies (15), other identifiable sources (58); for some documents, the source simply could not be determined (23).

Search results

The searches of the three collections identified elementary social studies curriculum guides for the years 1972 and on. The documents identified were further analyzed according to producer and type of guide. Table 24 reports the results of this analysis and reveals important differences among the three collections. (In subsequent discussion, "guides" should be understood as shorthand for "elementary social studies curriculum guides from 1972 on.")

Producers of guides were classified as either local or nonlocal. Local producers are school districts or individual schools, while nonlocal producers includes state and federal agencies, commercial publishers, etc. As Table 24 shows, locally-produced curriculum

TABLE 24

TYPES AND PRODUCERS OF ELEMENTARY SOCIAL STUDIES
GUIDES IN MICROFICHE COLLECTIONS

	ERIC Microfiche	Selected Curriculum Guides	Curriculum Development Library
Comprehensive guides			
Local	16 (64%)	48 (98%)	68 (88%)
Nonlocal	9 (36%)	1 (2%)	9 (12%)
Total	25 (100%)(9%)	49 (100%)(67%)	77 (100%)(53%)
Topic or unit guides			
Local	72 (32%)	10 (56%)	42 (65%)
Nonlocal	153 (68%)	8 (44%)	23 (35%)
Total	225 (100%)(80%)	18 (100%)(25%)	65 (100%)(45%)
Other Guides			
Local	16 (53%)	5 (83%)	2 (50%)
Nonlocal	14 (47%)	1 (17%)	2 (50%)
Total	30 (100%)(11%)	6 (100%)(8%)	4 (100%)(3%)
All types combined			
Local	104 (37%)	63 (86%)	112 (77%)
Nonlocal	176 (63%)	10 (14%)	34 (23%)
Total	280 (100%)(100%)	73 (100%)(100%)	146 (100%)(100%)

Note. Comprehensive = guides for complete social studies program for one or more grades. Topic/unit = guides for a single topic or unit of study in social studies program for one or more grades. Other = multi-subject guides or guides for special purposes, e.g., bilingual education, special education. Local = school district or school. Nonlocal = state & federal agencies, commercial publishers, etc. Includes guides from 1972 on.

guides are most heavily concentrated in CDL and Selected Guides, where

they account for over three-fourths of all guides. By contrast, in

ERIC, locally-produced guides account for a little more than one-third

of the guides.

The guides were classified into three groups, based on program coverage. <u>Comprehensive</u> guides are for a complete social studies program for one or more grades; <u>topic or unit</u> guides are for a single topic or unit of study in the social studies program for one or more grades. A third category, <u>other</u>, includes special cases, such as multi-subject guides or those for bilingual education and special education. Table 24 shows that whereas comprehensive guides account for half or more of the guides in <u>CDL</u>, and <u>Selected Guides</u>, only one-tenth of guides in ERIC are comprehensive guides.

As a matter of curiosity, the subject matter of unit or topic guides was tabulated to see if there were any dominant subjects. There were. Over 50% of topic or unit guides were accounted for by just four subjects, shown in Table 25.

Another question that arises about these collections is that of overlap. A master list of all locally-produced elementary social studies guides retrieved from the three collections was compiled and checked for guides included in more than one collection. As it turns out, there is surprisingly little overlap among them, as illustrated in Figure 7. Eight guides are included in both <u>CDL</u> and <u>Selected Guides</u>, and three guides are included in both ERIC and <u>CDL</u>. No guides are included in all three. Thus, the 268 guides in the combined collections include 257 <u>different</u> guides.

In reviewing the resumes and catalogues for guides in the collections, it became apparent that certain school districts had each contributed several guides. This raised the issue of how many

TABLE 25

MOST COMMON SUBJECT MATTER IN TOPIC OR UNIT GUIDES

	Number (n=309)	Percent	Cumulative Percent
Career education	54	18	18
Ethnic studies/cultural heritage	46	15	33
Geographic area studies[a]	41	13	46
Ecology/environment	31	10	56
Energy	17	6	62
"Skills"	14	5	67
Economics/consumer education	14	5	72
Law/legal education	14	5	77
Global perspectives	14	5	82

Note. ERIC Microfiche, CDL, and Selected Guides, combined.
[a] Includes units on local geography, etc., as well as conventional area studies, e.g., "The American Southwest," "Modern Africa," etc.

different districts were represented by the guides in the collections. Table 26 reports this breakdown for locally-produced guides. As the table shows, relatively few school districts are responsible for the guides in the collection. This has important implications for sampling procedures in any research using these collections as a source of data.

Summary

Selected Curriculum Guides in Microfiche, Curriculum Development Library, and ERIC Microfiche collections differ in ways that are

ERIC
Microfiche
(n=104)

Selected
Curriculum
Guides
(n=63)

Curriculum
Development
Library
(n=112)

101

3

55

101

8
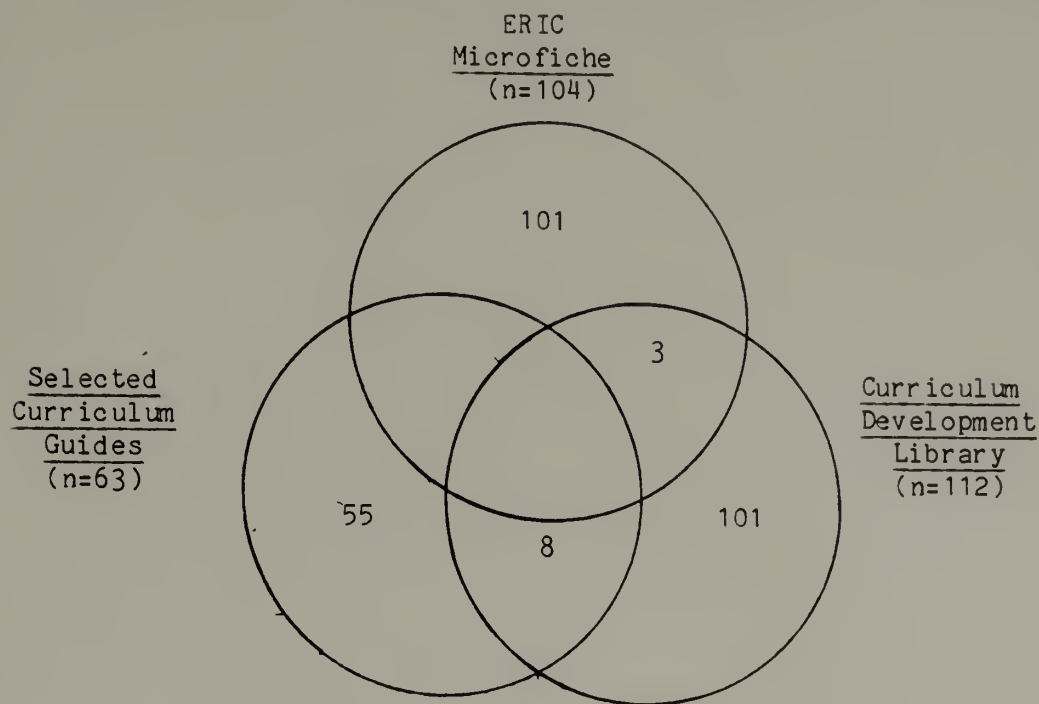
Fig. 7. Overlap of microfiche collections. Numbers in figure are
for locally-produced elementary social studies guides from 1972 on.

important to practitioners and researchers who wish to use these

collections as a source of data or ideas. Selected Guides and CDL are

both organized according to school subjects, a feature practitioners,

particularly, are likely to find attractive. For identifying guides

to be examined in detail, the indexes of CDL provide enough informa-

tion to make this easy. Selected Guides, on the other hand, has no

indexes per se, and users are likely to find the titles insufficiently

informative, meaning that the actual fiche may have to be consulted.

TABLE 26

SCHOOL DISTRICT REPRESENTATION
IN MICROFICHE COLLECTIONS

Type of Guide	ERIC Microfiche		Selected Curriculum Guides		Curriculum Development Library	
	Guides	Districts	Guides	Districts	Guides	Districts
Comprehensive	16	8	48	31	68	42
Unit or topic	72	40	10	6	42	22
Other	16	11	5	4	2	2
Totals[a]	104	55	63	39	112	62

Note. Locally-produced guides only, 1972 on.
[a] District columns may not total because of guides of more than one type for a district. Total number of different districts is 134.

The ERIC Microfiche collection includes many more guides than the other two collections, but they are correspondingly far more difficult to retrieve.

If one can judge from the elementary social studies guides retrieved, there are also differences in the guides included in the collections. Selected Guides and CDL include predominantly comprehensive guides, whereas ERIC has predominantly topic or unit guides. Similarly, Selected Guides and CDL both contain a larger proportion of locally-produced guides than does ERIC.

Again judging from the elementary social studies guides in the collections, there is very little overlap between the collections. In fact, no overlap between ERIC and Selected Guides was found, and only eleven duplications were found at all.

Reference Notes

1. Kraus International Publications, personal communication, December 3, 1982.

2. Bibliographic Retrieval Services, Lathan, New York. On-line searches of ERIC data base on April 8 and June 1, 1982.

References

Curriculum Develoment Library: Cumulative Subject Index (CDL: CSI). Belmont, CA: Fearon-Pitman, 1981.

Selected Curriculum Guides 1980 [catalogue]. Millwood, NY: Kraus Microform, 1980.

Thesaurus of ERIC Descriptors. Completely revised. Phoenix, AZ: Oryx Press, 1980.

APPENDIX C

APPENDIX   C

DOCUMENT POPULATION AND SAMPLE

The population of documents for this study consists of all (a)
locally-produced (b) comprehensive (c) elementary (d) social studies
(e) curriculum guides (f) from 1972 on in ERIC Microfiche (ERIC) and
Selected Curriculum Guides in Microfiche (Kraus Intl.). Comprehensive
guides are defined as those which cover the social studies program for
one or more grades; guides of limited coverage, e.g., a single topic
or unit of study, are excluded.

The sample consists of 39 guides selected from the population,
one for each school system represented. Documents included in the
sample are numbered in the listing.

Document
Number

001* Alexandria City Schools. Alexandria is . . . First ed. Alexandria VA: 1980. (ERIC Document No. ED 184 942)

Allegany County Board of Education. Kindergarten: Home and family. [Cumberland, MD]: 1978. (ERIC Document No. ED 187 656)

Allegany County Board of Education. Grade 1: School [and] Neighborhood. Cumberland, MD: 1978. (ERIC Document No. ED 187 657)

Allegany County Board of Education. Grade 2: Communities-- People [and] Communities--Goods and services. Cumberland, MD: 1978. (ERIC Document No. ED 187 658)

Allegany County Board of Education. Grade 3: Indians--Past and present [and] Allegany County--Past and present. [Cumberland, MD]: 1978. (ERIC Document No. ED 187 659)

Allegany County Board of Education. Grade 4: Maryland--Geography [and] Maryland--History of the colonial period. Cumberland, MD: 1978. (ERIC Document No. ED 187 660)

002 Allegany County Board of Education. Grade 5: United States--Our expanding nation [and] United States--Interdependence of regions. Cumberland, MD: 1978. (ERIC Document No. ED 187 661)

Allegany County Board of Education. Grade 6: Political science [and] World cultures--A comparative study. Cumberland, MD: 1978. (ERIC Document No. ED 187 662)

003 Auburn Public Schools. Social studies resource guide: K-3. Auburn, WA: 1973: (Selected Curriculum Guides, 1974, No. 0952)

Auburn Public Schools. Social studies resource guide: 4-6. Auburn, WA: 1973 (Selected Curriculum Guides, 1974, No. 0953)

─────────────────

*Document dropped from sample.

004* Baltimore City Public Schools. [Social studies: Human behavior studies program: Grades K-6]. Baltimore, MD: 1972. (ERIC Document No. ED 088 753)

Baltimore City Public Schools. Social studies: K-6: Urban studies program. Baltimore, MD: 1973. (ERIC Document No. ED 095 086)

005 Cincinnati Public Schools. Elementary social studies. Curriculum bulletin no. 11. Cincinnati, OH: 1974. (Selected Curriculum Guides, 1976, No. 1276)

006 Diocese of Cleveland. Patterns for man: Social science guidelines: K-12. Rev. ed. Cleveland, OH: 1975. (Selected Curriculum Guides, 1980, No. 2298)

007 Eastwood Local School District. Course of study for social studies: Grades K-12. Pemberville, OH: 1979. (Selected Curriculum Guides, 1979, No. 1920)

008 Elmwood Local School District. Course of study for social studies: Grades K-12. Bloomdale, OH: 1979. (Selected Curriculum Guides, 1979, No. 1921)

009 Fairfax County Public Schools. Program of studies: Social studies. Fairfax, VA: 1974. (Selected Curriculum Guides, 1975, No. 1116)

Galion City Schools. Social studies primary grades curriculum guide. Galion, OH: n.d. (Selected Curriculum Guides, 1979, No. 1943)

Galion City Schools. Social studies curriculum guide: Primary grades (1-3). Book II Galion, OH: n.d. (Selected Curriculum Guides, 1979, No. 1944)

Galion City Schools. Social studies curriculum guide: Primary grades (2-3). Book III. Galion, OH: n.d. (Selected Curriculum Guides, 1979, No. 1945)

010 Galion City Schools. Social studies intermediate grades curriculum guide [4-6]. Galion, OH: n.d. (Selected Curriculum Guides, 1979, No. 1946)

_____

*Document dropped from sample.

011 Grosse Pointe Public Schools. The social studies program of the Grosse Pointe Public Schools: K-12. Grosse Pointe, MI: 1976. (Selected Curriculum Guides, 1977, No. 1459)

012 Highland Park Independent School District. Social studies cur- riculum guidelines for teachers: Grades K-12. Dallas, TX: 1977. (Selected Curriculum Guides, 1979, No. 1926)

[High Point Public Schools]. A social studies curriculum guide: Kindergarten. [High Point, NC]: n.d. (Selected Curricu- lum Guides, 1979, No. 1936)

[High Point Public Schools]. A social studies curriculum guide: Grade one. [High Point, NC]: n.d. (Selected Curriculum Guides, 1979, No. 1937)

[High Point Public Schools]. A social studies curriculum guide: Grade two. [High Point, NC]: n.d. (Selected Curriculum Guides, 1979, No. 1938)

[High Point Public Schools]. A social studies curriculum guide: Grade three. [High Point, NC]: n.d. (Selected Curriculum Guides, 1979, No. 1939)

[High Point Public Schools]. A social studies curriculum guide: Grade four. [High Point, NC]: n.d. (Selected Curriculum Guides, 1979, No. 1940)

013 [High Point Public Schools]. A social studies curiculum guide: Grade five. [High Point, NC]: n.d. (Selected Curriculum Guides, 1979, No. 1941)

[High Point Public Schools]. A social studies curriculum guide: Grade six. [High Point, NC]: n.d. (Selected Curriculum Guides, 1979, No. 1942)

014 Irvine Unified School District. Social science curriculum guide. Irvine, CA: 1978. (Selected Curriculum Guides, 1979, No. 1918)

015 Kansas City Public Schools. Our heritage. Kansas City, MO: 1976. (Selected Curriculum Guides, 1979, No. 1919)

016 Lake Local School District. Course of study for Social studies: K-12. Millbury, OH: 1979. (Selected Curriculum Guides, 1979, No. 1922)

Las Virgenes Unified School District. Social science: First
grade. [Westlake, CA]: 1979. (Selected Curriculum
Guides, 1979, No. 1927)

017 Las Virgenes Unified School District. Social science: Second
grade. [Westlake, CA]: 1979. (Selected Curriculum
Guides, 1979, No. 1928)

018 Madison Public Schools. Sixth grade interdisciplinary packet
(Science-social studies). Madison, WI: n.d. (ERIC Docu-
ment No. ED 062 261)

019 [Markham] Cook County School District 144. Social science cur-
riculum guide 1974-1975: K through 8. Markham, IL: 1974.
(Selected Curriculum Guides, 1976, No. 1275)

020 Merrick Union Free School District. Elementary social studies
research curriculum guide. Merrick, NY: n.d. (Selected
Curriculum Guides, 1977, No. 1464)

021 Montgomery County Public Schools. Program of studies, social
studies, K-8. Rockville, MD: 1979. (ERIC Document No.
ED 193 152)

Mounds View Schools. Elementary social studies curriculum and
resource guide [K-3]. St. Paul, MN: 1971. (Selected Cur-
riculum Guides, 1973, No. 0837)

022 Mounds View Schools. Elementary social studies curriculum and
resource guide [4-6]. St. Paul, MN: 1971. (Selected Cur-
riculum Guides, 1973, No. 0838)

023 Muscogee County School District. Social studies curriculum
guide: K-6. [Columbus, GA]: 1977. (Selected Curriculum
Guides, 1978, No. 1592)

024 Newport News Public Schools. Continuum of skills: Grades one -
seven. Newport News, VA: 1977. (Selected Curriculum
Guides, 1979, No. 1949)

025 Northwood Local School District. Course of study for social
studies: Grades K-12. Northwood, OH: 1979. (Selected
Curriculum Guides, 1979, No. 1924)

026 North Baltimore Local Schools. Course of study for social
studies: Grades K-12. North Baltimore, OH: 1979. (Se-
lected Curriculum Guides, 1979, No. 1923)

027 Otsego Local School District. <u>Course of study for social studies: Grades K-12.</u> Tontogany, OH: 1979. (<u>Selected Curriculum Guides,</u> 1979, No. 1925)

028* Paramus Public Schools. <u>Social studies curriculum guide: Grade 1--Families & schools.</u> Paramus, NJ: n.d. (ERIC Document No. ED 167 463)

029 Philadelphia, School District of. <u>Key competencies: Social studies, elementary school.</u> Philadelphia, PA: 1980. (ERIC Document No. ED 193 109)

     Prince George's County Public Schools. <u>First grade social studies curriculum guide: Families here and in other lands.</u> Upper Marlboro, MD: 1978. (<u>Selected Curriculum Guides,</u> 1979, No. 1932)

     Prince George's County Public Schools. <u>Second grade social studies curriculum guide: Local communities.</u> Upper Marlboro, MD: 1978. (<u>Selected Curriculum Guides,</u> 1979, No. 1933)

030 Prince George's County Public Schools. <u>Third grade social studies curriculum guide: Interdependent communities.</u> Upper Marlboro, MD: 1978. (<u>Selected Curriculum Guides,</u> 1979, No. 1934)

031* Salt Lake City School District. <u>A guide of recommended basic skills in social studies: Kindergarten - grade six.</u> Salt Lake City, UT: 1979. (<u>Selected Curriculum Guides,</u> 1979, No. 1948)

032 Seattle Public Schools. <u>Curriculum summary for grade one.</u> Seattle, WA: 1980. (<u>Selected Curriculum Guides,</u> 1981, No. 2442)

     Seattle Public Schools. <u>K-6 Social studies program.</u> Seattle, WA: 1980. (<u>Selected Curriculum Guides,</u> 1981, No. 2443)

033 Shelby County [Schools]. <u>Social studies skills continuum with related activities.</u> Memphis, TN: 1976. (<u>Selected Curriculum Guides,</u> 1977, No. 1461)

---

*Document dropped from sample.

034 South Huntington Schools. Social studies skills continuum [Grades K-11] South Huntington, NY: 1980. (Selected Curriculum Guides, 1981, No. 2441)

035 Spokane Public Schools, District 81. Social studies program guide [K-3]. Spokane, WA: 1977. (ERIC Document No. ED 152 618)

Spokane Public Schools, District 81. Social studies program guide [3-6]. Spokane, WA: 1977. (ERIC Document No. ED 152 619)

036 Utica City School District. Social studies K-12: Geography. Articulated curriculum. Project Search. Draft copy. Utica, NY: 1975. (Selected Curriculum Guides, 1980, No. 2296)

Utica City School District. Social studies K-12: Sociology. Articulated curriculum. Project Search. Draft copy. Utica, NY: 1975. (Selected Curriculum Guides, 1980, No. 2297)

Vernon Public Schools. Social studies curriculum guide: Grades 3-4-5. Vernon, CT: 1975. (Selected Curriculum Guides, 1979, No. 1931)

037 Vernon Public Schools. Social studies curriculum: Gr[ades] 1 & 2. Revised ed. Vernon, CT: 1977. (Selected Curriculum Guides, 1979, No. 1930)

038 [Waukegan] Community Unit School District No. 60. Social studies: K-6. Rev. ed. Waukegan, IL: 1977. (Selected Curriculum Guides, 1978, No. 1593)

039 Wayne Highlands School District. K-4 Social studies curriculum guide. [Honesdale, PA]: 1975. (Selected Curriculum Guides, 1979, No. 1947)

APPENDIX D

CURRICULUM DECISIONS INVENTORY

Paul M. Williamson

_____

Revision D

_____

Document Number |___|___|___|

Fiche: _____

Completed
(check)

|___| Data recording .... By_____ Date_____

Number of data sheet pages completed:
Data sheet 1: ...... ___1__
Data sheet 2: ...... _____
Total: ...... _____

|___| Keypunching .... By_____ Date_____

|___| Cards sorted & checked ..... By_____ Date_____

|___| Set 1 |___| Set 2

|___| Cards entered in data files By _____ Date_____

|___| Set 1 |___| Set 2

INSTRUCTIONS FOR RECORDERS

The Curriculum Decisions Inventory should be used only by
recorders who have successfully completed the CDI Recorder
Training Program.

Data Sheet 1: Document Identification and Description

Item
1-4 Copy from title page of the document.

   If there is no title page, copy from the cover. For state, use
   the two-letter abbreviations used by the post office (if you
   don't know it, write the regular abbreviation before the box).

5 Date should be on cover or title page.

   If no date is given there, scan the first section of the document
   for a date.

   If no date can be found in the document, enter "9999."

6 Use "PK" (PreKindergarten), " K" (Kindergarten), "01, . . . 12."

   If grades are not specified on the cover or title page, look in
   the introductory sections or check for grade-level designations
   used in the headings.

   If no other grade designations can be found and the document is
   labeled "elementary," enter lowest = " K" and highest = "06".

7 Use the last printed page number.

   If the document is unpaged, or if the sections are paged
   separately, calculate the total length by examining the fiche and
   using the formula given.

Data Sheet 2: Curriculum Event Information Units

* Complete 1 form for each CEIU found in the document. Forms are printed four to a page.

> A CEIU is a segment of a curriculum document containing one or more decisions for a given curriculum event.

* Use #2 pencil or marker (or pen) with dark ink.

* Start at the first page after the cover and/or title page and work through the document one section at a time. Code all the CEIUs in one section before moving to another. A CEIU cannot be larger than one physical section of the document. Remember: CEIUs may vary greatly in shape. They may overlap and may even be embedded one within another at times.

* The meaning of each item on Data Sheet 2 is shown on the annotated form on the following page.

* For items represented by LINES (e.g., ⌊___⌋), write in a number. Every line must be filled in.

  For multiple choice items, select from the numbered choices provided.

  For all others (except SERID, BEGPG, ENDPG), enter:

  > 0 . . . if the decision is not specified
  > 1 . . . if the decision is specified

* For items represented by BOXES (e.g., ☐), enter a "1" in all that apply. Leave all other boxes empty.

* When supplying numbers, right justify the number in the spaces provided and fill with zeroes.
  > This: ⌊0 ₁ 1 ₁ 7⌋. Not this: ⌊1 ₁ 7 ₁ ___⌋.

* Use as many pages of Data Sheet 2 as necessary. Number each new page, starting with "1."

* When the entire document has been coded, check off "Data Recording" on the CDI cover, enter the number of pages of each data sheet used, and initial and date it.

① **SERID**
SERIAL IDENTIFICATION
NUMBER - START WITH 001
AND NUMBER CONSECUTIVELY
THROUGH WHOLE DOCUMENT.

② **BEGPG**
PAGE NUMBER WHERE CEIU
BEGINS.

③ **ENDPG**
PAGE NUMBER WHERE CEIU
ENDS.

④ **SECTN**
BASIS OF DOCUMENT SECTION
WHERE CEIU IS FOUND (SAME
FOR ALL CEIUS IN SECTION)

⑧ **DECISIONS FOR THE EVENT**
1 = PRESENT 0 = NOT PRESENT

A **ORGC**
ORGANIZING CENTER - FOCAL
POINT, CENTER OF ATTENTION.

B **INT**
INTENTIONS - AIMS OR PURPOSES
FOR EVENT.

C **CONT**
CONTENT - SUBJECT MATTER TO
BE DEALT WITH.

D **ACTN**
ACTION - WHAT PEOPLE DO DURING
EVENT. WHAT HAPPENS.

E **PROPS**
PROPS - THINGS USED DURING
CURRICULUM EVENT, BY TEACHER
OR STUDENTS.

F **ACTORS**
TCHR
TEACHER CHARACTERISTICS
OR IDENTITY.
SCHX
STUDENT CHARACTERISTICS
SGRP
STUDENT GROUPING FOR
INSTRUCTION.

G **CONDITIONS**
TIME
TIME ALLOCATED FOR EVENT.
SPACE
SPACE USE OR ARRANGEMENT.
FACIL
SPECIAL FACILITIES NEEDED.

H **SUBEV**
SUBORDINATE EVENTS - SMALLER
EVENTS WHICH MAKE UP LARGER
EVENT.

I **POSITION**
ORDER
DECISION ABOUT ORDER OF EVENTS.
CNCUR
DECISION ABOUT CONCURRENT
EVENTS.

J **PRTY**
PRIORITY ASSIGNED TO EVENT AS
A WHOLE (USE 9 FOR PRIORITY
ASSIGNED TO SPECIFIC DECISIONS).

⑨ **ACCESSORY INFORMATION**
1 = PRESENT (OTHERWISE BLANK)

JUST
JUSTIFICATION - REASONS WHY.

PRTY
PRIORITY - INDICATION OF REL-
ATIVE IMPORTANCE.

OPTN
OPTIONS - CHOICES PROVIDED AS
ALTERNATIVES TO GIVEN DECISION.

RULE
RULE OR GUIDELINE FOR CHOOSING
AMONG OPTIONS. (USE ONLY IF
OPTIONS PRESENT)

⑤ **SCALE** OF THE CURRICULUM
EVENT REFERRED TO IN CEIU.

⑥ **FUNCT**
FUNCTION SERVED BY CURRIC-
ULUM EVENT. (PLANNING,
TEACHING, EVALUATING: UNLESS
OTHERWISE, USE TEACHING)

⑦ **DOMEL**
DOMINANT ELEMENT IN THE CEIU.
(AT TOP OR LEFT)

Form fields:

- ① SERID
- ② BEGPG
- ③ ENDPG
- 1Evnt SECTN
- 2El
- 3Oth ④

⑤ SCALE	⑥ FUNC	⑦ DOMEL	⑧ (A) ORGC	(B) INT	(C) CONT	(D) ACTN	(E) PROPS
1 Prog	1 Plan	1 Orgc					
2 Cors	2 Tch	2 Int					
3 Unit	3 Eval	3 Cont					
4 Top		4 Actn					
5 Activ		5 Prop					
		6 Actr					
		7 Cond					

⑨ JUST	PRTY	OPTN	RULE

F ACTORS: TCHR SCHX SGRP
G CONDITIONS: TIME SPACE FACIL
H SUBEV
I POSITION: ORDER CNCUR
J EVNT PRTY

[3]

KEYPUNCH INSTRUCTIONS

Data Sheet 1

* Punch 1 card per data sheet.

* Punch columns 1-16 as follows:

        1: "1"
        2: skip
        3: RECORDER (from CDI cover)
     4-12: skip
    13-15: DOCUMENT NUMBER (from CDI cover)
       16: skip

* Punch columns 17-29 as shown below. Columns 30-80 are blank.

_____

                                                        column
(1)   Title _____

       . . . .

(2)   School or system _____

       _____

(3)   City _____

(4)   State .... |17|18|

(5)   Year of publication .... |19|20|21|22|
            (Missing = 9999)

(6)   Grades covered
            Lowest .... |23|24|

            Highest .... |25|26|

(7)   Length of document (pages) .... |27|28|29|

Data Sheet 2

* Punch 1 record (card) for each case on the data sheet. Cases are separated by heavy black lines (4 per sheet).

* For each record, punch columns 1-16 as follows:

  1: "2"
  2: skip
  3: RECORDER (from CDI cover)
  4-12: skip
  13-15: DOCUMENT NUMBER (from CDI cover)
  16: skip

  Punch columns 17-80 as indicated at right.

* For each column, punch the indicated value or 0 (if blank).

* Note that after the first panel of the form, data for the record are punched line by line from left to right, not in columns.

* In the unlikely case that the record's serial number exceeds three digits, begin the entry in col. 16 instead of col. 17 and make a note of this on the cover.

[5]

DOCUMENT IDENTIFICATION AND DESCRIPTION

(1) Title _____

_____

_____

_____

(2) School or system _____

_____

(3) City _____

(4) State .... |___|___|___|

(5) Year of publication .... |___|___|___|___|___|
        (Missing = 9999)

(6) Grades covered
      Lowest .... |___|___|___|

      Highest .... |___|___|___|

(7) Length of document (pages) .... |___|___|___|___|
        If unpaged, calculate length:

(_____ X _____) + _____ = _____
   Full rows   Frames   Frames in   Total
                per full   partial   length
                   row   rows

PAGE:

SERID

SCALE	FUNC	DOMEI		JUST	ORGC	INT	CONT	ACTN	PROPS		ACTORS			CONDITIONS				SUBEV	POSITION			EVNT PRTY

BEGPG
ENDPG
1Evnt SECTN
2Elem
3Othr

SCALE: 1Prog 2Cons 3Unit 4Top 5Acts
FUNC: 1Plan 2Teh 3Eval
DOMEI: 1Org 2Int 3Cont 4Actn 5Prop 6Acts 7Cond
JUST / PRTY / OPIN / RULE

ACTORS: TCHR SCHX SGRP
CONDITIONS: TIME SPACE FACIL
POSITION: ORDER CNCUR

(Form repeated in four identical blocks across the page, each with SERID, BEGPG, ENDPG, SECTN, SCALE, FUNC, DOMEI, ORGC, INT, CONT, ACTN, PROPS, ACTORS (TCHR, SCHX, SGRP), CONDITIONS (TIME, SPACE, FACIL), SUBEV, POSITION (ORDER, CNCUR), EVNT PRTY fields.)

APPENDIX E

Curriculum Decisions Inventory

RECORDER TRAINING PROGRAM

INSTRUCTION BOOKLET

(*** EXCERPTS ***)

Paul M. Williamson

———————————

Revision D

———————————

————————————————————————————————

This is one of three booklets in the
complete Recorder Training Program:

Part 1: Instruction Booklet
Part 2: Response Booklet
Part 3: Annotated Key

————————————————————————————————

Introduction

     The Curriculum Decisions Inventory (CDI) is an instrument for
collecting data about the decisions included in curriculum guides.
This Recorder Training Program (RTP) prepares individuals to serve as
data recorders using the CDI.

     Using the CDI involves two basic operations. First, the
curriculum guide is broken up into smaller chunks, or segments, called
recording units. Then, information about each of the recording units
is recorded on a data sheet.

     The RTP develops the competencies needed by recorders using the
CDI. First, recorders have to be able to recognize recording units in
the document, determining where each recording unit begins and ends.
That is, recorders have to "know a recording unit when they see one."
Second, recorders have to understand and be able to apply the concepts
and specialized vocabulary -- the "data language" -- used in coding
the recording units. Third, recorders have to be familiar with the
CDI instrument itself and the procedures to follow in using it.

     The heart of the RTP is this INSTRUCTION BOOKLET that introduces
the ideas and procedures needed to use the CDI and then provides
realistic practice. Besides the Instruction Booklet there are two
other parts. The RESPONSE BOOKLET is used for writing responses to
the practice materials in the Instruction Booklet. The ANNOTATED KEY
is used to check responses, and it also explains the reasoning behind
the standard responses.

     The RTP must be completed successfully before using the CDI.
The RTP has been developed and tested using experienced teachers as
recorders. While others without this background could conceivably be
trained to use the CDI, it would probably require more extensive (and
perhaps different) training materials because of the specialized
documents and concepts involved.

Directions

The RTP is a self-instructional program supplemented with coaching for two sections (Sections D & E), as necessary. As you work through the Instruction Booklet you will find both explanatory and practice material. Use the Response Booklet to write your responses to the practice material. Do not write in the Instruction Booklet.

From time to time you will be directed to compare your answers with those in the Annotated Key. Circle all "wrong" responses in your Response Booklet.

Checking your responses to the practice material is part of the instructional process. It is an opportunity to refine understanding of the ideas and skill in applying them. Therefore, whenever your responses differ from those in the Annotated Key, try to understand the reasons for the "right" responses and where you went astray. Remember: the expectation is that responses will become more and more accurate as you progress through the booklet; it is not expected that responses will be perfect from the beginning.

SECTION A

Section A sets out the basic ideas behind the
CDI. These ideas are quite simple, and you
will probably understand them easily. How-
ever, you do not have to try to remember them;
they are provided only as background.

Basic Ideas

The Curriculum Decisions Inventory is used to collect information about the decisions for an educational program that have been made and put down in a written curriculum guide. The information to be collected is related to a few basic and simple ideas about educational programs. These are introduced here to put you in the "big picture." The necessary concepts will then be developed individually in more detail.

1. Educational programs are made up of curriculum events. Simply put, CURRICULUM EVENTS are educational happenings, situations in which something happens that is meant to contribute to the education of the learner. Taking a field trip to a farm, putting on a play, reading a story, holding a discussion of a current event, taking a biology course, writing a paper, constructing a model, performing an experiment -- these are all examples of curriculum events.

2. Curriculum events vary in SCALE, from large-scale to small-scale. That is, some curriculum events are "bigger" events than others, and large-scale events, like a "course," are made up of several smaller-scale events.

3. Curriculum events -- of whatever scale -- are composed of several elements. ELEMENTS are basic parts, or ingredients, that make up a curriculum event. The term is used as it is in chemistry when we say that water is composed of two elements, hydrogen and oxygen. The elements of curriculum events are things like ACTORS (generally a teacher and at least one learner), ACTION, CONTENT, PROPS (instructional materials, teaching aids) and so forth.

4. The curriculum events that make up an educational program have to be arranged somehow. This arrangement is the STRUCTURE of the program. Besides arranging curriculum events hierarchically into larger-scale events, curriculum events are also arranged in time, either concurrently (at the same time) or sequentially (one after the other). The POSITION of a curriculum event in the structure is described by identifying the curriculum events which surround it in the structure; i.e., by identifying the other curriculum events that go with, go before, and go after the curriculum event in question.

5. Curriculum events serve different FUNCTIONS in an educational program. In the CDI, three general functions are distinguished: PLANNING, TEACHING, and EVALUATING. Giving a test is an example of a curriculum event with the latter function.

[4]

Some of the vocabulary used above may seem a bit exotic. These ideas and terms were chosen because they are useful for <u>describing</u> <u>and</u> <u>analyzing</u> the information in curriculum guides. The vocabulary is not necessarily that which teachers use in their work, but that is unimportant as far as the CDI is concerned.

SECTION B

Section B introduces the "data language" --
the specialized concepts and vocabulary used
in the CDI. By the end of this section, you
should understand the data language well
enough to identify an example of each of the
concepts.

Scale of Curriculum Events

A CURRICULUM EVENT is an educational happening, a situation in which something happens that is meant to contribute to the education of the learner. A field trip, a discussion about a book or story, a chemistry course, a lecture on the causes of the Civil War -- these are all examples of curriculum events.

Some curriculum events are "bigger" events than others; that is, they vary in SCALE. In the CDI you are asked to determine the scale of the curriculum events you find described in the guide, using the following categories:

1. PROGRAM OF STUDY is a total educational course of study offered by a school. Elementary schools may have only one program for all students, whereas secondary schools may have more than one, e.g., vocational, college preparatory, business, etc. Program is the largest-scale event considered in the CDI.

2. COURSES are the large-scale events which make up a program, generally lasting for a school year or one or its main divisions, e.g., semester. Courses may be known as "subjects," especially at the elementary level. In the CDI, "Social Studies" for Grade 4 would be considered a course.

3. A UNIT OF INSTRUCTION is one of the main divisions of a course, developed around some limited aspect of it. Units are relatively large-scale curriculum events.

4. A TOPIC OF INSTRUCTION is one of the main divisions of a unit. Topics are relatively small-scale curriculum events.

5. ACTIVITIES are simple, discrete curriculum events that do not contain any smaller-scale events.

Curriculum events are known by many names: "learning experiences," "learning opportunities," "lessons," "learning activities," etc. Generally these are activities in the scale above. Other terms are sometimes encountered for the larger-scale curriculum events, e.g., "module," "level," "strand," etc. In order to translate these into the scale above, one must see how the term is used in context, since the terms are not used consistently by all educators.

PRACTICE

What is the scale of each of the following curriculum events?
      (A) Program (B) Course (C) Unit (D) Topic (E) Activity

[1]   Woodland Indians (a one-semester offering in third grade)
                                                              (RTP)*

[2]   Indian Family Life (one of four parts to Woodland Indians)
                                                              (RTP)

[3]   Social Studies, K-6
                                                              (RTP)

[4]   Making a Teepee (crafts project taking 1-2 days)
                                                              (RTP)

[5]   Grade 4: Social Studies
                                                              (RTP)

---

        *Most examples in the RTP are quoted from published curriculum
guides or articles.   The reference for each example is given in
parentheses following it. Full citations may be found in the list of
references at the end of this booklet. Some examples are made up; the
reference for these reads "RTP."

Functions of Curriculum Events

        Curriculum events play different roles, or parts, in an educa-
tional program.   These different roles are referred to in the CDI as
FUNCTIONS. In the CDI three different functions are distinguished:

        PLANNING is the function if the curriculum event is used
primarily to create or modify plans for future curriculum events. An
example of a curriculum event with this function would be one in which
a teacher and students identify topics to study, form into study
committees, etc.

[8]

EVALUATING is the function if the curriculum event is used to assess student knowledge or skill. An example of a curriculum event with this function would be giving a test. Curriculum events that evaluate can come before instruction ("diagnosis," "needs assessment" etc.) or after instruction ("testing," "achievement testing," etc.).

TEACHING is the function if the curriculum event is used to help students learn. This includes more-specific functions such as introducing, providing practice, instructing, reviewing, etc.

In the CDI, teaching is the "default" function. This means that if the function of a curriculum event is not clearly planning or evaluating, then it is assumed to be teaching -- "by default."

The function of a curriculum event will seldom be labeled in the curriculum guide. You must decide. Function can be determined by asking the question, "Why are they doing this: to plan, to evaluate, or to teach?"

PRACTICE

What is the function of each of the following curriculum events?
(A) Planning (B) Teaching (C) Evaluating

[6]   Use the test following all the objectives on "People and How They Live" or ask the first two questions on the test after you've done some of the activities listed.

(CG 1927, p. 10)

[7]   Have the pupils indicate and list all ideas that come to mind when you mention the word Indian.... Have children identify key questions they need to consider in the study of the Indian. Films and pictures can be used to trigger children's interest in the topic....

(CG 953 ,p. 4:1)

[3]   The children can bring examples from home of various kinds of maps such as blueprints of their house, a neighborhood map,.... The uses of various types of maps can be explained.

(CG 837, p. 64)

---

[9]

Elements of a Curriculum Event

A curriculum event is made up of several basic ELEMENTS, or ingredients. In the CDI you are asked to determine whether a decision about each of these elements is specified for a given curriculum event. For certain elements, you are also asked to describe the decision is more detail. Note, however, that the primary consideration is whether or not a decision has been made about an element, not what the decision is or how worthwhile it is. In other words, you are not asked to evaluate the decisions, only to take an inventory of which ones are there.

Elements: Organizing Center

The ORGANIZING CENTER is the focal point around which a curriculum event is organized. Organizing centers are "catch-hold points" or "centers of attention." The crucial thing about an organizing center is that it focuses or directs the attention and efforts of the learner. Specifying an organizing center amounts to posing a question or problem to be investigated. An organizing center is what learners "put their minds to." Rule of thumb: an organizing center will almost always be written as a question or be preceded by the heading "Problem."

PRACTICE

---

[9]   Which of the following specifies an organizing center?

(A)   People are similar in their basic human needs and meet these needs in a variety of ways.

(ED 187 659, p. 16)

(B)   How did the environment, customs, and traditions of the Shawnee Indians determine the way they lived?

(ED 187 659, p. 16)

Elements: Intentions

INTENTIONS are the aims, or purposes, that a curriculum event is supposed to accomplish. That is, curriculum events are staged "on purpose," and intentions are those reasons. Intentions are known by many different names, but these are generally variations of the terms "purposes," "aims," "goals," and "objectives."

Decisions about intentions can be framed in different ways, or in different terms. Intentions are framed in terms of outcomes if they state the end-products of the learning process. That is, they tell what the student will be able to know or do at the end of instruction. For example:

Identify, from pictures, people as consumers and people as producers

(ED 095 086, p. 87)

Intentions are framed in terms of process if they state the activity or method in which the student is to be engaged during the instruction. For example:

To visit the zoo and discuss what was of interest there
(Eisner, 1975, p. 352)

Intentions are framed in terms of pedagogical role if they state what the curriculum event is supposed to do for the student. For example:

To develop social attitudes consistent with democratic values
(ED 152 619, p. 10)

When educators state intentions, they often begin the statement with a verb. This may make it difficult to distinguish between outcomes and processes. The best that one can do is look at the context of the statement and make the most reasonable determination possible. As a rule of thumb, if the verb is preceded by "to," or if the phrase with a verb stands without other directions or explanation, it probably states an intention (outcome) with an understood "At the end of this . . . the student should be able to" before it.

PRACTICE

----

[10] Which of the following specifies a decision about intentions?

(A)   Man exists in time
        Man organizes to live
        Man has basic needs
        . . .

                                                    (CG 953, p. 4:2)

(B)   Students will be able to describe the concept of positive
        self image in terms of national, ethnic, and familial
        heritage, sex, and the skill, talents, interests and/or
        aspirations of the individual

                                                    (ED 152 619, p.10)

Elements: Content

        CONTENT is the subject matter of the curriculum event.   Content
consists of information, concepts, generalizations, ideas, principles,
values, processes, etc. Content is the "something" that is being
taught and learned.

        A decision about content can be specified in different ways.
Content may be specified as a topic. For example:

    The Meaning of the Pledge
                                                    (CG 1927, p. 2)

    Content may be in an outline. For example:

    Interaction of people
        Individual behavior and attitudes
        Group behavior and attitudes
        Interdependence of people
                                                    (ED 095 086, p. 88)

[12]

Content may also be stated as one or more _propositions_. For example:

Every society develops a system of roles, norms, values, and sanctions which guide the behavior of individuals and groups within the society

(CG 953, p. 4:1)

PRACTICE
_____

[11] Which of the following specifies a decision about content?

(A)   Columbus Day is celebrated in honor of Christopher Colum-
       bus, one of many explorers and discoverers

(CG 837, p. 36)

(B)   The class can study a weather map, discuss its purpose,
       and interpret the information on it

(CG 837, p. 64)

_____

Elements: _Action_

ACTION is "what happens" in a curriculum event. Action is specified with verbs, and it may be stated in terms of what the _teacher does_ or what the _student does_. Decisions about action use words like "apply," "construct," "look at," "present," "measure," "discuss," "take field trip," etc.

In addition to describing specific teacher or learner behaviors, decisions about action may also include a description of how the action is to be developed over time, as in the following example:

[13]

Unit II, _Decision Making_....   The unit begins with a "Life
Auction" exercise, which pushes students to identify their
personal priorities and to make decisions which will get them
what they want (or not, if they make the wrong choices).
Later in the unit, students address decision making as a
process, and learn specific steps useful in that process.
Once they have mastered the process in the abstract, students
apply it, first to a case study, then to a hypothetical
personal problem, then to an actual decision each of them must
make.

<div align="right">(Dunne et al, 1980, p. 10)</div>

PRACTICE

---

[12]   Which of the following does _not_ specify a decision about action?

(A)   View study prints and/or filmstrips to develop the
concepts of the following:
Respecting the rights of others
....

<div align="right">(ED 095 086, p. 89)</div>

(B)   How do you get along with the adults in your block?

<div align="right">(ED 095 086, p. 89)</div>

(C)   Collect pictures of foods and materials the Indians used.
On one side of a chart, display the pictures of things we
still use today. On the other side, display pictures of
things we no longer use. Why were the foods and materials
of the Shawnee Indians so limited as compared to today's
selection?

<div align="right">(ED 187 659, p. 19)</div>

Elements: Actors

ACTORS are the participants in a curriculum event. At least one
actor, a learner, is necessary for a curriculum event, but most
curriculum events also involve a teacher under whose direction the
event is staged. Decisions about actors specify something about the

<div align="center">[14]</div>

participants in the event. Three specific kinds of decisions about actors are distinguished in the CDI.

TEACHER CHARACTERISTICS are decisions about the identity, qualities, abilities, background, etc. of the teacher. "Teacher" should be interpreted broadly to include other persons involved in instruction, such as guest speakers or special resource people brought in to work with students.

STUDENT CHARACTERISTICS are decisions about the qualities, abilities, prerequisite experiences, etc. needed by the learners.

STUDENT GROUPINGS are decisions about how the learners are to be organized for the curriculum event.

PRACTICE

Which kind of decision about actors is each of the following?
      (A) Teacher chax. (B) Student chax. (C) Student groupings

[13] After the children understand what a community, state, and country is,....

(CG 1927, p. 1)

[14] Assign a committee to construct a relief map of the U.S. on a large sheet of cardboard....

(CG 1940, p. 6)

[15] Because discussion plays such a large part in this unit of study, the teacher should be skilled at asking open-ended questions and redirecting student responses so that interaction is student-student rather than student-teacher.

(RTP)

Elements: Props

PROPS are the things used during curriculum events by learners and teachers ("actors"). Props is a generic term that encompasses what are commonly called "instructional materials," "materials," "teaching aids," etc. Props does not include things to be used by the teacher in preparing for curriculum events, such as background

reference books.

                                   PRACTICE

----

[16] Which of the following specifies a decision about props?

        (A)   Books about Columbus' travels which can be used to compare
               his times with our times are:
                    Christopher Columbus by Clara Judson
                    Let's Find Out About Christopher Columbus by Martha
                       Shapp
                    ....
                                                        (CG 837, p. 36)

        (B)   Teacher resource: Glance at a Valley, School library
                                                        (CG 953, p. 4:1)

Elements: Conditions

        CONDITIONS are the circumstances or requirements under which a
curriculum event takes place.   Three principal conditions are
identified in the CDI: the allocation of time, the arrangement and use
of space, and the kind of facilities required.

        TIME decisions concern how much time is to be used for a
curriculum event.

        SPACE decisions concern how the classroom is to be set up or
arranged.   This includes such things as furniture arrangement, work
areas, etc.

        FACILITIES decisions concern the kinds of buildings, special
rooms or places, etc. that are needed for the curriculum event.

PRACTICE

What kind of conditions decision is specified in each of the
following?

(A) Time (B) Space (C) Facilities

[17] Visit Auburn Museum for view of early settlement in the Auburn
      area

(CG 953, p. 4:2)

[18]   Percent of   Approximate
                    Grade   Instructional Time   Minutes/Week
                 Kindergarten   7.5   55

(CG 2443, p. 1)

[19] Divide the room into 3 unfurnished sections, using flats and
      room dividers, with desks along one wall for writing areas.
                                    (Peters & Williamson, 1975, p. 79)

Dominant Element

        When decisions are made about the elements of a curriculum
event, one of those decisions is dominant, or takes precedence. The
DOMINANT ELEMENT is the one from which the others follow logically.
In the CDI you are asked to identify the dominant element among those
specified for a given curriculum event.   In the CDI, the dominant
element is the one stated first, reading left-to-right (for column
formats) or top-to-bottom on the page. That is, the dominant element
will be at the top or left.

PRACTICE

───

[20]   Which element is dominant in the following description of a
       curriculum event?
            (A) Organizing center (B) Intention (C) Content (D) Action
                      (E) Props (F) Actors (G) Conditions

Financing city government	Show the film, <u>Cities</u> and <u>Government</u>: <u>Governing</u> <u>Our</u> <u>Local</u> <u>Community</u>. Discuss how a city can best spend its revenues....	Film, ISD 110: <u>Cities</u> and <u>Governments</u>... 01086, 9 min., color
		(CG 953, p. 4:4)

───

Subordinate Curriculum Events

       Large-scale curriculum events -- programs, courses, units, and
topics -- are made up of smaller-scale curriculum events. That is,
programs are made up of courses, courses of units, etc. In the CDI,
you are asked to determine whether the description of a curriculum
event includes a specification of the smaller-scale, SUBORDINATE
EVENTS that make it up. That is, does it say what the smaller-scale
events are? In deciding whether subordinate events have been
specified, it is important to look only at the information about the
larger-scale event. Code this decision present only if there is an
explicit, specific statement to the effect, "This [program, course,
etc.] includes the following:. . . ." Merely finding smaller-scale
events described later in the document doesn't count.

PRACTICE

── — — — — —

[21] Which of the following specifies a decision about subordinate
      events?

     (A)   In the fourth grade, direct instruction should be provided
            in the skill areas. It is understood that many skills
            will be introduced in the fourth grade and will be
            expanded in the fifth and sixth grade.

                                                        (CG 1940, p. 1)

     (B)   The suggested curriculum for the fourth grade includes
            four units:
                 I.   Map Skills
                II.   Globe Skills
            ....

                                                        (CG 1940, p. i)

── — — — — —

Position

        Curriculum events have to be arranged in time. There are two
basic choices: events can occur concurrently (at the same time) or
sequentially (one after the other). So, deciding on the POSITION of
any given curriculum event really boils down to three related
decisons: What other curriculum events occur at the same time? What
other curriculum event does this one come after? What other
curriculum event does this one come before?

        In the CDI you are asked to determine whether decisions about
CONCURRENT EVENTS or the ORDER (SEQUENCE) OF EVENTS have been
specified. Code these decisions present only if they are explicit.

        The items in curriculum guides are often numbered. These
numbers may indicate order (sequence), or they may just be identifying
labels. Consider numbers as position indicators only if the guide

<u>explicitly</u> <u>states</u> <u>that</u> <u>that</u> <u>is</u> <u>the</u> <u>interpretation</u>. The only exception
would be events that are numbered grades: "Grade 2" obviously conveys
position (after "Grade 1" and before "Grade 3").

<div align="center">PRACTICE</div>

Which position decision is specified in each of the following?
           (A) Concurrent events (B) Order of events

[22]   This unit on Explorers and Discovers should be coordinated with
       the study in reading/language arts of biographies of famous
       explorers.

                                                                  (RTP)

[23]   Unit IV: Explorers and Discoverers
            Prerequisite: Unit II: Reading Maps and Globes

                                                                  (RTP)

<div align="center"><u>Accessory Information</u></div>

        When decisions are specified in a curriculum guide, the
decisions may be accompanied by additional or qualifying information.
In the CDI you are asked to look for four kinds of ACCESSORY
INFORMATION. Again, you are only asked to determine whether the
accessory information is present; you are not asked to evaluate it.

        Accessory information may apply to a curriculum event as a
whole, or to a specific decision about it, i.e., to a particular
<u>element</u> or its <u>position</u>.

<u>Accessory Information: Justification</u>

<div align="center">[20]</div>

JUSTIFICATION is an explanation of the grounds or reasons for something. Justification answers the question "Why?" Justification completes the sentence, "Do x because _____."

PRACTICE

---

[24] Which of the following statements is a justification for something?

(A) It is important that the teacher provide opportunities for each child to:
--Become aware of the services available to him and the people who live on his street....
(ED 095 086, p. 86)

(B) Generalization: An understanding of how special days are celebrated in our country will help the child gain knowledge about the history and traditions of our country.
(CG 837, p. 35)

Accessory Information: Priority

Some things in an education program are more important than others. PRIORITY is an indication of relative importance. Priority can be indicated in various ways, but usually by attaching a label like "basic," "elective," "major," "optional," "enrichment," etc. Another practice that should be considered a form of prioritizing is indicating teaching emphasis, i.e., whether teaching is directed to "exposure," "mastery," "reinforcement," etc. However, consider labels like these as priority indicators only when they are added to a statement; for example

	K	1	2	3	4	5 ...
Compare two or more maps				e	T	T
....						

(CG 2443, p. 5)

where e = exposure/introduction and T = direct teaching, or

Introduce: Work and aspirations

[21]

Priority may apply to a curriculum event as a whole (e.g., an activity labeled "enrichment") as well as to a specific decision about the event (e.g., identifying some objectives [intentions] as "basic").

PRACTICE

_____

[25] Which of the following content decisions specifies priority?

(A)   D. Natural features
          1. Rivers
          2. Lakes
          3. Ocean
        *4. Bays
          ....

       _____
       *More difficult for fourth graders

                                        (CG 1940, p. 3)

(B)   Regionalizing the World
           Interdependence
           Interaction
       World Regions
           Location
           ....

                                        (CG 837, p. 1)

_____

Accessory Information: Options

OPTIONS are choices that can be made. Options present a decision point: Do this or. . . . In the CDI, options should be considered present only if there are explicit alternatives to something specific. For example, a general admonition to "do some of the following" would not count, whereas "do this or one of these" would.

PRACTICE

---

[26] Which of the following specifies options?

(A) "What am I?" Choose a map symbol and ask, "What am I?"
     Example: "My source is usually in the mountains; my symbol
     is a thin line growing larger." Locate on a simple map.
     Answer: river.

                                               (CG 1940, p. 7)

(B) "How far?"   Divide students into teams, give each team a
     state map. Name two cities, first team to give distance
     between cities gets a point. Team to reach five points
     wins. Variation: (a) use a world map, (b) find cities
     that are 200 miles apart....

                                               (CG 1940, p. 8)

Accessory Information: Rules

      RULES are guidelines or criteria to be used in making choices
from among options.   A rule could be translated into an IF-THEN
statement: IF such-and-such is so, THEN choose. . . .

      In the CDI, look for rules only if options are stated.

PRACTICE

_____

[27] Which of the following specifies a rule?

    (A)   Form small groups to discuss the question, Should you ever
            disobey a law? If the class includes both silent types
            and discussion monopolizers, separate the quiet ones into
            one group and the talkative ones into another; otherwise,
            group randomly.

                                                          (RTP)

    (B)   Assign students to small groups. Each group will read one
            of the following historical fiction books. Have each
            student pick one character in the book and keep a diary,
            written from that character's point of view.

                                                          (RTP)

_____

STOP   Check your answers with the
        Annotated Key.

SECTION C

Section C introduces the CDI data sheet and
recording procedures. A brief explanation is
also provided on how to divide up the curricu-
lum document into recording units for coding.
Practice at using the data sheet is then
provided with material taken from actual cur-
riculum guides. In this set of practice
material, the segments to be coded have al-
ready been marked, so you will not have to
contend yet with that task. By the end of
this section, you should be able to enter data
about a recording unit on the data sheet and
be at least somewhat aware of how recording
units are identified.

The Data Sheet

        Recording data about decisions in curriculum guides with the CDI
is essentially a two-step process: the guide is divided into smaller
segments called RECORDING UNITS and then information about each of the
recording units is entered on a DATA SHEET. You have already learned
in Section B what decisions and accessory information to look for in
the recording unit. Now you will learn how to enter that data on the
data sheet.

        Don't worry if the following explanation seems complicated or
confusing at first.   It's a lot like the rules for some games -- much
easier to understand after you've played the game!

        The CDI forms for entering information about recording units are
printed with four forms on each page. The next page shows one of
these forms with notes that explain the meaning of the items.   The
ideas should all be familiar to you (except for items 1-4, and those
will be explained shortly), although the abbreviated labels may seem a
bit strange.   You will have to remember what the items and
abbreviations mean, eventually, because the actual data sheets contain
only the forms, not the explanations.

① SERID
SERIAL IDENTIFICATION NUMBER - START WITH 001 AND NUMBER CONSECUTIVELY THROUGH WHOLE DOCUMENT.

② BEGPG
PAGE NUMBER WHERE CEIU BEGINS.

③ ENDPG
PAGE NUMBER WHERE CEIU ENDS.

④ SECIN
BASIS OF DOCUMENT SECTION WHERE CEIU IS FOUND (SAME FOR ALL CEIUS IN SECTION)

⑤ SCALE
SCALE OF THE CURRICULUM EVENT REFERRED TO IN THE CEIU.

⑥ FUNCT
FUNCTION SERVED BY CURRICULUM EVENT. (PLANNING, TEACHING, EVALUATING; UNLESS OTHERWISE, USE TEACHING)

⑦ DOMEL
DOMINANT ELEMENT IN THE CEIU. (AT TOP OR LEFT)

⑧ DECISIONS FOR THE EVENT
1 = PRESENT 0 = NOT PRESENT

A ORGC
ORGANIZING CENTER - FOCAL POINT, CENTER OF ATTENTION.

B INT
INTENTIONS - AIMS OR PURPOSES FOR EVENT.

C CONT
CONTENT - SUBJECT MATTER TO BE DEALT WITH.

D ACTN
ACTION - WHAT PEOPLE DO DURING EVENT. WHAT HAPPENS,

E PROPS
PROPS - THINGS USED DURING CURRICULUM EVENT, BY TEACHER OR STUDENTS.

F ACTORS
TCHR TEACHER CHARACTERISTICS OR IDENTITY.
SCHX STUDENT CHARACTERISTICS
SGRP STUDENT GROUPING FOR INSTRUCTION.

G CONDITIONS
TIME TIME ALLOCATED FOR EVENT.
SPACE SPACE USE OR ARRANGEMENT.
FACIL SPECIAL FACILITIES NEEDED.

H SUBEV
SUBORDINATE EVENTS - SMALLER EVENTS WHICH MAKE UP LARGER EVENT.

I POSITION
ORDER DECISION ABOUT ORDER OF EVENTS.
CNCUR DECISION ABOUT CONCURRENT EVENTS.

J PRTY
PRIORITY ASSIGNED TO EVENT AS A WHOLE (USE 9 FOR PRIORITY ASSIGNED TO SPECIFIC DECISIONS).

⑨ ACCESSORY INFORMATION
1 = PRESENT (OTHERWISE BLANK)

JUST JUSTIFICATION - REASONS WHY.

PRTY PRIORITY - INDICATION OF RELATIVE IMPORTANCE.

OPTN OPTIONS CHOICES PROVIDED AS ALTERNATIVES TO GIVEN DECISION.

RULE RULE OR GUIDELINE FOR CHOOSING AMONG OPTIONS. (USE ONLY IF OPTIONS PRESENT)

Coding form grid with fields:
① SERID ② BEGPG ③ ENDPG (1Evnt / 2Elem / 3Oth SECTN)
⑤ SCALE (1Prog, 2Cors, 1Unit, 4Top, 5Activ)
⑥ FUNC (1Plan, 2Tch, 3Eval)
⑦ DOMEL (1Orgc, 2Int, 3Cont, 4Actn, 5Prop, 6Actr, 7Cond)
⑧ A ORGC B INT C CONT D ACTN E PROPS
F ACTORS: TCHR SCHX SGRP
G CONDITIONS: TIME SPACE FACIL
H SUBEV
I POSITION: ORDER CNCUR
J EVNT PRTY
⑨ JUST PRTY OPTN RULE

[28]

Response Modes

Note that there are two kinds of spaces for entries on the form, lines and boxes.

Lines. For items represented by lines (e.g., ⌊___⌋), write in a number. Every line must be filled in.

* For multiple choice items, select from the numbered choices provided.

* For all the others enter:

0 . . . if the decision is not specified
1 . . . if the decision is specified

* When supplying numbers, right justify the number in the spaces provided and fill with zeroes:

This: ⌊ 0 ⌊ 1 ⌊ 7 ⌋. Not this: ⌊ 1 ⌊ 7 ⌊ ⌋.

Boxes. For items represented by boxes (e.g., ☐), enter a "1" in all that apply. Boxes are for the four kinds of accessory information. For example, if you find a decision about intentions and the decision is accompanied by justification, you would put a "1" in the first box in the column headed "INT." Leave all boxes that do not apply empty.

Location and Context Items

Items 1 to 4 are new to you. These are used for information about the recording unit itself (compared to the decisions found in it).

Item 1. You will assign a serial identification number to each recording unit you find in the document, starting with "001" and numbering consecutively through the whole document.

Items 2 & 3. Enter the page numbers in the document where the recording unit begins and ends. If the recording unit is all on one page, these numbers will be the same.

* Change any Roman numerals to regular Arabic numerals.

* Sometimes documents are divided into sections and each section is paginated separately. A section prefix may also be used, as in "1-1" for "section 1, page 1." In this case, omit any section number and use just the page number.

Item 4. Most curriculum documents are organized into sections
by their authors. You are asked to indicate on what basis the section
where the recording unit you are coding was organized. In making this
determination, the title or heading given to the section is a good
clue.

* Code the section as EVENTS if the section is based on more-or-less
  complete descriptions of curriculum events. This code would be used
  for sections with titles like "Grade 2," "Unit III: Indians," etc.;
  these are events.

* Code the section as ELEMENT if the section is based on a specific
  element, considered more-or-less in isolation. This code would be
  applied to sections with titles like "Skills," "Approved Texts,"
  etc.; these are specific, isolated elements (in this case,
  intentions and props). For example, a section devoted to a grade-
  by-grade listing of objectives would be coded element, since a
  single element (intentions) has been singled out.

* Code the section as OTHER if the section is based on anything else
  except events or elements. This code would be applied to sections
  on "Philosophy of Education," "How to Use This Guide," "Curriculum
  Development Committee," etc.

Procedure

Complete the items in numbered order. The tricky part is item
8.   As you read the information in the recording unit, enter a "1" on
the line for each decision you find. At the same time, record the
presence of accessory information (item 9) for the decision with a "1"
in the appropriate boxes. Then go back to consider any lines not
filled in.   Double check for those decisions and make the necessary
entries. The crucial thing is to be systematic so that nothing is
overlooked.

Note: priority for the event as a whole is recorded in item 8j;
priority that applies only to information for a specific decision is
recorded in item 9.

Guidelines

Code only information that is definitely there; do not "read
between the lines." If you are unsure whether a certain decision or
accessory information is present, assume it is not. To be coded as
present, the information should be explicit and reasonably obvious.

Base your recording on the <u>nature of the information</u>, not on what it may be <u>called</u> or <u>labeled</u> in the curriculum document.

Recording Units

RECORDING UNIT is a general term that refers to the individual segments of a document that are to be coded.

In the CDI, a recording unit will be any segment of the document that refers to a particular curriculum event -- that is, to a particular <u>program</u>, <u>course</u>, <u>unit</u> of a course, <u>topic</u> in a unit, or <u>activity</u>. For this reason, the recording unit in the CDI is called <u>C</u>urriculum <u>E</u>vent <u>I</u>nformation <u>U</u>nit (CEIU).

The way to identify a CEIU can be explained as follows: Read along in the document until the document starts talking about some particular curriculum event (i.e., a specific program, course, unit, topic, or activity). That's where the CEIU begins. Now find where the document stops talking about that event. That's where the CEIU ends.

At this point, the CEIU may be "as clear as mud," and that's okay. In the practice set which follows, some of the CEIUs are marked, and you will use those to practice using the data sheet. After you have seen some -- played the game, as it were -- there will be a fuller discussion of the CEIU in the next section, and by then it won't seem so abstract.

PRACTICE

The remaining pages of this section are excerpts reprinted from actual
curriculum guides. At least one CEIU is marked on each page. Code
each of these marked CEIUs on the forms in your Response Booklet. The
forms provided for this practice set include the explanatory notes, so
you won't have to keep referring back in this booklet to refresh your
memory.

    Although these examples are taken from different documents,
pretend that they are all from the same one. Therefore, start
numbering (SERID) with 001 and continue in order and keep on, even
though the material obviously comes from different documents.

****

PRACTICE SET DELETED
PAGES 33-50

****

_____

SECTION D

_____

Section D focuses on how to identify recording
units -- Curriculum Event Information Units --
in curriculum documents. Practice is provided
at identifying CEIUs in material taken from
actual curriculum guides. By the end of this
section, you should be able to   identify
recording   units   (CEIUs)   in   curriculum
documents.

The Curriculum Event Information Unit

    Recording data about curriculum guides with the CDI is
essentially a two-step process: the guide is first divided into
smaller segments called recording units, and then information about
each of the recording units is entered on a data sheet. You have
already learned what to look for in the recording unit and how to
enter it on the data sheet. You have also been introduced in a
general way to how to identify the recording units. Now it's time to
concentrate on this skill.

    The recording unit for the CDI is the Curriculum Event
Information Unit (CEIU). A CEIU is a segment of a curriculum document
which contains one or more decisions for a given curriculum event. To
understand this definition and be able to identify CEIUs, each of the
key terms in the definition must be understood.

    A given curriculum event. A curriculum event is an educational
happening -- a situation in which something happens that is meant to
contribute to the education of the learner. In the CDI, curriculum
events are classified according to scale: activity, topic, unit,
course, or program. "A given curriculum event," then, is a specific
activity, topic, unit, course, or program. A CEIU must refer to one,
and only one, of the curriculum events on this scale.

    One or more decisions. The decisions for a curriculum event
are: its elements (organizing center, intentions, content, action,
props, actors, conditions), the identification of any subordinate
events which it includes, and the position of the event in the
structure with other events. At least one of these decisions must be
present in a CEIU.

    Segment. A CEIU includes whatever portion of a curriculum
document pertains to a particular curriculum event. The boundaries of
the CEIU are determined by answering two questions: Where does the
document start talking about this particular curriculum event? Where
does it stop talking about it? The makers of curriculum guides often
organize the document into sections. For the CDI, a CEIU may
encompass up to an entire section of the guide, but may not extend
beyond it. If there is any question about what constitutes a section,
the first-level headings in the document's table of contents should be
considered to define the sections.

    Several points about CEIUs should be noted:

1. The size of CEIUs may vary greatly, depending on the scale of the

                              [52]

event in question and how much information is given about it.
For example, a CEIU for an activity may be only a few lines on a
page, while a CEIU for a course may extend over several pages.

2. The shape of CEIUs may vary, depending on the lay-out of the
    page. A CEIU may be a neat column or row in a chart, or a
    running paragraph. On the other hand, a CEIU can just as well
    have an irregular shape like a piece from a jigsaw puzzle. The
    main task is to include all the information that pertains to the
    curriculum event in question, however it might be arranged on the
    page.

3. CEIUs may "overlap." This occurs most often when certain
    information is shared by more than one event but is only written
    down once on the page, as, for example, when several activities
    all have the same objective or content.

4. Not everything in a curriculum document will be included in a
    CEIU. Curriculum guides often contain a lot of material that may
    be quite valuable but which does not contain decisions for con-
    ducting a particular curriculum event. For example, there may be
    such things as a list of the people who developed the guide, a
    short history of the process, a statement of philosophy,
    background material for the teacher, etc. To repeat, these
    things may be valuable, but as far as the CDI is concerned, they
    should be ignored unless such material also contains specific
    decisions about specific curriculum events. Similarly, copies of
    students' worksheets and other instructional materials (things to
    be used by the students) should be ignored. What would count is
    a decision to use those materials in connection with a specific
    curriculum event.

    Before proceeding to the practice material, you should look back
at the marked CEIUs in the practice set for Section C, focusing on how
these ideas were applied.

PRACTICE

The following pages contain material on which to practice identifying CEIUs. This practice set is different from the practice material in the previous section in these important ways:

1.   The boundaries of the CEIUs are not marked. However, a large, numbered arrow (e.g., 001 ➤) points to some information about the event in the CEIU. It will be up to you to figure out the boundaries. Not all CEIUs on the page are marked!

2.   The data are entered on regular data sheets, not annotated ones.

        If you still need to refer to the annotations, you may remove the annotated form from the beginning of Section D in the Response Booklet to use for ready reference.

Again, number these practice CEIUs from "001" as if they were all from the same document.

This section is designed to include most of the different formats you are likely to encounter in curriculum guides.

Identifying the CEIUs correctly is crucial to using the CDI successfully. In this practice set you are asked to check your responses frequently. ASK FOR COACHING ON ANY MISTAKES YOU CANNOT FIGURE OUT.

****

PRACTICE SET DELETED
PAGES 55-72

****

SECTION E

Section E introduces the other parts of the
CDI (besides the data sheet you have been
using) and provides additional practice using
the instrument. In this practice set, you do
everything that a recorder must do to use the
CDI. Completing this section successfully
will demonstrate competence to use the CDI.

The Complete CDI

The data sheet you have been using is actually only one part of the instrument. The parts of the complete CDI instrument that concern you as a recorder are:

1. COVER SHEET. The CDI cover sheet contains adminstrative information necessary for handling the data. It also shows an identifying code number for the document. The only thing you have to do with the cover sheet is check off in the appropriate box when all the data for a document has been recorded and initial and date it.

2. INSTRUCTIONS. Instructions are provided for using the instrument. These are a summary of instructions you have already learned here.

3. DATA SHEETS. There are two kinds of data sheets used in the CDI. One you have already used. The other (which is actually first in the instrument) is used for document identification and description. This data sheet is straightforward, and the instructions provided should be adequate; no further instruction about the use of that data sheet is provided.

A copy of the complete CDI instrument follows this page.

****

CDI AND PRACTICE SET DELETED
PAGES 75-110

FOR CDI, SEE APPENDIX D

****

References

CG 0837

Mounds View Schools. Elementary social studies curriculum and resource guide [K-3]. St. Paul, MN: 1971. (Selected Curriculum Guides in Microfiche, no. 837. Millwood, NY: Kraus International Publications)

CG 0953

Auburn Public Schools. Social studies resource guide for the use of teachers in the elementary schools, 4-6. Auburn, WA: 1973. (Selected Curriculum Guides in Microfiche, no. 953. Millwood, NY: Kraus International Publications)

CG 1927

Las Virgenes Unified School District. Social science: First grade. Westlake, CA: 1979. (Selected Curriculum Guides in Microfiche, no. 1927. Millwood, NY: Kraus International Publications)

CG 1940

High Point Public Schools. A social studies curriculum guide: grade 4. High Point, NC: n.d. (Selected Curriculum Guides in Microfiche, no. 1940. Millwood, NY: Kraus International Publications)

CG 2297

Utica City School District. Social studies K-12: Sociology. Draft ed. Utica, NY: 1975. (Selected Curriculum Guides in Microfiche, no. 2297. Millwood, NY: Kraus International Publications)

CG 2443

Seattle Public Schools. K-6 social studies program. Seattle, WA: 1980. (Selected Curriculum Guides in Microfiche, no. 2443. Millwood, NY: Kraus International Publications)

Dunne, F., Elliott, R., & Block, A. Beyond the cities: Expanding the sense of option among rural adolescents. Curriculum Inquiry, 1980, 10, 3-28.

ED 095 086

Baltimore City Public Schools. Social studies, grades K-6. Part Two: Urban studies program. Baltimore, MD: 1973. (ERIC Document No. 095 086)

ED 152 619
Spokane Public Schools, District 81. Social studies program guide,
     3-6: Intermediate grades. Spokane, WA: 1977. (ERIC Document
     No. 152 619)

ED 187 659
Allegany County Board of Education. Grade 3: Indians -- Past and
     present (with) Allegany County -- Past and present. Cumberland,
     MD: 1978. (ERIC Document No. 187 659)

Eisner, E. W. Instructional and expressive objectives. In M. Golby,
     J. Greenwald, & R. West (Eds.), Curriculum design. New York:
     Wiley, 1975. (Originally published in AERA monograph series on
     curriculum evaluation, no. 3)

Peters, R. G., & Williamson, P. M. Northampton as Colonial Settle-
     ment: A resource unit for teachers (mimeo). Northampton, MA:
     Smith College Campus School, 1975.

RTP.   Examples with 'RTP" as their reference were contrived for the
     RTP by the author.

SUPPLEMENT

COACHING PROTOCOL FOR SECTIONS D AND E
(NOT INCLUDED IN TRAINEE MATERIALS)

The printed RTP materials may be supplemented by individual coaching in Section D and the first sub-section of Section E. The complexity of the recorder's task -- especially determining the boundaries of the recording units -- makes coaching necessary: to cover all possible contingencies in the printed materials would make them formidably complex and time-consuming, and printed materials cannot easily offer the reassurance and support which recorder trainees seem to need as they learn their task. Accordingly, the following protocol is to be used to guide coaching in those sections.

Strategy

Coaching interventions are designed to maximize information to the recorder trainee by highlighting (1) relevant concepts and their definitions, and (2) critical differences between confused concepts or within source materials.

Tactics

Specific tactics for implementing the coaching strategy are described below according to the issue or problem underlying the difficulty the recorder trainee is experiencing. In all cases, at the end of the prescribed procedure, pause. If the trainee says nothing or does not indicate comprehension, rephrase and pause again. Continue until trainee responds positively.

[113]

Classification

Case 1: Decision coded "present" when not.

1. Have trainee identify information believed to specify the decision.
2. State definition for erroneously-applied concept.
3. Characterize the nature of the information used by trainee, c.f., definition (2 above).
4. Supply correct category for information in question.

Case 2: Decision coded "not present" when present.

1. State definition of decision involved.
2. Identify information in source material which specifies the decision.
3. Characterize information and link to definition (1 above).

Boundaries

Case 1: Information wrongly excluded.

1. Establish event scale.
2. Identify information wrongly excluded.
3. Explain why information belongs to event in question.

Case 2: Information wrongly included.

1. Establish event scale.
2. Identify information wrongly included.
3. Explain why information does not belong to event, if possible by identifying some other event to which it does belong.

Procedure

1. Establish query or error of procedure.
2. State correct procedure.